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A case study of collaborative writing with the computer

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A CASE STUDY OF COLLABORATIVE WRITING WITH THE COMPUTER

by

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A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE MASTER OF ARTS

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ABSTRACT

A CASE STUDY OF COLLABORATIVE WRITING WITH THE COMPUTER

Marcie J. Simons

This study addresses the need for research which examines collaborative writing using computers. Its purpose was to identify, through observation and description, distinctive features of collaborative composing with a computer. The study examines how three writers collaborated in writing using a personal computer. The group's writing sessions were recorded on audio tapes that were then transcribed for analysis. The analysis consisted of examining the data for patterns that might account for certain aspects of collaborative composition including how the group made decisions and negotiated their individual writing styles and strategies, and how the computer affected their writing processes.

The analysis of the data identified variables specific to collaborative writing at the computer. The addition of these variables created new relationships among factors already found in individual composition. Further research is needed to determine more precisely how these factors interact. Suggestions for such research are included.
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CHAPTER I
INTRODUCTION

Writing traditionally has been thought of as a highly individualistic activity. In literary study especially, the romanticized image of the artist-author\(^1\) has shaped the way in which we look at writing. The concept of authorship places great emphasis on the author as sole creator of his or her text. This image has been the predominant model in the composition classroom as well. Students are taught that writing is an autonomous activity and creativity and originality are highly valued.

But writing is not always such an individual or solitary activity. Collaborative writing is practiced by people in a variety of contexts, including academia. Perhaps most notable is the collaborative writing that takes place in business settings, where groups work together to produce such documents as status and budget reports, instructions and procedures, and grant proposals. In a study on collaborative writing in the workplace, Faigley and Miller found that three-quarters of the college graduates they surveyed collaborate in writing in a variety of settings.\(^2\) Examples of co-authorship are found also in social, civic and professional organizations which often produce newsletters, brochures and reports.\(^3\) And, as Lunsford and

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\(^3\)Tobi Mackler, "Group Produced Documents: An Exploratory Study of Collaborative Writing Processes" (Ph.D. Dissertation, Columbia University
Ede point out, while those in the humanities tend to not practice co-authorship in their teaching and writing, their colleagues in the sciences and professions do.\textsuperscript{4}

However, recent changes in the composition classroom reflect a growing conception of writing as a social, interactive activity, rather than as a solitary one. Collaborative learning and collaborative writing techniques have been included in the current pedagogies for teaching composition. Peer critiques, peer tutoring, collaborative planning groups and other techniques are cropping up in writing classes and writing centers across the country. Students are learning how to write together, taking advantage of the social context for writing. At Carnegie-Mellon, for example, students working with a collaborative partner during the planning stages of their paper found that they develop plans and "come to the point" more easily.\textsuperscript{5} No longer is writing an isolated activity for students with only their teachers for feedback; they are able to share their writing with a community of peers.

With all of the interest in collaborative learning and writing methods, until recently no one has studied the processes of co-authoring where two or more people collaborate to produce a text. Interestingly, there is a growing body of collaboratively-written literature by composition teachers and theorists such as Linda Flower and John Hayes, Lisa Ede and Andrea Lunsford, and C.H. Knoblaugh

\textsuperscript{4} Ede and Lunsford, p.157.
and Lil Brannon to name a few. Yet, with the exception of Ede and Lunsford, none have examined what occurs when they collaborate.

There exists a large body of research that examines the decision-making processes and the dynamics of groups. But, while task performance is often the focus of such studies, writing as a group task is virtually ignored. Even studies on groups whose decision-making results in written text or whose primary function is to produce written text do not examine the actual writing activity. Rather, they focus on the decision-making processes or on the interaction of the members of the group and not their interactions with one another and with the text.

Where collaborative writing methods are being utilized as tools for helping students learn to write better, the new computer technologies are being examined with much the same purpose in mind. The possible affects of personal computers on writing processes have generated a great deal of interest in recent years. The enormous increase of computer usage not only on campuses, but in businesses and at home as well, has given rise to a tremendous output of research and practical application.

When computers, in particular, word processors, were first introduced to the writing environment, it was thought that they would automatically enable students to write better. Various claims

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6 These works include Hayes and Flower's "A Cognitive Process Theory of Writing" and "Identifying the Organization of Writing Processes"; Ede and Lunsford's "Why Write . . . Together?" and "Classical Rhetoric, Modern Rhetoric, and Contemporary Discourse Studies"; Knoblaugh and Brannon's "Teacher Commentary on Student Writing: The State of the Art" and Rhetorical Traditions and the Teaching of Writing.
7 Mackler, p.6.
were made concerning word processors' ability to ease the burden of especially inexperienced writers by facilitating revision through freeing writers from lower level concerns such as spelling and increasing writers' willingness to take risks. But, since the initial fervor, teachers and researchers have taken a more cautious attitude because of somewhat mixed results from using word processors in the composing process.

While computers are utilized with increasing frequency in collaborative settings, there is no investigation into the phenomenon. The research on computers has been limited to individuals' writing processes. A need exists for research that examines what occurs when two or more people compose together with a computer, if only because of the rapidly growing use of computers and collaborative writing in classrooms and writing centers as well as businesses.

This need is underscored by the public nature of writing with a computer. Collaborative writing takes individuals' writing out of the artist's "garret" and places it in the public domain. It assures a public context for the composing process. Computers also function to bring writing into the public domain. An individual's written work is made more accessible to others because the text is displayed on a screen that others are able to see and it is easy to print out work-in-progress. Furthermore, a computer lab or computers in the workplace create a public environment for writing and very often the computer is connected to a network of computers, making the text available for an even larger audience.

My interest in these issues comes, in part, from my experiences with using personal computers for writing and teaching and from
research and observation of collaborative learning and writing techniques. I came to realize that my own involvement in informal peer critiquing and peer tutoring falls under the category of collaborative learning and that this type of informal collaboration has increased for me while I have been in graduate school becoming part of what Stanley Fish calls the academic "interpretive community."^8

My interest was further intensified by the realization that virtually no scholarly investigation into collaborative learning and writing with computers exists, especially on the phenomenon of group authoring with computers. This study addresses the need for research on collaborative writing using computers. It offers an analysis of how a small writing group approached their writing task using a personal computer. With this research I hope to expand our knowledge of the social context of composing by examining writing as a collaborative, social act as compared with an individual, private one.

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^8 See John Trimbur, "Collaborative Learning and Teaching Writing" in *Perspectives on Research and Scholarship in Composition*, Ben W. McClelland and Timothy R. Donovan (eds.) (New York: The Modern Language Association of America, 1985) for a discussion of Fish's "interpretive communities."
CHAPTER II
COLLABORATION AND WRITING WITH COMPUTERS

I begin this chapter with a discussion of the theory and practice of collaborative learning and how, due to the lack of research on collaborative writing, co-authoring might be examined in light of collaborative learning. I continue with a brief review of research conducted on individuals composing with computers to help in determining what kinds of effects computers might have on the writing processes of the group in this study.

Collaborative Learning

Collaboration is not a new concept, but its inclusion in the current pedagogies for teaching composition is. Students have always learned from their peers outside of the classroom, while inside, particularly in the humanities, collaboration was seen as inappropriate. Not until the last two decades have teachers and researchers taken advantage of collaborative learning as they began to recognize the value, and possible necessity, of social interaction in the learning process.

The rationale for collaborative learning rests on recent critical trends advocated by theorists such as Kenneth Bruffee, Peter Elbow, and others which posit the conception of thought and knowledge as social constructs. In "Collaborative Learning and 'The Conversation of Mankind,'" Bruffee contends that knowledge is "an artifact created
by a community of knowledgeable peers" and is made possible through collaborative, social activity. Similarly, thought is a social construct because it is "internalized conversation" and conversation is a product of social interaction. Thus, because writing is "internalized conversation re-externalized," it, too is a social construct produced by collaborative activity.⁹

This social view of knowledge differs from the traditional one which sees knowledge as a "permanent and determinate truth."¹⁰ In this viewpoint, knowledge is an object to possess or "something we acquire and wield as individuals relative to each other, not something we generate and maintain in company with and in dependency upon each other."¹¹ Teaching writing also is objectified in the traditional conception; students are given models and proper forms by teachers.

But in collaborative learning, knowledge and writing become social activities. Students learn how to write and construct meaning together in the "interpretive communities" Fish speaks of, rather than being "given" meaning by the teacher. The collaborative classroom is a "reorganization of the relations between students and teachers and among students themselves in their roles as writers and readers."¹² In the traditional classroom, student writers have only one audience in mind, the teacher, for whom they write the "ideal" text or the text they believe the teacher is looking for. And, the

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¹⁰ Trimbur, p. 94
¹¹ Bruffee, p. 645.
¹² Trimbur, p. 88.
classroom discussion usually centers on the teacher as giver of knowledge rather than on students creating knowledge. In the collaborative classroom, the teacher no longer is the ultimate authority, but instead acts more indirectly as a guide or task setter.

Collaborative learning helps students learn how to write better by helping them discover how to make decisions during the writing process. Composing is a decision-making process in which writers continually make judgments about what information to include, who the intended audience is, how to phrase a sentence, what word to use, and so on. A writer may have discrete knowledge about his or her subject, but must be able to apply that knowledge effectively. According to Bruffee,

To learn to make a judgment, or a complex series of compound and interrelated judgments as in speaking or writing a language, we have to think not only about the subject we are judging (the next word and its form, the next sentence), but also about the way our minds work in making the judgement. We have to try to get outside ourselves. We have to try to see the world as other people see it, or as some of us tend, for the time being, to agree to see it. We have to overcome our private way of thinking, our habits, our biases and preconceptions.\(^1\)\(^3\)

Collaborative learning enables students to "get outside" of themselves by helping them to see different perspectives and different approaches to making the decisions involved in writing. An example would be the way that collaborative learning enables writers to become more aware of their audience. Our sense of

audience dictates what we write and how we say it. Most inexperienced writers do not or are unable to take into account "the information requirements of their readers."\textsuperscript{14} The collaborative environment provides a tangible audience for student writers, giving them a sense of how readers will respond to their writing and helping them develop the reader-based prose Flower speaks of.

Because of the lack of research on co-authoring, research and practice on collaborative learning most likely will prove helpful in examining the processes involved in co-authoring. Co-authoring, like collaborative methods of learning how to write, involves social interaction in the production of text. There are obvious differences between the two types of writing, but there exists also similarities which, when examined, might give us a better understanding of both collaborative learning and co-authoring and how social interaction influences or changes writing processes.

Most notably collaborative learning and co-authoring differ in that with one, writers interact to help one another to produce individual texts and, with the other, writers work together to produce a single text. In the collaborative learning environment, writers aid one another through feedback, but the text is still considered to be the individual student's paper. The individual writer does not have to employ the suggestions of strategies, he or she is the one who makes the final decisions. In co-authoring, individual writers must cooperate and compromise. For Ede and Lunsford, this negotiation

meant "giving up some of [their] cherished stylistic tics" such as a penchant for dashes or a favorite revision strategy."\(^{15}\)

In both types of writing, the social interaction of collaborating changes the traditional reader-writer relationship.\(^{16}\) In both, there are multiple perspectives or feedback which influence the writing process as compared with a solitary, individual writer who receives no feedback during the writing process except possibly from the teacher. The question for both kinds of writing is, in what way is the relationship changed?

The practices of collaborative learning and co-authoring also effect our traditional concepts of creativity, originality and responsibility. Traditionally, writing places a great deal of value on the individual creativity and originality of a text; as Trimbur notes,"Collaboration . . . verges on plagiarism in the minds of many teachers."\(^{17}\) But, Ede and Lunsford note, their "own strong sense that two may create ideas that neither would have reached alone argues for the value of dialect as invention."\(^{18}\)

Computers in the Writing Process

The effects of using computers on writing processes has generated a great deal of research recently. Because writing processes themselves are so complex, the results are far from conclusive.

There are so many factors involved in writing, which is complicated

\(^{15}\) Ede and Lunsford, p. 154.
\(^{16}\) Ibid., p. 156.
\(^{17}\) Trimbur, p.102.
\(^{18}\) Ede and Lunsford, p. 156.
by the introduction of technology in the process, that it is often difficult to determine what the effects are or what might cause them. Some effects vary according to writers composing styles and strategies, others according to writers' competency with computers and so on.

Most of the research concerning word processors to date centers on how word processing affects revision. Perhaps this is because, as Lil Brannon speculates, revision is a "microcosm of the entire act of composing."19 Early work by Colette Dauite praised word processing for its ability to facilitate revision by lessening the effects of some physical and psychological constraints, such as re-copying, which burden writers and deter revision.20 Collier found that when using a word processor students revised more, "considering and experimenting with a great many alternatives".21 Studies have shown that students are more enthusiastic and more inclined to experiment and take risks because of the "impermanency" of the text on the screen as compared to the "permanency" of pen and paper.22

But more revision does not necessarily mean better revision or improved writing. Many researchers have discovered that revision with the word processor seems to occur more on the local or sentence/word level than on a higher organizational level. Collier

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found that the increased revisions he observed centered primarily on "words, phrases, and clauses".\textsuperscript{23} One study concluded that word processing even seems to discourage revision of the macrostructure of a text, especially for inexperienced writers.\textsuperscript{24} Less experienced writers might be encouraged to preserve what is on the screen rather than make qualitative revisions because it looks good.\textsuperscript{25}

Paul LeBlanc attributes the mixed results to the fact that the use of a word processor does not create new revision strategies but works to either hinder or help pre-existing revision strategies.\textsuperscript{26} Removing the hindrance of re-copying does not help a writer who is unable "to imagine an alternative text" in the first place. Though the speed and the ease of text handling made possible by the word processor affect the way we write and revise, we cannot expect the writing processes of different writers at different levels of expertise to be affected in the same manner. For example, for some writers, the increased speed made possible by the word processor leads to less thinking - or less time for thinking - rather than more.\textsuperscript{27}

Another feature of word processing composing that differs from pen and paper composing is how text is displayed. For some writers, the physical difference between the two is enormous because of the

\begin{itemize}
\item Collier, p. 153.
\item LeBlanc, p. 36.
\end{itemize}
strategies they employ. Re-reading as a planning strategy can be made much more difficult when using a word processor because only part of the text shows at a time. In a study of experienced writers learning to compose on the computer, Lillian Bridwell-Bowles, et al found that writers who used "the forward progress of their words appearing on paper as 'discovery drafts' were least pleased" when composing with the word processor. These writers rely on re-reading and constant planning while writing and "unless they could see their writing, what they had composed was lost as an aid to invention and discovery." And, Christina Haas found that writers planned significantly less when composing on the word processor than when composing with pen and paper.

The size of the screen might contribute to writers' focusing on the word and sentence level, possibly explaining why when revising on the word processor students tend to be concerned with the microstructure rather than the macrostructure of a text. Only a small portion of the text appears on the screen at a time, forcing students to concentrate on that part of the text rather than the text as a whole. For inexperienced writers who have difficulty in developing the macrostructure of a text, the word processor becomes an additional burden rather than an aid.

More research, then, is needed to examine how the use of a word processor affects writing processes, because, like collaborative

30 Haas, p. 201.
31 Ibid., p. 185.
learning, the word processor is a contextual feature which may affect writers' cognitive processes. Word processors might inhibit certain composing behaviors while enhancing others, and only by understanding the potential benefits and limitations of word processors can we learn to use them more effectively in the writing process.

With all of the research conducted on the effects of computers on composing processes, there is little research on groups composing with computers. There exists some work on groups writing or problem solving with the computer, but these studies focus solely on the social interaction and group dynamics and not the cognitive processes involved. While the former are important in analyzing the effects of the computer, the latter need to be researched to gain a fuller understanding of the effects of word processors on group composition. Such an understanding could be used to help teach groups how to write together more effectively and perhaps more efficiently.

\[32\] Ibid., p. 204.
CHAPTER III
DESIGN AND PROCEDURES

I employ an observational research approach to accomplish the purpose of this study: to gather information on and describe the composing processes of a group of writers working at a computer. In this chapter I describe the design of the study and the methods used to collect and analyze the data, as well as possible criticisms of the methodology. In the last section of the chapter, I briefly discuss several of the issues which I kept in mind when analyzing the data.

Design of the Study

This study examines the writing processes of a small group collaboratively composing with a word processor. They worked on a Macintosh computer, composing their project on Microsoft Word Version 3.0. The members of the group were three, male students - Sam, Jim and Bill - enrolled in a technical writing course at X University for the Spring 1989 semester. They were not regular undergraduate students, but were classified as non-degree seeking graduate students enrolled in this one course. They each somewhat recently had received undergraduate degrees and were working as assistant football coaches at X University. None of the three were basic or novice writers, but neither were they very experienced or expert writers, as their writing experience primarily consisted of
college writing assignments. Furthermore, they had not collaborated in writing prior to this.

The group members' competence with computers varied. All three had some familiarity with using word processing as part of the technical writing course's requirements. The instructor required that all class assignments, including tests and papers, be completed with a computer. The group members also used computers at work, using statistical programs for conducting game analyses and graphics for football playbooks. Sam was most familiar with computers, having worked with them before and owning his own. Jim was slightly less familiar, and Bill had not used computers with any frequency for writing or otherwise, prior to taking the technical writing course.

Though none of the men had participated previously in group-authored composition, as assistant coaches and ex-football players, they were accustomed to working in a team or collaborative environment and with one another. This factor is important to the current research because there was not a period of adjustment for the group like that found in much other research on group processes. The subjects were very comfortable with working together and were not reluctant to make comments and actively participate in the writing process. My hope is that the group's familiarity with one another adds to the quality of the data gathered because they might interact more freely or on a more intimate level than groups who are not used to collaborating with one another.

For the writing task, the group acted as an ad hoc university committee whose function was to review, formulate, and put in writing the university's stance on the recent passage of two NCAA
by-laws (Propositions 48 and 42). X University is a small, private university that has high academic standards and is a member of an athletic conference. The by-laws were designed to make the academic requirements for college athletes more stringent. The group members conducted research and interviewed members of the X University community such as the head football coach and the Associate Director of Academic Advising for their input on the subject.

The writing group produced four documents - two memoranda, a press release, and a position paper which was six pages in length. The memoranda were, in essence, progress reports which were directed to the members of the university community, explaining the purpose and activities of their committee. The press release was directed at those both within and outside of the university community, stating the university's "official" position on the by-laws and what effect, if any, the new requirements might have on the university. In the position paper, which is about six pages long, the group examined the by-laws and the controversy surrounding them and explained the university's position on their intent and effect.

I feel that I need to explain briefly here the controversy associated with the NCAA by-laws, Propositions 48 and 42. The by-laws set minimum academic requirements for student athletes which are more stringent than those of previous years. Critics feel that the by-laws are discriminatory towards minority athletes and that they make it more difficult for minority athletes to obtain athletic financial aid. Critics are most upset with the minimum college entrance examination (SAT) requirement. They charge that the SAT
is a poor indicator of academic success and is biased against minorities.

Although the writing task took place in an academic context, the rhetorical situation was closer to a "real-world" situation and was not an artificial laboratory setting. The working sessions were not timed and they worked when it was convenient, using Sam's personal computer. Furthermore, the subject matter was self-selected by the group and not the instructor. The technical writing instructor gave the class an open-ended assignment in which students were able to choose projects which were relevant to their interests. The topic chosen by the group was one in which the writers felt they had a "stake" because it involved an issue of their everyday, "real-world" work. They considered the X University community to be their primary audience and their instructor to be the secondary audience.

The subjects and the writing task are not intended to be representative of writing groups either inside or outside of the classroom. There are many variables that influence writing behavior. These need to be considered when researching individual's writing processes and even more (?) examination of a group of writers. I do not plan to develop a model of writing groups in general but, rather, to gather and analyze data which might lend some insights into the writing processes and social interaction of groups that collaborate in writing using computers.

Collection of Data

Of the available methods for collecting data, I chose to record
the group's working sessions on audio tapes which were later transcribed for analysis. I chose this method because I believed that it would obtain a more complete and accurate account of the collaborative writing processes as they occurred than retrospective methods such as post-task questionnaires or interviews. Retrospective accounts of the writing activities of individuals for such a writing task are suspect because of possible distortions or interpretations by the writers themselves. Nor could retrospective accounts yield data of the actual interaction between the writers. A more quantitative approach also seemed inappropriate because the purpose of this study is not to provide measurements of keystrokes or types of interactions but rather to describe and interpret, through observation, the interactions which occur during the collaborative writing process.

The recording method allowed the writers, as I mentioned earlier, to work where and when they chose and was, I felt, the least intrusive method for collecting data. My aim was to gain an account of the writers' sessions in a setting that would be as close to a naturalistic one as possible to avoid the distortions or influences found in a more artificial, laboratory-like setting. I was not present during the sessions to observe and thus possibly influence the writers' speech.

However, in using a recorder there is the problem of what Michael Stubbs refers to as the "observer's paradox". He notes

When speakers know they are being observed, their language shifts towards more formal styles, probably rather erratically, as not everything in language is under equal conscious control, and as speakers probably go through cycles of half forgetting they are being recorded. So the most casual language is the most difficult to observe.\textsuperscript{35}

I acknowledge that the tape recorder might have had some effects on the writers' interactions and speech, but do not feel that it significantly distorted the data. The subjects did "talk" to the recorder, for example, they addressed it when they turned it on or off, saying such things as "We're stopping the tape, we've got a phone call" and "We're going to print out . . . so we're going to put the tape on hold for a sec." Stubbs cites one argument in response to these kinds of interactions with the recorder which suggests that the subjects' awareness of the recorder is just another example of people's awareness of being monitored to some extent all of the time by friends, colleagues, teachers, and so on.\textsuperscript{36}

Other researchers feel that subjects become accustomed to the recorder and, therefore, their consciousness of being recorded decreases and even disappears periodically. The awareness especially decreases during situations in which the speakers are involved in a particular task with its own demands on their attention. I feel that for the most part the members of this group were highly involved in their writing task and did not modify their speech to a significant degree. Furthermore, they were accustomed

\textsuperscript{35} Ibid. p. 224.
\textsuperscript{36} Ibid., pp.224-225.
to the equipment because they had used it while conducting the interviews for their project.

I interviewed the writers informally after the group had written and turned in their documents. Some information I felt was necessary was not clear on the tapes, such as whether or not Sam was always in control of the keyboard. I also asked them to describe briefly their "normal" individual writing activities such as whether they usually compose directly on the computer or first with pen and paper, to obtain a sense of the ways in which their writing as individuals differed in general from their writing as a group. This information was intended to provide a better understanding of the writing context for the analysis of the data.

Analysis of Data

In analyzing the transcriptions of the writing sessions, I used both discourse analysis and protocol analysis methods. My purpose was to examine both the social interaction of the writers and the writing processes involved in their collaboration, so a combination of the two methods of analysis seemed most appropriate. A greater emphasis probably was given to conversational discourse analysis because the data consists of dialogue among the writers concerning the production of the text. The writers were not asked to talk about their writing processes as subjects involved in think-aloud protocols are, but did so in the course of their collaboration.

In general, discourse analysis is used by linguists to examine both written and verbal discourse, though in this study, I use the
term to refer specifically to naturally occurring conversational interaction. Discourse analysis examines how people make meaning and are understood; how they ask and answer questions and to what purpose; how topics are introduced and changed; and so on. The basic question of discourse analysis is how do people communicate and interpret meaning in conversation?

There is a complex and extensive variety of social context in which conversations take place and which often determine the meaning of interactions. Specific conversational behavior is attached to specific situations and, as Deborah Tannen notes, the same linguistic form can have different meaning depending upon the speaker and the context. Many general models of spoken interaction exist which analyze such interactions as those between teacher and student, doctor and patient, and parent and child, for particular exchange structures or patterns of interaction. An example of a type of exchange frequently found in teacher-student dialogue would be an initiation or question by the teacher followed by a response from the student and ending with feedback from the teacher.

In this research, I examine a particular type of discourse which has not been analyzed before - the discourse of collaborative writing. In their report of their collaborative writing experiences, Ede and Lunsford comment on how talking seemed to be a necessary part of their co-authoring, giving them the "constant benefit of dialect, the

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traditional counterpart to rhetoric."38 The question is what kinds of conversational interaction takes place during all of this "talking?"
And, is there a model of spoken interaction about text creation which can be gathered from the exchanges?

What these exchange structures tell about the writing process cannot be determined simply through discourse analysis. An understanding of individuals' writing processes is necessary. Protocol analysis has been used to identify writing processes and create models of individuals' composing. A protocol is a "description of the activities, ordered in time, which a subject engages in while performing a task."39 The term protocol analysis in composition theory generally refers to think-aloud protocols in which a writer is asked to talk about everything that comes to mind when composing. The think-alouds are conducted in laboratory settings with a researcher present who "prompts" the writer when he or she forgets to speak aloud as can happen when the writer becomes absorbed in the task.

Protocol analysis is a cognitive approach to examining writing which attempts to infer what psychological processes take place during the composing task or activity. In the simplest terms, in analyzing a transcription of a writing protocol, a researcher codes or categorizes the comments or statements the writer makes (what Flower and Hayes refer to as segments) in terms of writing processes such as generating, organizing, translating or editing.

38 Ede and Lunsford, p. 153.
What is developed from coding the segments are models or descriptions of individuals writing processes; how particular writers approach and carry out their writing task. The descriptions are not merely measurements or frequencies of processes. Composing is a very complex task which cannot be explained by merely stating, for instance, that planning occurs primarily during the early stages of writing and editing occurs primarily during the latter. What criteria guide writers in the choices they make? Factors such as the writing conventions or rhetorical rules a writer follows must be determined in order to obtain a fuller "picture" of the composing process. For example, when a writer writes, how he or she communicates his or her meaning is often regulated by a set of rules such as "repeat ideas for emphasis" or "don't repeat words/phrases in close proximity."40 Protocol analysis attempts to determine these unspoken rules the writer follows but does not always acknowledge.

Practical and Theoretical Issues of the Methodology

There exist some possible problems and criticisms of the data collection and analysis methodology which I feel need to be addressed here. The "observer's paradox" has been discussed already, but it is a frequent criticism and a practical and theoretical concern. The possible distortion of the spoken interaction on the

transcripts is another issue. Some criticism focuses on the fact that spoken and written discourse - even the same words - are different at the most basic level. One is an aural medium and the other is a visual medium and what is perceived is changed by the medium.\footnote{Stubbs, p. 239.} Furthermore, in conversational interaction there are sometimes physical or non-verbal communication which cannot be transcribed accurately which might determine or add to the meaning of the spoken interaction. Transcribing conversations can distort the analysis because they are taken out of their intended contexts with aural and physical communication cues which in itself. But, as Deborah Tannen notes, if the conversation is not taken out of its context, then it cannot be analyzed.\footnote{Tannen, p. 35.}

Transcribed conversations also might not be as accurate or detailed as the actual spoken discourse. Frequently the transcriber cannot comprehend or hear all that is said because of overlaps in speech (especially when more than two people are speaking) or hard to hear words. What this criticism points to is that conversations cannot be transcribed precisely. However, for the purpose of this study, the transcriptions of the working sessions of these writers is in sufficient detail to obtain a sense of the patterns of collaborative discourse. Furthermore, as Stubbs notes, data on speech behavior collected by tape recorder are "too rich to be useful, unless one has also a way of focusing on the features of communication which are relevant."\footnote{Stubbs, p. 239.} The focus here is on examining possible patterns of
specific types of exchanges pertaining to the collaborative writing process. I do not attempt to describe in great detail all that is going on in the working sessions. Nor is my interpretation the only possible one to be gotten from the data.

As with discourse analysis, protocol analysis has been criticized. Most of the criticism of protocol analysis rests on the contention that the protocols simply cannot reveal writers actual cognitive processes. Not denying the validity of this criticism, Flower and Hayes note:

The power of protocol analysis lies in the richness of its data. Even though protocols are typically incomplete, they provide us with much more information about processes by which tasks are performed than does simply examining the outcome of the process. Knowing what answer people get in solving problems is much less informative than catching even fragmentary glimpses of the complex processes by which they arrive at the answer.\textsuperscript{44}

Another criticism is that the verbalization of the writing act distorts what actually is happening. Language or talking is different than thinking; it changes the "course or structure of thought processes."\textsuperscript{45} However, in the way that I am using the protocol-type analysis, talking is a necessary, indeed integral, part of the writing experience which must be taken into account. The subjects think out loud to communicate with one another. It might be possible that more information about writing processes is generated

\textsuperscript{44} Flower and Hayes, "Identifying the Organization of Writing Processes," p. 10.

from collaborative discourse than is possible in individual think-aloud protocols.

The distortion caused by a controlled environment is also an issue of protocol analysis. However, as I discussed earlier, the context for this study is a naturalistic setting in which the subjects are interested in and motivated by their topic. I do take into account the subjects' awareness of the experimental context.

Procedures and Initial Research Questions

In analyzing the transcriptions for this study, I had in mind a number of questions and issues that I wanted to examine. I read and re-read the data, looking for patterns of interactions, types of exchange structures, and writing processes. What I found was a number of interesting phenomena in a tremendous amount of data as there were seven hours of audio tape transcribed. I decided to concentrate primarily on a small section which consists of the production of the first page and a quarter of the position paper, amounting to almost one hour of tape (refer to Appendix A). I chose this portion because the group had worked together already on the memoranda and, thus were somewhat used to composing together. The section captures the initial stages of the paper - how the writers define and approach the rhetorical problem.

After re-transcribing the section, I examined it keeping in mind my initial questions and hypothesis. One issue I was very interested in was the decision-making or consensus-reaching processes used by the group. Individual writers employ various
writing strategies that guide them through text production but do not have to contend with other writers when they make decisions concerning their text. How, then, do these writers negotiate their different writing strategies and styles? Faigley and Miller note that co-authorship "places a different set of demands on a writer than does single authorship. Writers must be able to blend their styles with the styles of others so that the final document has a single, unified voice."46 Ede and Lunsford note that many of their usual revision strategies were altered by the process of co-authorship.47 In negotiating their strategies, did the group vote or did they have a tacit understanding? What factors seem to affect these negotiations - knowledge, assertiveness, status, or something else?

Related to the question of decision-making is the issue of leadership and control which seemed to me to be another way in which co-authorship must differ from individual writing. In task groups there must be a strategy or mechanism for control. Is there a group member who "directs" the group or some other mechanism either tacitly or verbally agreed upon? Small group research shows that very often there is a leader who has the power to control the activity of the group and that there are different ways of evaluating leadership such as speaking more or typing at the keyboard the most. One possibility I considered was that the person at the keyboard might have a great deal of control over the writing and discussion.

Of course, what affect or influence might the computer have on

46 Faigley and Miller, p. 567.
47 Ede and Lunsford, p. 156.
the group's writing processes was another area of interest to me. Based on research on individual composing on computers, I anticipated that some of the problems created by using the word processor might be exacerbated in the collaborative setting. For example, Haas found less conceptual planning with students using the word processor.48 Individual members might have difficulty working with the computer because they need to see more than just a small portion of the text at a time. As mentioned earlier, some writers rely on constant re-reading and planning and have great difficulty with working on a word processor because they are unable to do so as well as when working with pen and paper. This kind of problem might prove to be disruptive to the group's writing processes. Since the section I focus on contains a great deal of the group's planning, I examine how often they print out hard copy while writing to determine what effects, if any the word processor has on planning.

It is also possible that the word processor might facilitate writing for the group because they are able to see more of the text as it is produced as a group than if they were using pen and paper. And, being able to make both large and small changes very easily might also prove helpful as there is input and suggestions from more than one individual.

CHAPTER IV
DISCUSSION OF ANALYSIS

This chapter is organized into four major sections that cover the planning, social, and translating processes of the writing group and the effects of the computer on their writing. In each section I describe and discuss what I feel are significant factors in this group's co-authoring. There are other factors, but the ones I have chosen seem particularly effect this group's writing processes.

Planning Processes

The segment of the transcription I analyze in detail covers much of the group's first writing session. The first third of the segment consists entirely of planning discussion with no actual writing taking place other than a sketchy, handwritten outline. The remainder covers the actual writing of the first page and a quarter of the paper. I describe how these writers approach their writing task - how they see or define the rhetorical problem and how they plan to solve the writing problem using the rules of composition as they see them. In examining their planning processes, I pay particular attention to the first third of the segment, but also analyze the remaining portion, as planning can occur throughout composition.
How They Define Their Purpose

As Flower notes in "The Construction of Purpose in Writing and Reading," writing is a purposeful act. But, it is reductive to say that writers have only one purpose in mind when writing. More accurately, writers have a number of purposes or a "web of purposes" which can include reasons for writing (to sway opinions, to inform, to complete an assignment), the conventions of writing, and social and cultural constraints.

Nor is it accurate to say that writers begin writing with this web of purposes firmly in mind. They do come to writing with a topic and even a set of goals about how to write about the topic; but purpose is dynamic and is constructed through the act of writing. David Bartholomae states that "It is difficult to imagine . . . how writers can have a purpose before they are located in a discourse, since it is the discourse with its projects and agendas that determines what writers can and will do." 50

When constructing a web of purpose, writers set goals, put forth and evaluate possibilities, generate hypotheses that may prove to be untenable, and so on. Many of these ideas are never realized in the finished text, but protocols of writers at work allow researchers to get a glimpse of some of what is happening in the writer's mind. But, because the construction of purpose is complex, much of what take

place remains unavailable even through protocols. I feel that both
the construction of purpose and the observation of the construction
of purpose are made more complex by the nature of group writing.
With more than one writer, there may be more suggestions and
possibilities and more evaluation of goals and criteria. But, it might
be that observation of the construction of purpose is made easier
because, as a group, the writers necessarily must converse with one
another; they must state possibilities, resolve conflicts aloud, and so
on.

Like many individual writers, the members of the group first
approach their writing task with a general sense of purpose, which is
to state X University's position on Propositions 48 and 42. But,
before they begin to plan and write the paper, they conduct some
pre-planning, discussing various ideas and setting some of their
goals. In their first meeting, they discuss and decide upon the
questions for the interviews with members of the X University
community. Through developing the questions, they also develop
goals and the direction of the position paper. For example, they feel
they need to "worry about people" who would "argue against" the
propositions and consider interviewing such a person or persons.
They realize that the controversial nature of the by-laws lends itself
to both proponents and opponents and that they therefore need to
incorporate both points of view in the paper regardless of the
University's position.

In their first writing session they develop their purpose more
fully. They seem to have a sense that their purpose is closely tied to,
if not dependent upon, the purpose of the propositions. They choose
to "defend" themselves by showing whether or not the propositions have "served [their] purpose." Bill says

How does it serve - right. 'Cause that's gonna (unclear) because we're gonna give an opinion as to whether it serves its purpose and that's how we're going to base our opinion of - our stance.

But they do not actually base their stance on whether or not it serves its purpose. They feel the position already has been decided as a result of the University's higher academic standards. Their position is that they already agree with the rules' premise and they do not have to sacrifice athletic goals to maintain the present level of academics. They seem to see themselves as conveyors rather than creators, a concept that I discuss in further detail in the section on how they use sources and their own ideas. Their goal, then, is to show whether or not the propositions' purpose is served in order to validate their position. They feel that they need to "present evidence" in order to "fend off everybody who's going to attack [their] position."

One piece of evidence they feel is crucial to their defense is the "definition" of Proposition 48. They are concerned with stating "what it is" so that "everybody's clear on what the meaning [of the rule] is." They feel that defining or stating the rule shows how it serves its purpose. Its purpose is what they refer to as raising "academic awareness," which is raising academic standards for student athletes. To them, defining the rule makes it self-evident that Proposition 48 raises academic awareness, and they spend a great deal of time discussing the placement and length of the definition, always
working with the assumption that it is a necessary part of their defense.

As they plan, these writers set goals. In this dynamic process, they put forth possibilities that they never actually incorporate in the paper. One possibility that they discuss and then discard is the effect the by-law has on other universities. The writers consider including the effects on other schools as further "evidence" of how the propositions have accomplished their purpose, as well as how X University is made more athletically competitive. They decide not to include how the propositions affect other schools both because they do not have enough information to write about it and because they feel that it is not as relevant to the purpose of the paper. As they plan, they decide that to defend or validate X University position they do not need to introduce how it affects other schools. They choose to focus on X University itself and the sense of the "rightness" of the university's position.

The group also considers including the minority athletes' point of view in the paper. They discuss the possibility in their pre-planning meeting and again while they are planning. They feel that because minorities are the ones most affected by the propositions, their opinions should be reported. But they are unable to gather the information they feel they need, in particular they are not able to interview the head of the Minority Affairs Office at the university. So they choose to discard the possibility of including minorities' view on the proposition.

In summary, these writers begin writing with the general purpose of stating the university's position. Because of the controversy
surrounding the propositions, they feel they need to defend or validate their position, which favors the propositions. The writers choose to defend the position by showing the intent or purpose of the propositions - raising academic standards - and whether the propositions have "served their purpose." To do this they decide to present "evidence" which includes a need for higher academic standards and a definition of Proposition 48. They also include views of both opponents and proponents in an attempt to demonstrate that the arguments against the propositions are not as valid as the arguments for.

Genre

Genre guides writers in how they construct purpose and how they organize their writing. These writers intend to create a "position paper," a genre they never define, but implicitly refer to, saying what it includes and what must be done. For example, Bill says "What we got to keep in mind is . . . that we're writing a position paper, not writing a report on Prop. 48" which suggests an implicit understanding that a position paper differs significantly from another genre, "a report." They understand that a position necessarily must be defended and they need to "present evidence" in order to do so. To them, certain information, "evidence," must precede their own position.

Genre as Game Plan and Play Pattern

There might be a relation between the social history of the group
and their use of genre concepts in composing. The members of this group are used to collaborating according to a commonly understood pattern: they approach games with a game plan and they execute particular plays that have commonly known patterns. They have been taught that when in doubt, they should refer to the patterns or to the rules. The group treats composing, especially the composing of a position paper, a genre that is new to them, in much the same way. They refer to the parts (like introduction, definition, body) and to the organization and spatial arrangement to express their understanding of the document they are composing. They use language of motion and space to express the composing process appropriate to a position paper. Their comments deal with arrangement or placement, such as "what we put here," "lay out the whole rule," "then go into the paper," and so on. These are common expressions among all speakers of English, but they seem to predominate with these writers, occurring more frequently than expressions of belief or feelings.

They way in which they repeatedly make statements such as "We have to start a new paragraph here," illustrates how their concern with spatial arrangement guides their writing. They seem to see the paper as a series of "blocks" - paragraphs - with each block containing its own idea or piece of information. While it is not incorrect for writers to start a new paragraph for a new idea, these writers adhere to this organizational pattern, structuring the paper through physical arrangement of content rather than the articulation of ideas or logical development.

Outline Concept
Sometimes the group acts as though they were governed by a sense of a limited genre, the position paper, and sometimes as though they are following a more general sense of genre, the "introduction and body" form. They may assume a kind of nested relationship in which position papers, like all compositions, must have an introduction and a body.

The group relies heavily on the creation of an outline which consists of an introduction and a body that is divided into various topics. When they first sit down to write, they immediately begin to write an outline; the first line of this section is "All right, we're writing an outline now for our position paper." Here, the speaker, Jim, addresses the tape recorder and the importance lies in that he specifies the outline concept rather than simply commenting that they are beginning or planning the paper. I believe that what looks like an abrupt jump into the creation of the outline without discussing their purpose and the goals, can be explained in part by the pre-planning of the group before this session. As I discussed earlier, some of the initial writing concerns were covered in the very first meeting in which they discussed what questions to ask in their interviews.

I also feel that their sense of an outline with an introduction and body as a necessary organizational strategy precludes them from approaching the writing in any other way such as brainstorming, freewriting, using an issue tree, and so on. They perceive the introduction and body almost as mythical concepts which are always used when writing. They have an unspoken understanding that this
is how to go about writing a paper and that writer and reader alike are aware of this organization.

To these writers, the content of the introductory paragraph is not as important as the existence of one. Sam, who is at the keyboard, silently initiates the typing of the introduction without discussing its contents or purpose with the other two. Jim even leaves the room and Bill looks over notes while Sam independently writes the introduction. A few minutes later, Jim returns and asks "Where you at?" and Bill answers "we're still working on the first part, the first paragraph" without having seen or discussed the first paragraph.

The group has an idea about what an introduction is and they feel it must be there. But they do not feel that they have to share in the creation of it because the introduction is a kind of "given." Their sense of an introduction is summed up by Jim's statement "Just a kind of general introduction." They discuss some of the content and structure of the introduction, but the discussion is limited to whether or not to include the definition of Proposition 48 in the introduction.

Bill comments that "the introduction should be the purpose of the paper - state the purpose of the paper." Later, in a post-writing interview, Sam remarked that an introduction should "spark the reader's interest," though there is no dialogue among the group about how the introduction is going to achieve this goal or even that they had agreed upon it as a goal. Furthermore, Sam does not utilize either one of the goals when he actually writes the introduction. The introduction fails to "spark" the reader's attention and to state the purpose of the paper.

Initially, the body of the paper also is discussed as a kind of
"given." They refer to what they are going to "put into" the body and Jim states that "we got to get some structure to what our body's gonna be." But, as they write, the idea of the body as a whole gives way to the separate parts or topics covered in the rest of the paper such as the definition or the opponents and proponents.

How They Use Sources and Their Own Ideas

One of the interesting things about the group's writing process is that in planning the document, their sense of genre seems to dictate content, as well as structure, and does not seem to offer them much opportunity to express their own ideas. In the group's planning, there is less concern with creating meaning that with presenting "evidence." The content of the paper, in some ways, seems to exist before writing takes place as information and opinions that the group must present. They seem unwilling to express their own opinions, as if the position paper genre precludes them from doing so.

Much of the group's attention is devoted to placement - what should be placed where, what must come first, which opinion should be presented first. Curiously, they choose to place the actual position at the end of the paper. They never consider introducing the position first and then justifying or explaining it in light of the rule and the controversy. Rather, they feel they need to present the rule and the various opinions first.

It could be, however, that the group members see paper writing as "knowledge telling." Flower notes that "Many students leave high school seeing school writing as an occasion for recitation or a tool
teachers use to evaluate their comprehension of a textbook. This 
group's sense of the position paper genre might be a reflection of 
their sense of all paper writing as "knowledge telling."

I believe that the placement of the position at the end of the paper is a contradiction. As Bill said, the introduction should "state 
the purpose of the paper" and the purpose of the paper is to state the 
position, which suggests announcing the position early. The 
placement of the position could be explained by how they give 
others' ideas precedence over their own. It could also be explained 
by the way they view their position as a foregone conclusion. They 
talk about "taking" their position as if they have a choice, but, as I 
discussed earlier, they feel that they do not have a choice because of 
X University's already higher academic standards. It is as though the 
position is less important because it is self-evident to them.

Social Process

Leadership and Control

Before I began the analysis, I felt that there should be some kind 
of leadership mechanism for the group. But when I first analyzed 
the transcription, I thought that that there was no clear leadership 
figure for the group because they all took turns initiating, making 
suggestions, giving opinions, and dictating. Upon closer analysis, it 
became evident that Sam is the leader of the group in both subtle

51 Linda Flower, "Cognition, Context, and Theory Building." *College 
and not so subtle ways.

One very obvious way in which Sam controls the group is that he owns the computer and is the only one who ever types at the keyboard. Since he is the one entering the keystrokes, he has "effective control" -- practical control. He chooses the exact words a great deal of the time and what is discussed and decided by the group is not always exactly what ends up in the finished text.

One notable example of Sam's taking control occurs when he silently initiates typing the introductory paragraph. Sam does not indicate that he is about to start writing, he simply starts typing and the only comment one of the other writers makes is "what you startin' to type there?" The other two exhibit a passivity in the way they allow him to take over and only make suggestions concerning grammar rather than content or structure. Nor does Sam elicit opinions or suggestions.

Sam can exercise control by starting to type. But being at the keyboard does not automatically give Sam control over the writing. For example, in a class I once taught, the person who acted as scribe or secretary for a collaborative writing group was dictated to and wrote down exactly what the others told her to. She participated in the decision making, but did not control the discourse in the manner that Sam does.

The social process and the social history of the group seem to accord Sam his power. Indeed, as I mentioned, on first glance the group seems to be more democratic. Due to the social conditioning of working as a team, there is a sense of a team or collaborative effort, but there also is a definite leader. I think that Sam's conditioning as
a quarterback who is both a leader and a team player accounts, at least in part, for the subtle kind of control he yields over the group. Sam is comfortable in a directive role and the others are used to his being in such a role.

Sam employs several different tactics to assert his control. He is most frequently the writer who has the "final say" on a decision. He often accomplishes this by effectively cutting off further discussion. When the group is debating how they will define or write out Proposition 48, he decides for them, as illustrated by the following excerpt:

Sam: . . . After I finish this paragraph, we'll get into the-Right here, this article. It's got some (unclear) uh definition-I think that's a good definition of what it is without having to go into that three page definition y'all we're talking about.

Bill: I'm going to look for some good definitions of that thing 'cause I saw some . . .
Sam: Right there-it's perfect.
Jim: Well, there ought to be something a little more-I mean, I don't think you should get too general, I mean . . .
Sam: That tells you what . . .

Sam simply decides which definition he wants to use and does, regardless of any objections. Bill then agrees verbally with his decision, while Jim no longer argues the point, deferring to Sam's decision, whether or not he would have preferred a more descriptive definition.

Sam uses this tactic of cutting short the others on several other occasions. At one point, Jim is concerned about not having enough
information on minority views, and Sam says decisively "We still have enough information on minority views," closing the topic and the discussion.

Even when Sam makes incorrect or questionable decisions concerning certain rules of writing, Jim and Bill defer to his decisions. I think that in these instances, both Sam's role as leader and the other writers' uncertainty about some rhetorical rules contribute to their acquiescence. When Sam copies the proposition definition word for word from an article, he does not put quotation marks around it, but simply footnotes it. Jim states that they need to "put quotes there," but Sam disagrees and proceeds to simply footnote it. In another instance, when the writers are debating a word choice, both Bill and Jim decide on the word occurred. Sam vetoes this decision and uses the word prevailed, claiming "it's the same thing," which it's not.

On a few occasions, Sam yields initiative or control to either Jim or Bill, asking them to "word it" for him or to tell him "what to type." But, he often takes back control by not letting them finish or by changing what they have told him to type. At one point he says to Jim "Tell me . . . go ahead-it's your sentence. It's on you. Tell me what to type." Jim works for a while, trying out loud to translate his thoughts into words. Sam then takes back control by summing up Jim's attempts into a single sentence, utilizing some of Jim's words, but not capturing all of the detail. Sam then says "That's (unclear)-short and sweet and to the point" and begins typing the sentence without further discussion.

In another instance, Sam tells Bill to "word it for" him, but as Bill
attempts to "word it," Sam interrupts by quoting from an article which contains information on the concept Bill struggles with. Bill asks him why he had not told him that he had the article and Sam replies "All right, we'll use that," and proceeds to do so. In both instances, yielding control to another writer creates a sense of more of a team effort than there actually is.

When the group is discussing and creating the outline, Sam is the one who almost invariably introduces the topics to be included. While all three discuss the merits and placement or order of the outline topics, Sam has effective control by being the one to introduce them. He brings up new ideas both when the group has come to the end of discussing other concepts and when they have not. For example, when they are debating whether or how to include the effects of the by-laws on X University and on other schools, Sam introduces the "opponents and proponents" concept.

Admittedly, the group has discussed already the topics he brings up during their first pre-planning meeting. The group is familiar with the ideas and have, in effect, accepted them as topics that should be covered in the position paper. Furthermore, planning should be a time when new and old ideas are introduced and evaluated. By being the one to introduce the ideas during the development of the outline, Sam controls the discussion and the structure of the outline, which in turn guides the paper.

There are a few instances in which Sam controls the other writers with negative behavior in which he asserts his control through deflating their status. He takes advantage of his greater knowledge and control of the computer. At one point Bill asks how much they
have written so far and Sam responds with subtly derogatory comments about Bill's unfamiliarity and slight discomfort with computers:

    Sam: It tells you right there how many pages we have there, Bill --- It's a real neat computer.
    [ (Unclear).
    Jim: Huh?
    Bill: I didn't know it had a page counter on it.
    Sam: I know you don't know all about computers-they really freak you out. But we're all very proud of you today and-
    and . . .

Sam's comments emphasize both Bill's lack of experience and Sam's experience with computers, asserting Sam's control over Bill as a writer.

    Sam also comments on Jim's difficulty with re-reading from the screen. When Jim has difficulty in understanding the arrangement of information on the first page, he questions Sam about what he has typed. Sam responds by saying "Gonna tell you what I'll do if it'll make you feel better, Jimmy. You'll have something to look at, hold in your hand," and he proceeds to print out the first page. He might be helping Jim to re-read the first page, but he also shows a subtle contempt for his difficulty which I feel Sam might perceive as Jim's questioning of his authority or ability.

    I think that there is no question that Sam is the leader of the group, often making decisions or guiding the others' decisions. Although his control and knowledge of the keyboard do not account for all of his authority, he has control of the keyboard and
consequently controls what is written. But he maintains a sense of teamwork through employing various leadership tactics, yielding initiative or control at times to strengthen this impression and guiding in other ways, such as being the one to introduce new topics.

Translating Process

Recursiveness and the Writing Process

Writing is a complex and varied process that does not progress in orderly, linear stages, but, rather, is marked by recursiveness. Even when using an outline as a guide or map, writers jump back and forth between generating ideas, revising and discarding plans, and so on.

Flower and Hayes propose that writing consists of three major processes, Planning, Translating, and Reviewing, which, in turn, consist of several subprocesses. Through planning occurs most frequently at the beginning of writing, translating in the middle, and reviewing at the end, the different processes and subprocesses of writing can occur at any time throughout the composing process.

This group demonstrates recursiveness in their writing, for though they have created a general outline that they follow closely, they also often move back and forth between the various processes of composing. They generate ideas and edit even as they are

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52 Flower and Hayes, "Identifying the Organization of Writing Processes," p.12.
translating, they review what they have written, often regenerating plans in the process, and so on, in response to the demands of the paper.

An example of how they move back and forth between processes occurs after they have completed the introductory paragraph and are continuing on with the writing of the definition of Proposition 48, according to their outline. While working on the definition, they realize that they need to "lead into" the definition with some of "historical background" of NCAA rules and requirements. They stop, formulate this new goal, return to their sources, and write a paragraph which leads into the definition.

Word and Sentence Level

Rehearsal of a Sentence

Turning thoughts into acceptable sentences often takes a great deal more effort than simply speaking them. As Elbow notes, "Writing forces us not only to form the letters, spell the words, and follow stricter rules of correctness (than speech); we must also get into the text itself all those cues that readers might need who are not present with us as we write . . . "53

From protocols of writers at work collected by Flower and Hayes, it is apparent that much of the sentence production process involves repeating or rehearsing key words and phrases as the writer attempts to produce an "acceptable sentence." The following excerpt

of an individual writer at work from research by Flower and Hayes illustrates this phenomenon:

Um, because of the, maybe because of the emphasis-Um, 4.0's. Trying to be more specific. Um, even though I don't have a 4.0 Um, because of the emphasis on 4.0's. Ok, because of the emphasis on 4.0's grades are maybe a natural, or maybe instinctive, are instinctive motivator.54

The finished sentence reads: "Because of the emphasis on 4.0s here at CMU, grades become an instinctive motivator for myself."

The writing group also exhibits this rehearsal phenomenon. However, I feel that in comparison to the above individual writer, the members of the group repeat words and phrases with greater frequency when they are producing a sentence. The following excerpt is from the transcriptions of this group at work with key words and phrases underlined:

Bill: And then put-then you got to put something like, you know -- uh -- they had to do something to strengthen the uh - had to do something to the standards or something and that's what brought about, you know, Prop 48-or unclear) whatever ----
You know, put, the NCAA had to do something to strengthen the academic standards. To keep the integrity of the schools intact or something like that.

Jim: The NCAA felt that they had to do something to strengthen the academic standards to-

Bill: To meet the integrity of the schools

Jim: To meet the integrity of what - of their membership. Or to maintain the integrity of their membership.

54 Flower and Hayes, "The Dynamics of Composing," p.38.
Bill: Put agreed. -------- Agreed that more - stricter ... [Stricten, that stricter ... 
Jim: That stricter- [ 
Bill: Academic requirements were needed. Or academic standards were needed -- 
Jim: To maintain the level of integrity of their schools or something. 
Bill: Yeah, to maintain their, their - (unclear) agreed that stricter minimum academic requirements were needed to maintain their - say to maintain their, uh, I guess the group integrity or to maintain -- 
Jim: Stricter academic requirements were necessary- 
Bill: To maintain their integrity. To maintain ---- NCAA membership agreed that ... 
Jim: How 'bout (unclear) ... minimum academic were necessary to maintain their integrity. 
Bill: No (unclear) ... [ 
Jim: To maintain integrity. 
Bill: ... integrity of the univ-of the universities. 
Jim: No, just to maintain the NCAA's integrity. 
Bill: Well, both really because the universities were selling out their integrity too by lettin' in just a bunch of jerks. 
Jim: NCAA's concern with the NCAA as a whole, not (unclear) specific institutions. 
Bill: Yeah, but the NC-yeah but it has to worry about the universities. That's what makes up the NCAA is the university presidents, that's the members. 
Jim: I think they should just - 
Bill: I mean they were just discrediting themselves and they were discrediting the universities. 
Jim: I hear you. The NCAA membership agreed that stricter minimum academic requirements were necessary to maintain their integrity. Or to maintain integrity period. 
Bill: All right. 
Sam: To maintain the integrity of the educational process.
Bill: To maintain the integrity of higher education or something like that.

Individual and group writing differ on the most basic level: in group writing there is more than one writer. It might be that the context of group writing increases the frequency of rehearsal from the simple fact that there are multiple writers each attempting to turn their thoughts into sentences. Repetition could prove to be a common and perhaps necessary factor for some, if not all, writing groups.

There is another factor to consider when examining the high frequency of the group's rehearsing. Pointing out how writing is seen as permanent, Elbow states that "The function of writing is to record what we have already decided."\(^{55}\) The writing process is marked by "elaborate planning beforehand to decide what to write and frequent pausing in the middle to search for the right word or the right path."\(^{56}\) With this group, it might be that the idea of the "commitment" of putting their thoughts on paper or even in the computer forces them to repeat sentences or phrases over and over again until they are "just right."

Related to this might be the way in which the group planned their paper. The individual writer studied by Flower and Hayes planned her writing in great detail before starting to write and, therefore, already had a greater sense of what she wanted to say before starting the actual writing. This group creates a very general outline, instead relying on the actual writing itself to help them discover

\(^{55}\) Elbow, p. 287.
\(^{56}\) Ibid., p. 287.
what "to say" and how to say it.

Word Choice

Sometimes the writers help one another to find a word that expresses their common understanding of a meaning. In the middle of dictating, a speaker might pause and say "I can't think of the word" and another writer then suggests a term. Or, as they are rehearsing their sentence, if one writer appears "stuck," another often will fill in with a word or phrase.

The long transcript excerpt which demonstrates the rehearsal phenomenon, also illustrates how they help one another to choose words or phrases. Frequently, as they construct the sentence, a speaker will repeat what a previous speaker has said and will add on a word or phrase which continues the forward progress of the sentence. This process repeats several times. Often, a speaker will use a cue, such as "something like that," or indicate a choice needs to be made, and another speaker will make a suggestion.

What I found interesting is that these suggestions are seldom questioned and it is not clear whether writers with larger vocabularies might consider more alternatives at such points. Sam, Bill, and Jim are not highly experienced writers and, on occasion, have a writer-based prose problem. There is some research which indicates that collaborative effort might help writers to develop a greater audience awareness, but this group sometimes has an audience problem. Without further research on the groups and

individual's audience awareness, I cannot say whether this group's collaboration improves or detracts from their sense of their readers.

One illustration of this is their use of the term *academic awareness*. When both the instructor and I read this phrase, we were not quite sure to what they were referring. There is a sense of the meaning, but it is not a very clear or exact term for the concept to which they are referring. The discussion that precedes their choosing the phrase somewhat clarifies what they mean by the concept, but, under normal circumstances, the reader would not be privy to that information.

I discovered that the term *academic awareness* is derived from an article they cite entitled "Proposition 48: A Success at Raising Awareness Level." Perhaps due to vocabulary limitations or even perhaps due to their sense that place others' ideas and opinions above their own they appropriate the word "awareness." But the meaning is not as clear to the reader as it might be because they use the term without explaining what it means. When there is a word or phrase that all three understand, there is little questioning about the reader's understanding.

**Concern With Brevity Versus Audience Needs for Information**

The members of the group make different assumptions about the reader's needs or level of knowledge, in terms of how much information needs to be given to the reader. What might explain their audience awareness problem is Sam's and Bill's desire to make things "short and sweet." For them, the rule of thumb seems to be 'the shorter, the better." Jim is more concerned with the reader and
argues on occasion for giving the audience more information.

The length of the definition of the rule is a good example of their differing views on audience. They have a choice of possible definitions or summaries of the rule which vary in length. Jim wants to make sure that "everybody's clear on what the meaning is," so he prefers a slightly more detailed and, therefore, longer version. Bill and Sam do not want to go through "every little nit-picky thing . . . like the actual rule has." They prefer a definition that is a "general one" so they "don't get technical."

I think that Bill's and Sam's concern for brevity could be explained also by a need for expediency -- expressing their ideas as briefly as possible in order to get the information down so the group can move on. In this way they sacrifice reader understanding for a goal that appears to have a higher priority for them.

_Monitoring - The Redundancy Rule_

In an individual's writing, the basic processes of writing seem to be under the control of a monitor. Flower and Hayes state that "The monitor functions as a writing strategist which determines when the writer moves from one process to the next."\(^{58}\) The monitor acts to guide writing on all levels from planning to editing. In collaborative writing, a group process must take over a monitoring one. For example, when the group senses that they do not have enough information to "lead into" the definition of the rule, they create a new subgoal of explaining the need for higher academic standards. They

stop working and return to an earlier section of the paper to include the information. They generate ideas, organize the new information, and then produce text before returning to the definition of the rule.

One of the monitoring functions is the detection of repetition. For this group, not repeating words and sentences is one of the rules that guide their writing. On several occasions, they indicate a concern with being "redundant." For example, when Jim realizes that a sentence they are working on is nearly identical to an earlier one, the group's writing is interrupted in order to avoid the repetition. Their concern with repetition or redundancy is limited to words and phrases rather than concepts and, as such, acts as an editing function.

Computer Effects and Effect of Computer Knowledge

The observations I make concerning the effects of the computer on the group's writing are just that, observations. I do not have data either on other groups writing at the computer or individual protocols for these writers that could be used as a basis for comparison. I do have their own descriptions of their usual writing practices. I have examined the computer's effects on this group by keeping in mind other research concerning individual writers at the computer and groups working together on non-writing tasks, both with and without a computer. My description of the effects of the computer includes instances not only from the planning section of the transcript, but also from other sections.

Concern With How Their Writing Looks
As I discussed in the review of research literature, researchers have found that writing with a computer or word processor often results in less higher organizational level planning and more attention paid to the local or sentence/word level.\(^{59}\) It has been theorized that this might be due to a few different factors. One factor might be that that small size of the screen forces writers to concentrate on only a small part of the text at a time rather than the text as a whole. Another factor, one which I feel is relevant to the current research, might be that less experienced writers feel that because their writing "looks good" on the screen, it must be good writing.

This group seems especially concerned with how their writing "looks" and the placement or physical arrangement of sentences and topics on the screen. At one point, when they are looking at a page they have written, Jim says "Looks good," and Sam replies jokingly "Well obviously, it's professional and this stuff's publishable." What Sam says in jest is, I feel, how the group sees their writing- if it looks "professional", it must be well written and "publishable."

As a group, these writers do not revise on the higher organizational level much, but, rather, edit as they write, trying to create sentences and paragraphs that are "finished" in order to move on and not look back. They spend much time on phrasing and on grammatical and formatting rules, more so than perhaps they should during the actual writing of the paper.

Their concern for how the paper will appear is reflected in how

\(^{59}\) Collier, p. 153.
frequently they discuss footnotes. Footnoting concerns seem to detract from writing and their unfamiliarity with the footnote command seems to compound this detraction rather than facilitating their writing. They spend a great deal of time discussing footnote formats and where the footnote appears on the screen or the page. I do not want to say that these interruptions lessen the quality of their writing, but their need for getting everything to look just right, leaves less time and concern for higher level concerns.

In examining their writing processes, I cannot say that the computer itself causes them to be more anxious about the visual and physical aspects of their writing, but I do think that it contributes to those concerns. I suspect that even if they were writing without a computer, as non-expert writers, they would be concerned with these visual aspects of their writing.

It seems as though their mid-level technological fluency affects their writing because they are not familiar with or comfortable with the computer. The technology still partly controls them. The footnote example illustrates this point. The footnote command is designed as an aid or facilitator for writers, but, for these writers, it "interrupts" their writing processes, controlling them by focusing their attention away from composing.

Re-Reading and Reviewing With the Computer

In order to re-read and review what they have written, these writers tend to print out hard copy to read. At one point, Jim asks Sam to print out a page they have been working on. He comments "Just to see what it looks like on paper. Just to have something in my
hands so I don't have to look at that screen" and Bill concurs by saying "Yeah." I believe that their discomfort with reading from the screen is partly due to their inability to imagine what the paper looks like as a whole from what shows on the screen.

Their discomfort could be attributed to the physical difficulty of reading from the screen. Though they situate themselves around the computer and are able to read from the screen at eye level, the screen is not large and Sam does not increase the size of the font to facilitate reading. To read from such a small area with small type is like trying to read from a typed piece of paper that is two or more feet away. But I feel that this physical constraint only adds to a discomfort that is the result of their unfamiliarity with the computer. They tend to use the computer as a highly technical typewriter, not utilizing very many of the functions other than the basic ones. I believe this tendency is a result of their level of technological fluency. For example, they do not use the "Find" command or a split window when they are looking to see if they are repeating the sentence in the introduction.

How Writing Style Differed From Individual Usual Writing Styles

I found possible effects on the group members' individual writing styles that might be attributed to the computer or the context of group writing at the computer. Though I have no actual observational data on the individual writers' styles, I did ask them in the post-writing task interviews to describe their usual styles.

In "Composing and Computers: A Case Study of Experienced Writers," Bridwell-Bowles, et al, describe two primary types of
writers in terms of their writing styles: the "discoverers" and the "executors." The discoverers "compose to find out what they have to say" and the executors "plan extensively and then execute."\(^6^0\)

There are also writers who combine these styles.

These researchers asked the discoverers, the executors, and the combiners how they felt the computer had affected their writing ability. They concluded:

Those who planned initially and then executed a draft were most satisfied with what the computer could do for them, probably because their style of composing meant that large-scale problems were solved in advance . . . Those who used the forward progress of their words appearing on paper as "discovery drafts" were least pleased. These writers were accustomed to constant rereading and planning as they wrote and . . . Unless they could see their writing, what they had composed was lost as an aid to invention and discovery. Those who were able to work our "combinations" of planning, executing, drafting on paper, and entering their texts on the screen were most successful.\(^6^1\)

When examining what effects the computer might have had on the writers of the current study, I kept in mind the way in which they describe how they usually compose and the findings of Bridwell-Bowles, et al. I do not want to put labels on these writers, but I think that these terms are a good descriptive tool for identifying the effects on their composing styles.

When Sam composes on his own he uses the "discovery" method, creating a very general outline and then composing entirely on the computer. He only writes down on paper thoughts that come to mind.

\(^{60}\) Bridwell-Bowles, et al, pp. 87-88.

\(^{61}\) Ibid., p. 103.
while he is actually composing which he feels he might use at a later time. Bill is also a "discoverer," but he usually composes with pen and paper and then types, editing and making minor revisions as he types. Jim uses a combination of styles, developing a general outline either by hand or on the computer. If a computer is available, he uses it, and, if not he, writes by hand to be transcribed at a later date. Jim is comfortable with both composing by hand and on the computer. From the basic outline, Jim writes notes that are sentences and paragraphs on topics or ideas that explore the topics of the outline in more detail; in effect, he creates a second, more elaborate outline. He then takes the more detailed outline structure and writes the paper. Lastly, he edits and makes both large and small revisions.

The fact that the group uses the "discoverer" style may affect how they write and how well they write collaboratively. They are not expert writers and, as Bridwell-Bowles research shows, even expert "discoverers" have more difficulty writing on the computer because reviewing is "lost as an aid to invention and discovery."

I feel that composing on the computer might have affected Bill's writing. He usually works with pen and paper and, therefore, is not used to seeing his words on a screen and reacting to them as he would be used to seeing his own handwriting on paper. In one episode, he proposes text and struggles with the structure of the sentence. When the others come in and offer phrasing, he gives in and says "O.K." I cannot determine whether Bill would act differently if he were more experienced at seeing his own words on the screen. But when he is confronted with a keyboard and a screen and is not actually typing, it may have changed the way he comes up with
things to say.

Jim is accustomed to more elaborate planning, putting more thoughts on paper or the screen before actually writing. It might be for him, as for Bill, that the method he uses to compose affects the way in which he comes up with things to say.

I believe it is possible that the difference between the group's collaborative style and Bill's and Jim's usual writing practices affected the degree to which both of them acquiesce to Sam's leadership style. Not only is Sam in control of the keyboard and the "natural" leader of the group but he is the most familiar and comfortable with composing in the "discoverer" style directly onto the computer. Bill and Jim might defer to him more because of this.
CHAPTER V
CONCLUSIONS AND IMPLICATIONS

The analysis of the data indicates several different factors or variables that interact in multiple and varied ways to affect the group's collaborative writing. Not all of the variables affect the group's composing processes with the same degree of control or influence. A few, such as leadership, have a strong influence over the writing processes and, indeed, over other factors. None of the variables operates continuously, although some operate with greater frequency than others. Examining these variables and the relationships among them is a step towards describing and understanding collaborative writing processes.

The leadership factor appears to have the most influence over this group's writing processes. Much of the time, Sam's control dictates what is written and how it is written. Sam often makes a decision rather than wait for a consensus, and the other writers almost always defer. The validity of his leadership is dependent on other factors, the foremost being the social conditioning of the group. Sam is accustomed to being in a leadership role and the others are accustomed to being led.

But the writers' social conditioning is not the only factor that enables Sam to be in a controlling position. The group's sense of genre, particularly their unfamiliarity with the position paper genre, causes them to be unsure of what is expected. As a result, Jim and
Bill often defer to Sam's decisions because of the power already accorded him by their social conditioning.

The composing style used by the group also acts to strengthen Sam's control. Sam is accustomed to composing directly on to the computer, using only a sketchy topic outline, while the other two writers are not. Bill and Jim are more willing to be led because the composing style used by the group is new to them but not to Sam.

The computer technology is another important variable affecting Sam's leadership. He is most familiar with the technology and the other writers depend on his knowledge of the computer. And, while Jim and Bill's difficulty with reading from the screen is often a problem for individual writers composing at the computer, in this collaborative context it seems to strengthen Sam's position.

The factors which contribute to Sam's leadership affect the group's writing processes in other ways. Their sense of genre influences how they plan the paper and use the "introduction and body" organizational strategy. How the writers perceive what constitutes a position paper and their unfamiliarity with the position paper genre cause them to suppress their own ideas and to favor others' opinions and ideas. This possibly explains their decision to place the actual position at the end of the paper rather than at the beginning as might be expected. This unfamiliarity with the genre also interacts with the group's previous collaborative experiences, an aspect of their social conditioning, causing them to see the organization of the paper in terms of physical or spatial arrangement.

While contributing to Sam's control over the group's writing, the computer and the members' knowledge and experience with the
computer also influence their writing. It appears that many of the
effects that have been found in studies of individuals composing at
the computer also operate in this group's collaborative writing. The
group often focuses on how the paper "looks," rather than on its
coherency. Jim and Bill's difficulty with reading from the screen and
their need to print out text frequently, appears to be connected not
only to the size of the screen, but also to the changes in their usual
writing styles. And, the group's mid-level technological fluency often
forces them to focus on computer functions rather than on their own
writing.

The writers' individual cognitive processes also operate as factors
in the group's composing processes. I have determined some of the
rhetorical rules they follow which affect their writing, such as the
redundancy rule and the convention that requires a new paragraph
for each new topic introduced. But, cognitive processes are more
difficult to observe than situational variables, such as leadership, so
much of the underlying cognitive processes of the writers remains
unavailable in this study.

The writers' sense of audience is a factor which seems to vary in
its effect on their writing. It appears that the group's sense of
audience is a factor that is strongly influenced by other variables.
Sometimes, such as when they add a paragraph on the "historical
background" of the by-laws, they are very much aware of their
audience. But at other times, they seem to have a reader-based
prose problem because they do not have an accurate sense of
audience knowledge or understanding. Furthermore, the group's
sense of audience needs is often at odds with what I see as Sam and
Bill's desire for brevity. One of their criteria or goals for paper writing is to keep things "short and sweet", and to meet this goal they sacrifice reader understanding.

Several of the factors I have identified in this group's writing are ones found in individuals' composing processes, such as writing style and audience awareness. Others, such as leadership, are specific to collaborative writing. The addition of these collaborative variables distinguishes individual writing from collaborative writing. Their presence changes the relationships among factors already found in the writing process. Further research is needed to better identify and describe these collaborative variables and to examine how they interact with and change the relationships among the other variables.

This study has certain limitations. The data and analysis primarily focus on what might be called situational variables such as leadership. I was not able to determine much of what took place in the individual writers' minds. Certainly the situational influences interacted with the individual writers' cognitive processes, but I was unable to determine much of how and to what degree they did.

For example, I did not observe or analyze the individual writers' solitary writing to contrast with their collaborative writing. One characteristic of this group's writing process is that it is very rule-governed. But I could not determine, within the boundaries of this study, whether this is a characteristic of their individual writing or a result of their collaboration. It might be that this rule-governed writing behavior is a collaborative strategy to simplify the writing or to avoid possible conflict. However, Linda Driskill, the group's instructor, has observed that the athletes she has taught, such as the
members of this group, tend to see paper-writing as a series of rules they must follow. Driskill notes that athletes are socialized to think in terms of rules - everything should be according to the rules, including paper-writing.62

Without observing the individual group members' solitary writing, I could not tell whether their rule-governed behavior is a result of their collaboration or their socialization as a part of their individual cognitive processes. Research which contrasts individuals' solitary writing with their collaborative writing is needed to help determine how collaborative factors interact with individuals' cognitive processes.

Research that employs different methodologies than that used in this study are needed as well. This study is descriptive and observational. Observational research can be used to build theories and to pose questions, but, as Flower notes, "A theory based on observation, like any argument, is still nothing more than a probabilistic statement."63 I feel that other, more quantitative methods, could measure more precisely and examine more systematically the processes of collaborative writing, rather than only relying on the interpretative data of observational research. I do think, though, that more observational and descriptive research should be conducted to examine more closely specific issues or factors of collaborative writing. This study examines a wide range of issues only briefly and somewhat superficially rather than focusing on specific aspects or factors of collaborative writing.

62 Personal communication, April 1989.
One of the specific issues I feel warrants further research is the function of leadership in collaborative writing. From this study, it appears that leadership has a very strong influence on collaborative writing processes. However, in other groups, the leadership factor might not be so influential. How leadership interacts with other variables which change from group to group should be examined. How does leadership function in groups made up of more experienced writers or writers who are more familiar with the particular genre of the paper they are working on? What happens in groups where there is no "pre-determined" leader? It might be that a leader emerges or that there develops some other mechanism which controls the decision-making of the group. What happens in groups that are more technologically fluent? Does the relationship between leadership and technological expertise change from what I observed with this group?

Examining the variables of collaborative writing with the computer will provide us with a more comprehensive understanding and a more accurate way of describing what takes place during collaborative writing at the computer. Writing is a complex act and, while there has been a great deal of research which examines individuals composing at the computer which might shed light on what takes place when groups compose at the computer, such research cannot take into account the variables which influence collaborative but not individual writing.

Flower argues that researchers need to create a theoretical
understanding of the interaction between cognition and context. She calls for a "grounded theory . . . a vision that is grounded in specific knowledge about real people writing in significant personal, social, or political situations." To construct a theory of collaborative writing at the computer we need to determine how the contextual and cognitive variables of the collaborative writing process interact. To do so, we must conduct research which examines collaborative writing in a variety of situations.

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64 Ibid., pp. 282-283.
65 Ibid., p. 283.
BIBLIOGRAPHY


Composition and Communication 40 (October 1989): 282-309.


O'Donnell, Angela, Donald F. Dansereau, Thomas Rocklin, Judith


APPENDIX A

TRANSCRIPTION SEGMENT

Jim: All right, we're writing an outline now for our position paper.

Bill: (unclear) starting an outline on what we're gonna do. right, you know, how do you want to start it out? I mean, you going to use articles, stuff from the articles, or use stuff from the interviews or how. Or state that-or are you going to state what Prop 48 is?

Sam: (unclear) have to do that

Jim: We have to state what it is. I think that . . .

Bill: You goin' to write out the whole rule?

Jim: We got to start out with an introduction, which would be a general definition of what Prop 48 is and what its all about so everybody's clear on what the meaning is.

Bill: OK, do you want to do something like an abbreviated version or you gonna lay out the whole rule because the whole rule gets kinda pointless. (Unclear) through the whole . . .

Jim: No, just an abbreviated version that hits the main points of the rule.

Bill: All right

Jim: And then, uh . . .

Bill: 'Cause I mean . . .

Sam: (Unclear) the introductory paragraph then define the rule
and then go into the paper?

Bill: Something like that.

[  

Sam: Or do you want to incorporate the rule into the introductory paragraph?

Bill: No...

[  

Jim: That'd be good. Just the introductory paragraph and then define the rule.

Sam: The rule would be part of the paper - part of the body.

[  

Jim: What if, what if, what if (unclear)

Bill: A part of the body? OK. Uh. Do a pretty thorough explanation without going through every little nit-picky thing like that - like the actual rule has. Something like that.

[  

Jim: Yeah?

Jim: And then in the body of the paper we'll just use things that, you know, articles that we've gotten from you know the, some of the articles we've gotten and things from the interviews that we've got from the people on campus. I wish we could have interviewed [the Minority Affairs woman].

Bill: (Unclear) still not around.

Sam: We still have enough information on the minority views.

Bill: (Unclear)

[  

Jim: Yeah, I think we got quite a bit.

Bill: Paperwork (unclear)

Speaker: (Unclear)

Sam: Are you all (unclear)?

[  

Bill: The whole minority thing seems to all be - that's all based on the SAT scores - their whole big bone of contention primarily - I mean there is a little bit of other stuff mentioned in there, but (unclear) deal with mostly the SAT scores.

Jim: OK, so we're gonna - Introduction's - just a kind of general introduction and the definition of what the general rule is, what the proposition's about. And then what, how do we want to go? We got to get some structure to the - what our body's gonna be.

Sam: First off, I think we should answer some basic questions before we take our position, you know?

Jim: Answer questions like - well what do you mean?

Sam: Well, why don't you tell what the purpose was of uh (unclear) that's gonna be

[What the purpose of the study was?

Jim: That'll be, uh . . .

Bill: The purpose of our study?

Jim: No, the purpose of 48.

[No, the purpose of Prop 48 and 42 - That's one of the main questions that we asked. But we can incorporate that into the introduction.

Bill: The introduction should be the purpose of the paper - state the purpose of the paper.

Sam: (Unclear) we can say as it affects X University. You know (unclear) from what we've (unclear) so far.

Jim: Do you want to say that first of do you want to save it for the end?

Sam: Save it for the end when we're talking about, 'bout, you know, our stance or whatever our position.
Bill: Well, what we got to keep in mind is that we don't lose sight that we're trying to make it so that we're writing a position paper, not writin' a report on Prop 48.

Sam: (unclear) we've got to present evidence though . . .

Jim: Yeah, well we . . .

Bill: You've got to present the evidence but you've got to keep in mind that we're not writing just a report. Basically what you're doing is you're fending off everybody who's gonna to attack your position.

Jim: Well, what we found out, I mean, our position, X University's position is the one that doesn't affect us. It has no effect on us because our standards are already higher, way higher than what the NCAA minimum requirement is.

Bill: Yeah, but we're-I mean-technically we've been given a deal here where we've got to state a position. That X University is either in favor, or not in favor of the prop . . .

Jim: Yeah, well, I see that, but -

Bill: I guess we really wouldn't have to have that hard core of a stand because in a way-

Jim: (Unclear) Prop 48.

Sam: You think for higher academic standards we're gonna be (unclear).

Jim: Yeah

Jim: All right, so-

[ Sam: Yeah. We've got "Introduction" and we've got the rule to define, so what are we going to talk about first? I mean, we could talk about how it affected XUniversity, how it makes it more competitive, the same thing we covered in the interviews. (Unclear) discriminatory? And what }
should we (unclear) this thing together?

Bill: Uhh . . .

Speaker: Does it serve its purpose?

Sam: That should be the last thing we answer right before we take our position, I think.

Bill: How does it serve-Right, 'cause that's gonna (unclear) because we're gonna give an opinion as to whether it serves its purpose and that's how we're going to base our opinion of, of our stance.

Jim: Yeah, I think after you define Prop 48 and 42 you ought to state what-what has it done across the nation, I think. (Unclear) kinda affects (unclear)-accross the nation. Or should we just state . . .

Bill: The only problem with what its done across the nation is you know, all our articles are so vague . . .

Jim: I don't think . . .

Bill: . . . because they're doing that darn study that's going to take ten years to finish it.

Jim: All right, since we're-I don't think-maybe that's the wrong approach. Maybe we should - since we're looking at how it affects X University --Maybe we shouldn't even worry about - You know, we could state generally overall . . .

Bill: We could make some general assumptions overall about what its done across the country and then bring that back into focus on X University specifically.

Jim: OK

Bill: General nationwide (unclear) X University specific-

Sam: We could talk about, uh, opponents and proponents --- of Proposition 48 and 42.

[
Bill: Yeah, show that both sides of the argument.

Sam: (Unclear) we could put that in there that it has served its purpose?

Jim: (Unclear) do that right after, uh, right after the definition I think.

Sam: (Unclear mumbling) I think I read an article on that -- (unclear) ------ OK?

Jim: OK

Bill: What'd you do?

Jim: (Unclear) Prop with the definition and then proponents and opponents.

Bill: OK.

Jim: And then --

Sam: We're definitely going to talk about writing something.

Jim: Yup.

Bill: Yeah (unclear) talk about that..

Sam: The discriminatory too would be a big part of it

Jim: I would say -

Sam: That's what so controversial about it

Bill: Yeah, the whole deal is, the whole deal of the controversy is based on discrimination whether its keeping people who shouldn't be -- no, I take that back. There is a little bit of controversy just saying whether or not it's keeping people out of school. They should be allowed to go to school whether they are black or white.

Speaker: (Unclear mumble) OK
Sam: They passed that one stage (unclear) its discriminatory towards females too, isn't it?

Jim: So you wanna, do you wanna say . . .

Bill: (Unclear) the SAT too, yeah.

Jim: You wanna state - OK, go into the discriminatory part about it-next?

Sam: Yeah I think that that would be good because that's what that's the opponents viewpoint (unclear) discriminatory. OK?

Speaker: OK ------ discriminatory *(very low)*

Sam: I think after discriminatory we can talk about the X University community views on Prop 48. Right?

Bill: Yeah.

Sam: -- X University (unclear) athletic --

Speaker: (Whistling)

Sam: OK?

Speaker: (Whistling)

Jim: I think we can go on to . . .

Sam: Has it served its purpose, right?

Bill: Well, yeah.

Jim: Has it served its purpose across the nation?

Sam: (Unclear) when we get to that part of the paper.

Bill: Because then it'll serve its purpose (unclear) X University (unclear) heck of a lot fairer

Sam: I think its main purpose was-just from what I've read-
heard - basically its design was to raise academic
Awareness. I think its done that. ---

Jim: All right.

Sam: And our position (?)

Jim: (Unclear) the university - what we'd be, what we'd be
saying would be the committe's - official position.

[  
Sam: There you go.

Bill: (Unclear) wait a minute. Let me see --- let me see what
Sam wrote down. "Introduction," "Definition",
"Opponents," "Proponents," "Discriminatory" - "X Univer-
sity Athletic Department Views on 48 and 42," "Has it
served its purpose?"

[  
Jim: "Has it served its purpose?"

Bill: That's basically our opinion, "Has it served its purpose,"
and then, the position that we gonna . . .

Jim: (Unclear questioning tone)

Sam: No, we're gonna (unclear) . . .

Jim: These opinions from the interviews we got.

Speaker: (Unclear)

Bill: (Unclear) talkin' and the articles, stuff-all the stuff
that we've gathered.

Speaker: And then - our position.

Sam: The committee's position for the university

Bill: OK.

Jim: Which would be what we put in the press release.

Bill: All right, the position is really mainly what the press re-
lease is all about. That's going to be the whole press release almost just the position.

Speaker: Uh-huh.

Bill: And maybe just a sentence or two or something based on a sentence or two from the position of, uh, of this paper. All right, that looks—I guess OK.

Jim: All right, so what we gonna—what you startin' to type there?

Sam: Introduction.

Jim: What you putting down there?

Sam: (Unclear) scratch out something.

Bill: How ya going to type it?

Sam: How'm I going to type it?

Bill: You gonna type it like it would—what kind of format would you type it . . .

Jim: Just like a paper --- just a general paper . . .

Bill: Like an article wouldn't you? Wouldn't you type it more like an article - like uh, like something - it would look like the format of one of the articles like we got?

Jim: No -- why?

Sam: Not important

Jim: We're not sending the article to a magazine or anything.

Bill: No.

Jim: It's just something for people (unclear) to read.

Bill: Yeah, the internal people to read, the athletic department and so forth.
Sam: We're stopping the tape - we've got a phone call.

Sam: OK, we're continuing with the writing of the paper.

Jim: All right, give us what you've got for a general outline, er, introductory paragraph (unclear) page or whatever.

Bill: What is the (unclear)

Speaker: (Unclear mumbling by one or two speakers)

Jim: I'm going to have to excuse myself (exits room).

Bill: OK (unclear) - - -
OK, the press release, when we get to that, is supposed to be one page anyway. Its supposed to be limited to a page. (Unclear) almost like para-our last our (unclear) closure deal or whatever - - -
This has all the stuff in it for the press release.

Sam: Huh?

Bill: What have you got? - - -
The only thing is, you might state what bylaws 5.0 and J is, "cause . . .
[

Sam: I'll get to that, I'll get to that.

Bill: "cause everybody -- there's no (unclear) about Prop 48.

Sam: I'll get to that.

Bill: All right.

Jim: Where you at? (upon re-entering room)

Bill: We're still working on the first part, the first paragraph.

Jim: Tell us what you've written so we can-

Sam: Sit over here and watch.
Jim: (Unclear)

Jim: We're supposed to talk so she can hear what your thoughts are.

Sam: (Unclear) should be able to read the paper. I know that . . .

Jim: I know that, but (unclear).

Speaker: How come (unclear)?

Jim: We're supposed to be, uh- group input. So what's it say?

Sam: It's just a general introduction.

Jim: (Reads over what has been written so far for several seconds)

Jim: Don't use contractions.

Sam: You're right.

Bill: (Chuckle)

Jim: Double spacing it?

Sam: Yes sir.

Jim: You think we should go into a formal definition instead of just a --- as opposed to what we said-just a general definition?

Bill: (Unclear) do a formal definition is a three page paper. Just (unclear) a definition of the thing 'cause it's a detailed . . .

Jim: (Unclear) like intricacies that we've missed that-that might not make it clear that (unclear).

Bill: I think if you use something similar to some of the articles broke it down in that way, it comes across clear as to what, uh, the primary focus of the rule is without
going through every little dot and every "i" and crossing every "t" of the rule. It's three pages. You know the rule that Jill gave us that-the rule on it and it's three pages exactly.

Sam: I think you might want to (unclear)

Jim: (Unclear) maybe (unclear) should talk more because that's what she wanted.

Sam: What?

Bill: (Unclear) she wants to see how it goes (unclear)

Sam: Oh.

Bill: She wants to see how we came up with the sentences.

Sam: OK. - - - -
Obviously this rule was real controversial. That's what I'm trying to incorporate into this introduction. Trying to point out some things find out the-reasons, uh, why people (unclear) -- After I finish this paragraph, we'll get into the - right here this article, it's got some (unclear) uh definition-I think that's a good definition of what it is without having to go into that three page definition y'all we're talking about.

Jim: OK. Go ahead. Continue. Let's continue (unclear) the NCAA membership concurred that the minimum academic re-

requirements were necessary to attain -

Bill: I'm going to look for some good definitions of that thing cause I saw some . . .

Sam: Right there-it's perfect.

Speaker: (Unclear question)

Jim: Well, there ought to be something a little more-I mean, I don't think you should get too general, I mean . . .

Sam: That tells you what - you even have to have physical
sciences, social sciences, two years of natural physical sciences, (mumbly reading). Eleven academic courses, including three years of high school English, two years of math, two years of social science, two years of natural or physical science. (Unclear) must have a minimum combined grade point average of 2.0 in these subjects.

Bill: Yeah, somethin' like that. Just go with the general one like that. That one's a pretty general . . .

Sam: Don't want to get technical (unclear).

Bill: That's just-that's what I was thinking.

Sam: I remember when I wrote a paper one time and I got ripped for being-for not using legalisms.

Bill: (Chuckle)

Jim: OK? Let's see. What else can we say?

Sam: When are y'all going to mention that bylaw "5 1 J" is Proposition 48?

Jim: Just put it up there, Bylaw 5 1 J. --- OK. Wherever you want to put it. I thought it might be wise to put it like that, behind that . . .

Bill: I think it would be too - like - yeah.

Sam: OK fellas.

Bill: (Unclear) real quick and simple when they see it - so they don't go a whole paragraph and say 'well what the heck is 5 1 J?'

Jim: You might want to say something too about Proposition 42 in there.

Speaker: (Unclear)

Sam: In the definition, the only difference between 48 and 42 is the penalty. You can't get a grant-in-aid so when we go
into the definition down there I'll put it in there.

Jim: OK.
[  
Bill: All right.

Sam: Do I sound like a weiner?

Jim: Yeahh.

Bill: Uh, should you go into something like, well, you know, some of the stuff we have kinda goes even more historical than that. Like saying that, you know, back in the 60's and stuff that uh-that um, they had to, you know, you had to have really high standards to get into colleges to play sports or just get into college in general. And then as time went by, the standards slowly started deteriorating till it got to the point in 1983 where they decided something had to be done.

Jim: Yeah, you think we should go . . .
[  
Sam: (Unclear) something like that, (unclear).

Bill: Well, that's basically what happened. Things were (unclear) tough. So tough and then they . . .
[  
Jim: Yeah, (unclear).

Sam: (Unclear) what?

Jim: Start out with something a little more historical like Bill said.

Sam: Like . . .

Bill: Uh, standards in the 60's and previous to that time
[  
Jim: It's like what Coach was talking about - was telling us about.
[  
Bill: Yeah ---- And I saw that in some of the articles I read, too and stuff like that that
you know . . .

Sam: Erase this?

Jim: No, no, no, use that's good.

Bill: No, no ------ that's -- that's good.

Sam: OK.

Bill: What I'm saying is, you know, add a little bit more of . . .

Jim: Go back to the top.

Bill: . . . a briefer, more historical note to it.

Jim: Just say . . .

Sam: We can talk about that when we are defining it, we could lead into the definition that way. Say that the standards used to be this, historically they were that back in the 60's-right her in (unclear). Now they are this-this is the Prop 48 standards.

Jim: I don't care. Either way I think you should put it in there.

Bill: Yeah, I don't think it really matters.

Sam: Word it for me, Bill.

Bill: Um -- let's see, I'm not sure where to put it is the only problem-put it before, uh (unclear) introduction and see...

Sam: (Unclear) started.

Bill: . . .problem is (unclear) start it out. Uh, lets' see --- Something like -- the past history is one that-where-one where,uh, you know, academic standards were relatively high for all incoming students-prior to 1960.

Jim: No, it was in the 60's

Bill: 60's I should say. 1960's. During that
time—during that time um, they slowly deteriorated.

Jim: It was repealed. Wasn’t it, uh, NCAA rule like 3.1, something like that?

Bill: I can’t remember exactly what the rules were.

Sam: "NC-1.6 rule existed-used a formula based on a prospect’s class rank and high school GPA and SAT or ACT score to determine eligibility. However actually that rule made it more difficult to attain eligibility than today’s version. In 1973 the NCAA membership voted to repeal the rule and what followed for the next ten years is the guideline (unclear) eligibility . . . ."

Bill: Why didn’t you tell me you had the article? I forgot where I read it.

Sam: All right, we’ll use that, just type it.

Bill: Yeah.

Speaker: Hang on a sec.

Bill: (Unclear) something like that.

Jim: Got somebody at the door, (unclear) stop the tape.

Jim: All right, continuing with the writing of the-position paper.

Bill: were we?

Sam: We have just finished with the introductory paragraph and now we’re leading into the definition of Proposition 48.

Jim: OK.

Bill: All right. (Unclear) affected (unclear mumbling/reading).

Sam: We can kinda use like a historical background and how
the standards used to be a little bit tougher than they are
today. Which is kinda funny.

Jim: OK.

Bill: All right. Yeah, (unclear) tougher than it was-than it is
today and everybody's complaining about it and groaning
about it.

Jim: Back in the 60's when they used to use that GPA and SAT combination
format?

Sam: Uh-huh.

Bill: All right. (Unclear) during the 1960's-the NCAA --- (un-
clear) formula based on the prospect's class rank . . .

Jim: I saw a couple other articles with that in there.

Bill: . . . or high school -- (unclear) had it.

Jim: Talking about the historical. You dig some up on yours?

Bill: Yeah. I got some on mine. GPA and SAT or ACT- - - - To determine what eligibility-

Jim: You know something we left out of our-what we want to
put in the paper . . .

Bill: What?

Jim: Just like, uh, how to better approve Proposition 48.- - -
'cause there are a lot of things that people don't like
right-so it's a different . . .

Bill: Yeah, well that-not really a lot to do (unclear).

Sam: Well Matt Smith said there was some ways you can alter-adjust the test.
Jim: (Unclear).

Bill: (Unclear) adjustments and alterations. Jill said there's things she wanted different. Coach said there's things he wanted different. There's things in these articles that they say they want (unclear) about using the different things.

Jim: I think we should add that in the paper, too. Later on -- It's kind off track from where we're at. I think in the paper we should add that. You don't think so?

Bill: Hum -- I don't know. I'm trying to think of how that relates to - I mean that relates to writing a report on it. I don't know whether it relates as much as to (unclear) . . .

Speaker: (Unclear).

Jim: Well, you want to give a general background on what the whole thing's about.

Bill: Yeah.

Jim: It's an idea.

Speaker: All right.

Bill: (Unclear) made it more difficult to attain eligibility than - - - - This formula made it difficult to . . .

Jim: This formula made it more difficult to attain eligibilty than by today's standards. Prior to, even before- They were harder than Proposition 48. Right?

Bill: Yeah. Uh-huh.

Jim: OK.

Sam: One minute (unclear).

Jim: Than today's standards, comma, including Proposition 48.
Bill: There you go.

Speaker: OK.

Bill: (Unclear mumbling)

Jim: So now what do we --

Sam: Umm. We need to, uh - I guess we could say that this rule's repealed in 1973. Correctomundo?


    [ (Unclear). Yeah.

Bill: ...for academic standards to get into college.

Bill: OK. We're continuing where we left off the tape ended -- It won't stand up -- OK ------ You've got to put the sentence in about changing. The rule's changing in 1973 which basically made it so that there were no rules- so-previous . . .

    [ Say that. That sounds-that sounds good.

Bill: ...Put, the NCAA whatever rule was-taken away in 1973 ...

    [ Basically you just had to have a 2.0 GPA, high school GPA to be eligible.

Bill: Yeah, 2.0 that's all you had to do.

    [ Right. - - -

Jim: That's it. No SAT score or anything. So put - put in 1973, OK, the rule's repealed in 1973. OK? (Unclear) ------ A student athlete only needed a 2.0 grade point average to be eligible.

Bill: Then put something like, during this time you saw a
great decline in the, let's see, academic . . .

Sam: Integrity.

Bill: . . . Oh, the academic -- how do you want-what word do you want to use? - During the time between 1973, the institution of Prop 48 saw a great decline in - academic - I can't think of the word.

Jim: (Unclear) what are you trying to get to?

Bill: You saw the (unclear) Standards?

Bill: Yeah, academic standards for gettin' into college. They were just letting anybody in.

Jim: That's basically what's (unclear unclear) 2.0 grade point average to be eligible.

Bill: We need something to tighten it up so it ties in.

Jim: Decline in academic-

Bill: In academic-

Sam: Awareness. Yeah.

Bill: Oh yeah, awareness.

Sam: Awareness prevailed


Jim: (Unclear) prevailed during this period-

Bill: How do you spell prevailed?

Jim: (Unclear) during this period that's (unclear)? -- Decline in academic awareness prevailed during this period. Or occurred -- didn't prevail.
Bill: OK, put occured.

Sam: It prevailed. It's the same thing.

Bill: It's all grammatics.

Jim: Um, you could say right here then, kinda like when Coach was telling us that, uh --you know, that about how, uh -- we're still (unclear) we got a - a reduction in quality student athletes. You got a bunch of thugs is basically is what he's saying, instead of having a good . . .

Sam: Student athletes.

Jim: . . .student athletes to work with during that time period.

Bill: Well, are we going to do it like where we have a section that-like when we did our outline? (Unclear) outline.

Jim: Where'd you put the outline, Sam?

Bill: Our outline - Are we just gonna use the information we got from those people in that section that we called, you know, "X University Athletic Department Views on 48-42" or?

Sam: Yeah, that's what we decided.

Bill: We can just put all that stuff in there and, you know, show all of the different positions of the faculty members right there and that (unclear).

Sam: OK.

Bill: And then put-then you got to put something like, you know -- uh -- they had to do something to strengthen the uh - had to do something to the - standards or something and that's what brought about, you know, Prop 48-or (unclear) whatever ----- You know, put, the NCAA had to do something to strengthen the academic standards. To keep the integrity of the schools intact or something like that.
Jim: The NCAA felt that they had to do something to strengthen the academic standards to-

Bill: To meet the integrity of the schools

Jim: [To meet the integrity of what - of their membership. Or to maintain the integrity of their membership.

Bill: Put agreed. ------- Agreed that more - stricter . . .

Jim: stricter

[Stricter, that

Bill: That stricter-

Jim: Academic requirements were needed. Or academic standards were needed --

Bill: To maintain the level of integrity of their schools or something.

Jim: Yeah, to maintain their, their - (unclear) agreed that stricter minimum academic requirements were needed to maintain their - say to maintain their, uh, I guess the group integrity or to maintain --

Bill: Stricter academic requirements were necessary-

Jim: To maintain their integrity. To maintain ---- NCAA membership agreed that . . .

Sam: How 'bout (unclear)

Jim: . . .minimum academic were necessary to maintain their integrity.

Bill: No (unclear) . . .

Jim: To maintain integrity.

Bill: . . .integrity of the univ-of the universities.
Jim: No, just to maintain the NCAA's integrity.

Bill: Well, both really because the universities were selling out their integrity too by lettin' in just a bunch of jerks.

Jim: NCAA's concern with the NCAA as a whole, not (unclear) specific institutions.

Bill: Yeah, but the NC-yeah but it has to worry about the universities. That's what makes up the NCAA is the university presidents, that's the members.

Jim: I think they should just -

Bill: I mean they were just discrediting themselves and they were discrediting the universities.

Jim: I hear you. The NCAA membership agreed that stricter minimum academic requirements were necessary to maintain their integrity. Or to maintain integrity period.

Bill: All right.

Sam: To maintain the integrity of the educational process.

Bill: To maintain the integrity of higher education or something like that.

Jim: What did you have in the introductory paragraph? -- Go back - cursor up. - - - That's kinda like redundant, what we're doing now.

Bill: All right. Change it a little bit.

[ I'm changing it. Maintain the integrity of the educational process.

Bill: It's the same thing.

Sam: (Unclear).
Jim: Let me look here, let me look here. Cursor back up.

Sam: Yeah, cursor back up.

Jim: All right, All right, All right. --- That's not it-you didn't go up.

Sam: Well, you told me to stop there Jimmy.

Jim: I hear you. The NCAA membership concurred that minimum academic requirements (unclear) level of integrity essential for any pursuits associated with higher education. -- Now, run it back down -

Sam: OK.

Bill: I see what you're saying.
   [ (Unclear) we're repeating ourselves.

Bill: I see what you're saying.

Sam: It's necessary to repeat yourself right there.

Bill: We've got to make sure it isn't the same sentence, (unclear) repeat the same sentence twice.

Jim: Why-why did we put a paragraph here too?

Bill: (Unclear) could use a paragraph. You don't want (unclear) paragraph.
   [ 'Cause I'm leading-

Sam: I'm leading into Prop 48 right now. Is (unclear) the historical background, the definition. OK, after we-All right after we iron out this sentence I'm going to say . . .

Jim: Oh what the definition-
   [ Boom! Proposition 48-In response to this garbage Proposition 48 was passed.
   [ (Unclear) defini-
tion of Prop 48.

Sam: And then define it.

Jim: OK, discussion (unclear).

Bill: Right.

Sam: Gonna tell you what I'll do then if it's make you feel better, Jimmy. You'll have something to look at, hold in your hand.

Jim: Print it out?

Sam: Print a draft.

Jim: We're going to print out the first-introductory paragraph here so we're going to put the tape on hold for a sec.

Sam: OK, we've got a rough draft of the first introductory printed out here and we're just gonna --

Bill: (Unclear) it is?

Jim: However longer that is(?)

Bill: (Unclear).

Sam: It tells you right there how many pages we have there, Bill --It's a real neat computer. [  
Bill: (Unclear).

Jim: Huh?

Bill: I didn't know it had a page counter on it.

Sam: I know you don't know all about computers--they really freak you out. But we're all very proud of you today and--and . . .

Jim: Here's what you can say, OK. Start a new paragraph now that says This lack of academic-Awareness -- was, uh. Say, this lack of academic Awareness was to many (un-
clear) throughout the NCAA membership and discussions continued about it through the 1970's and early 1980's. Uh, in the early 1980's, Proposition 48 was born to meet these arguments. -- (Unclear) I mean that this is repeating what you've said right here.

Sam: OK, Jim. I hate typing three paragraphs and having to do it again. And what (of this or it is)?

Jim: All you have to do is this one sentence over:

Sam: Type it ---- Tell me.

Jim: The (unclear) discussions (unclear) in the late 1970's?

Sam: Go ahead. --- It's your sentence. It's on you. Tell me what to type.

Jim: All right, I said that-um-

Sam: Word for word now, don't give me no generalisms 'cause (unclear). What do you want me to type?

Bill: I (unclear) generalisms *(laughingly)*.

Jim: I said that, uh ---

Sam: In response to this lack of academic awareness-

Jim: In response- - - - (Unclear). In response to this lack of academic awareness, Proposition 48 was born. --- In the early 19- I just, er, say - In response to this academic -

Sam: In response to this lack of academic awareness.

Jim: this lack of academic awareness, discussions --

Sam: No, we'll just put-that's fine. We'll be (unclear).

Jim: Discussion -- just say discussions, uh caused an ---
uproar within the NCAA membership. The result was the formulation of Proposition 48."

Sam: In response to this lack of academic Awareness, Proposition 48 was adopted in 1983. Then we'll define it. That's (unclear)-short and sweet and to the point.

Jim: OK.

Bill: (Unclear) hear it it's too far away.

Jim: Speak up.

Bill: I don't want to scream the whole thing.

Jim: You don't have to scream.

Sam: In response to this lack of academic Awareness Proposition 48 was adopted in 1983. --(Unclear) now -- I agree that this paragraph right here is the best one for the definition. We'll footnote it and everything.

Jim: OK.

Sam: OK?

Bill: All right.

Sam: OK, I'm going to type this one in.

Bill: Where (unclear)?

Sam: Do you want me to read it to you all first and see if you all want to change any of the sentences before I type?

Jim: (Unclear) probably want to paraphrase it.

Sam: We'll footnote-foothnote it and we'll just do it exactly.

Jim: (Unclear) put quotes there.

Sam: No you don't. (Unclear) footnote it. --- Briefly, the re-
quirements of Proposition 48 stipulate that for a pros-
ppect to be eligible as a freshman, he or she must have
completed a core curriculum of at least eleven aca-
demic courses including three years of high school Eng-
lish, two years of math, two years of social sciences.

Jim: I've read it.

Sam: Is that fine for you guys?

Jim: Yeah, I mean, I think that's a good ---- definition.

Bill: That's the best defini-
tion without going crazy and (unclear) stupid definitions
that nobody would understand or want to read anyway.
This way, it gives what the vital information is.

Jim: (Unclear) start out with "Briefly."

Bill: Yeah, that's right (unclear) expect the whole darn thing.

Sam: Yeah, (unclear)-All right that's fine.
She's gonna think we're gonna kill each other.

Bill: (Laugh)

Jim: This gives you the page numbers on your screen?

Sam: Uh-huh.

Jim: (Unclear). --- We need to put in what Prop 42 is too.

Sam: Yeah.

Bill: Put that right after it.

Jim: When Prop 42 is gonna go into or is supposed to go into
affect in 1991?

Sam: 1990. August.

Jim: August, 1990?
Bill: (Unclear) this recruiting class.

Jim: It just got voted on last-this year?

Sam: Uh-huh, it just got passed at the last convention.

Bill: [It got passed-

Jim: [Last convention of '89?

Bill: Yeah.

Jim: And that's when Chaney, er, Thompson walked out on the basketball game.

Bill: Yeah. And Chaney's been having a fit too.

Jim: (Unclear) they say it's racially biased.

Bill: Yeah. ----- We'll get to all that later on

Speakers: (Unclear mumbling.)

Jim: I know at X University they won't accept just any math. They won't accept just plain algebra.

Bill: Well, that's X University. That's (unclear) Prop 48. This is Prop. 48 (unclear).

Jim: They won't accept computer math.

Sam: Is that (unclear)? I guess---

Bill: (Unclear) what?

Jim: You got-you got a spell checker in here?

Sam: Uh-uh.

Bill: You don't have a spellcheck in here?
Sam: I do have. I have it.

Jim: (Unclear) spellcheck.

[ ]

Bill: (Unclear) go the cheap route? (Laughs)

Jim: Well, we don't need it right now.

Sam: I don't need it.

Bill: That's your footnote there right?

Sam: Yeah, why don't you go ahead and write it down for us Billy?

Bill: (Unclear) what? -- Write what out?

Sam: The footnote.

Jim: (Unclear) the end of the -

Bill: (Unclear) if I wanted to do it.

Jim: (Unclear) got a book that's gotta (unclear).

Bill: We'll have to get it later. ---- She didn't give us any guidelined on how to do this (unclear).

Jim: Well, that's just standard operating procedure. (Yawn) Oooh, I'm tired.

Sam: The minimum combined grade point average -

Jim: 2.0, right? Or is it the 2.0 is his core classes? Combined.

Sam: The minimum combined grade point average -

Jim: Yeah, in his core.

Bill: That's what Coach --- pretty good (unclear).

Jim: What's that?
Bill: (Unclear mumbling).

Jim: Have to listen to his tape again. I want to listen to his tape again.

Sam: We asked you to record them.

Jim: Huh?

Sam: We asked you to record them.

Jim: Yeah, I know. That's what I'm saying we ought to go and listen to all the tapes . . .

Sam: The prospect must have a minimum combined grade point average of these subjects and also have maintained-

Jim: (Unclear) definition - 'cause then we're going to have to get into --

Bill: (Unclear) proponents and opponents -

Jim: We could use them, you know, proponents, opponents -

Bill: Let me see the outline.

Jim: Are we on page two yet?

Sam: Yeah.

Jim: Hey, give it a footer and header, too.

Bill: A what?

Jim: A lower and an upper (unclear). How much margin (unclear)?

Sam: (Unclear) show you. It's the standard - What it's set on.

Jim: I thought (unclear) paying attention to that stuff.

Sam: It does the margins.
Jim: OK. All right.

Bill: (Unclear) type's small, doesn't it?

Jim: Well that-see that?

Sam: This is a draft mode
        [ When you do the draft mode it doesn't put out normal type. It doesn't put out the font that he picked.

Bill: I thought it was the way that you were (unclear) whatever.

Jim: We want to state what its intention is. What it's intended to do? ---- Its basic intention is --

Bill: We'll have to go back and look at the first part to see if it doesn't make it obvious without having to say it.

Speaker: All right.

Bill: (Unclear) we don't want to get redundant. That's the problem. So much of this material we got is redundant. (Unclear) same opinion over and over again in all of these articles.

Jim: You printing that out?

Bill: Oh, I'm getting a headache.

Sam: One page is out.

Bill: Is that the way it's going to be printed out, or is that a draft?

Jim: No, that's a draft.

Sam: It takes too long to print it. If you print it the regular way, it goes a lot slower.
Bill: Oh, OK. I didn't know. --- Why is it different?

Sam: OK, there's somebody at the door. Off tape.
APPENDIX B
POSITION PAPER WRITTEN BY GROUP

FINDINGS ON PROPOSITION 48 AND 42

Before NCAA Bylaw 5-1-j (Proposition 48) was adopted at the 1983 NCAA Convention in San Diego, Ca., it was heavily debated by those involved with intercollegiate athletes. Most were concerned with its fairness and some argued that it was racially unjust. Others contended that it would just not work. But, the NCAA membership concurred that minimum academic requirements were necessary to attain the level of integrity essential for any pursuits associated with higher education. Based on these concerns, Proposition 48 became effective during the 1986 academic year.

The NCAA has been imposing academic standards for quite some time. During the 1960's, NCAA 1.6 rule existed that used a formula based on the prospect's class rank or high school GPA and SAT or ACT score to determine eligibility. This formula made it more difficult to attain eligibility than by today's standards, including Proposition 48. NCAA 1.6 rule was repealed in 1973. In the time which followed, a student needed only a 2.0 GPA to be eligible.1 A decline in academic awareness prevailed during this period.

In response to this lack of academic awareness, Proposition 48

was adopted in 1983. Briefly, the requirements of Proposition 48 stipulate that for a prospect to be eligible as a freshman, he or she must have completed a core curriculum of at least 11 academic courses including three years of high school English, two years of math, two years of social science and two years of natural or physical science. The prospect must have a minimum combined grade point average of 2.0 in these subjects and also have maintained an overall high school GPA of 2.0. Furthermore, the high school student-athlete must have a combined score of 700 on the SAT or a composite score of 15 on the ACT. There is one option in the current rule that allows those who maintain a 2.0 high school GPA, but do not meet the standardized test minimums, to sit out their freshman year and are limited to three years of eligibility. But, they do receive grants-in-aid.²

At the 1989 NCAA Convention a new proposition (Proposition 42) was passed that takes Proposition 48 one step further. Proposition 42 denies athletically related financial aid to any student-athlete who fails to meet the minimum standards set forth by the NCAA and requires these individuals to forgo practice and competition their freshman year. Furthermore, they are allowed only three years of eligibility. In essence, Proposition 42 eliminates the option in Proposition 48 that allowed "partial qualifiers" to obtain a grant-in-aid. Proposition 42 will become effective in August 1990 if not repealed by the next convention.³

as with any legislation, there are two sides to be debated. This

³ Hiller, The debate over proposition 42. p.6.
paper will now examine opponents to Proposition 48 and 42. The strongest argument for opponents to Proposition 48 is that one of the measuring instruments (SAT or ACT) is biased and unfair towards the underprivileged, primarily minorities. An Associated Press Poll of all 192 NCAA member institutions playing football in Divisions 1-A and 1-AA indicates that 86.5 percent of 213 football players who are ineligible this season under Proposition 48 and identifiable by race are black.\textsuperscript{4} Several college football and basketball coaches feel that Proposition 48 is damaging to young athletes because they become stigmatized as being a Prop 48 casualty. Such notable coaches and administrators as Georgetown's John Thompson and Temple's Charlie Theokas have publicly voiced their opposition to Proposition 48 and 42. John Thompson, head basketball coach at Georgetown University, walked off the court of his own game against Boston College on January 14, in protest of the new NCAA rule. Charles Theokas, athletic director at Temple University, was the proposition's foremost opponent at the recent convention. Theokas states, "I believe it would prohibit opportunities for some student-athletes. It take away opportunities for furthering their education by taking away the probability of athletic scholarships."

Opponents of Prop 48 and 42 point to a study done by researchers at the University of Michigan and North Carolina. This study challenges the accuracy of aptitude-test scores in predicting the academic performance of black athletes in college. The study showed that for black athletes, H.S. GPA correctly predicted success

in 84% of the cases, while test scores predicted success on 30% of the time. A combined index was correct 49% of the time. The study contends that scores on the SAT used to predict success may "have serious negative consequences for black athletes."

Opponents contend that Prop 48 and 42 could lead to cheating in order to recruit academically unqualified athletes. Pat Dye, head football coach at Auburn University, believes in this theory. He states, "Proposition 48 and 42 will encourage cheating to get non-qualifiers into schools above and beyond what already takes place."

An examination of the proponents views on Proposition 48 and 42 will follow. One of the key points raised by proponents of Proposition 48 is that it has raised academic awareness of all prospective student-athletes across the country. According to the NCAA News, what Proposition 48 did best of all in Year 1 was raise the awareness of high school underclassmen entertaining dreams of earning athletic scholarships some day.

Not everyone believes that Proposition 48 and 42 is racially biased and unfair. One supporter of this belief is Dr. William Sangster, faculty representative from Georgia Tech. Dr. Sangster says, "I was on the committee that first came up with Proposition 48 and it was a CFA committee which not many people remember." "I can tell you for sure, that in our minds there was nothing racist in the sense we were trying to eliminate opportunities for minority students. What we were trying to do was make sure that the

students who got to college had a chance on the basis of their preparation to successfully cope with the college programs."

The intent of the rule makers was not to harm student-athletes chances of receiving athletic scholarship, but to increase the likelihood of graduating with a degree. By establishing these standards, the legislative body of the NCAA has sent a message to student-athletes that higher academic performance will become the norm.

Interviews with X University Athletic Department personnel and academic advisors indicate a general support of Proposition 48 and 42 with certain modifications. All agreed that Proposition 48 achieved its purpose of raising academic awareness in high school student-athletes. Jill Green, academic coordinator stated, "It (Proposition 48) has upgraded academic performance and that it has prevented the exploitation of student-athletes." Overall, the interviewees felt that Proposition 48 has had a positive effect and that this type of legislation should remain in effect.

In response to what effect, if any, Proposition 48 would have on X University, the responses were two-fold. First, all respondents agreed that it has no direct effect on X University's recruiting of student-athletes, because X University has always maintained academic standards well above NCAA minimum requirements. X University has never signed a partial or non-qualifier and never will. Second, most candidate interviewed agreed that the recruiting pool would be reduced in size and this will help X University become more competitive because we will be playing against student-athletes that we have recruited all along. Burt Marsh, athletic
director of X University, did not concur with this viewpoint. He states, "I think it depends on the reaction of the kids. That's the point. Let's raise the standards and motivate the kids to reach them." Thus he felt the talent pool would not be reduced in size because high school athletes would react positively to these standards.

When asked the question is Proposition 48 biased or discriminatory, the viewpoints differed. Matt Smith, associate director of student advising, felt that the SAT was not perfect; that it was both racially and sexually biased. He stated, "I have found better correlation from core courses, GPA, and class rank." Jill Green felt, "Proposition 48 and 42 has taken away scholarships and eligibility ostracizing them from a group they are comfortable with." She felt that it was socio-economic discrimination rather than one based on race. She stated, "It's punishing kids with money who don't have money." X University head football coach felt that no discrimination was occurring due to Proposition 48. He quoted a letter in response to John Thompson's accusation of racial discrimination. He stated, "If 100 black basketball players are disqualified by Prop 48 the next 100 that are used to replace them will probably be black." He went on to say, "Those are the ones being left out, ones with less athletic ability but better grades. A six foot ten inch player who is academically superior will replace a seven foot player who is academically marginal."

During the interviews, several ideas were presented on how to improve Proposition 48 and 42. The head coach felt that a sliding scale should be used concerning SAT scores and core GPA's. He felt
that a higher GPA would require a lower SAT score. He also felt that student-athletes should not be required to sit out a year and miss practice because it harms their future athletic performance. Matt Smith stated that you should use other types of tests, "The kinds of tests that will tell you more about success in college are not the kind where you fill in the bubble."

From the information presented in this paper, a position will now be taken concerning Proposition 48 and 42 on behalf of X University. At X University the emphasis is on academic excellence. The integrity of and X University degree will never be compromised. Even though Proposition 48 and 42 do not directly affect the recruitment of student-athletes at X University, this committee favors any legislation which strives to raise academic standards as a whole. The committee believes that academic achievement can be realized while pursuing athletic endeavors and legislation of this type will ensure this pursuit. Based on these thoughts, X University supports Proposition 48 and 42 but realizes that there is room for improvement. X University does not discriminate based on race, sex, or religion and our support of Proposition 48 and 42 does not change this policy.