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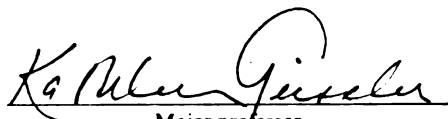
**Interactions in the Computer-Supported Writing Classroom:
An Ethnographic Study of the Teacher/Student/Technology
Relationship**

presented by

Nancy S. Tucker

has been accepted towards fulfillment
of the requirements for

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**INTERACTIONS IN THE COMPUTER-SUPPORTED WRITING
CLASSROOM: AN ETHNOGRAPHIC STUDY OF THE
TEACHER/STUDENT/TECHNOLOGY RELATIONSHIP**

By

Nancy S. Tucker

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ABSTRACT

INTERACTIONS IN THE COMPUTER-SUPPORTED WRITING CLASSROOM: AN ETHNOGRAPHIC STUDY OF THE TEACHER/STUDENT/TECHNOLOGY RELATIONSHIP

By

Nancy S. Tucker

This project examines, over the course of one semester, the multiple interactions in a computer-supported composition classroom at Jackson Community College, Jackson, Michigan, in which teacher and students are active participants in the learning environment supported by technology which has been integrated into the classroom. By means of an ethnographic approach-- combining researcher observation (audiotaping, videotaping, and field notes), teacher reflection (gathered by interview), and student commentary (gathered through questionnaires and interviews)--this study attempts to illuminate the following:

- the pedagogical and learning approaches used in this classroom, including the ways in which computers were integrated into the experience of the classroom;**
- the usefulness of a tool/instrument distinction for understanding various uses of the computer in this classroom;**
- the nature of the interactions that took place within the computer-supported composition classroom, particularly those relating to power, authority, and responsibility;**
- the impact of computers on the writing classroom;**
- changing notions of text in this computer-supported writing classroom.**

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Nancy S. Tucker
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**To my parents,
George Podany and Lois (Peterson) Podany,
who first taught me the joy of language and learning.**

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Introduction

In 1989, I began work on a Ph.D. in English focusing on computers in composition because of my personal involvement with each. It seemed to me that if I, a technophobe writer of poetry and short stories, could fall in love with composing on a computer, then anyone could and probably was--which must mean that people were doing some pretty exciting things in the field. Like any good graduate student researcher, I was looking for an important question to explore and this seemed like a good one: What was happening with computers in composition?

As I began to look into this phenomenon of composing and teaching composition with computers, I became aware that even though computers were rapidly becoming part of our landscape in education and in our personal lives, the information that existed regarding the nature of the beast was contradictory. The contradictions, in part, reflected the small amount and limited nature of the research that had been done in this area; it was just too new. It seemed to me then that someone ought to look into the situation in regard to computers in the composition classroom and that I was the logical someone.

In 1993, after much searching, I found a classroom at Jackson Community College in Jackson, Michigan in which the teacher and students were active participants in the learning environment supported by technology, including networked computers and other equipment, which had been integrated into the life and pedagogy of the classroom. My project

examined, over the course of one semester, multiple facets of life in this **computer-supported composition classroom**. Through a combination of **ethnographic observation** (audiotaping, videotaping, and field notes), teacher **reflection** (gathered by interview), and student commentary (gathered **through** questionnaires and interviews), my study attempted to illuminate **the** following:

- the pedagogical and learning approaches used in this classroom, including the ways in which computers were integrated into the experience of the classroom;
- the usefulness of a tool/instrument distinction for understanding various uses of the computer in this classroom;
- the nature of the interactions that took place within the computer-supported composition classroom, particularly those relating to power, authority, and responsibility;
- the impact of computers on the writing classroom;
- changing notions of text in this computer-supported writing classroom.

In the chapters that follow, I provide, first (Chapter 1), a context for **the study** by drawing on the discussion in the field over the past several **years**, positioning myself in relation to that discussion (including my personal **understandings**, approaches, and biases) and explaining the setting in which **the research** was done. I also included speculation about the interpretive **lens--that of tool/instrument--by which I view this classroom as well as information** about the methodology used to conduct the study. Following this **contextualizing**, I have in Chapters 2-5 taken a close look at the classroom in **operation**. Chapter 2 focuses on the first day during which all activities and **attitudes** that will be important for the rest of the term are initiated. Hence, **it presents** a microcosm of the class in operation and serves to open the

questions which will be important to the rest of the study. Chapter 3 **concentrates** on the way in which computers are integrated into the pedagogy **of the** classroom community to support students learning to write. In this **chapter**, I look at composing taught by means of two different technologies-- **pencil/paper** and Microsoft Word®, a word processing program, and at **collaboration** undertaken by means of Timbuktu®, a screen sharing software **program**. Chapter 4 examines students' use of Storyspace, a hypertext **authoring** tool, by training the tool/instrument lens on students' work and **students'** observations of their work. I also include reactions from the teacher **as well** as my own observations. In Chapter 5, I take a closer look at what the **students** write and say--beginning, middle, and end of the semester--about **their** experience in the classroom Chapter 6 provides a conclusion and some **recommendations** for further study.

CHAPTER 1

CONTEXTS: HISTORY, METHOD, GEO/DEMO GRAPHICS

Review of Literature in Computers and Composition

One of the earliest pieces of research on computers and composition is

Hugh Burns' 1979 dissertation, *Stimulating Invention in English*

Composition through Computer-Assisted Instruction (Bridwell-Bowles 79).

From this beginning, research in computers and composition proceeded in the **way** that, according to Louise Wetherbee Phelps, composition research **generally** proceeds, along an ever-deepening arc from practice to theory and **back** (the PTP arc).¹ According to Phelps, it begins this way:

In composition practice, problems have been defined and tackled in a characteristic way. First, a situation arises where teaching breaks down in ways that don't yield to trial-and-error solutions. In these circumstances . . . research begins, with the goal of comparing methods to discover empirically which is most effective and why (37).

Much of the research from the early days of computers in composition **sought** to demonstrate that the hardware, software or the very existence of **the computer** made for better writing (or conversely, that the writing was no **better** with computers). The research design was predicated on the (often **unstated**) assumption that a direct and simple link existed between the **hardware** or the software and the individual student's performance (performance was sometimes defined as product, sometimes as process, **sometimes** as a combination of process leading to product) and, therefore, by **manipulating** the hardware, the software, or the process engaged in by the **student**, one could change or control the outcomes. As Hawisher's report on

research from 1981-1988 indicates, several studies over the years have focused on the advantages (or lack of advantages) of word processing over composing with pen and paper (Haas and Hayes; Kaplan; Bessera; Burnett; Pivarnik; Hawisher and Fortune, 1988). Some of these studies looked at quality of writing, some at quantity (longer pieces, more of them), some at whether students did more prewriting with the computer, some at whether students did more revising with the computer. Results of these studies have always been mixed; some indicate changes, some show no significant difference, some (Nichols, LeBlanc) find that results depend on the student's approach.²

Research eventually moved to what Phelps would call "more fundamental inquiries into the constituent processes and activities that underlie surface behavior or its products" (37). Researchers moved beyond the study of the product or process produced by working with a computer to measure and assess performance factors such as reduced writing anxiety, increased comfort levels with the technology, ease or difficulty of revising on-line. According to Hawisher, in the studies she reviewed students generally exhibited favorable attitudes toward the computer.³

These were necessary studies. However, as Gail Hawisher and Cynthia Selfe point out in their provocative 1990 book, *Evolving Perspectives on Computers and Composition*, "These research questions seem outdated and naive to those of us working in computers and composition studies today." Yet some of this kind of research, particularly work like Christina Haas' "Seeing It On the Screen Isn't Really Seeing It,"⁴ led to a rethinking of some of the theoretical bases involved in our discussions of computers in writing, which in turn has prodded the discussion in new directions that inform current research, including my own. Nancy Kaplan in her article,

“Ideology, Technology, and the Future of Writing Instruction,” asks her readers to consider the tools writers use to write and how those tools **“implicate and are implicated in the power relations, or more broadly the ideologies, permeating reading and writing acts”** (14). Cynthia Selfe in **“Redefining Literacy: The Multilayered Grammars of Computers”** argues **that** computers change our concepts of text and suggests ways to bridge the **gap** from old concepts to emerging concepts. Stephen A. Bernhardt in **“The Shape of Text to Come: the Texture of Print on Screens”** explores changes in **the** shape of text as the medium of presentation changes from paper to screen **and** suggests nine dimensions of variation between paper and on-screen text.

One of the tools that computer composition scholars see as holding **much** promise for changing our concepts of text is hypertext. Hawisher and Selfe title Part 3 of *Evolving Perspectives* **“The Promise of Hypertext: Changing Instructional Media.”** In the introduction to this section, they **write:** **“[T]he creation of hypertexts as new instructional forms may produce one of the more profound changes in learning associated with this new electronic age”** (173). Thus far hypertext has produced much experimentation **and a** plethora of books and articles which indicate that this may be true. Two **books** that discuss the meaning, function, and potential of hypertext for our **society** are Edward Barrett’s *The Society of Text: Hypertext, Hypermedia, and the Social Construction of Information* from 1989, and, more recently, Jay David Bolter’s *Writing Space: The Computer, Hypertext, and the History of Writing* (1993), which is available in both paper and hypertext disk **versions**. Articles by Shirk, by McDaid, and by Smith define hypertext, **develop** metaphors, explore potential, and suggest areas of research. LeBlanc’s book *Ringin’ in the Virtual Age: Writing Teachers Writing Software* encourages writing teachers to develop hypermedia software. A

1994 collection titled *Literacy and Computers* contains articles that connect **hypertext** to a broadly based view of literacy (Johnson-Eilola, Moulthrop and Kaplan) and provide cautionary advice on what can and cannot be expected of **hypertext** (Charney, Dobrin). Catherine F. Smith suggests hypertext as a **heuristic** for thinking ("Hypertextual Thinking"). The direction of all this **work** indicates the potential for change.

At the same time that this work was taking place, on the level of praxis **other** work was moving us away from some of our earlier naive assumptions. **While** part of the naiveté of our profession's research assumptions has had to **do with** assuming a simple and direct link between hardware and/or software **and** performance, another part of that naive approach was presuming the **computer**-supported writing classroom and its inhabitants to be one stable **unvarying** entity. Since the late 1980's, researchers and writers about **computer**-supported writing have begun to recognize the need to complicate **their** thinking and have further broadened and deepened their search in **order** to address these issues. Researchers have recognized the importance of **context**ualizing their work. In the introduction to a section of *Evolving Perspectives* specifically devoted to the politics of computers, Hawisher and Selfe write, "In this section, we look at computers in the *context* of the **learning** spaces we inhabit. . ." (276; emphasis mine). Context implies a **much** broader scope than the simple manipulation of hardware and software; it **implies** looking at the variety of factors and interactions which affect the **people** working in these particular environments. Hawisher and Selfe's use of **the** term "we" also allows for a broader interpretation: as much as **students** are inhabitants of learning space, so are teachers--and researchers.

Part of this contextualization involves considering the social and **political** situation both of the students and of the classroom. This has given

us work on race, class, and gender issues in computer-supported classrooms. **Hawisher** and **Selfe** in *Evolving Perspectives* publish several articles that deal **with** these issues, including “The Equitable Teaching of Composition with **Computers: A Case for Change**” by Mary Louise Gomez in which she argues **that** instruction remains differentiated by student’s race, social class, **language** background, and gender; and “Feminism and Computers in **Composition Instruction**” by Emily Jessup in which she talks about the **computer** gender gap and questions the impact this gap has had on computer **use** and on teachers of writing. Several researchers have examined whether **or not** the use of electronic conferencing as a means of class discussion tends **to level** class and gender differences (Cooper and Selfe; Hawisher, Meyer, and **Selfe**).

As we moved from the late 1980’s into the early 1990’s, the field has **become** increasingly cognizant of the need to consider real students and real **teachers** in real classrooms, realizing that what happens in any given **classroom** is a function of the interactions extant in that setting. Consider *Computers and Community*, edited by Carolyn Handa: all articles are about **the computer** in the writing classroom community. Barker and Kemp’s “**Network** Theory: A Postmodern Pedagogy for the Writing Classroom” and **Cynthia** Selfe’s “Technology in the English Classroom: Computers through **the Lens** of Feminist Theory” give attention to the theory behind the **computer** classroom. Carolyn Handa provides an extended argument about **the need** for community in the writing classroom in “Politics, Ideology, and **the Strange**, Slow Death of the Isolated Composer or Why We Need **Community** in the Writing Classroom.” Carolyn Boiarsky in “Computers in **the Classroom: The Instruction, the Mess, the Noise, the Writing**” combines **theory** with practice in examining the placement of desks in building a sense

of classroom community in a way that helps students learn to write, contrasting her own classroom with other approaches and arrangements. “**The Computer Classroom and Collaborative Learning: The Impact on Student Writers**” by Carol Klimick Cyganowski and “**Computers and the Social Contexts of Writing**” by Kathleen Skubikowski and John Elder both examine the ways in which computers affect the work students do in classrooms. While all of these pieces draw on awareness of the the actual classroom as yielding valuable insights for researchers, none of them are full-length ethnographic studies of a classroom.

In fact, little research of a broad scope done within the context of the classroom has been published. Marcia Curtis and Elizabeth Klem, in their 1992 article “**The Virtual Context: Ethnography in the Computer-Equipped Writing Classroom,**” note the importance of this type of research:

Contemporary theories and pedagogies situate writing in a social context: current interests in the writer-audience relationship, “discourse communities,” and the social construction of discourse, all bespeak an understanding, by teachers and theorists alike, of our subject as socio-political in nature. (157)

However, they also note how little of this type of research exists regarding composition in computer-supported classrooms.

Yet despite this fact, and despite an almost pervasive acknowledgment of the potential benefits of research focused, not on “texts” exclusively, but on the “context” in which writers produce them, relatively little ethnographic--that is, true contextual research--has appeared, in composition studies generally and computer based-composition studies especially (Durst, Hawisher). (157)

They cite Durst and Hawisher in support of their statement. Durst found, of 1000 studies surveyed from *Research in the Teaching of English* bibliographies dated 1984-1989, only 100 were ethnographic, and none of those were related to computer-assisted writing (157). In her research report

mentioned earlier covering the years 1981-1988, Hawisher found four ethnographic studies on computers and composition, two published and two doctoral dissertations, as well as a few case studies; however, there was a decided dearth of ethnographic studies on composition in computer-supported classrooms. The *CCCC Bibliography of Composition and Rhetoric, 1991*, lists 185 articles, books, and dissertations in the category of Computer and Literacy studies, two-thirds of which deal with computers rather than literacy. Of these approximately 125 studies, none were described as ethnographies: one was a case study, one was an empirical study, two more could be identified from the description as using ethnographic approaches and one was a short piece describing one class period in a computer networked classroom.⁵

Two recent ethnographic studies related to composition offer useful precedents to my research. One, *Academic Literacies: the Public and Private Discourse of University Students* (1991) by Elizabeth Chiseri-Strater, traces the writing of two university students over the period of one year's time, providing both a detailed close-reading of the work of these students and an exemplar of an ethnographic approach, but does not deal with computers. The other, *Writinglands* (1990) by Jane Zeni, is drawn from the work of teachers in grades 3 through college who participated in the *Gateway Writing Project* in St. Louis. Zeni characterizes the book as "neither a research report nor a how-to manual. It is the story of committed teachers . . . learning to integrate new electronic tools into their writing workshops." In this study, Zeni looks at the work these teachers have done in response to the question: "How can we weave the computer into the human fabric of a writing workshop?" (xi).

Like Zeni, I was interested not in technology alone, but in teachers, **writers**, and classrooms, or at least in one specific teacher, set of writers and **classroom**. I wished to pursue the large issue of the life of a writing **classroom** equipped with computers. My study begins with the broad open **question**, similar to Zeni's: What happens in a computer-supported writing **classroom**? In addition, it addresses an area which I, along with Curtis and **Klem**, find problematic:

a[n] . . . absence of *teachers* and actual *teaching* from the bulk of computer research, even from examinations of the computer's relationship to teaching methodology: the focus, rather, seems inevitably to shift to the presence of the machines. (157)

They “. . . urge. . . a new reflexive stance, repositioning teacher and researcher **alike** within the scope of the investigation and teacher, student, and **technology** together within the larger social situation that is ethnography's **province**” (156-157). This is what Zeni did; this is one of my major goals: to **examine** the relationship of teacher, student, and technology.

Is it Tool or Is it Instrument?: Metaphors in Flux

As we explore a computer-supported writing classroom, one issue we **must examine** is that of the metaphors we employ to describe the setting and the **technology**. One of the most commonly used metaphors relating to **computers** is that of *tool*; in use, the phrasing is often “the computer is just a **tool**.” Nancy Kaplan in “Ideology, Technology, and the Future of Writing **Instruction**” challenges this belittling of *tool* when she draws our attention to an **unexamined**, underlying assumption of the tool as value-free and neutral (14), **hence just a tool**. Not so, she writes; tools are “the “material **instantiations** of discursive practices” and they, therefore, “embody **ideologies**” (14). They “work for users, but they also influence the shape of

users' work, affecting how users understand their world and their scope of **action** within it" (11). Kaplan insists that writing instruction cannot **"continue to ignore the ways tools implicate and are implicated in the power relations, or more broadly, the ideologies, permeating reading and writing acts"** (14). Kaplan further suggests that new technology has **"restructured some of our fundamental ways of thinking about and understanding the world, shifts traceable in our language habits, the metaphors with which we create and express the world"** (15).

The metaphors we use to talk about our world have an effect on how we **think** about it and what we can do. Therefore, I believe that it is **important** to consider whether the metaphor of *tool* truly addresses what we are **doing** with computers and with software programs. The term *tool* carries **certain** implications that may be inconsistent with some of our uses of **computer** technology in the writing classroom. Other possibilities have been **suggested**, even used, including *environment* (used by Martha Petry among **others**) and *medium*, each of which seems appropriate in different **circumstances**. As we consider this classroom, I suggest that, in addition to *tool*, **we** consider the metaphor of computer as *instrument*. There is some **precedent** for this use of the term; Ann Berthoff in *The Making of Meaning* **speaks** of language, not as a *tool*, but as a "speculative instrument." In fact, **one section** of her book is titled "Instruments of Knowing."

Although the terms *tool* and *instrument* are often considered to be **synonymous**, for the purposes of this discussion I will draw a distinction **which** delineates the differences between them, in regard to actual **definitions**, etymology, and common use. These differences will give us a lens **by which** to view computer use in the classroom that is the subject of this **study**.

Webster's Third International Dictionary gives us some help in **definition** and etymology. *Tool* is defined as “instrument used or worked by **hand**” or “used by a handicraftsman or laborer in his work,” also as “an **implement** or object used in performing an operation or carrying on work of **any kind**.” There are several similar definitions and a few different ones, including “one who allows himself to be used or manipulated by another, a **dupe** or puppet,” an archaic form for sword or weapon, and an archaic but now **slang** term for penis. There is also a verb *to tool* which means to “**ornament** the surface of” something, “to shape, form or finish with a tool.”

Definitions of *instrument* include “a means whereby something is **achieved**, performed, or furthered,” “a utensil, as a means or aid, an **implement**,” “an implement used to produce music,” “a measuring device for **determining** the present value of a quantity under observation,” and “an **electrical** or mechanical device used in navigating an airplane,” and, similar to an earlier use of tool, “a person or group made use of by another, a dupe or tool.”

The etymology of each gives further weight to the differences between them. *Tool* is thought to have come from either the Old Norse ‘tol’ which is **akin** to tool or weapon or from the Gothic ‘taujan’ meaning to do or make. *Instrument* comes from the Latin ‘instrumentum,’ which is from ‘instruere,’ **meaning** to construct, equip, arrange, instruct.

The weight of all this definition and etymology gives credence to a view of a **difference** between the two when employed as metaphors for computer use, but the clearest and most pithy way of saying it comes from the *American Heritage Electronic Dictionary* (AHED). According to AHED, a *tool* is “a **handheld** implement, such as a hammer, saw, or drill” or (the pithy part) “a **device** used to do work or perform a task.” For *instrument*, it gives the

same last definition, along with an additional meaning: *instrument* is “a **means** by which something is done, an agency, . . . a vehicle, . . . a channel.”

When considering the meaning attached to the terms, we can ask: **what things** do we call *tool*? Hammer, saw, drill, shears, can opener. And **what do** we think of as *instruments*? Microscope, telescope, seismograph, stethoscope. What do each of these sets of terms have in common? Tools **manipulate** something and extend the user’s ability to do something; the **reference** is most often to physical action although it can extend **metaphorically** to non-physical. Instruments allow users to view or **experience** things differently, thus enhancing understanding. I am **suggesting** that *tool*, in the context of computers, has implications related to the **manipulation** and manufacture of written products, while *instrument* has **implications** related to the expansion and enhancement of thinking and **writing** processes.

Let me offer some examples of using the computer (and its software **programs**) as a tool, compared with using the computer (with software) as an **instrument**. The computer is a tool when I use it to move text around, change **fonts**, change margins, change spacing, store text and later retrieve it and **print at will**, all with the goal of making surface changes so that I may **produce** a product. The computer is an instrument when I use it to move text **around**, change fonts, margins, and/or spacing (yes, I’m repeating my earlier **comment**) with the idea that it may cause me to view my writing differently or **change** my understanding of what I’m doing. It may also be an instrument **when** I darken or turn off the screen so that I can’t see what’s on it as I write (**freewriting**), brainstorm lists of topics, insert comments or questions into **another** writer’s text, use hypertext programs to draft work, collaborate or

converse through electronic means; in short any use that encourages **thinking/writing**, either thinking about a topic or thinking about writing.

The lines between these two uses are not clearly drawn, nor are they **hard and fast**. Both student-writers and the teacher will move between the **two uses** as needs change. These uses of the technology are a fundamental **part of** the questions to be explored in this setting. As I examine and discuss one **computer-supported** writing classroom, I will juxtapose the two terms **and the** metaphors they conjure, the familiar *tool* with the less often used *instrument*, in the hope that they may provide a lens by which we can see **more clearly** into the life of this classroom and the student/teacher/technology **relationship**.

Ethnography: Why, What, and How?

In looking at the life of the classroom, we look at motion, not at stasis but **at** process. To effectively examine this process, it is clearly necessary to use **an** approach that will support the examination not just of the surface of **things**, but of the classroom as a living, dynamic system of teacher, students, **technology** in relation one to the other and in motion. An ethnographic approach permits that. Elizabeth Chiseri-Strater in *Academic Literacies*, her **exploration** of the discourse of two university students, draws on Linda **Brodkey**, when she writes: “[t]he major concern of ethnography lies with the ‘**study** of lived experience’ (Brodkey 1987a, 25)” (xxi).

With its emphasis on what Clifford Geertz calls (following Gilbert **Ryle’s** lead) “thick description”⁶ --explained as an intellectual effort in **interpreting** the why behind seemingly simple surface actions--ethnography **leads to** a deeper, more interpretive understanding of classroom life. In **simple** terms, an ethnographic approach allows me to ask the open question I

posed, “What happens in a computer-supported classroom?” and to answer **that** question broadly, deeply, and contextually, *for a specific classroom*.

Geertz indicates that the ethnographer is faced with “a multiplicity of **complex** conceptual structures, . . . which he [sic] must contrive somehow first **to grasp** and then to render” (10). In addition, he writes: “anthropological **writings** are themselves interpretations . . . thus, fictions; fictions in the sense **that** they are ‘something made’, ‘something fashioned’--the original meaning **of fictio**--not that they are false, unfactual. . . .” (15).

Chiseri-Strater also connects with the idea of fictions when she writes:

Readers of ethnographic accounts feel as if they are participating in the very texture of the informants’ lives, because, I think, ethnography, like literature, yields a different kind of reality, another type of knowledge. Ethnography provides, just as literature does, a sense of the universality in life, as well as the feeling of “being there,” of having participated in an experience. (xxii)

This sense of ethnography’s similarity to literature, as a fashioning of **fictions**, is my point of connection. I am a teller of tales, a story-ist, if such a **word** exists. I forget numbers and statistics because quantity does not seem **relevant** to me without understanding the blue of a lake, the green of the **grass**, the tension and/or the laughter between two people sitting on the **green** grass splashing their toes in the lake. I remember the stories that **others** spin for me, that I weave in conjunction with them. And when I tell **what** I remember, I know that the details build to give life and force, and in **essence**, to become the story which in turn creates the meaning of the **experience**. This understanding is what informs my ethnographic approach.

Geertz gives:

three characteristics of ethnographic description: it is interpretive; what it is interpretive of is the flow of social discourse; and the interpreting involved consists in trying to

rescue the 'said' of such discourse from its perishing occasions
and fix it in perusable terms. (20)

Additionally, "it is microscopic" (21).

For me, an ethnographic approach has the following characteristics, similar to, related to, connected with Geertz's ideas, but with a slightly different emphasis. First, the details of an experience shape the meaning, so that the experience arises from the context in which it happened: contextualized and, as LeCompte and Preissle say, "holistic" (3).

Second, the story of the experience is created in participation with all who were involved in the experience but also taking into account the ethnographer's role in shaping the experience. Or as Chiseri-Strater writes, ". . . [the story reflects] the lived-through experience of informants' lives, by means of the ethnographers' lens" (*Academic Literacies*, xxi). The lenses, of course, are central to what ethnography is all about and what makes it different from other kinds of research. Part of the ethnographer's charge is to select those details which most closely represent or re-create the experience, in her view, through her lens. When Chiseri-Strater writes: "Every research method carries with it a world view" (xx) , and "[e]thnography does not masquerade as a neutral approach" (xxi), it becomes clear that the lens of the ethnographer is not only significant, but must be made obvious to the readers of that ethnography. As Chiseri-Strater did⁷ and as suggested by Curtis and Klem and by Herrington,⁸ I have been attempting (and will continue the attempt) to position myself and make my world view obvious.

Finally, in order to truly discern the experience, it is necessary to step both forward for the close detail, and back to see the broader outline. In addition, the ethnographer must tilt her head sideways, squint her eyes, and sometimes listen between the lines of what is being said, that is, use many

ways of gathering information and interpreting that information, or as LeCompte and Preissle say, ethnography is “multimodal or eclectic” (3).

As a writer of both fiction and non-fiction, with some experience in seeing the details of a situation and capturing those details, moving in and out and looking at things slant, I find I am most comfortable using an ethnographic approach to explore the questions I have about computers in composition-supported classrooms. Beyond my personal comfort, ethnography allows me to place the research I do in a broad context and provide the different kind of reality to which Chiseri-Strater refers. Ethnography doesn't limit one's research to that which can be measured by numbers (although numbers can be useful). It doesn't insist on just one point of view. It allows for multiple voices, more than one “take” on a situation, for viewing and analyzing the situation over a longer period of time and in a broader range than any other research method.

While this polyvocality⁹ can be exciting and interesting, it can also be unsettling. When multiple voices speak to a particular experience, each seeing through her/his own lens, interpretations of that experience may, no, must vary. The ethnographic researcher deals with several kinds of variation in terms of reported experience. One is a variation in which the participants seem to be saying the same thing generally, but differ in the specifics by which they come to their conclusion. For example, in my study many students told me that their instructor had been instrumental in helping them improve their writing. Each had a slightly different view on how that had happened for them personally and what it meant to them, but the comments were variations on a theme and generally in agreement.

Another kind of variation is an actual difference in the experience as reported and/or in the effects of the experience. For example, some students

commented favorably on Storyspace™ (an idea processing program), others unfavorably. This is a given in any type of research. In ethnographic research, the reasons participants give and the ways they talk about it become central to understanding the differences.

A third kind of variation is one in which the participants come to the same conclusions, but because they have vastly different reasons for their conclusions, the conclusions themselves are really not the same. For example, two students both said they disliked working with Storyspace®. One disliked it because it pushed him too hard; the other disliked it because it confined her writing. These two people are not coming from the same place in their discussion of this experience. Even though the conclusion looks the same, it's really not.

The final kind of variation which I think it important to mention is the old Indian philosopher/elephant puzzle. Seven blind philosophers were placed around an elephant and asked to tell what this beast was like. Each reached out to feel the part of the elephant closest to him. The one by the tail said it was like a rope; the one by the leg said it was like a tree, and so on. Each philosopher "saw" what he saw because of his particular positioning. And of course, each reported what he saw and the reports were contradictory. Students in an ethnographic study can be like this. Each has a limited notion of what an experience was like and must report from her own view, with her own lens. The ethnographic researcher has the advantage then of stepping back with her lens and looking at the whole of the elephant. That kind of variation, once it's all compiled, is actually a joy because it makes for a richness in the study of the experience that can be gained in no other fashion.

All of these variations, similarities, differences and contradictions must be attended to. Although I put the elephant puzzle last, I don't mean to

imply that contradictions which emerge during ethnographic research can be always and completely resolved by stepping back and seeing the larger picture. The contradictions may remain contradictions, may even escalate into paradoxes. This, too, is the nature of ethnographic research. To me, that seems not unreasonable because it also the nature of human nature. An ethnographic approach to understanding is sometimes contradictory and always complicated. So be it.

My biases. Some of them are obvious by now. However, here are a few more. I value collaborative learning, a process-oriented approach to writing, a supportive environment for writing, the idea that knowledge is socially constructed. These characteristics are part of what makes a "good" writing classroom for me. When I looked for a classroom in which to do my research, they were part of my unstated criteria.

The Situation at Jackson Community College

While any "good" classroom in which students used computers to accomplish a significant part of their work might have yielded adequate information, the best classroom seemed to me to be one in which the teacher was experienced both in teaching writing and in teaching it with computers. I found the classroom and the teacher at Jackson Community College.

Jackson Community College is located in south central Michigan, with its main campus just south of the town of Jackson, Michigan. It serves a student population of between 7, 000 and 8,000. Like most community colleges, it is a commuter school rather than a residential one. Its student population is drawn primarily from the immediate area. While many of the students fit the profile of the traditional first-year college student--18 or 19,

just out of high school--others are returning students with different backgrounds, skills, and needs.

The main campus is approximately five miles south of the city, located in a large open area, bordered by woods and fields. Although the entire campus consists of no more than five buildings, there is room to grow and evidence that growth is taking place. The student union is new, large, and nicely appointed with cafeteria, lounge areas, facilities for receptions, and meeting rooms. The library (housed in the classroom building) is also newly appointed and boasts a card catalog recently put on-line.

The writing programs are housed within a unit called the Department for Collaborative Learning and Teaching (COL), which takes as its goal:

to encourage a close examination of learning and teaching styles and techniques through conversation and community-building. In and out of our classroom environments, we develop the social and intellectual skills for successful interdependence and independence. (From the brochure, *for collaborative learning & teaching*)

Students take a placement examination as they enter the college to determine the appropriate courses for them to take in writing. There are three options based on the placement exam. Some students are advised to begin with ENG 101, Introduction to Writing, which is designed for "students who feel they need supplemental help in writing. . . ." The majority of students begin with English 131, The Writing Experience, (3 credits, 3 class hours) described in the catalog as follows:

Students write and talk frequently about their writing and the writing of other students. This course helps students feel comfortable and confident with their writing while they work to improve and refine skills. Prerequisite: Open to students with satisfactory scores on placement tests.

A very few students place out of English 131 and begin with the next class, English 132, The Writing Experience (3 credits, 3 class hours), but most

students take this as their second English class at JCC. It is described as follows:

Students write, read, and talk frequently about their writing, the writing of other students and published writing. This course emphasizes critical thinking, information-gathering and those forms of writing useful to academic and professional life. A continuation of ENG 131. Prerequisite: ENG 131.

There are also classes in research writing, technical writing, and business communications that follow the Writing Experience classes and may be required depending on the program in which the student is enrolled.

Technology is an integral part of the programs supported by this unit: a drop-in lab, called the Computer Learning Facility, and two networked interactive classrooms are available to students. All of these facilities are Macintosh-based. The philosophy on which they operate is as follows:

As part of our student-centered pedagogy, we use computers as tools for discovery and exploration. We create music, art, collections of poetry and essays, newspapers, multimedia, hypertext--growing lists limited only by our collective imaginations. (From the brochure, *for collaborative learning & teaching*)

In an article titled "Collaboration and Conversation: Three Voices," Aurelie Seward (writing in collaboration with Carolyn Guyer and Ann M. Green) explains the approach at JCC this way: ¹⁰

Our lab, two classrooms, and networks were designed and are continually redesigned with collaborative learning in mind. The computers are clustered in a way which induces interaction. . . . Each learner has an equal tool to work with and easy access to all resources via the network. (6)

As she continues her discussion, Seward is referring to a specific project called Writing Conversations, but she is also talking about the program as a whole:

We did not begin with a theoretical framework but, rather, with a handful of interested people and an idea: We would encourage

learners to use computers as transparent thinking tools which could enable discovery, risk taking, and exploration. The language has changed quickly as it does with things electronic; the idea, however, of using computers and networks as tools to enable discovery has remained. (6)

She also refers to certain "attitudes and policies in this learning environment," including "valuing multiple authorities, integrating technology as an additional modality for learning, and providing open access for students to all electronic goodies" (6).

It is in this environment that the computer-supported writing programs at JCC began (in 1986) and continue: an environment that values using computers as thinking tools and that, unlike some computer-supported classrooms, integrates the technology into the total writing environment. It is in this atmosphere that I began my research in the fall of 1993, research which continued through spring of 1994.

Methodology

Having received approval from UCRIHS (University Committee on Research Involving Human Subjects) at Michigan State University in the fall of 1993 (see Appendix A for official documentation), I began a pilot study in the fall semester of 1993, followed by the project study in the winter semester (January-April) of 1994. Both studies were conducted in Martha Petry's 8:00 a.m. ENG 131 classroom.

For the pilot study I had these aims: to understand the operation of the classroom both by observing and by conversations with the instructor so that I might discover what areas would be most productive to concentrate on, and to talk with and observe the students so that I might have a sense of the way they worked in the classroom in general and particularly in relation to computers. During the pilot study I developed the beginning-of-term

questionnaire and tested it on the class, observed the class for approximately 10 class sessions and took some field notes (I did only a very small amount of video taping), and interviewed (audiotaping) eight out the 24 students who completed the class, testing my interview questions on these students. From this pilot, I discovered the following:

- that much of the work was organized around the small groups and that it would be most productive to focus on the members of one group;
- that most students had some familiarity with computers, and that some but not all had experience in writing with the aid of computers;
- that some had much experience and facility with writing while others had less;
- that those who I interviewed at the end were very articulate about their own writing processes and the role their groups, their instructor, and the computers (including software programs) played in the development of their writing abilities during the semester. For example, one student told me that he did not like working with Storyspace, but he recognized that he wrote in deeper, richer, more extended ways with it than he would have done without it. He considered it, then, a worthwhile experience even though he would not have chosen it.

As a result of this pilot, I made the following adjustments going into the project. First, I made some minor changes in my beginning questionnaire. Second, I decided to focus on one group, whichever seemed most interesting after a few days of observing all groups, and follow that group through the semester. Third, I determined that my interview questions were effective in eliciting interesting and provocative responses and could, therefore, stand with little adjustment. Naturally, all of these

assumptions were called into question in the regular study. In the winter term of 1994, nothing worked the way it did in the fall of 1993.

In gathering information, both for the pilot and for the study itself, I was guided by the basic principles of ethnographic study to which Curtis and Klem refer: "open questioning, full contextualization, and reflexivity" (161).¹¹ Although I began the research with some ideas about what I wanted to explore, I tried to let my questions be shaped by what happened in the class itself rather than by a predetermined set of objectives. That turned out to be a good approach because, as mentioned earlier, relying on lessons learned from the pilot study would have been misleading in regard to this term. I consistently asked myself what I thought I might be finding and what those findings might mean. I also asked the instructor, on a regular basis, what she saw happening in the class and what meaning she attached to what she saw. When I spoke with students, which I did informally throughout the term and more formally at the end, I again tried to keep the questions open enough so that they could reflect on their experience in their own way.

In order to most fully contextualize the material gathered, I "use[d] a variety of research techniques to amass [my] data," which LeCompte and Preissle note as an important principle of ethnographic research (3).¹² For my study, I used close observation of the classroom and audio and videotaping of the classroom. I videotaped and/or audiotaped 18 of 28 class sessions, organized so that I taped at least one out of the two class sessions each week. When I videotaped, sometimes I followed the teacher, sometimes I followed the students or selected students. In audiotaping, I did the same but often placed the tape on one group of desks. I used one brief questionnaire at the beginning of class. I interviewed the teacher before the semester began and several times during the semester, once formally, more

often informally. During class time (sometimes as I set up equipment) I chatted with the students; however, I have no formal records of these conversations. I collected copies of their mid-term self-evaluation and their final evaluation of the class. These midterm and final evaluations, given to the students by their instructor, emphasized reflexivity on the part of the students, and thus worked into my approach very effectively. At the close of the semester, I interviewed the teacher and ten of the thirteen students who finished the class, audiotaping those interviews. I collected portfolio writing from all the students who finished; many of them also gave me their daybook/journals and rough drafts of their work.

The Class: Goals, Technology, Participants

In order to provide a contextual frame for discussion, I would like to look more closely at the classroom; i.e., outline the approach to writing used by this instructor, describe the classroom design and the software programs available to students, and summarize some demographic information about the students, including age, gender, ethnic background.

Martha Petry has taught humanities and writing courses at Jackson Community College since 1985, teaching in the computer-supported environment since it was established in 1986. Each year she teaches several introductory composition classes for first-year students at JCC. In her approach to the teaching of writing, Martha emphasizes writing as an activity that everyone can do, indeed an activity with which everyone already has some experience. She establishes the classroom as a community of writers who will "write about things they care about" and share their ideas, insights, and skills with each other. Her initial goals for her students are that they become more comfortable and confident as writers.

To this end, Martha's students do freewriting in daybook/journals, use brainstorming to find topics, make lists of things they can write about, collaborate on group projects, write multiple drafts of their pieces, read each other's work and respond to it, conference with their instructor, and, at the end of the semester, submit a portfolio of their work for evaluation. (A more detailed explanation of the rhythm of the classwork is provided in the next section.) Some of this work may be inscribed by handwriting, especially that done outside of class, but anything done in class is computer-generated, and students are expected to turn in computer-generated work for final evaluations.¹³

This classroom has 25 Macintosh computers, one per student, grouped in **what** are called here "pods," clusters of 5 desks pushed to face each other; 5 **pods** per classroom. The pod is not just a convenient table arrangement but a **work** group as well, organized in a manner that supports the pedagogy of this **classroom**¹⁴. Groups pick their own names, generate their own identities, and **develop** (and re-develop) roles that they play in working together. The **teacher** has a central computer station wired to a projector which can display **her** computer work on a large screen on one wall. The classroom is **networked** both within itself and to a larger intra-campus network which, **with** the right software, allows students in this class to communicate via the **computers** with each other and with people outside of the class. (See Figure 1 for the floor plan.)

A variety of software is available to the students. They begin with a **fairly** standard word processing program, Microsoft Word for Macintosh®. **They** also work with a groupware program, Timbuktu®, which allows them to **work** collaboratively across a local area network (LAN) without moving from **their** own individual work stations. Another program they work with is

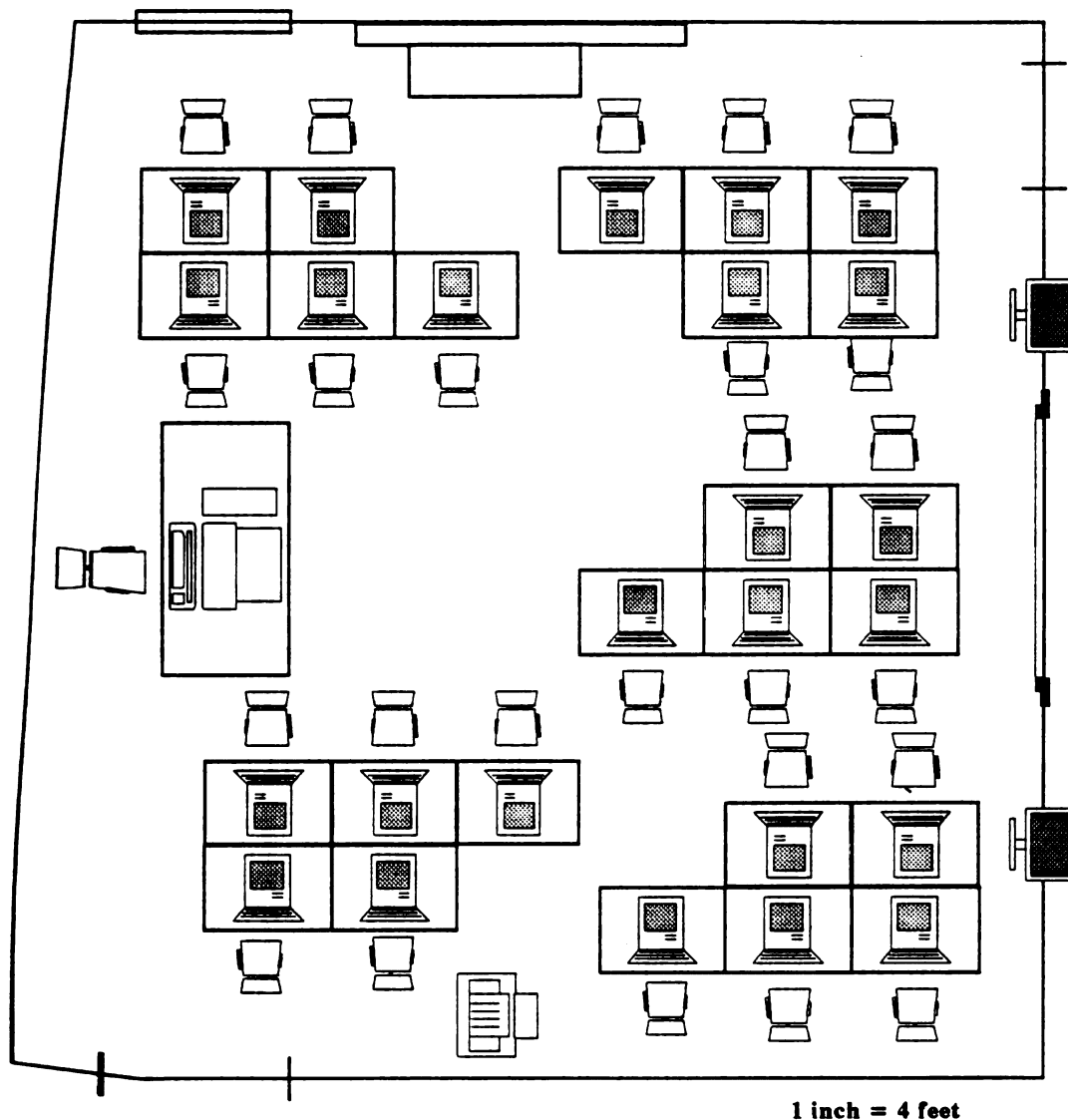


Figure 1 Room Plan of Computer-Supported Writing Classroom at JCC

Storyspace™, a hypermedia program which allows them to compose in hypertext on one topic or central theme in a series of “places” (on the computer) using much detail and explanation, and eventually to edit and link those writings into a coherent whole which may be produced in print text or in electronic form.

The demographic make-up of the classroom varies from semester to semester. In Martha’s fall semester classes, the traditional 18-year-old first-year student predominates. However, in the winter term (during which I conducted this study), the non-traditional older returning student is the norm. Winter term, 1994, began with 23 students registered, 12 men and 11 women, a fairly even gender division. However, one registered student never attended the class, and two more stopped coming after the first week, leaving 9 men and 10 women, a total of 19 students in the class at the end of the second week. Based on a brief survey I did during the first week of class to which a total of 17 students responded (7 men and 10 women), the ages of this group ranged from 18 to 49 years old, with the average age being 29. There were three 18-year-old students and two 19-year-old students. Regarding the ethnicity and gender of the students: at the beginning, there were 6 white male students and 8 white female students of US background; 2 African-American male students and 2 African-American female students; 1 male exchange student from the Soviet Union; no Asian; no Hispanic; no Native American students. Out of the total of 19 students attending in the second week of class, 11 students finished the class, 4 men and 7 women. According to the instructor, this was an unprecedentedly low completion rate, possibly due to Michigan’s having had one of the worst winters in 20 years, which several faculty and staff members felt adversely affected attendance in the entire school, not just this class.

Beyond these statistics which can be measured and calculated, lie stories of students, many who are parents and/or householders and thus, had responsibilities commensurate with that status. Many of these students were returning students, (whom teachers often note as having both an extra measure of determination and some serious concerns about whether they can compete with 18-year-old students in the classroom). Several of them had taken special reading and writing classes the previous semester to prepare them for this first term writing class. As we might expect, they also had insights and biases that stemmed from their particular circumstances and backgrounds.

The Class: A Detailed Overview

English 131, The Writing Experience, is a 15-week class. The class I observed met Tuesday and Thursday from 8:00 a.m. to 9:15 a.m. The text used in this class is Donald Murray's book, *Write to Learn*, which contains advice about and exercises for students to use with their own writing as well as examples of student writing and professional writing.

The class itself operates using a form of the workshop approach. The students use brainstorming in class to find topics and then make lists of things they can write about. This often is the first step in any new assignment. The brainstorming and lists extend to their daybook/journals, in which they do freewriting on an average of four times a week. Topics for their writing come from their own experience, reading, movies, class discussion, local and national news. The daybook/journal is not used as a diary but as a place for recording and expanding ideas that may turn into pieces of writing for the class, and for making notes about their own writing

process. It is collected three times during the semester for comments by the instructor and counts for 35% of their final grade.

Three “official” papers are assigned (with dates they are due to the instructor for her comments), Paper 1 is “A Scene from Life/ A Narrative Moment”; Paper 2 is “A Person or Place Intriguing (or Important) to Me; Paper 3 is an authority paper in which each student writes about something on which he/she is an authority. All papers are written using a process approach to writing and a workshop approach to revising; therefore, during the course of the semester, students write multiple drafts on a variety of topics, read each other’s work and respond to it with comments and suggestions for improvement, and re-write the earlier drafts of their own work.

In addition, each of these papers is part of a larger assignment or body of work. Paper 1 is assigned after students have spent 3 1/2 weeks brainstorming and sharing ideas and writing in their journals both in and out of class a series of pieces about topics such as childhood events, scenes from high school, their neighborhoods, who they are as an adult, embarrassing moments, times they feared death, other topics that they consider important to write and think about. When the students come to the point of choosing what to write about for Paper 1, they already have numerous rough pieces, most of which fit the general topic, from which they can chose one for expansion and eventual fine tuning.

Paper 2 (Intriguing/Important Person or Place) uses Storyspace as the instrument (or tool) by which students work with their writing (not all students use Storyspace for this assignment; that will be discussed at length later). Work on this paper continues for several weeks. Paper 3 (I’m an authority on. . .) is part of a larger assignment in which students first identify

areas in which they have some expertise and write about one of those areas, and then identify topics about which they would like to know more, i.e. personal research topics, and begin the research, culminating in a bibliography and an oral research report but not necessarily a written report.

One formal conference with their instructor is required during the semester. In addition, almost all students conference informally with the teacher during or after class sessions. At the end of the semester, each student submits for evaluation, a portfolio, defined as a 12-15 page "collection of your finished writing submitted to show the variety and quality of your best work" (Appendix B). Each student must attach to this portfolio a rationale, in the form of a letter, as to why he/she chose the pieces included. The portfolio is worth 45% of the final grade.

The activities that take place during class time are those mentioned earlier in conjunction with the papers: brainstorming for topic ideas; making lists of things to write about; freewritings on topics as diverse as "who am I as a writer" to "my most frightening experience" to "mysteries (in the universe) I would like to solve"; sharing ideas; sharing writing with large and small groups; discussion of writing techniques; collaboration on group projects. The bulk of the class time is spent on individual writing. A "typical" day may include some "teaching" or explanation/demonstration time by the instructor, varying from as little as 5 minutes to as much as 60 out of 75 minutes (the latter was a rare occurrence). More typically, teacher time was spent with individuals or small groups of people as they had questions. But each class day after the first day included some writing time on the computer, again varying from 15 minutes to the entire 75 minute period. After the first week, students would come into class and automatically turn on the computers

(since theirs was the first class of the day, it was a necessary move) and begin to work on their writing.

Early in the semester many of the class activities serve to help students become more comfortable with the class and with their own writing, including the brainstorming, freewriting activities, group or collaborative work, orientation and support for using the computers. As the semester continues, these same activities function in different ways and places.

Brainstorming and freewriting continue to be important elements as new assignments are introduced. Group work remains an important element as pieces are re-drafted for readers (or in the case of the oral presentation of personal research, for listeners). Orientation and support for working with the computers continue throughout the semester, with particular emphasis as new software programs are introduced in the writing of Paper 2. Toward the end of the semester, extra time is given to final preparations for the students' portfolios, including much uninterrupted time on the computers.

During this semester, except for the few times a new project was being introduced, students were always at different places in their work, to the point where they might be working on totally different projects or at least on different phases of the same project. Since none of their papers were officially "done" until the portfolio was turned in, they could always go back and rework some of their pieces. (See Appendix C for Week-by-Week Calendars of Activities.)

Moments and Questions

Tracing the threads of what happens in any classroom is like having a handful of different colored ribbons trailing down over my fingers, some crossed over each other, some entwined behind, some very visible. I have to

pull each ribbon away from the bundle and--without detaching it--smooth it, untangle it, trace it with my fingers and let it dangle. When each is visible and smoothed, then I have to gather them all together somehow and try to tie them in a bow. But the bow comes later; first I must pick a spot to begin untangling.

Choosing moments to focus on was a difficult task because, of necessity, some rich and interesting aspects must be left out. The three moments that I have chosen to focus on are the following: 1) the first day of class, 2) two sessions which illustrate the integration of computers into the pedagogy of the classroom, 3) and the sessions during which Storyspace is used to help students draft with computers.

In this classroom more than any other I have seen, the first day sets the tone and establishes the way in which the classroom will operate for the rest of semester. It shows the integrated approach to computers in the writing classroom that will continue throughout the semester. Because of this, the first day served to open up the questions I wanted to explore through the rest of the semester. I chose two sessions to illustrate the integration of computers into the pedagogy because these two sessions contain both individual work and collaborative work, and because I could focus both on the teacher's method of integrating computers and the students' work with the computers. I chose the Storyspace sessions because they highlight the way in which the technology in this classroom is used both as tool and as instrument.

As I worked with the materials and reflected on what seemed to be happening in this classroom, my initial, global question--what happens in a computer-supported writing classroom?--became somewhat more focused into four subsidiary questions which will guide my exploration and interpretation:

- 1) What is the impact of computers on the pedagogy and the learning experience in this class?
- 2) What difference does the tool/instrument distinction make in viewing the work of this classroom, particularly with computers? How are computers used as tools? as instruments?
- 3) What are the nature of the interactions, particularly the power relationships in this computer-supported classroom?
- 4) What effect do computers have on notions of text?

Note on Notation Methods

Throughout the following chapters, I use direct quotes from the **participants** (initially from their conversation and later from their writing) as **often** as possible, so that as I support the points I am making, the language of **the** participants, both individually and in interaction with each other, shows **through**. I have in most cases broken large chunks of transcription into **smaller** pieces, either providing orientation and explication before and after **the** quoted material or interspersing the quoted material with explication **and/or** summary of omitted material.

All material transcribed from conversation is italicized, except in a few **cases** where quoted material was short or not easily attributable. In these **cases**, the material has been placed in quotation marks and included within a **sent**ence of explication.

Within the transcription itself, interpretation, usually of an action, is **found** within parentheses (*class laughs*) as are (*indecipherable word*)s and **sign**ificant silences (*pause*). When it seemed pertinent, I indicated the length **of a** pause. Square bracketing indicates a word or words [*that I*] put in. **Missing** text is indicated by ellipses . . . like that. Emphasis as loudness is

shown by *ALL CAPS*; stress by underlining. Please note that sometimes it was difficult to say for certain whether a given word was *LOUD* or stressed, so I used MY best judgment.

When a speaker broke off abruptly in the middle of a word or a thought, I used a double hyphen followed by a space (--) to indicate that break. If a speaker started talking while another was finishing, I positioned the second speaker's beginning words directly below the words which he/she interrupted.

Beyond this, I occasionally used a special way of noting something which I explain directly in the text as I am preparing to talk about a particular section. Since I am not a linguist and this is not a purely linguistic analysis, I trust the preceding information will be sufficient to explain the conventions I used in presenting this material. ¹⁵

¹ In her model, Phelps' posits four phases of research in composition which she calls collectively the P'TP (practice to theory and back) arc. Phase one research is initiated when a "crisis" or "problem" emerges which does not "yield to trial-and-error solutions" but instead creates a "babble of competing philosophies." Phase one research "compar[es] methods to discover empirically which is most effective and why." When Phase one research doesn't give definitive answers, researchers begin Phase two activities: "more fundamental inquiries into the constituent processes and activities that underlie surface behavior or its products" (37). Phase three is when ". . . [researchers] look beyond behavior per se to define the underlying conceptual schemas that shape the attitudes and choices of both teachers and students." Eventually, they move to Phase four, metatheory, which involves "more comprehensive networks of meaning, and metacriticism develops to evaluate the methods, assumptions, conclusions, and roles of the researchers themselves."

² Through the entire decade of the 1980s an informal discussion continued among users of computers about the advantages of one brand of computer over another. I could find very little published material that purported to locate differences in writing on the brand of computer although it may have been an undercurrent in some work. However, in 1990, Marcia Peoples Halio published an article "Student Writing: Can the Machine Maim the Message?" in which she compared the work of students who used DOS computers with the work of students who used Macintosh computers and found the writing of DOS users more

serious and “better.” Her article touched off a storm of debate among people who questioned her methods and her results, as well as those who asked why this should be an issue. While the article was not well-received, it did spark a debate that brought to light questions about what we value in a computer-supported writing environment.

³In her report on research, “Research and Recommendations for Computers and Composition, published in *Critical Perspectives on Computers and Composition Instruction* in 1989, Gail Hawisher looks at 42 studies conducted between 1981 and 1988. Of these studies, 26 were comparative and 16 were naturalistic. These studies primarily “concentrated on the effects of word processing on students and other writers, on the processes in which writers engage as they write, and on the products writers create with the aid of computers. Few studies have examined how computers affect and interact with the cultural context or learning environment in which they are used—either for writing or for instruction” (45). I have drawn some of my conclusions based on her summaries of the research.

⁴ Haas examines the ease/difficulty of reading and revising on line. Her work is actually a call to rethink our theories of reading to accommodate reading and writing on line.

⁵The last piece is an article by Charles Moran in *Computers and Composition*, November 1991. Moran does not call it ethnographic; however, it does use the basic ethnographic approach.

⁶ Geertz indicates that ethnography is defined in the *doing* of it, “defined as the kind of intellectual effort it is: an elaborate venture in, to borrow a notion from Gilbert Ryle, ‘thick description’” (6). Following this statement is an elaborate explanation taken from Ryle in which the meaning of “thick description” is illustrated.

⁷ Elizabeth Chiseri-Strater uses this approach in *Academic Literacies*. She says “It is no accident that I decided to look at college students’ literacies, or that my research paradigm is ethnographic. Both my personal perspective as a composition scholar and my training as an ethnographer are woven into the texture of this study” (xxi).

⁸ In Curtis and Klem’s article, “The Virtual Context: Ethnography in the Computer-Equipped Writing Classroom,” they quote Anne Herrington as having written that “reflexivity and public accounting” are necessary in ethnographic research and that ethnographic research should include “. . . reflecting on how one’s own values, gender, class and culture shape research [and then] including that reflection in the published account of the research” (54). At the time of publication of the book in which Curtis and Klem’s article quoting her appears, Herrington’s work had not yet been published. Herrington’s article is now available as a chapter titled “Reflections on Empirical Research: Examining Some Ties Between Theory and Action,” *Theory and Practice in the Teaching of Writing: Rethinking the Discipline*, Ed. Lee Odell Carbondale: Southern Illinois UP, 1993. In the published work the quoted words do not appear. The exact quote is: “Other researchers, including those advocating feminist and critical ethnographic approaches, stress that the researcher’s own personal history, attributes, and assumptions should be included as part of the ‘data’ for a study.”

⁹ I have used the term “polyvocality” to indicate many voices speaking about the same experience. This may be similar to M. M. Bakhtin’s idea of “heteroglossia,” which carries two definitions; one, a social diversity of speech types; and two, multiple voices. Bakhtin’s work has a linguistic emphasis with which he concentrates on discourse in the novel and the way in which the themes an author advances are carried by the heteroglossia, while my work concentrates on the voices of actual participants in the classroom. However, as an admitted story-teller and shaper of fictions (both in Geertz’s sense of the term and in a more generic sense), I may be talking about the same thing.

¹⁰ I did not discover this article until after my research had been completed and many of my conclusions about the philosophy evident in Martha Petry's classroom had already been formed. It was with delight that I realized that my conclusions about this classroom were in line with the stated philosophy of the program.

¹¹ Hammersley and Adkisson also discuss reflexivity, which they consider to be the hallmark of all social research, particularly ethnography. They write that social research has a "fundamental reflexivity, the fact that we are part of the social world we study, and that there is no escape from reliance on common-sense knowledge and on common-sense methods of investigation. All social research is founded on the human capacity for participant observation. We act in the social world and yet are able to reflect upon ourselves and our actions as objects in that world" (25).

¹² LeCompte and Preissle write that ethnographic methods "elicit phenomenological data" which "represent the world view of the participants; that ethnographers use "empirical and naturalistic" research strategies; that ethnography is "holistic" and contextual; that "ethnography is multimodal or eclectic; and that, in short, ethnographic researchers use a variety of research techniques to amass their data" (3).

¹³ Not all of the computer-generated work must be generated on the school's computers. Several students had their own computers, both the same and different brands, and worked at home on their writing. One student told me that she ended up doing her final portfolio on her word processor at home because it was easier than coming back to school.

¹⁴ For further discussion of the connection between pedagogy and work station placement, see my article "Equipping the Classroom for the 21st Century: Pedagogical Theory in Computer-Supported Classrooms or It's All in Where You Put the Desks," forthcoming in the fall 1995 issue of the *MCEA Journal*. In this article, I compare this classroom to a workshop to discuss the way in which the placement of work-stations supports the pedagogy of both collaboration and work on individual projects.

¹⁵ I followed MLA guidelines whenever they were applicable to the work; however, the MLA guidelines do not deal with transcription, per se.

CHAPTER 2

ACT I: THE FIRST DAY, A MICROCOSM

This day, like a strand of DNA, contains the instruction set for the way the class will grow the rest of the semester, including the way in which computers will be integrated into the pedagogy of the class. On this first day, they begin, at least in some small way, three of the main tasks with which they will be engaged throughout the rest of the semester, namely 1) building a classroom community of writers, 2) using and integrating technology into classroom life, and 3) writing. Martha establishes this classroom as a place for collaboration, active learning, intellectual speculation, risk-taking, writing to learn, and learning to write.

Because the ethnographic approach to data collection results in such a large body of heavily contextualized data, and the meaning of that data is altered when broken out of that context and conceptualized thematically, I want discuss one chunk of data in some fashion akin to its original context. In this chapter, I will use the format of the play to re-create the experience of the first day in a whole context and to focus on the (inter)action thus allowing me to show clearly and quickly what actually happened in the classroom.

Brodkey states that "ethnographers study individuals as if their lives were mounted on a cultural proscenium--in full view of an audience" (25). This particular application of the notion that all the world's a stage seems appropriate for study of this first day of class since the day unfolds much like a story or a play. (Inter)action is central and the entire term is foreshadowed or prefigured by the first day: a tone is set, an attitude established, ways of

doing things are modeled, expectations of behavior are expressed, eventual outcomes are suggested. The instructor doesn't merely talk on the first day about what they will do later in the semester, she and the students act, do things. Martha is the master narrator, much like the stage manager in *Our Town*; she is the playwright/director, but involved in an impromptu, ad lib play--the outliner of the story. She writes some of her own lines, organizes the action, sets the lighting and invites the supporting cast, but ultimately relies on everyone to make the story/play work. She knows a cue when she hears one, and she knows how to get everyone involved in finding their own cues--which is what happens from the beginning of the first day.

To fulfill my obligations both as re-creator of experience and as analyst/interpreter of those experiences, I have used two special methods, one an organization pattern, the other a device. The play is organized into a series of scenes which are chronological; within those scenes some material is organized thematically. The device is RAIAE, the Researcher's Analytical/Interpretive Alter Ego. As the play unfolds RAIAE (say RAY-YAH) will comment on the meaning of the action, serving the function of the chorus in a Greek play. This character also allows me to deal with my dual role as participant/ethnographic researcher.

With that as introduction, let the play begin.

The Writing Experience: English 131

The Characters

Instructor: Martha Petry-Joyce. Veteran teacher, a small lively woman.

Researcher: Nancy

Videographer: Judy

Lab assistant: Trish

Computer network administrator: Alex

Equipment demonstrator: Chris

Researcher's Analytical/Interpretive Alter Ego: RAIAE.

Students: 18 people of various ages (18-50), both male and female, mostly white, some African-American, with a range of attitudes, including hopefully expectant, somewhat bored, obviously nervous. The individual personalities will sort out as the action of the first day progresses.

The Setting

A classroom at Jackson Community College, Jackson Michigan, on a snowy day, early in January, 1994. The warmth and brightness of the room contrast markedly with the blustery weather outside. In the classroom, computers are a definite presence. They are arranged on desks which have been pushed together into groups, 5 desks to a group, 5 groups of desks, for a total of 25 stations. A teacher station is at one end of the classroom opposite a wall painted white which serves as a screen for projection. On the wall between is a white marker board (a replacement for the chalkboards of old).

As students enter the room, each takes his/her place at one of the desks at which there is a computer, for there are no computerless stations.

Prologue

RAIAE (Researcher's Analytical/Interpretative Alter-Ego): *As we begin to look at these scenes, we will see three kind of activities that begin on the first day of class and continue throughout the semester: 1) building a classroom community, 2) using and integrating technology into the classroom life, and 3) writing.¹ On the first day, each activity is addressed overtly and directly in a particular scene while the other activities either play a lesser role or happen*

incidentally. Activities overlap and interweave. Scenes 1 and 2 overtly focus on building a classroom community, while Scene 4 focuses on using technology and Scene 5 on a discussion of writing. (In Scene 3 the researcher explains her work). As I sketch, analyze, and interpret, it is important to keep in mind that all activities are performed in service of writing.

Scene 1: Good Morning, America

(7 minutes) The teacher introduces herself, calls the roll, briefly identifies this as a beginning composition course and explains what will happen during the rest of this session. The teacher sets a relaxed, comfortable tone and begins connecting with students immediately by telling them her name and asking that they call her Martha, a request which many of them have never gotten from a teacher. She also encourages a comfortable atmosphere by her use of comments that address the student more directly than a simple roll call would do. The computers remain quietly on the desks.

*Martha: Charles _____, hi, and you're in your same space.
[Charles is a student who has been in other classes with Martha before.]*

Martha: Andrew _____. . .D'you like Andrew, or Andy?

Martha: Mark _____. Hi Mark.

Martha: Lani _____. Is that right?

Martha: Thomas _____. . . . Did you know there's a famous children's writer who has your last name? I'll bring you in some of his stories.

RAIAE: The personal tone set by Martha encourages students to begin to connect with Martha and with each other in this brief scene. Slowly students join Martha in creating this dialogue, at first with echoes, later with more substantive engagement. For example when Martha has trouble with the

pronunciation of one student's name, both that student and another get involved in the exchange.

Building the classroom community is a complex activity which involves sharing personal information and knowledge; developing interactions between students and between teacher and students; and encouraging a relaxed atmosphere which allows for humor, exploration, and risk-taking. By making at least a small personal connection with each person as she calls role, Martha initiates this complicated process which will continue and expand with the introductions in Scene 2.

Scene 2: Getting to Know You, Getting to Know All About You

(30 minutes). The teacher, the guests, the students introduce themselves and continue the task of establishing a classroom community. This classroom community is not shaped just by Martha but by all of its members. On the first day, this a community of place, i.e. whoever is in or comes into Room 205 between 8 a.m. and 9:15 a.m. is part of that community. On January 4, 1994, that includes all the players listed at the beginning of this play. No sound is heard from the computers.

*Martha: When we write in here, we are going to be writing about things that we care a lot about, that you care about, that I care about. And your peers. . . people in your writing group and in the class at large, are going to be writing about things I hope that they care about. And sometimes that's pretty frightening to write about experiences that are important to you and reactions that you have to either personal experiences or to films or to videos . . . **When we write, we cannot remain anonymous**; as soon as we open our mouth either in word or print people start to make judgments about us. And that can be a pretty scary thing, like the first days of classes are always pretty scary, so today we are going to spend a lot of time introducing ourselves.*

RAIAE: Martha acknowledges the fear but immediately takes steps that will force everyone to confront it by introducing themselves. She sets the

tone and provides the model for sharing personal information and knowledge, which is the second item on the day's agenda, immediately after the calling of the roll.

Sharing Personal Information

Martha, giving instructions: I want you to tell two facts about yourself, and then I want you to share with us one surprising fact that not very many people know about you. (pause) I think it's only fair that I have to go first since I seem to be in charge here (she laughs).

She talks about the reasons that she walks around in the classroom; first that she has great adrenaline energy, especially early in the morning and that her favorite time is 4 a.m.; second, that for years she taught dance and finds that she needs body language from her students to indicate whether they are understanding her or not (which she encourages by her own movement). Her third and surprising fact is a fairly long story about her changing household.

Martha: The third and surprising thing. . . I have a changing household. And there are people who do know that. Um. . . The changing household means that there used to be four of us and now there are three, I'm in the process of a divorce, that isn't surprising at all, but this might be surprising.

Martha moves toward the door where Alex is standing.

One of the ways that we, my children and I, understand immediately whether we've had a hard day and just, you know how you all walk in, you know and you're ready to collapse or yell at each other. Sometimes that happens after a long day of work and you're arriving home at the same time and everybody's kind of out of sorts. (throat clearing).

The clue to if it's been a really bad day is that, any one of us at any time can walk up and say, "Would you please hold my foot."

Martha swings her foot up and plops her ankle into Alex's hand.

(Softly) Just like that..

A ripple of laughter crosses the room.

Alex: *I'm not in her household,*

The whole class laughs.

RAIAE: *Through her stories--which are funny, cute, somewhat unusual and interesting, personal but not intimate, the teacher has provided a model, a way of beginning to establish what can be said and how people can talk in this community. As part of that model, Martha's stories reveal something of her personally and also provide places for others to connect with her. Each person following Martha also reveals something of her / himself and at the same time connects with some part of what has been said before--beginning with each of the guests.*

Nancy is next after Martha and tells them that she is a doctoral student doing research on Martha's class, that she lives in Grand Blanc and has to get up very early and drive a long way to get there, and that when she's mad she throws Kleenex boxes at the wall.

Judy, who is holding a video camera on the class, identifies herself as a teacher at MSU who hates to get up in the morning and suggests that she is not nearly as intimidating as her students think at first.

Trish, the lab consultant, tells us she is a teacher of French, ESL, and basic writing at JCC who got her Master's at Michigan State. However, when she got her Bachelor's in French, she went to France for two weeks, ended up getting married and staying for eight years.

Alex says he graduated from high school in 1985, began working in the lab in 1986 and now is a network administrator in charge of all classrooms and labs and all Macintosh computers on campus. He enjoys his job, but hasn't managed to get his Associate's degree though he is still trying. When he gets angry, he works on his anger by beating on the bed with a tennis racket.

RAIAE: *The four guests in the classroom use (and manipulate) some of Martha's themes, namely morning and stress, and also introduce a new theme. occupation, which is picked up by subsequent speakers. As students begin their introductions they too take up these themes, and introduce new ones which in turn are echoed by other students. As these themes resonate throughout the class, a group sense of identity begins to emerge.*

Martha picks names randomly from her class list, requesting that each student, as called upon, tell two facts and one surprising thing about themselves.

Melinda, the first student to speak, continuing the theme of stress: *And--surprising-- I guess I'll do what you guys did-- When I get mad I really-- I rarely don't, I'm really [not] a stressful person, I really don't-- actually I have a lot of sisters so I guess I do take it out, I just take it out on my sisters. . . .*

As student after student follows Melinda in telling something about themselves, four major themes emerge during the sharing of "ordinary facts": school majors, marital status/children, where they've been or where they're going, and work.

Sara: *I just moved here from Ohio, to tell you about myself. Um, I did used to live here, but did that moving around thing and then (laughs) I'm back. I am separated, I've got two children. . . .*

Jenny: *Um, I'm here majoring in criminal psychology. . . . I'm moving to Utah.*

Lani: *I moved to Jackson in June. I graduated from Charlotte. I work until 1 o'clock Monday night, so when I come in here I'll be draggin'.*

Nick: *I am an exchange student from the Soviet Union. I also was an exchange high school student.*

Charles: *I, I uh, graduated from high school in 1963. And ah, I moved to Ohio . . . and I took up welding.*

Heather: *I'm married. I have two kids. . . . I'm a design consultant for The Design Shop in Jackson.*

Jim: *Let's see, I'm a theater major. . . . I work at Radio Shack so if you need a deal on a stereo, come and talk to me [class laughs].*

Margy: *Um, married, four children. . . .I'm studying for radiology.*

Andy: *Uhm, I've been working on an Associates' degree in criminal justice. And-a I moved here from Iron Mountain about 9 months ago. It's about 450 miles away, way up north. . . . I just got married about 3 or 4 months ago . . .*

Ann: *I'm a newly divorced mother of two children under the age of three. . . . I'm going into the diagnostic medical sonogram program this coming August. . . . Hopefully I will be transferring up to Traverse City after I get my degree.*

Karen: *I live in Brookline. I have a husband and a daughter.*

Mark: *I graduated from Grass Lake just this past year I'm an aircraft mechanic*

RAIAE: *These ordinary facts, which Martha has requested from the students, establish a common ground, a common theme, and help build the group sense of identity. The surprising facts Martha has requested do something different, three things in fact. First, the sharing of surprising facts simultaneously makes the students more memorable to each other and establishes each of them as having an individual identity with the group. Second, it serves as a small risk-taking exercise, which is important because they will be asked to continue to take risks in this class. Finally, because this class is based on personal writing, sharing gives the students the chance to search for and try out an interesting tidbit on an audience, thus to see their personal lives as fodder for writing.*

When the students begin talking about surprising facts, they start to show a bit more variety; they introduce new themes but they don't completely

abandon connecting with previously mentioned themes. Two deny the possibility of surprise:

Sara: Um, as you get to know me I guess you'd think there's not a lot that would surprise you because if you know me you know me by what you see.

Nick: I don't really like surprises. I don't really have a surprising fact.

Some note the differences between what might be expected and what is:

Josh, a broad-shouldered, soft-spoken, 18-year-old computer major: I like going to plays and musicals. People don't think I do that stuff, but I like to do that.

Heather, a bubbly, outspoken person with two small children: When I've got something to think about or something is bothering me, I like to go outside and sit and think about it.

Many of the surprising things are also funny things: Sally tells us she's been hit so much her car must have an invisible bull's eye on it; Jamie doesn't drive well; Charles tries (unsuccessfully) to sing in the shower; Margy can't figure out how she can find Room 217 from Room 205. One is an obvious joke--Jim says his father fed him with a slingshot when he was a child. Others are idiosyncrasies: Jenny likes warm pop, Ann eats a side of M&M's with her buttered popcorn, Mark hates lima beans. Karen's surprising fact seems to amaze her. She says, eyes wide as she laughs: "I'm-- I'm here!"

No one reveals anything terribly intimate, with the possible exception of Andy who tells the class that his recent marriage is to a woman who is 25 years older than he is. Even that is not intimate, just unconventional. And then he hedges on telling her age.

RAIAE: The connections noted here are of three kinds: connections of form, of content, and of shared experience. Form: students use the same general form for speaking that Martha modeled--two ordinary facts, one

surprising fact told in that order and comments that begin with "I am" or "I have." Content: as noted, several themes emerge--content connections.

Shared experience: the sharing of one small bit of personal information, one small experience of risk-taking in which almost everyone participated helps bond the group.

Interactions: Teacher's Support/Shaping and Connecting

RAIAE: Throughout this period as the students are revealing and connecting, Martha is actively supporting and shaping their efforts as well as doing her own form of connecting. Her support is not unqualified acceptance of everything each student says; it is, initially, more of a consistent acceptance of the effort, and then, support/shaping based on her perception of, first, the students' needs and, second, the goal she maintains of building a community. She calls on students, not in alphabetical order, nor in the order by which they have seated themselves, but randomly. This serves to move the focus to the people, rather than the classroom geography or the alphabet. As students introduce themselves, Martha takes notes, underscoring the importance of what students have to say and demonstrating a very fundamental sort of writing to learn, that is, taking notes to help remember.

When Melinda, the first student to speak, has some difficulty, Martha acknowledges Melinda's nervousness and helps her get through the task.

Melinda, standing, back to camera: You'd like two facts-- Well, first my name's Melinda _____. A surprising-- (sigh and quick out-breath) I'm very nervous here. I rarely stand up in front of a lot of people and talk.

Martha: If you're more comfortable, you can sit down. It's okay.

Melinda: It really doesn't matter. (class laughter) [something mumbled, like "I'd still be nervous."]

Martha: As long as you're up.

Melinda: *Um, now what did you want? two--*

Martha: *Two facts, any two, and then one surprising thing that not many people know about you.*

Martha moves to the screen at the south wall, leans against the wall, and writes on a notepad the comments being made.

Melinda: *This is really hard. I'm really not a shy person, actually. I really can talk..*

Martha *That's a fact, that's fine.*

Melinda: *Here's another fact. It's really not important, but I come from a big family, I'm the oldest of 5 children. And--surprising-- I guess I'll do what you guys did-- When I get mad I really-- I rarely don't, I'm really [not] a stressful person, I really don't-- actually I have a lot of sisters so I guess I do take it out, I just take it out on my sisters. . . .*

Martha: *Okay, great Melinda. That was wonderful to start us off.*

RAIAE: *Martha is patient and supportive as she helps Melinda deal with nervousness. When Melinda loses confidence, Martha finds a fact in what Melinda has said and thus validates Melinda's ability to participate and be successful in this endeavor, a move which is not lost on the class. This move allows Melinda to come up with another fact and then a surprising fact. When Melinda is done speaking, Martha again validates her effort, a pattern that Martha uses consistently throughout this class period.*

Martha supports or shapes in some way every snippet that people tell, and thus simultaneously connects with and leads students. At no time does Martha use a standard teacher evaluative response such as "Good" or "Good answer." Martha's comments are more of the kind that occur in ordinary conversation between peers or between a host and guests. And at no time does Martha let anyone avoid the work that must be done. She has asked them for facts and will not accept non-answers or fictions.

Two situations in particular show her shaping the discourse, insisting that the assigned work be done, and supporting students efforts to do that work. When Nick, the exchange student from the former Soviet Union, says:

Nick: *I don't really like surprises. I don't really have a surprising fact.*

Martha does not let that go, nor does she harangue Nick, but instead opens an opportunity for him.

Martha: *It's amazing that you don't like surprises but you're an exchange student.. Which would have to be filled with surprises. I mean--*

Before Martha has finished speaking, Nick has thought of a response.

Nick: *Uh, actually the first time when I came here I didn't really like American food.*

That would be an adequate response; Nick says he didn't like American food.

However, Martha doesn't let the opening go and asks him a question.

Martha: *What was worst thing you ever had to eat?*

Nick: *I tried to eat French fries with a fork and knife, (class laughs) and then my American family told me Americans eat a lot of food with their hands, so that's a surprising fact.*

Martha: *Thank you, Nick.*

In this case, Martha directly shapes the discourse in a direction which will meet her goal of building a community. Nick, because of his cultural background, may well contribute something quite distinct to this community, and Martha is making use of this opportunity.

There is one other situation in which Martha shapes the discourse overtly: her conversation with Jim. After telling his basic facts, Jim tries to use an outrageous joke--fiction--as a surprising fact:

Jim: *Surprising fact--my father fed me with a slingshot when I was a child (class giggles) Besides that, everything's kinda. . .*

This joke is not well-received by the class, only a few giggles. But Martha does not let it rest. She expands on his joke.

Martha: Maybe you'll write about this experience. (pause) Did you like to eat? (pause) You don't know?

Jim: That part of my life's in the subconscious. I don't know.

Martha: Thanks, Jim.

Jim: I've been in therapy for three years for like nightmares and stuff, but I don't know what it means.

Then she builds on Jim's experience with her own:

Martha: Another surprising fact. I never knew that and I've known and worked with Jim. We worked together on Equus. He was a horse. I mean, he was in the part of a horse.

Jim: Yeah, yeah, we know what you really mean. (class laughs)

RAIAE: Martha's move here works two ways; first, it shows Martha's personal connection to experience outside the classroom, and second, it opens an opportunity for (perhaps even pushes) Jim to connect with others in the class.

Jim: Oh, ah, just to plug it real quick. If anyone wants to, there are open auditions for Inherit the Wind next Monday and Tuesday.

Martha: Everyone get that? Inherit the Wind is a play. Large. large cast. They're looking for bodies.

Jim: Thirty people.

Martha: Thirty people. Remind me when we get to the bulletin board that that might be one of the things you'd like to post--once we're on the network.

RAIAE: In this case, Martha works with a student attempt at humor that could close off conversation and shapes that conversation so that her connection with the students is expanded and the student in turn sees a way to connect with the rest of the class.

In the midst of this support/shaping and forging and exploring her connections with students, Martha also points students at the connections they have with others in the classroom. The interaction with Jim is one example, but there are others. When Andy says that he's "been working on an Associates' degree in criminal justice," Martha responds: "Who else is doing that? Jenny? You're in criminology?" Andy then turns and talks briefly to Jenny.

When Karen says, as her surprising fact, ". . . I'm here," Martha uses this comment to connect many people in the class.

Karen: *I'm-- I'm here.*

Martha: *Yes? Is this your first semester out here?*

Karen: *Yeah* (nods).

Martha: *Well, welcome. Anybody else absolutely new to JCC, never been here before in your life? (Hands go up) Wait, I want to see that. (Martha counts) one two three four five six seven. Welcome.*

This move on Martha's part visually shows the students one more way in which some of them are connected. At one point in the conversation after several people have talked about moving either in or out of the area, Martha says, "A lot of travelers in this class, coming and going."

Interactions: Students

While Martha has been supporting/shaping and connecting, the students have been doing some connecting of their own. Now students begin to form deeper and more subtle connections and to interact with one another.² During the introduction period, each student interacts with Martha, at least

on a nominal level. However, some of the students also begin to interact with each other.

The first student who both connects on a deeper level and interacts strongly and dramatically with another student is Sally, the fourth student speaker. Sally's impact is actually in two steps, separated by the space of five speakers. The first step begins when Martha calls on Sally. After identifying herself as a single 30-year-old mother of two who is always running to her children's sporting events, she says:

Sally: *My car has an invisible bull's eye wrote on--printed on it.*

Martha: *It has a WHAT? What does it have?*

Sally: *People have a habit of hitting me. So it has this invisible bull's eye, nobody knows about.*

RAIAE: *To this point, no one has dealt with a theme or topic in this way. Up to this point, even the surprising facts have been pretty conventional and conventionally stated (Melinda takes out anger on her sisters, Sara says she is not surprising, Jenny likes warm pop). Sally follows the conventions which are being established regarding form; however, she follows Martha's example ("Here, hold my foot") in style by sharing with the group something fanciful, flamboyant, whimsical, something not-quite-safe, something that might make her look a bit odd. It may even have been something she has said before, with a group of friends, for example. She shares this without hesitation. Sally's move "works" in that it is supported by class laughter and by Martha's more-than perfunctory response: "I LIKE that. (pause) Good luck. . . ."* It functions to further the building of community by leading to an interaction.

Martha immediately warns the students, especially Sally, to watch out as they are driving for the great numbers of deer around the college. Trish adds that the police also patrol.

The second step in Sally's interaction happens when Jamie, five students later, comes back to the driving theme:

Jamie: *The surprising thing--I really can't drive very well.*

Sally, responding immediately: *Stay away from my car. The one with the broken lights all the time. Stay away.*

The class responds to this exchange with much laughter.

RAIAE: *I think a line has been crossed here This is no longer a simple teacher-student exchange; Sally talks to Jamie, and whether consciously or not, places herself not just as a student responding to teacher directives but as a community-maker, an actor not merely a re-actor.*

Another student who begins interacting with others in the classroom is Andy, who begins his interaction during Bob's "turn." Bob is the sixth speaker. When Bob provides a list, no wasted words: "I work in a hotel; I drive a Buick; and the surprising thing is that I don't like talking in front of many people," the class responds to this with laughter, whether at his economy of language or at the final part of the contribution (sort of a "no kidding" response), I can't determine. However, Andy moves into the conversation with a comment, "She'll [referring to Martha] fix that."

RAIAE: *This seems to be both an attempt at interaction and a comment on his perception of the function of the class.*

Andy inserts himself into the conversation and ostensibly addresses Bob, but Martha is expected to hear, as is the rest of the class. Andy, by his comment, invites response. Bob, apart from a nod and a smile does not

respond, but Martha does: “Yes. Well, bit by bit we’ll-- or maybe ease it just a bit. . . .,” both a support and a clarifying function here.

Andy is involved in another interaction a little later with Jim.³ When Jim introduces himself, he says, “. . .another fact, I work at Radio Shack so if you need a deal on a stereo, come and talk to me,” to which Andy responds, “That’s where I’ve seen you.” The second half of Jim’s comment can be seen as an invitation to interaction to the entire class, while Andy is responding to the first part of Jim’s comment.

Relaxed Atmosphere

RAIAE: The relaxed atmosphere apparent in this classroom begins with Martha’s own attitude, which I characterize as supportive and gently humorous. As mentioned earlier, she begins by asking that the students call her by her first name, Martha, a move which students often do not experience in classrooms and, therefore, serves to signal a more relaxed atmosphere.

One of the major outstanding elements of this class on the first day is the laughter that takes place during this class. During the first 45 minutes of the class, there are 62 separate instances of laughter, ranging from a single chuckle to a general group guffaw. About one-third of those laughs are Martha herself laughing, usually a single chuckle, sometimes at something she has said that strikes her funny, sometimes at something someone else has said.

Martha’s smiles, good humor, and laughter help set the tone for this classroom. Because the teacher laughs even at herself (especially at herself), everyone else can laugh, both with her and at themselves. And they do. What seems particularly significant is that two-thirds, over 40 instances of laughter, again ranging from one-person chuckles to general laughter, are from persons other than the teacher. Beyond this, the laughter is not all generated in

response to the teacher; this is a not a situation in which the teacher is doing a one-woman stand-up comedy routine. The other people in the classroom follow Martha's lead and pick up on her cues. Then they make her laugh, and they make each other laugh.

This is a good-natured laughter, not a mean-spirited humor. When Martha says she is getting a divorce, nobody laughs. When she follows with the story about her family method of diffusing bad spirits, "would you hold my foot?", people do laugh. When Andy tells that he is married to a woman 25 years old than himself, no one laughs; but when he follows that with "I won't tell you her age, though, because she wouldn't like that," everybody laughs. Nobody tells put-down stories about other people, probably because Martha has structured the sharing so that they are talking about the personal, the individual, themselves.

Back to Martha: Overt Group Building

Martha closes this scene with a monologue, in which she addresses her fellow actors. She walks around the room, naming all students, a group at a time, pointing to people as she identifies them by name. (The cadence and emphasis of her naming are represented by means of periods and spaces to indicate pauses and length of pauses--one beat per dot--between names and ALL CAPS to indicate emphasized words.)

Martha: (moving to southwest group) Group one. This is Melinda. Let's see how good my notes are. Sally . Tom.

*(moves to northwest group; clears throat) Group two.
(To Jamie) Did you talk?*

Jamie: Oh yes.

*Sally: He tried.
(class laughs)*

Martha: *Bob Sara . . . Josh . Margy JAMIE.*

(moves to south center, in front of screen)

This is hard work. I'll see approximately 130 students in the next day (clears throat) and by Thursday, I will want to have most of your names learned.

Let's see. Group three. That's Heather . Jim . Andy . Karen.

(moving to southeast group)

Group four. Charles . . . Ann MARK. Okay.

(moving to northeast group, points at one student) *Nick . It's simple because I think of that long first name. This one is-- you're Lani and you're Jenny. All right.*

Welcome. (walking back to teacher station) We know . . . little things about each other. Hopefully this will help us as we write.

RAIAE: *The recognition and repetition of names in this fashion is a ritual action which anoints each group as a group and each individual as a member of the community, emphasizing to the students the importance of both group and individuals. It also provides closure to this particular activity. Although community-building continues, the foundation at this point is established. This is now a class--with groups. Task 1 on the day's activity list is complete.*

Scene 3: The Researcher's Monologue

(8 minutes) This is a business scene in which the researcher explains the nature of her research on collaboration in a computer-supported classroom and requests the cooperation of the students. Following some introductory remarks by the researcher, these comments occur:

Martha: *Those of you who haven't been to JCC before [should] know, you are in a computer networked environment in the classroom. You are absolutely in the forefront, in Bill Moyers words. . . "on the cutting edge of technology." . . . Nancy is interested in how students collaborate in computer environments, which is what she is interested in researching. . . You will be her project. You will form the stuff of her study. How you interact as a group, how we interact as a large group, how in some ways I*

introduce computer technology to you and how it gets integrated, those kinds of things.

Nancy: I'm beginning a dissertation project which will focus on what happens in a composition classroom which uses computers to support the work of the classroom.

RAIAE: Although they have been a silent presence since the moment the students walked in, this is the first real reference made to the computers which perch on every desk in the classroom. The conversation about computers in this scene, though brief, foreshadows the integration of technology and sets the stage for the next scene.

As we move to look at Scene 4, the purpose of which is to overtly confront the technology of computers in the writing classroom, it is important to remember that technology of some kind has always been present in composition classrooms and that the technology shapes the writing. For years, the technology that has been used in composition classrooms has been pen and paper, chalk and blackboard. More recently, teachers have added overhead projectors to their repertoire of technological magic, while student have used typewriters (most often outside the classroom). Within the past 10 years, computers have become an available technology for use in the writing classroom. Earlier technologies of writing have in some ways become invisible; we don't think of them as "technology" because they have become so integrated into our thinking by long use. Computers are highly visible as a technology because they have not yet become integrated into the writing classroom. However, that is beginning to change. Martha's classroom is one site of this change. Her goal may not be to make the technology completely invisible, but it is to make it at least more comfortable. She tells the students, as they are finishing the process of logging on to the computers, "Logging on right now for those of you who have never done it before, is a very conscious

act. . . it will become eventually very much automatic and something that you don't have to attend to with a bunch of energy."

Scene 4: Let's Roll Up Our Sleeves and Push a Few Buttons

(15 minutes) The computers, which have been sitting quietly for the past 40 minutes, now become the object of discussion.

RAIAE: *The activities of community building and interaction, completed in the last scene, form the foundation for the next task, namely learning to use the technology Today, the students do--overtly and in a block of time dedicated to this activity--what will become integrated into their everyday work for the rest of the semester: use the computers. In this scene, students, teacher, support staff, and guests share knowledge and interact, both with each other and with the computers. The relaxed atmosphere and the humor continues, allowing and encouraging the interaction which supports the students' efforts to learn the technology and further strengthens the newly-formed sense of community.*

The roles change slightly. Martha moves from the central focus for students to become a supporting player. The role of central focus is passed to Chris, who comes to demonstrate logging onto the computer network, and to the computers. Martha and Trish roam among students and help those who are stuck. Their interaction with students is primarily individual and is quite non-structured, occasioned by the need of the moment. Students must attend to Chris' directions, to the computer's signals, and to help and prompting from Martha, Trish, Nancy, and each other.

Chris: Integrating Technology Without Pain

RAIAE: *Chris works very hard in this scene to make learning about using the computers an easy and comfortable experience for students no matter*

what their level of experience with the technology. This is obvious in her use of humor and her effort to explain without jargon.

As Chris is introduced to the class, she is invited by Martha to share two facts and one surprising fact with the class.

Chris: *Hmm. Okay. Number one. You already said my name, that doesn't count?*

Martha: *(laughs) No, it doesn't count.*

RAIAE: *Just as Martha refused to accept non-answers from students, she cuts no slack for Chris on this bit of community-building work either. Everybody participates. That is central to Martha's definition of community.*

Chris: *(laughs) I work full-time at the college, and I've been here since 1986.*

Martha: *That is two.*

Chris: *Uhhhhh. Let's see something you don't know about me.*

Martha: *Something that not many people know-- None of us know a whole bunch about each other. But something maybe not even your closest friends know about you.*

Chris: *Hmmm. I'm not gonna say my weight. I'm 5 foot 2. (Chris and class laugh) with little flats. (Chris laughs)*

RAIAE: *Chris' attitude is relaxed; she is willing to laugh with the students. This attitude continues as she begins to walk the students through logging on to the computer. She doesn't assume knowledge, she tells people what to expect, and she avoids arcane technical jargon and integrates the technical terms that she uses into normal relaxed speech.*

. . . I'd like to start by having you turn your computers on. The switch is located on the back left side just next to the power cord. Back left side, just next to the power cord, if you just flip that little toggle switch, it will turn on your computer.

People start flipping toggle switches.

You should hear a dinging noise and your screen should kind of start to turn gray. Eventually you'll see a little happy face on it and it will say "Welcome to Macintosh."

Chris continues her monologue:

The steps that we're gonna go through initially are the steps that you'll go through every time you come in here to access your folder. You have a folder set up that's only your folder, nobody else can get into it except you, including your instructor, so if you're working on a project and you want to give that project to your instructor, you will see a folder for Martha that you will have to physically drag that assignment into. She cannot get into your folder, so if you're thinking that it's done, she can just go ahead and take a look in my folder and grade it--no she can't do that.

RAIAE: *Chris comments on important issues of privacy, individual space, responsibilities--both the students' and Martha's, all of which are computer-related. Each enrolled student has a folder already established in the general class folder. Chris' guided tour explains to them how they are to find this space that is designated as their writing space.*

She explains again what the students will be seeing on screen:

*. . . Then the rest of your screen should start appearing. Along the bottom of your screen, you'll see programs that we have available for you when you're in here. Umm. **Microsoft Word** is the word processing program that most of the time you start off with. I believe that you will use **Story Space** which is an idea processor to help you put your ideas together for your homework. There's a trash can that you can throw old documents away. Up in the upper right corner, you should see something called **Macintosh HD** or something similar to that. That's the hard drive that's on each of these computers. These hard drives contain the programs that are down at the bottom and printing information and so forth.*

RAIAE: *Each item that Chris points out is something that students will be using for writing in the class. She is careful to explain not only what these items are but also how the students will be using them, in other words, why they are important to students.*

When she begins to explain the “process of finding where your folder is located and logging into it,” she doesn’t assume knowledge, but checks to be sure what is known and continues sharing her own knowledge on the basis of what seems necessary for the group.

If you look up at the top of your screen, you’ll see a little black apple in the upper left corner of the screen. What I’d like you to do, is take your mouses-- has everybody used the mouse before? Is there anybody not familiar with the mouse. Okay.

At this point, Chris has checked to see what knowledge students have. They have the opportunity to say, yes they know or no, they don’t know. Before she goes on with directions on what to do with the mouse in order to log on, she interrupts her own monologue to explain mouse use, then continues her presentation in this vein--checking understanding, embedding technical jargon in explanation.

Chris walks them through several more steps in the logging on process, until they get to the file server for their classroom and she instructs them to select it, then follows with these directions:

Now underneath where it has that okay box, there’s a user name box. I’d like you to type in your full first name followed by a space followed by your middle initial without the period, another space and your last name. Go ahead and type, what’s there will be wiped out when you start typing.

RAIAE: *As the students type in their names, they are notifying the computer of their existence and claiming the writing space to which they are entitled.*

Interactions: Everybody Talk

The backdrop for Chris’ presentation is a general cacophony of busy, working (inter)activity. Every person in this room is involved in some physical action, which, of course generates noise. People chat with each

other. Computers ding and buzz and light up. Trish, along with Martha, who has become a supporting player in this scene, roam as Chris talks. They stop to look at computer screens and respond to students' questions. Nancy roams a bit to observe but finds herself pressed into service as students assume that she could be of assistance to them. Chris moves around as she talks to see how people are handling her instructions.

RAIAE: The interactions of teachers and students become less governed by rules of turn-taking and more controlled by the need of the moment. Conversation is focused on the situation at hand. The roles of teacher (as one-who-knows-and-explains) and student (as one-who-learns-from-teacher) blur somewhat in this scene. If there is a question, whoever can answer the question, does.

When Chris talks about the mouse, a situation arises that needs to be dealt with. Ann, who sits facing Mark in group 4, draws attention to it.

Ann: He (pointing at Mark) doesn't have a mouse.

Chris and Martha both respond.

Chris: You don't have a mouse?

Martha: Mark doesn't have a mouse.

Then there is a babble of voices (Martha, Chris, Mark, and others).

The only clear response is Mark.

Mark: Oh, no, I can't play (he laughs).

Ann gets up from her seat, takes a mouse from another computer, then walks around the table and plugs it into Mark's machine.

Martha: Thank you, Ann.

RAIAE: In this passage, a student's problem is identified by another student and solved by that same student. The solving is supported by Martha in her thank you to Ann. I deliberately have used the verb "solving" as

opposed to the noun “solution” because I believe that, while the solution is supported, Ann’s act of solving is what is really what Martha is thanking her for.⁴ Another point worth noting is Mark’s use of the word “play.” This whole situation seems relaxed enough to Mark that he can joke about it and identify it, not as work, but as play.

Ann is also on camera a few minutes later, away from her own station, helping Charles, another member of her group, who has also been helped by Trish and by me.

As Chris gives directions about typing in their names, Melinda gets confused:

Melinda: *Wait a minute, I’m lost.*

Tom, sitting next to her, leans over, stares at her screen:
What’s wrong?⁵

Melinda: *Okay, my name’s already here, right?*

Tom: *Yeah, hit on it. And return. Is that the only thing?*

He turns briefly to his own screen, then back to Melinda: *Hit, click on okay. Er, no. Go up to classroom 205. Click it.*

This seems to take care of Melinda’s immediate problem, but Chris has identified a problem that Tom has.

Chris, looking over Tom’s shoulder at his screen: *I think it might want you to say Thomas, instead of Tom. So just double click on Tom.*

Tom, taking the suggested action: *Oh, okay.*

A few moments later, Martha stops at Andy’s desk:

Martha, to Andy: *Yeah, just hit return, hit it again, then hit it again.*

A few moments more, Trish is wandering, looking over shoulders at people’s screens:

to Jim: *Click on the go away box.*

to Andy: *Click on the go away box.*

to Heather: *Now you want to click on what we call the go away box.*

RAIAE: *This scene has proceeded with great collective energy, lots of (inter)action, and a blurring of roles. Martha refocuses that energy as she closes this scene. In the following monologue, she moves from supporting player to leading role again; however, even as she is drawing the students' attention, she is refocusing it on them, on their groups, and their responsibility to each other.*

How many of you have never, ever been on a Macintosh before? (counts) four, five, six. Okay. How many of you have never been in a networked classroom before, so those six plus others, right?. Never been in this kind of a classroom, never logged on before. I want to see all those people who've never logged on before. Hands. Okay. You notice that there are people in your groups have done this, yes? For those people who have done this before, your responsibility to the members of your group is to help them do this until they get comfortable with it.

She continues her monologue and closes it with the following statement:

As we continue-- and we'll probably do this [logging on] three times on Thursday, so just endure it for those people who already know how to do it, and remember that your expertise will be needed by the other members of your group. You know that you won't let them flounder around TOO long before you say, "Ah, I can help you right there, I know what you're doing wrong." Okay?

There is a strong effort in this section to avoid letting the technology intimidate the students. In addition to relaxed language and lots of interaction, Martha makes a statement which should ease some fears:

I'd like to reassure those people who have never done this before in their life that the course, the course and your success in it is not dependent on how well you learn to use the computers. Okay? What I'd also like to tell you that you'll find, I think, eventually, for those of you who are not used to the computer or doing any

work on the computer, it will really speed your process and make revision and all those kinds of things much easier and simpler.

This effort parallels earlier and continuing efforts to avoid letting the situation intimidate the students.

To close Scene 4, Martha claps her hands once, asserts, "We are READY. Thank you, Chris." And the scene ends as Chris smiles and leaves.

RAIAE: The closure ritual in this scene, Martha's drawing students' attention once again to each other and to their connections and responsibilities to each other, parallels the closure ritual at the end of Scene 2. In this case the group has accomplished task 2 for today, using and integrating technology into the classroom life. They have also begun task 3, writing, as they established their space in the virtual reality designated for classroom 205.

Scene 5: Reality Bytes

(15+ minutes) Laws that will govern what has been established, as far as community, integrated technology, and writing spaces/places and activities are discussed in this scene. Martha hands out course descriptions and explains the rules and the expectations contained therein, and then discusses the homework assignment.

RAIAE: The activity in the class up to now has provided a foundation for Martha's discussion in this scene. She says, "[T]he business of this class is writing." The overt business of this scene is to discuss writing and the responsibilities of both students and teacher in this particular environment. It includes discussion of themes that have been introduced earlier--community and technology--and their relationship to writing. It also continues the effort of community building which has begun in earlier scenes, and in some ways summarizes what has gone before while pointing to the next acts of the classroom drama.

About Writing

Martha: *We will write about so many subjects in so many ways, contexts, varieties, styles and forms that writing, I'm certain, will become a more natural activity.*

... we'll explore in our own and each other's writings. . . a whole range of ways that the written language is used depending on what we're writing, how we feel about the subject, who we're writing to, why we're writing, and even how we feel about the writing itself. Being comfortable and confident with our writing is no easy task. Yet it is where we must begin if we are to become better writers.

RAIAE: *The implied goals in the preceding passages are making writing a more natural activity and becoming better writers.*

In the following lines, Martha specifically states the goals of the class:

The goal of this writing experience class is for you to become a better and more confident writer. We'll also learn to talk about writing in a variety of settings and locations.

RAIAE: *The language in this discussion reveals the teacher's approach. In this discussion of writing, the term "we" is used several times--we as writers--it is both a personal and inclusive term, as is classroom community. In addition, the emphasis is on the act of writing, on the activity of writing, and on growth--"becoming better writers."*

She also discusses an area that will not be an initial part of the goals, but will come later:

Attention will be given to the mechanics of writing, you know, mechanics are all those surface things, like spelling, punctuation, verb / noun agreement, noun / pronoun agreement, . . . only later in the course, [it's a] later part of the writing process, not the one I'd like you to be worried about now. What I'd like you to be worried about now is writing a lot, writing about things you care about, writing with energy and passion.

As Martha talks about goals, she also talks about methods. The following excerpts are culled from approximately 3 minutes of conversation; most of the deleted parts expand her comments by example.

Sometimes I'll ask you to think about writing while you dance or listen to music or take a solitary walk, sometimes we'll talk about writing strategies in class in . . . your small group or in large group. . . .

Sometimes we'll break into small pairs Sometimes you'll work in your small writing groups, the cluster you're in now. . . .

Sometimes I'll informally lecture, . . . but mostly I don't do that. . . . Sometimes we'll use literature, stories, essays, poetry, anecdotes, sometimes, we'll use films, sometimes, we'll use videos to spark writing ideas and topics.

Some writing will be done in class; some writing will take place in your daybook journal. Other writing will be assigned by me and will be worked on both inside and outside of class.

One conference about your writing will be required . . . probably around the sixth week or seventh week of the course. . . you'll just have a personal conference with me.

RAIAE: In her elucidations and clarifications, Martha demonstrates an underlying awareness of students' concerns, even as she explains the goals of the class and the methods whereby those goals will be achieved. Goals and methods are woven together in her conversation. The examples she gives of what they will do and how they will do it involve a range of approaches and several types of technologies, which is typical of the way this class operates.

Responsibility: Yours, Mine, Ours

Responsibility, in this discussion, falls into one of three categories: 1) the students', 2) Martha's, or 3) a joint responsibility. The discussion of responsibility operates within the realm of the classroom community.

The students' responsibilities are as follows:

Martha: Your responsibilities. Your main task as writers will be discovering, using and improving your own writing voices. Your writing voice is kind of like that voice you hear in your head. . . . that all of us recognize and . . . that is . . . inside us You know those kind of voices. Those voices are all your own. You have an angry voice, you have a fearful voice, you have an

anxious voice, you have an informative voice, you have a descriptive voice, you have an excited voice. We're trying, we're going to get all of those voices onto the page. . . . I think you will discover your own personal writing problems as well as their solutions. You won't need me to say, 'Ah, this has got a problem.' You'll be able-- you'll begin to recognize your problems and how to fix them. And that will also happen with your group . . . We'll learn how to do that.

Martha lists her own responsibilities as follows:

My responsibilities. I will be reading and responding to all of the things that you'll be so busily scribbling down in your writing.

. . . In this course, part of my responsibility is to evaluate your process, where you began and where you ended.

When she talks about joint responsibility, she makes it clear that she is discussing this as a cooperative venture:

Our responsibility is together, we have this responsibility, what happens in this class happens because of all of us. It's not just me. There are more of you out there than there are of me. And your responsibility is to your group. . . . They will come to depend on you. They will miss you if you're not here. They will probably miss you more than I will miss you. And I mean that because you'll all be functioning as a working writing group.

RAIAE: *In her discussion of responsibility, Martha makes it very clear that this responsibility is both individual and collective. She focuses on writing, on how community is connected with writing, and how technology supports the work of writing that will be done in this classroom.*

About Technology

When Martha talks about technology, the discussion is integrated into the rest of the things she has been talking about: it follows immediately after comments about the group functioning as a working writing group and is followed by comments about the textbook they will be using in this class. In the middle of Martha's comments, she has some difficulty with the technology

and is rescued by a student, Charles, who needed much help with the technology earlier in this act. His help is welcomed by Martha.

Martha: What we use, obviously the resources of this Macintosh computer classroom. We'll use some software, Microsoft Word, Storyspace, Timbuktu maybe. You will need one of these disks. . . And you can purchase them, the most cheapest place on earth-- the most cheapest?-- is from the Mac lab next door. And the disk looks like-- (she fiddles with her computer) the disk looks like-- hm, it's not ejecting. That's 'cause I've got something open. The disk (pause) still doesn't . . .

Charles: Is this the right one? (holding up disk)

Martha: THANK YOU!!! Charles. (class laughs) It looks like this. And it costs about a dollar I think. And you don't need to purchase it right away. It's important to have one of these to save all of you-- all of the writings that you do here in this classroom or in the lab when you access your classroom folder all of that writing is saved in your classroom folder. You know that little place where you were just visiting. But at the end of the term or any time when you want to work on it away from JCC, if you have access to a Mac.

Building Community, Student Involvement

RAIAE: Throughout the analysis of this scene, I have used the term "discussion" loosely. The students have the text of the course description and are more or less actively engaged with that text, with the oral presentation of that text, or with both, but Martha is actually giving a monologue. Nevertheless, she still builds community and seeks to foster interaction in this scene, both through her language and her action.

To begin, her comments during the presentation of the course description are personalized. There are no vague and anonymous references to "the student", or to "the instructor." Instead she says "you" and "me" and "we". She talks about "your responsibilities" and "my responsibilities" and says, "[O]ur responsibility is together, we have this responsibility, what

happens in this class happens because of all of us.” She talks about “our writing.”

RAIAE: *This use of language encourages students to think of themselves both in first person and as part of this community.*

Secondly, she draws on some of the general knowledge of what students of the past have told her:

Martha: *For those whose first course this is at JCC, I have been told that this is where people make friends because you write about things that you care about a lot.*

RAIAE: *By this move she connects this group to a larger community of learners / writers.*

She also connects what past students have told her with what she knows from her experience:

Martha: *This is a long course description, probably one of the longest you’ve ever seen in your life. There are many reasons for this. Most students that I’ve encountered, as a teacher, have told me, and my own experiences as a student have also informed me that many of you, like me, spend a great deal of effort and energy trying to figure out what it is that the teacher wants. . .and this course description really tells you what it is that I want, what it is that I expect, what it is that I’m looking for.*

She seeks the involvement and feedback of students. She addresses issues that she surmises to be of concern to students but also checks her understanding as she goes:

I would like you to give your honest opinion now. How many of you, unless this course were required. . . , would opt, on your own free will, to take it, yet again, another writing course.
[Counting] One, two, three, four, five of you. Most-- six of you. Most of you have had lots of experiences with writing or few experiences with writing, but some of you haven’t felt very good about that experience. Is that correct? So you feel somehow trapped here. You say ‘Oh God, I have to endure this all over again. And I’m going to see red marks and all that stuff all over my paper.’ Most of you have had some pretty wild woolly experiences with writing. Some wonderfully positive, some horribly negative. Yes? I need body language here. Good, good.

RAIAE: *Martha is seeking to continue to establish a classroom code which includes the students and values honesty from them. By asking students to think about and apply a question to their personal situation and to respond to that question by raising hands, Martha is further establishing the importance of connections and groups. Raising hands identifies these students as an informal "group." When she uses language that she attributes to a mythical "student construct"--you, the quintessential student, and asks for their response to her construction ("Yes? I need body language here."), she is further soliciting their involvement.*

Finally, through the course of this scene, she addresses particular students and makes them part of her illustrations.

Martha: We're going to be using class time to talk about ideas for writing, to talk about each other's writings and to write itself. Sometimes we'll break into small pairs and sometimes that might be like this--

She leans over and touches Bob on the shoulder.

Bob, is this Bob?

He nods.

Bob and Charles might be. . . partner[s]. . . Even though they're separated by spatial area, we might be using a program called Timbuktu so they can share each other's writing that way.

Bob is in the northwest group, Group 1, while Charles is in the southeast group, Group 4.

Martha also ties in what she knows of the students so far and actually refers back to the community-made knowledge. For example, she uses Heather's statement about going outside to illustrate a point about voice.

Martha: When Heather goes outside, right Heather? (Heather nods) and just is at peace or not quite at peace, but wants to be alone and by herself to get the world back together in whatever ways, there is a voice.

She also draws from the established base of community knowledge when she is discussing the need to keep all writing:

If I don't see your process, then I don't know what I'll evaluate. I need to know where you are at the start of the course and where you are at the end. So you have to save everything. You feel like trashing stuff, throw Kleenex boxes, hit your bed with tennis balls, like Alex says, but don't throw away those pieces of writing.

Finale

The class ends with Martha's signal:

All right. This class is done for today. But these are the things I'd like you to do.

She gives a list of tasks: reading the course description, writing down their questions, looking at the calendar of the first two weeks experiences, and closes with the final lines:

That all right? Everybody okay? See you all on Thursday.

The computers hum softly, their murmur subdued beneath the hubbub created by students as they chat and gather their materials to move beyond the world of this newly established computer-supported classroom writing community.

Epilogue

RAIAE: *And so the first day ends, as many do, with much more to be accomplished and with high expectations on the part of the instructor, the researcher, and at least some of the students. The activities begun on this day--building classroom community, using and integrating technology, writing--will continue through the semester, sometimes effectively, sometimes less so. Though silent for a large portion of the class, the computers are now and will continue to be a definite presence in this community. The computer impacts everything. How the computers impact the writing and the writing classroom will unfold in days to come.*

Curtain--The End--Applause

Power, the Distributing of Power, Responsibility

One of the important concepts in recent literature about classrooms is the idea of empowering students. It is also one of the questions I posed as I began looking at the computer-supported classroom: What are the lines of power and authority? As we look at the first day of this particular classroom, a pattern of power distribution becomes evident. Martha, as teacher, is the first focus for the students and the final focus, but not the sole focus. She introduces other people, as either colleagues or guests, and each of those people talks briefly. Those presentations fall within a very strict structure, but under that structure people say what they deem suitable. Then each student has a turn (whether they want to or not). At the moment of engagement, students may feel more on-the-spot than empowered, but Martha's action serves the long range goal of giving students a stake and a space in the classroom as well as demonstrating that they have a responsibility to the community which is forming. For that is the other part of power in this situation: responsibility. Even as Martha is providing openings for students to exert their own authority, she is also very directly giving them a responsibility for the operation of this community. Some of the students take power in small ways, i.e. they take initiative--for example, Andy and Jim, and notably, Sally--by speaking out of their designated turn or about a topic which is not the prescribed topic, a practice which is not discouraged. With some students, Martha pointedly insists that they take the responsibility for shaping this community, as when Nick tried to avoid giving a surprising fact or when Jim didn't give a fact at all but a joke. With the group as a whole, she directly names their responsibilities.

At times during this class period then, the teacher becomes a supporting player, not the only power in the class but someone who shares

her role of authority and responsibility with others. For example, when Chris comes in to demonstrate the machines, the focus shifts away from the teacher. Martha could demonstrate the machines herself but by bringing Chris in, she effectively demonstrates a willingness to share power, authority, responsibility. In this case, the focus is not only on one other person, Chris, but on the machines and on other people in the class, both teacher-role folk and other students. In working with the technology, students can be seen as asserting their power as they take responsibility. By writing their name on a folder in the virtual space of the computer network, each student is making a space for him/herself within this technological world.

As Martha comes back to her conversation about what they will be doing in class, she repeatedly stresses the students' authority to speak/write about their experiences. Martha's method of empowering her students, on this first day, is partly an insistence that they will all talk at least a little, partly giving them safe places to discover and assert their own power, and partly connecting power with responsibility.

¹ All activities in the classroom serve the overall purpose of improving students' writing, including building community and integrating the technology into the classroom life. Because Martha is attempting to develop a workshop classroom in which students share their writing with each other and rely on each other for reactions and suggestions, establishing a sense of community will help the students shape their writing and understand their audience.. An extensive body of literature exists regarding community and collaboration in classrooms, including Peter Elbow's *Writing with Power* and *Writing Without Teachers*; Elbow and Pat Belanoff's *A Community of Writers*; Anne Ruggles Gere's *Writing Groups*. The case for integrating technology is much less clear and not well documented, and part of what I hope to support in this work.

² The difference between connection and interaction is in some ways an artificial one; after all, interactions begin with connections. However, connections can be unacknowledged or one-way while interactions presuppose some two-way communication.

³ Andy's own "turn" doesn't come until after Jim's. Jim is the thirteenth speaker; Andy is the fifteenth.

⁴ This reading is consistent with all the things Martha says in Scene 5 about the students' responsibility to each other.

⁵ His exact words are not clear on the tape, but his comment leads to Melinda's response.

CHAPTER 3

INTEGRATING TECHNOLOGY INTO PEDAGOGY: COMPOSING WITH PENCIL/PAPER AND MICROSOFT WORD, COLLABORATING VIA TIMBUKTU®

As the first day of class establishes, by example and modeling, the way in which the class will operate, the days and weeks following show these methods in operation. In this classroom, as in more and more classrooms, using the computer is not exactly optional anymore. Computers are in the classroom, and either by administrative mandate or professional choice, teachers are learning to use this technology as an extra resource with which to work. However, the technology does affect the pedagogical approach. In this chapter I will examine two aspects of the pedagogy of this particular classroom, one related to individual composing and the other to collaborative work, to see how the presence of the computer impacts the pedagogy in this situation.

Composing with Pencil/Paper and Microsoft Word

The students in this class use two types of technologies to compose. One of these is a familiar technology--pencil/paper. The other is computer-based technology--first, a word processing program, Microsoft Word, and, later, a hypertext authoring tool, Storyspace (which will be discussed in a subsequent chapter). Pencil/paper is an easy technology to work with and plan for because it's familiar, so familiar that it doesn't even seem like a technology. This familiarity means that very little needs to be done in the way of instruction

about pencil/paper as a technology. The computer-based technologies, on the other hand, require both a different type of consideration in the planning of the course and more overt instruction because of the students' lack of familiarity with them.

In this classroom, Martha integrates this instruction about technology into the work of the class. Every lesson about technology comes in the context of a lesson about writing, so that the technology supports the composing that is done. The integration of technology into the classroom, then, is one way in which the pedagogy has been affected. I will look at the ways in which Martha integrates lessons about the technology into the work of the class and blends the older, possibly more comfortable technology with the newer, so that a bridge is provided by means of which students can move back and forth between the technologies and also can see their work as continuous between technologies. This is most evident with the movement back and forth between pencil/paper and Microsoft Word. As I draw attention to this integration of computer technology and to movement between old and new technology, I will also comment on the ways in which the technology is positioned as tool or as instrument by the teacher's demonstration of that use.

Pencil/Paper to Microsoft Word--and Back

The work that students do outside of class is done primarily with pencil (or pen) and paper, while work inside of class is primarily computer-generated. The reason for this is a very practical one: most of the students at JCC do not have personal access to computers outside of the classroom. Those who do have computers of their own often do not have Macintoshes, which is the standard at JCC. While the technologies in and out of class may be different, the use to which they are put is similar. The work done outside of class during

the early weeks is exploratory, in keeping with the philosophy espoused in the course: that of “exploring in our own and each other’s writings . . . so many subjects in so many ways, contexts, varieties, styles and forms that writing . . . become[s] a more natural activity” (From the Course Description, Appendix B). Exploratory writing is not only done outside of class; Martha includes exploratory and reflective writing as part of in-class assignments, thus bridging differences between out-of-class and in-class assignments and between technologies. To see how this works, I’d like to go to Sessions 3 and 4 to discuss the work done in these class sessions.

Session 3. Before coming to Session 3, the students’ homework assignment has been to read their textbooks about writing and freewriting and to write in their daybooks/journals as much as possible, including at least 15 minutes of writing “about who you are as a writer . . . not a teacher’s view, not an idealized view, but your own view of how you see yourself as a writer” (Calendar of First Two Weeks Activities, Appendix C) and to begin writing about a childhood event. As noted previously, these are exploratory writings, drafts of ideas, reflective pieces.

In class during Session 3, students work with Microsoft Word for Macintosh, a comprehensive word processing program that is available in all labs and computer-supported classrooms at JCC. This is the software that students began with on the second day of class and which they will continue to use throughout the term as their basic writing environment. On this day, the students engage in the following activities, in this order, accomplished primarily on the computer and done individually unless otherwise noted. They:

- use the computer to write in their journals,

- learn to manipulate the software as they learn more about writing journals (students see teacher's material projected on large screen as she addresses group but work individually with their own),
- use the computer to reflect about journal writing,
- use the computer to write about writing fears,
- participate in a group activity using networked computers and Timbuku®)

The day begins with a brief technology lesson, Martha explaining how to open a new document in Microsoft Word, which leads the class into its first writing activity of the day:

Right across from your title / topic Brainstorming, you see that little white box that I call the go away box. See that? All you have to is click on it once. You see how it'll return you to your folder. Now what you're really looking for is Word Start-up. Y'see that. And double click on it. When you double-click on Word Start-up, it will say it's locked. Click okay or hit the return button. All right. So everybody should be looking at a virtual blank sheet of paper.

With this virtual blank sheet of paper comes the writing activity from Martha:

I would like you to take 15 minutes. . . . I know for some of you the keyboard is difficult it will slow you down more than speed you up. Nonetheless, give it your best shot. You have 15 minutes to write a journal entry. You can write anything about anything you'd like to. [She lists several suggestions] Begin writing and try not to stop to edit. . . . Just write as though the wind were at your back. Please. Okay. Write.

For several minutes, the clatter of keyboards is the only sound in the classroom as the students tap journal entries into their computers. Martha writes along with them at her own computer on this assignment, while various assistants--Trish, Alex, and Dixie--roam the room to offer help as needed. After 15 minutes of work, Martha asks the students to stop writing. She signals a

change in activity and indicates how they are to mark that change with the technology:

Okay, would you please just stop wherever you are. Do a dot, dot, dot. Which is your signal, my signal, that I'm the one who is interrupting you. Right. I mean most of you were ready to go on, you had other things to say. I'd like you to go up to file, which is right next to the apple on your menu, and . . . drag your mouse, keep clicking down on your mouse and drag down to save . . . and let up.

At this point, Martha integrates a longer set of technology lessons into the business at hand, some of which lean more toward a tool use of the technology, some to an instrument use. She uses the overhead projector to display her writing to the screen and uses her writing as an example both of what journal entries can be about (instrument) and as a means of extending students' knowledge about using the computers and the word processing program Microsoft Word (tool). During the next 15 minutes, she explains and demonstrates the following techniques: using the scroll bar; inserting additional material; highlighting material to move it or delete it or change it, including changes such as increasing the font size and changing the font or font style (bold, italic, and/or underline) of already written material--all of which could be considered demonstrations of the computer as a tool. As she is explaining and demonstrating on her own journal entry, she directs students to practice some of these moves on their own material at their own screens.

Along with the technical information she presents, she also gives information about certain conventions and approaches she wishes them to use. For example, she says:

I want you to make sure you get in the habit of dating your journal entries. I don't care what system you use, but they must, every single journal entry must be titled, as a journal entry. . . .

She talks about how to write journal entries, based on her own experience and concerns. In the following segment, her discussion leans toward using the technology as an instrument:

JUST WRITE. (students laugh). Which is what you should be concerned about with your journal entries, too. Getting the words out quickly and on the pages in a journal entry is much more effective in terms of getting you to write freely and flowingly than to stop and negotiate about whether that makes sense. I mean you can always stop and contemplate, but I'd rather you not contemplate about the spelling of a word. Does that make sense?

The contrast she makes of getting words out and writing freely and flowingly, as opposed to considering the spelling of a word, draws attention to the different possibilities for use of the computer.

As on the first day, Martha again uses herself as an example. She shares her journal with them both as a means of demonstrating the techniques of editing with the computer and this software and as a way of providing an example or model of what journal writing can be; tool and instrument use of computers is integrated. When she shares her reflection about journals, she suggests ways for the students to think about them.

All right, we'll go ahead and read this journal entry so you'll see a piece of my writing. And I'm not so sure, as I never am-- . . . sometimes I think . . . after writing in a journal, "well, that wasn't very good. But at least I got words down on paper." Sometimes your journal will really flow and be easy and sometimes it will be very difficult.

After this overt work with the technology, Martha asks them to continue writing in their journal but to change the topic and write about their experience of writing in their journal, thus encouraging them to reflect.

. . . I would like you just to say how you felt about this particular writing today. This journal. Did it go as well as some of the writing you did over the weekend? . . . How did you feel while you were writing? Were you struggling for words? If you were struggling with the keyboard, if you had nothing to say, I want you to write all that. . . . How it felt doing this writing. Did it start out awful? Are you still mad at the machine? Who are you so

impatient with? All of those things. It's that affective response to your own writing. Affective.

Again Martha writes with the students.

After approximately 5 minutes of writing, they move on to a new assignment. As Martha has done with each new topic, she integrates comments about the technology with the signaling of a change. She says:

I'd like you to do a dot, dot, dot, again, 'cause I interrupted. I'd like you to go back up to file and down to save. . . . Now I'd like you to hit your return twice.

From this integration of technology and technical skills with the writing work of the class, she moves immediately to the assignment of topic:

And I would like you to write about all the fears you have about writing. Every single one of them. This is a free-writing and this doesn't have to be perfect. . . . You can write about any fear that you have, whether it's spelling or punctuation. Whether it's-- I don't know what your fears about writing are, but I'd like you to write them all down. Your fears about writing. Just go to it. Let it flow. You can jump from one idea to another, if you like. You may insert a little story. Fears about your writing. About the writing experience. What are the things that trouble you?

The students write individually for between 5 and 10 minutes before Martha stops them so that they may go on to the next phase of writing work which will be discussed later, collaborating by means of Timbuktu®.

In their work with computers during the early part of this class period, students are building on the thinking and the work they have done with paper and pencil in their journal/daybooks: making journal entries, reacting to writing on the computers, writing about writing fears (which seems particular akin to the writing about who they are as writers which was part of their homework assignment)--writing which is exploratory and reflective. As they are doing this writing about topics germane to the work of the class, the students are also learning how to use and manipulate the software program (Microsoft Word) and the equipment. Martha constantly integrates small lessons about using

the technology with the lessons about writing. Sometimes her focus is directly on the software or equipment; often the focus rests on technology only for a moment before they go on to the business of the class: writing. During the time they are focusing on technology, emphasis moves back and forth between considering the computer as a tool and considering the computer as an instrument. In addition, support is provided for students to learn the technology--besides Martha herself, three support people, lab assistants or consultants, are in attendance at this class period.

Session 4. Between Session 3 (Tuesday) and the next class meeting Session 4 (Thursday), students employ the more familiar technologies to continue writing work already begun: to read their textbook information about three different brainstorming techniques and to write daybook/journal pieces using those techniques, including mapping a neighborhood, freewriting about high school experiences, and making a tree about their adult life.

In class during Session 4, the students engage in the following activities:

- participate in discussion about brainstorming activities,
- watch teacher demonstration of brainstorming activities (use of marker-board),
- watch demonstration of writing technique on overhead projector from teacher's screen,
- learn how to drag files into group folder (teacher projects to large screen from her station, students practice at own screens),
- continue participation in small group activity, again using Timbuktu®.

In Session 4, class work continues to blend with homework, and technology continues to be integrated into general class activities. Session 4 begins, not with the use of computers but with a somewhat older technology--

markerboard, which is in some ways fairly akin to chalkboard.¹ Due to some confusion over the brainstorming activities assigned as homework, Martha begins class by talking with the students about areas of confusion. She then models the brainstorming activities--including mapping and drawing a tree--using her own experience and writing on the markerboard on the east wall of the classroom.

When this activity is completed and students seem to have resolved some of their confusion, Martha dims the lights and attempts to use the overhead projector to show an exercise. However, there is a technical glitch; Martha searches for Alex to fix it and while we are waiting, she explains the exercise, called 5-minute moments. A 5-minute moment is a scene from life, a scene which is no longer than 5 minutes in length. The writer "enlarges by slowing down the action so that we can see every single step of the events" (Martha Petry, in class 2/8/94). Once they have seen examples of this, the students will write their own 5-minute moments in their journal/daybooks. When Alex has toggled the proper connections, Martha then projects these examples (written in Microsoft Word and hence manipulable in the same fashion as their other work) from her screen to the large wall screen. As she reads the examples² and explains the technique, she highlights and enlarges the text, an activity that she calls attention to and explains to students as she is doing it, reminding them that they can also do it on their own texts should they wish.

Before the lights go on again and the class moves away from overhead projecting, Martha shows the class how to drag a file into their group folders, so that any member of the group can have access to that file. The utility of knowing this move is made apparent to the groups as they realize that at the end of the last class, when they were all doing group work using Timbuktu®,

each recorder in every group saved the file to his/her personal folder, and in the case of an absent recorder, the rest of the group does not have access to that file and will have to begin again. At this point they continue the group collaboration begun in the previous session.

As on the previous day, work done at home is connected with work done in class; pencil/paper work is linked with computer work. During this class, Martha specifically addresses confusion about the homework and shows how it can be done. The students' technology for this work had been (and will be when they come back to it) pencil/paper; Martha's technology was markerboard. In this case, she uses markerboard to approximate pencil/paper work. In showing 5-minute moments, she uses the computer technology primarily as a tool to show something that was done in Microsoft Word, but can be done with pencil/paper.

During Session 3, we saw bridging from pencil/paper to computers; Session 4 emphasizes bridging between in-class technologies (markerboard and computers) and out-of-class, (pencil/paper); the bridge works both ways. During these two days, technology is used as a means both to show writing strategies and to do the work of composing. It is demonstrated both as a tool for manipulating text and as an instrument for understanding. These two days exemplify the ways in which, throughout the semester, work with computers is integrated into the pedagogy of this classroom. The presence of computers both allows and necessitates adjustment of teaching (and learning) strategies. In fact the presence of computers and the use of computers provides a commentary on the use of all technologies (including pencil/paper or markerboard or overhead projection). We can't take technology for granted.

Collaborating with Timbuktu®

As Martha points out in the following quotes, the work in these early days is intended to help students become more comfortable and competent as writers, and computers play an important role in this effort.

... [O]ne of a number of items on my agenda when I start ... is, how they become more comfortable and competent as writers, as people who share their own experiences in writing, and own those, in a sense of a community of writers. ... [T]hat can't, and shouldn't be all teacher-directed and related, and so the fact that the computers are there and they allow networking and collaborative potential, is something that I really have to work early into the course. ...

*... I would be trying to foster like-group collaborations [even if we were] in [a] traditional classroom. **The computer helps me do it better because there are two things that are fostering the collaboration.** One may be mechanical and much more task oriented. ... [O]ften the skills that one needs as a writer aren't the same skills that one needs to even be able to follow that hierarchical organizational structure of logging onto the net, which we will repeat over and over again; one of the very first tasks is to have the group figure it out. If anybody gets lost in the group, our response is how can that person get on. ... I know what software ... helps me do what I want to do. ... they're immediately into Timbuktu ... sharing screens, getting used to looking at each other's writing, and exploring ... what are probably the hardest things to get over. ...*

Martha Petry, Interview, 12/14/95 (Emphasis mine)

In this section I will continue the discussion of Sessions 3 and 4 to examine a second aspect of the pedagogical approach used in this classroom--collaborative work--and the ways in which the technology is used in the early weeks of the class as part of the means of fostering collaboration. The primary technologies that support this are networked computers and a software program called Timbuktu®. In addition, this work points to a sharing of power and authority between teacher and students and among students.

Timbuktu® Explained

Timbuktu® is a remote control and screen sharing software which allows users to exchange files among their Macintosh computers and also to

view or control other users' screens across a network (this type of software is often called "groupware"). Timbuktu is useful in a situation in which a group is working to compose one document or in which individuals wish to share something they have written with one or more people for purposes of peer group critique or editing.

Within each group, one person at a particular station is designated as the controller; another person or several other people at different stations, which are connected through a local area network, can choose, by clicking on the controller's name/location, to observe the controller's screen through their own screens. When the controller types, they see, each on his/her own screen, what the controller has entered. As long as they are connected through Timbuktu to the controller's screen, they cannot use their own keyboards or any other input devices to enter data. They can, however, choose to disconnect. Control can also be passed to any other member of the group.

It is also possible for more than one person in each group to designate themselves as controllers, in which case all controller-designated keyboards would send data to the screens of the group members simultaneously. As this could result in a chaotic situation, particularly for new users, Martha typically asks that each group limit itself to one controller.

Early in the semester, Martha uses the network and Timbuktu as part of the means of teaching collaboration. For example, in sessions 3 and 4 students work on an assignment that spans two class sessions. For this assignment, each student begins an individual reflection on his/her own fears about writing. They do this using an individual word processing program. Then students move to a group consideration of such fears, using Timbuktu to create, first, a list of those fears, and then, suggestions to address the most troublesome.

In this particular instance, the teaching objective is to help students learn, first to work out ideas of their own, then engage those ideas with the ideas of others, and, in the end, collaboratively create something larger, greater, more than any of the individual pieces. Martha uses the transition from the individual word processing software to the groupware (Timbuktu®) to mark and support the transition from individual production to collaborative production. (At other times in the class the groupware is used in collaborative engagement that seeks to support and strengthen individual work. For example, later in the semester students can choose to send their work by way of Timbuktu to other class members for peer critique and editing.)

Session 3. The assignment begins with Martha's explanation of how she wants them to proceed and why:

This is your first collaborative learning project, which means you collaborate, you work together as a group. I will read the first set of instructions and then you guys are on your own. All right? [Martha reads.] Look around you at the five people who form your computer pod. I know that some of them are not there, so the three or four or however many -- this is your working group. Okay. Please reintroduce yourselves to each other if you need to; I need to make sure you know each other's name. And then decide on a name for your writing group. . . . Right now on my computers and in your classroom folders, you are group 1, group 2, group 3, group 4, group 5. I find nothing very exciting about that. . . . I'd like you to name your group. You can name your group anything. The slow starters, the early birds. I don't care. . . .

Then she begins to list and explain the different roles which must be assigned in each group, starting with recorder:

. . . agree on one person who today will record the views expressed in your group. Maybe today, it's the person you decide is the better typist. . . .

At this point she mentions for the first time the program they will be using:

*... and you will all use this program today called Timbuktu
Once you decide who your recorder is . . . I [will] come around and
... get you on as a small group to this program called Timbuktu.*

It seems significant that she does not mention the software program Timbuktu until after she has, first, established that this is a collaborative activity; second, explained that they are to re-introduce themselves and decide on a name; and third, begun discussing the roles they need to fill for this assignment.³ By placing Timbuktu in this order in the discussion--after mention of collaboration and something about the work they will be doing--she avoids privileging the software over the activity that it supports.

In addition, Martha does not read all the rules of the assignment; at no time does she tell students the topic of their collaboration. In reading the handout sheet, I would have to judge this as a deliberate move on the teacher's part. She tells them that she will read the first set of instructions (which includes information about re-introducing themselves, deciding on a name, and the roles needed for the assignment), and then they are on their own. Immediately after the part she reads is an underlined section that says:

One person other than the recorder and spokesperson please read
aloud all of the following instructions to the rest of the group.

Following this section is information about the topic and the procedure. So Martha seems to give an introduction to the parts she assumes will be difficult or confusing but leaves the students to read for themselves that they will be collaborating about writing fears. The effect of this move is both to foster collaboration between the students and discourage dependence on the teacher for something they can do themselves--read the directions.

Once she has mentioned Timbuktu®, Martha explains the way the program functions by using Group 3 as an example:

So let's just decide that Karen is the recorder in this group, Karen will be controlling the mouse and the keyboard, and you, Charlene, and you, Andy, and you, Heather, would all see her screen without having to bend over here and look at what she is writing. Timbuktu is a program that would allow any number of you to see each other's screens. . . .

She continues her list of roles to be assigned: the recorder or notetaker will type; the spokesperson will talk about the result of the group's work; the encourager will say, "Gee, Heather. That was a good idea"; the clarifier will "make sure everybody in the group understood what [any other] person said." Her final word to all the groups is "Go." And they begin.

Group 3. To see how a group actually functions when given this task, I have focused on Group 3, the center group⁴, the group Martha used as an example. On this day, the members of Group 3 collaborate, they assign tasks, they interact, they take control of the assignment. In their work with this assignment, they operate within the general constraints Martha has placed on the assignment, but they also put their own spin on it, modifying some of Martha's modeled hints, calling her on what seems to be an arbitrary change of directions, and disregarding a direct suggestion from her about what to do. By the third day, the students know that within the context of this classroom, this behavior is acceptable, even encouraged. They take advantage, appropriately, of their knowledge to modify the situation to suit themselves, thus asserting their own control and authority.

Four of the five members of Group 3 are in class today: Charlene, Karen, Heather, and Andy. When Martha says "Go," Andy, who has the paper that explains the assignment, begins the task of sorting out jobs, matching the position to the person who will accept it. As they sort, they share names and write them down. They also chat amiably, laugh, and, through their conversation, share information about themselves. Heather is the first to

volunteer; she'll be clarifier. Everybody writes her name in their own notebooks. Then Andy looks for a secretary/typist and glances around at the group asking about typing ability. Heather responds: "I can't type at all." When he looks to Karen, she is also shaking her head and indicates that while she can type, she freezes up under pressure of a screen. The group chats about the difficulty they have with typing, and Heather responds to a concern that Charlene mentions about working with the computer. Heather says: "Oh I like it. I like it much better than paper." Then Charlene nods when Andy asks if she can type, and Karen agrees to be spokesperson. There is some confusion over whether the absent Jim will be the official encourager and whether someone else will do it for that day. Although it seemed that Charlene had agreed to type, when Martha comes around to find out whom they have chosen, the conversation is as follows⁵:

Martha: And do you have a recorder?

All look at Andy; Karen and Heather speak: Andy.

In their choice of who takes what role, the students have ignored Martha's modeling. They may have recognized it as a example they needed to follow in spirit, but did not see it as incumbent upon them to choose the same people that she chose when she used their group as an example.

Martha then indicates that Dixie, a lab consultant, will help them get onto Timbuktu®. The scene is cacophonous because four other groups are also getting onto Timbuktu®, but there is an energy, amiable and purposeful, amidst the noise. As Dixie helps them begin, there is much laughter and several quick questions from each of them to confirm that they are doing it right; for example, "Do we just go up to Apple? Oh, now we go to exit bar," and "Then we hit it once?" and "Do you have to hold down on this or somethin'?" At one point, they express some concern about what they are doing, with Karen

saying, "I'm always afraid I'm gonna break something," and Heather commenting about forgetting to save and hitting the wrong button: "Then you have to start all over."

Once they have all clicked and entered in appropriate places, Dixie explains to Heather, Karen, and Charlene that Andy is the controller. They respond to that information in various ways, generally positive:

Dixie: *The three of you are done with your mouse now. He's going to control your computers with his.*

Heather: *Oh.*

Karen (laughing, rubbing her hands): *Hoo-HOO. Oh, good.*

Charlene: *That'll work.*

Andy: *You guys are just observing, I guess.*

Karen: *Yep.*

Heather: *Yeah.*

However, despite Andy's comment and Karen's and Heather's agreement, the other members of the group are decidedly not just observers. The nature of the software program might allow one person, the recorder, to control this situation, but the structure of the assignment, the nature of the topic assigned, and the skills and personalities of the people in the group interact to militate against control by one person. (See end of section for more discussion of this issue). Instead, the members of this group develop a collaborative working arrangement through this assignment.

When Andy taps in the name of their group (the Apple Dumpling Gang), his first move as recorder, Heather is quick to correct him on the spelling: "Spell it right. [pause] No. No. L. d-u-m-p l-i-n-g. You left the L out. Dump l ing, not dump ing." The others in the group nod and laugh, including Andy, as he corrects it. When this task is done, Andy asks the group for direction before

he proceeds: "Now what are we doing? Putting in all the information as to what?" After some banter, Heather takes on the task of reading the directions, and then restating them, thus: "We're supposed to share some of the fears that we wrote about, and create a list of fears the group has discussed. . . . Then we have to rank our fears in order of importance." Charlene rehearses her own understanding of the directions: "I guess, basically, we just start out talking about what we fear most about writing, right?"

Three of the four group members participated in this conversation which involved negotiating the next move they were to make. No single person had the answer and simply proceeded; each played a role in deciding the next move. Although Karen did not speak during this exchange, the video camera captures her laughing, reading the direction sheet over Heather's shoulder, and nodding in response to Charlene's comment. Thus it seems fair to say that they collaborated in their response and subsequent action. The subsequent action involves sharing their fears verbally, as suggested in the directions.

Charlene: Mine's language. Because I talk, I write like I talk. And I talk terrible. So you know, that's partly mine. Because, you know, I still, you know how down South everybody chops everything off. You know--

Heather: Yes.

Charlene: you talk so lazy? And that's how I write. It's scary. Cause, you know, instead of like spelling the words out, you know you chop everything off. That's one of my biggest--, that's why I don't like to write. Because I know I write so much like I talk that it gets to sound horrible.

Andy: Am I supposed to write these down?

Heather: We're supposed to talk about it then make a list. Um, my biggest fear is that like the teacher or somebody reads it and I have spelling wrong, or, commas, punctuation, in the wrong places. Er-rr-rrr.[growling sound] I just have so many [grades?] as far as teachers paying more attention to that than what you're trying to write down on the paper, and then just giving you bad grades, I just kind of, you know, forget it.

Andy: *Well, mine is, just like she said just keep on writing mistakes. I can't do that. I've got to go back and fix it.*

Heather: *Yeah.*

Andy: *I can't do that. I can't just let it go. I worry about doing it wrong so much.*

Charlene worries that she writes like she talks and her talking is "so lazy" because of her Southern upbringing that she drops the endings off all words. Heather is concerned that her poor mechanics get in the way of teachers reading what she means. Andy says he can't do what Martha says, keep writing when he's made an error; he has to correct it.

At this point the group work is interrupted by Martha checking on their progress. When they come back to attention to their task, they are about to start writing when someone in the group realizes that not everyone has spoken.

Charlene [to Karen]: *Wh- what was your fear?*

Heather: *Yeah, what was your fear?*

Karen: *Just getting it out I guess, being boring to someone else who's reading it. You know, "why would she write about something like that?"*

Charlene: *Yeah, yeah, it's interesting to you, but--*

Heather: *You have this great idea in your mind, but it just doesn't turn out the same on paper. It just isn't there.*

Karen: *True. I get something there, but it won't come out, that or the brain just doesn't work.*

Charlene: *Me, I can be writing along, and you can be thinking and then all of a sudden my mind goes blank. And then I can't remember to go back*

Karen, then, fears that what she wants to write about will just sound boring or silly to someone reading it.

During this sharing of fears, the three women in the group are quick to support each other and Andy by nods, back channel comments, such as “um-hm” and “yeah” and more extensive comments such as, “I do that, too” and sharing of similar situations. Andy does very little in the way of support. One is tempted to speculate that this is similar to current linguistic findings of researchers like Deborah Tannen who have noted that males in conversation do very little support work. While that may be true, another part of that may be that Andy is concentrating very hard on his role as recorder. After Charlene shares her fear, Andy asks, “Am I supposed to write this down?” Heather indicates to him that first they will just talk.

At one point in the sharing of fears, Martha interrupts which leads to a clarification of the guidelines for this assignment, almost a challenge to Martha.

Martha: *Andy, keep writing down all your ideas. Oh you are.*

Heather: *I thought we were supposed to talk about it first.*

Martha: *You can talk about it. Yes, you can talk about it. Umm. Actually Heather, you're right.*

Heather: *I read the directions.*

Heather does not hesitate to question Martha's interpretation/memory of her own guidelines. When confronted, Martha acknowledges that Heather is right.

As they get ready to write on the computer, Andy becomes involved; he asks several questions about how he should frame the work and formulate the responses. To Charlene, he says, “What would you say for yours?” and to the group at large, “Do you think we should put the names down?” The group becomes involved in telling Andy what to write. At one point, the group becomes actively involved in disregarding something that Martha has talked about earlier: ignoring spelling errors. She pointedly told the class several

times that she didn't want them to worry about spelling, but Group 3, with Andy as recorder, abetted by Heather, spends time getting the spelling right.

Heather: *There you go. e-r-n southern drawl. [pause] e-r-n southern. It's not gonna be a south drawl. D-r-a-w, right? draw?*

Karen: *D-r-a-w-l.*

Heather: *Yeah, drawl. I don't know. How would you spell drawl in that sense?*

Charlene: *D-r-a-w-l.*

(Everybody spells)

Heather: *Just drawl. Okay.*

After Heather directs Andy to write down Karen's comment and that is accomplished, she helps Andy work out the spelling of *punctuation*. Meanwhile Karen and Charlene carry on a lively conversation about spelling and the difficulty they each have with it until Martha stops them with the directive, "The notetaker, go up to file and down to save." After some comments on the homework assignment, class is over.

As noted earlier, the structure of the assignment, the nature of the topic assigned, and the skills and personalities of the people involved in this group militate against control by one person. The assignment is structured as collaborative work and the details of what that means are spelled out very clearly. Each person is to have a role; the available roles are carefully delineated, the method of matching the person to the role is left to the group. The order in which things are to be done is explicit in the handout of written directions which each group receives. The instructions include an admonishment to read the directions aloud, which if followed, allows everyone to hear what they are supposed to do. The assignment is to be done in class, by those in attendance, using the equipment available in class. This careful

structuring does not leave room for one person take-overs, indeed it makes it clear to all that they must be involved. Even so, the structuring of an assignment cannot guarantee compliance. However, the nature of the assignment helps here.

The assignment is to talk about their writing fears, then make a list of those fears and suggest ways of coping with them. Each of them has fears which another person in the group shares or at least can understand. As each person states his/her fear(s), others in the group can make supportive comments because they face something similar. This leads to discussion in which group members discover that they have many fears in common. They also discover that they have different fears, and thus there are areas in which they can help each other. Because they are not talking about strengths, they avoid the bragging syndrome to which groups are sometimes prone. By asking for personal disclosure, the topic led to a bond being formed for this group, a bond in which all have a relatively equal stake.

Finally, although Timbuktu might allow an individual, particularly one who was controlling the keyboard, to operate as a dictator, that doesn't happen in this group at least partly because no individual feels competent enough in all areas that the assignment calls for to do this on his/her own. Heather can't type; Karen freezes at the screen; Charlene can type, but (as emerges during the group time) is a bit confused about the computer. Andy panics about spelling, while Heather worries about the mechanics being more important than what she has to say. Andy isn't sure how things ought to be said and is very conscious of being observed, so that he asks for input and feedback constantly. The group members depend on each other in this situation.

By the end of their first day of using Timbuktu®, Group 3 has begun to forge a collaborative working relationship around the computer. They share

ideas and information to the point where knowledge in this group is negotiated, including how to spell words. They establish control over the assignment and begin to establish control over the technology.

Session 4. Session 4 begins with attention to matters delineated previously in this chapter. The group work begins in the context of the rest of the class life, about 40 minutes into the class. By this time, the students in group 3 have had ample time to chat with Jim, the missing member from last time, get him caught up on what they are doing, and generally get comfortable in each other's presence. Martha makes sure each group has a recorder and in the cases where the previous recorder is absent, suggests how they can cope with that, and then once again reminds them how to get onto Timbuktu®.

With the addition of Jim, Group 3 has all five members present today. This additional member and an additional day of experience bring the following changes to the group: first, they evidence more comfort with the work they are doing; second, they continue to help each other and collaborate; third, the additional member brings new ideas, creates added stress, and changes the power relationships within the group.

Group 3 members begin immediately to follow Martha's directions to set up Timbuktu®, leaning back and forth to look at each other's screens as the program loads. At one point Charlene asks who they're going to and then points to Andy. Karen nods, then gets up, walks around the table to look at Charlene's screen, presumably to offer help or support if necessary. All group members chat back and forth. When Charlene stares at the screen with a puzzled look on her face, then shakes her head, and glances at Jim's screen, Karen says, pointing at Andy: "He's doing it." It seems that letters were appearing on Charlene's screen and she couldn't figure out why. Andy seems

more comfortable with his role today, asking fewer questions about set-up and doing more recording of information as it comes up, at one point simply speaking the words aloud as he is typing them rather than asking what he should write or worrying about spelling.

In general, Group 3 members seem comfortable and supportive of each other as they set up and continue with the assignment. However, adding the missing member changes the group dynamic slightly. Jim is more experienced, both as a computer user and as a writer, than some other members of the group.⁶ When Martha comes back to see where they are, Andy makes an assumption that Jim challenges:

Martha: *All right, these are your fears. . . . and you listed them in order of most importance, right?*

Andy: *Most importance, yes.*

Martha: *Yes?*

Jim: *No, I don't think so.*

Andy: *Whadda ya mean?*

Jim: *I mean, 2 and 4 should be at the top. And 1 and 3 should be third.*

This ranking assignment provides a reason for the students to learn to move text with the computer, and Martha uses Andy's keyboard to show them how to do it. She also asks them to determine the order in which they want these fears listed and checks that there is general agreement as to the order. Heather is the person who actually voices which of these should come first. Martha looks at the list and says:

Martha: *And . . . 4, "not being able to come up with a good idea." Where do you want that one to be?*

Heather: *"Number one."*

While this work is going on, Jim is talking about writing in a way it has not been discussed in the group before. "Writing is a very selfish thing, you do it for yourself." He repeats this sentiment and briefly expounds on the subject, but receives no particular response from the rest of his group before his attention is drawn back to Martha and the task at hand, namely, determining how to alleviate the difficulty of the number one fear identified by the group: not being able to come up with a good idea.

As on the first day, several of the group members contribute to the discussion. Heather suggests brainstorming, Charlene thinks talking to people helps, Jim suggests just writing a word or a list of words; all suggestions are met with agreement or at least without objection. Then Jim makes another suggestion which raises questions and some disagreement.

Jim: *Listen to music.*

Andy: *Listen to music?*

Jim: *Yep.*

Andy: *Okay.*

Heather: *Umm.*

Jim: *Listen to music. That's how I really get into my creative mood. Whenever, I'm writing poetry or anything, I'll just pop in some music and just sit there and--*

Andy: *Yeah, that's one thing, but is it universal enough, though?*

Jim: *What?*

Andy: *I suppose you could use that.*

Heather: *Well, I mean, anybody, I mean, you put in anything, I mean, I can't listen to the words and stuff 'cause then I get too-- I could put in like classical--*

It seems that this is not an idea that either Andy or Heather would have thought of and that they are not immediately in agreement with Jim. However, the idea is not rejected; Andy asks if it's universal enough while

Heather seems to be trying to work out under what circumstances she might be able to agree.

Meanwhile Jim continues pushing his argument:

Not only does it, like, bring out the right side of your brain which is your creative side, it frees that up. It also blocks out anything else that could be going around and you're just surrounded by this music. So after a while you just ignore it. It's like a barrier between you and everything else. That's how I use it.

Andy, however, has found a valid personal objection, and yet he concludes that Jim's idea should be included in the list:

I don't know. For me, on certain days, [it would] distract me, distract me on certain days. I think it all depends on my mood I guess. But I think we should put that one in, listen to music or something like that.

This is a shift from the day before when Andy was neither supporting nor arguing with anyone's comments. Here he manages to do both in the same space of breath. Jim, on the other hand, does not, in this exchange, support anyone's comments. Immediately after Andy agrees that Jim's idea should be included, this exchange takes place:

Heather: *I get distracted very easily. I was trying to write and my kids were like "I wanna play with that."*

Jim: *That's why you tie 'em up and put 'em in the closet.*

Heather: *That's why I have to wait until 1:00 in the morning and everything's quiet.*

Jim: *I don't want children. . . . At least not this young. Wait until I'm older.*

Heather: *Well, it wasn't my plan, but things happen.*

The second day of the collaboration is different than the first. Some of this difference may be attributed to Jim's presence, but of course there is no way of definitively determining what affect his presence has. Nevertheless, there seems to be less supportive agreement and more contention on this day,

a trait which was not much in evidence on the previous day. While it may be that contention or disagreement happens on the second day of collaboration because people are on their best behavior on the first day, many of the points where contention begins can be traced back to Jim. With him as part of the group, both Charlene and Karen are much less forthcoming in their comments during this group work, although the videotapes show that each of them talked to him individually and to the group earlier in the day. I suggest that during Session 3, the group formed a tacit understanding of the way they would work to which Jim was not privy because of his absence. His approach during Session 4 is assertive and individual rather than cooperative and supportive as the group had been on the previous day. However, no arguments erupt. Instead, both Andy and Heather seem to weigh Jim's ideas and work them in to an existing group collaborative concept.

Having begun working on the computer on the first day of class, by the fourth day students are accomplishing several of Martha's main goals for the early sessions of the class: reading each others' writing comfortably, sharing ideas, collaborating. They collaborate and interact, on these two days, both because of the assignment and because of the computers. The technology provides, as Martha has suggested earlier, an additional means to foster the collaboration.

More Collaborative Sessions. The course plan called for several more collaborative sessions using Timbuktu®. During the pilot study, the class used Timbuktu for a collaborative in-class activity, a story, and also for a group project, in which they identified a problem on-campus or within the immediate community, developed solutions and wrote to a responsible person on campus or within the community defining the problem and proposing solutions. For a

variety of reasons--the pacing of the class was slower, severe weather problems, attendance difficulties⁷ --during the semester of the study itself, the class was unable to go beyond the collaborative story work (during Sessions 8 and 9) in their use of Timbuktu®.

Results

In the early sessions of this classroom then, networked computers and the groupware, Timbuktu®, are used by Martha to teach a skill--collaboration--which she deems very important, even central, to the continuing work of the class. In both the instances I have cited, there is evidence that students have learned to collaborate, or at least have learned something about what collaboration may mean, and how it may function.

I'd like to think for just a minute about how using the medium of the computer affects the experience and the outcomes. For in both cases, Sessions 3/4 and Sessions 8/9, the assignment students have been given could have been approximated using more traditional methods (pencil and paper or even typewriters). In Sessions 3/4, the students could have worked as a group, chosen a name, picked roles to play, shared their fears, and made a list of those fears without using this particular technology. Likewise in Sessions 8/9, it would have been possible to write a collaborative story with a different technology. So what difference did using computers have on the outcomes and experience of this assignment?

The most obvious physical outcome of having formed the text in the electronic medium are the features we have come to expect of computer-generated writing: it is not subject to the vagaries of handwriting (or poor typing); it can be stored easily and retrieved later for further changes and manipulations; it can be stored where any member of the group can retrieve it

(which may be either an advantage or a disadvantage but is definitely a difference from more traditional methods).⁸

Insofar as the experience, the key word may be approximated. While the experience may be approximated with other technologies, it will not be the same. Without this technology, it would not have been possible for the students in Group 3 to see their lists from their own stations as Andy put them on the screen.⁹ Using Timbuktu or a similar software allows the writers in each group to see the text as it is being formed and encourages the group to shape the text--as it is in process--through their comments, an experience which is the essence of collaboration. Aurelie Seward, in the article mentioned earlier, notes the value of Timbuktu this way:

TIMBUKTU requires taking turns--like conversation. Its use, then, requires learners to interact orally while allowing them to write a document together. As students use TIMBUKTU they also have the experience of watching another learner write, edit his or her own text, search for the right words, and add and delete--they get to "watch" another learner think. (9)

One of the greatest values of Timbuktu in this classroom is the one that Martha talks about: it supports the students in getting comfortable sharing their writing as a community of writers would do. They do indeed look at each other's writing, share their own ideas, work together to make something. Computers provide both an extra place or space for students to work in, to develop collaborative relationships in, and something else for them to share ideas about. So computers are in some sense not only the medium for their collaboration but also the subject of it. Having the technology in front of them meant that they talked not only over and through it, but also about it. Particularly in Session 3, while no one suggested fear of computers as one of their concerns with writing, they did express some fears and concerns about using the computers as they were sorting out who would be recorder. Some

understood more about the technology than others and were willing to share that knowledge; in these groups no one person knew so much that he/she became intimidating to the rest of the group. ¹⁰

One final point about technology in this situation that I think is important to remember: in all of these collaborative writing situations, the point of using computers is to support the work of the class. Students learn to manipulate the computers and software in the context of a collaborative writing goal, hence the computer becomes a tool or an instrument to be used to accomplish a goal which is not the goal of using the computer. In other words, when the students focused not on using the computer for its own sake, but on using the computer to accomplish another task, they learned the manipulation of computers in the context of a working writing situation. ¹¹ This is what I mean by integrating computers. Focusing on the writing work helps us remember that computers support the work of the class, not the other way around.

Using computers then, allows us to carry out some of the same activities we would want to do even if we didn't have computers but to do them in different ways. Doing these things in different ways, creates different experiences in the end. From what I was able to observe, these different experiences are good and productive ones for many students, experiences that the students come to value later in the semester.

Martha used Timbuktu early in the semester to teach collaboration. Later in the semester, students themselves chose to use Timbuktu to actually do collaborative work. Toward the end of the semester (Week 11, Session 20) the class had been working on something Martha referred to as authority pieces, pieces of writing in which each student claims his/her authority to speak about something he/she knows how to do and proceeds to explain how to

do the thing claimed. During Session 19 (Tuesday), all students brainstormed a list of ideas that would complete the sentence "I am an authority in _____. " Each then picked an idea that they wanted to write about and came to class on Thursday with the beginnings of a piece. They continued writing on the computers in class on Thursday (Session 20) for approximately two-thirds of the class period. The last third of the class time was dedicated to reading aloud the pieces they had been working on for comments from their peers. Normally, students would have done this within their small groups, but there were only 9 people present in class on this day, so Martha decided they should operate as one group. She told them, at the beginning of class, that they would be reading their pieces aloud to the rest of the class. When it became time to read aloud, Martha asked them to save, and then asked them to stop working so that they could listen. Karen made a comment about having to scroll her piece back to the beginning and not knowing where she was. Then she said, not too loudly, "Why don't we just all go on Timbuktu so we don't have to read 'em."

Martha heard and responded positively to this comment. "Well, that would be okay. That would be a good idea. You want to do that as well? It's not hard to do this. Karen had a great idea." Martha re-explained how to connect, and within a few minutes, almost everyone had Josh's screen on their own screen. There were a few glitches, but the point remains that at least one person saw the value of Timbuktu for herself in a situation removed from the original teaching situation. A lesson learned.

Effects of Integration of Computers on Students

Integrating unfamiliar technologies into the on-going work and life of the writing classroom in this way obviously has some effect on the students. First, it reduces the possibility of a problem common to new users of technology: an

overload on computer information. By getting short, small lessons about basic ways of manipulating equipment and software, by applying those lessons immediately, and by having the lessons reinforced through repetition at each new phase of the class, students have an easier time grasping and retaining the information.

Coupled with this is a reduction in the anxiety that using the machine and its software could have engendered in this group of students. With technical support close-at-hand and Martha demonstrating how technology is used in service of writing, this approach has the effect of making the computers less a strange, exotic, and somewhat scary technology and more a normal part of what is done in a writing classroom. Even situations where the technology breaks down serve as sites of learning. This classroom has quick and ready access to support, so that while technology breaks down, it can also be fixed and fixed quickly (usually in a matter of minutes).

The technical support also allows the students early success with the technology which gives them confidence about working with the computers which in turn leads them to take control of the equipment. By the third week, students are routinely coming into class, turning on the computers, opening their files, and beginning to work on their writing projects without any special direction by the teacher. In the ninth week of classes, I videotaped students in the center group as they worked through a computer problem they were each having. Karen and Charlene, with Heather kibitzing, spent ten minutes talking back and forth over the tops of their respective computers as they tried various approaches to get the program to boot. It was a troubleshooting conversation which included many "have-you-tried-this" comments and "yeah, mine's doing the same thing." Eventually, I went out to fetch a lab consultant, but by the time she got there (less than a minute later), Karen had solved her

problem and Charlene's as well. Karen's comment was "To think that the first day of class, I didn't even know how to turn it on." She admitted to me in a private interview that she had been afraid of the computer the first day of class.

One of the most powerful effects of integrating technologies into the work and life of the writing classroom is that it avoid privileging any of the technologies over the composing. In some ways, this may be less essential when dealing with pencil/paper technologies because they are so familiar we have forgotten that they are technologies.¹² However, it seems very important when dealing with the machines. Martha's approach to making technology a regular part of the classroom by focusing attention on it as necessary to support the writing goals of the classroom helps maintain the focus on the act of composing without ignoring the tools/instruments by which they will compose.

¹While I do not wish to do a detailed analysis and comparison between chalkboard and markerboard, I do think it important to note that the chalkboard and the slate are technologies which were used in the classroom alongside pencil/paper well over 150 years ago, in fact they were used more frequently for schoolwork than pencil/paper. Markerboards could only be designed after the development of the marker in the middle of this century. Markerboard, then, is not a new technology but a new twist on an old technology.

² In this case, I read the examples and she comments on them, an example of Martha using all resources available to her.

³ The handout they receive is also presented in this order.

⁴ The choice of this group was dictated primarily by practical considerations: it was one of the few groups which had a full complement of 5 members; (although only 4 of the assigned members were in class on this day) and it was easy to photograph given the placement of my camera as they began this assignment. The choice did turn out to be fortuitous, however, since the group is diverse in background, and as it turned out at the end of the semester, among the most stable in terms of attendance.

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- ⁵ It is possible that they understood the roles of typist and recorder as being two different roles; however, they did have the directions, specifically Andy had the directions, later Heather had them. It's also possible that despite my efforts, I misunderstood what happened in that transaction. There was a great deal of noise in the classroom and I did not move the audiotape to Group 3 until a few lines later, so I was relying on the video version only.
- ⁶ By "more experienced" I do not necessarily mean "a better writer." He does, however talk about writing in different ways than other group members, which will become obvious as the conversation proceeds. Interestingly enough, he is one of the people who does not finish the term; he disappears after the 9th week.
- ⁷ Michigan was hit with snow and ice storms in January of 1994, closing schools across the state. For only the second time in anyone's memory, JCC was closed on two different days in January. K-12 schools in the Jackson area were closed longer than that, making attendance a problem for those of Martha's students who had young children. Also, driving was difficult and treacherous, so that in addition to the official days closed, some students missed other days.
- ⁸ Although the text can be stored where anyone in the group has access, it doesn't have to be stored that way. It can also be stored in the file of the controller, thus allowing only the controller access. If then, the controller should be absent on a subsequent day, the group cannot get into the file. Group 3's controller, Andy, was in class the next day, but two other groups were not so lucky; their controllers were absent and they had to begin again. This situation provided an excellent learning experience for everyone about how groups work, particularly how they work in conjunction with computers and this particular software.
- ⁹ The scribe could, I suppose hold up the paper, but that move strikes me as awkward at best.
- ¹⁰ I wonder what would have happened to Group 3 if Jim, who is more confident both as writer and as computer user, and more ready to take over, would have been in class the day the groups were forming. We might have seen a different kind of group dynamic.
- ¹¹ This approach is analogous to the way many theorists believe language is learned; it is acquired in pursuit of another goal. Frank Smith says that children learn to say 'donut', not for the joy of saying 'donut', but so that someone will give them a donut.
- ¹² It may also be important that we remember that pencil/paper are technologies. Some theorists and writers have suggested that one of our goals should be to make the technology a transparent tool. (see Seward in "Collaboration and Conversation" for a reference to technology as transparent in the JCC classroom). I would suggest that rather than attempting transparency, we need to help students become comfortable with the technology and achieve some facility with it, which can lead to a naturalness in dealing with the technology, but does not make the technology transparent. I give you the example of a left-handed second grader trying to learn to write in cursive (using pencil/paper) in a right-handed world. The technology is not at that point transparent; we would do that child a disservice by insisting that it become transparent. It can become more comfortable. It also may be that for that particular child, it will never become wholly a natural act, but the student can achieve some facility and can probably achieve facility more quickly if we don't ask her to disregard the fact that she is using a technology, but rather to move her gaze back and forth between the technology and the message. I would further suggest that in this classroom, neither the technology nor the language are treated as transparent vehicles to simply carry a message. Students are encouraged to reflect on their actions and words.

CHAPTER 4

STORYSPACE™: TOOL OR INSTRUMENT?

Much of what the students draft throughout the semester is begun in paper/pencil, continued in Microsoft Word, expanded and revised using either or both technologies, and eventually drafted into final form on the computer using Microsoft Word. However, during the seventh week of class, Session 11, Martha introduces the students to a different kind of writing environment, Storyspace™, a hypertext authoring system, which most, but not all, students use to draft their second major paper.

As we begin to look at the way that Storyspace is used in this classroom, the question of the computer as a tool or as an instrument becomes particularly salient. While I have argued in earlier sections that we need to rethink the metaphor and attempted to point out places in which the metaphor shifts from tool to instrument, the existence of the two metaphors side-by-side, the difference between them, and the usefulness of each is most clearly demonstrated in the work that students do with Storyspace. In this chapter I will define Storyspace, explain the way it was used in this classroom, show examples from student work and comments and from the teacher's comments to point to the tool/instrument use and understanding, and finally, speculate about what Storyspace and hypertext in general may mean in regard to changing notions of text.

Storyspace™ Defined

In order to adequately discuss Storyspace, it is necessary to develop an understanding of what a hypertext authoring system is. A broad definition

comes from Jakob Nielsen, who, although not a compositionist, is a recognized expert on hypertext. In his book *Hypertext and Hypermedia*, Nielsen acknowledges hypertext as a broad concept to which there are many different approaches, something he calls “a multitude of hypertext” (x). Then he provides a general definition.

The simplest way to define hypertext is to contrast it with traditional text like this book. All traditional text, whether in printed form or in computer files, is *sequential*, meaning that there is a single linear sequence defining the order in which the text is to be read. First you read page one. Then you read page two. Then you read page three. [and so on]. . . .

Hypertext is *nonsequential*; There is no single order that determines the sequence in which the text is to be read. [See Figure below] Assume that you start by reading the piece of text marked A. Instead of a single next place to go, this hypertext structure has three options for the reader: Go to B, D, or E. Assuming that you decide to go to B, you can then decide to go to C or to E, and from E you can go to D. Since it was also possible for you to go directly from A to D, this example shows that there may be several different paths that connect two elements in a hypertext structure.

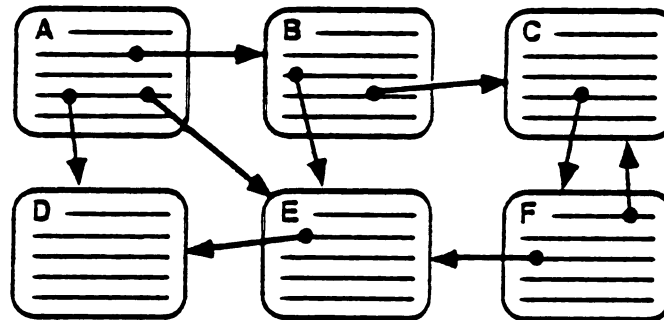


Figure 2. Simplified view of a small hypertext structure having six nodes and nine links.

Hypertext presents several different options to the readers, and the *individual* reader determines which of them to follow *at the time* of reading the text. This means that the author of the text has set up a number of alternatives for readers to explore rather than a single stream of information. (1-2)

Compositionist Johndan Johnson-Eilola gives us a similar definition:

Hypertext writers and readers depend on a computer-based organizational scheme that allows them to move from one section of text (termed a 'node,' often the size of a paragraph) to related sections of text quickly and easily. Such a text consists of a network, or web, of connections between nodes of a text, and readers choose which links to follow, which nodes to read, and which nodes to skip. . . .

Of particular importance to the following discussion is Johnson-Eilola's comment:

A text is hypertextual not because it was written in any specific computer program but because it follows this general theory of textual structure: readers do not read top to bottom across a page and front to back from page to page, but according to a path they navigate through a network of text nodes. (197)

All of these definitions focus on the reader with only a brief mention of the writer of hypertext. In fact in most commentary the writer of hypertext is seen in terms of her reader. Nielsen writes: "[A]dvice for authors of hypertext comes from our understanding of the reading situation." His suggestions all focus on writing in ways that may it easier for the reader, on considering the reader as the writer plans her work.

To think about the writer of hypertext, I'd like to move to the particular hypertext authoring program used in the classroom at JCC, Storyspace. Eastgate Systems, the distributor, focuses on the writer in its promotional materials:

Just as a pencil, a wax tablet, or a typewriter allows you to write traditional text, Storyspace gives you a way to write hypertext. . . . Storyspace . . . gives authors the tools they need. These include the ability to link information and sections of text in multiple, complex ways--with links that the reader can follow just by clicking the mouse. . . .

In actual practice, when a writer opens Storyspace, the screen looks much like the screen for many word processing programs--a empty blank space resembling a sheet of paper with a menu bar at the top. However, at

the left edge of the screen is a "tool box," a set of icons representing actions writers can take. The first action a writer takes is to use the text-maker icon to create a writing space or, in most cases, several writing spaces which appear as boxes on the screen. Writers normally name their spaces, and when they have created several, pick one and begin writing. Eastgate's literature explains this further:

The basic component in Storyspace is the writing space. This is an element that can hold any length of text, from one word to many scrolling screensful. A writing space can also hold other writing spaces--you just drag them over and drop them in, like folders on your desktop. . . .

At some point in the process of creating and writing in a number of spaces, the writer will begin to think about how these spaces are to be connected. When she has filled a number of spaces, perhaps all or at least most of what she intends, the writer will make decisions about what links are to be made for the reader to follow. Again, Eastgate explains:

The other basic notion in Storyspace is the link. A link is a connection that the author creates between parts of a Storyspace document. This is the essential breakthrough of hypertext--freeing text from the linear constraints of printed pages.

Links can go from any writing space to any other writing space--you just click on the two spaces with your link tool. Links can also connect words or phrases within writing spaces--so the author can link a term to its definition, or a name to a biography.

We can infer from this discussion then, that the process used by the writer of hypertext could be parallel to that of the reader. For example, the writer of hypertext need not write from the beginning to the end of a piece but can write in chunks which she can later connect in a variety of fashions. Also, the writer need not know which of these chunks is the beginning until a number of chunks or even all the chunks the writer intends have been written. The

writer can then determine which chunk works best for a beginning and then, as noted earlier, make links or paths for the reader to follow.

To help make this more clear, I'd like to use an analogy to pencil/paper. If I were to approximate writing in Storyspace by using paper, I would have to begin by having lots of different sheets of paper spread out in front of me. I would put a topic heading on one (or several) of them and then begin to write. As I wrote, I would sometimes come across an idea that seems to fit in another place. When that happened, I would move to a new sheet. I could move to as many new sheets as I wanted to. If I found that I had more to add, I could go back to any of those sheets I had already begun. Each sheet would have to be more like a scroll, so that I could write as much as I wanted. I would need an unlimited (practically unlimited) supply of paper (or scrolls), so that I could create as many new sheets as I wanted. I would also need a quick and easy cut-and-paste method to move information from one sheet to another.

When I had completed my writing, or possibly even as I was writing I would begin to see connections between some of my pieces. I would probably see some sheets that ought to come before others, but I might also see that in some cases people could read them in any order. At that point I would try to organize for myself and mark for my reader where to begin, where to go next and maybe some alternate orders in which it could be read. I might try labeling these sheets with numbers or words to indicate order; I could also (being a creative and visually-oriented person) link sheets by means of brightly colored yarn, so that my reader could follow the yarn-link. This could be especially important in places where I wanted my reader to have the choice about which piece to read next. This would then be, essentially, a pencil/paper hypertext.

While it is not exactly the equivalent of hypertext as it is found in the computer, it does make a starting place from which to think about computer

hypertext. While a pencil/paper hypertext is an interesting idea to play with in an analogy, the computer version has some obvious advantages; for example, Storyspace is not limited by physical space as my pencil/paper hypertext is, it can be easily folded up and put away and reopened in exactly the same order and organizational pattern for the next work session, and it takes advantage of the word processing capabilities of the computer--all things that can't be done with a pencil/paper hypertext.¹

Storyspace as Instrument for Learning to Write

Thinking about using Storyspace as an instrument for learning to write approaches the situation from a different perspective than definitions that focus on readers or on experienced professional writers, as Nielsen and Nickson-Eilola, and Eastgate have done.² In those situations, we are focusing on a hypertext product as the end result. If we think about learning writers, we need to think about the process of writing and the pedagogy which supports that process. Aurelie Seward in "Collaboration and Conversation: Three Voices" explains it this way:

STORYSPACE [is] a hypertext writing environment that allows *writers* to create more than the traditional linear path through a text. It allows *readers* access to many paths through one text. STORYSPACE is an idea processor. . . . [it] supports [a] sorting, stumbling, discovering, moving forward process. (10)

Martha explained to me her use of Storyspace as follows:

Actually, why I use [Storyspace] is it takes away the constraints of beginnings and endings. Particularly the beginnings. And allows them a different kind of process to use. (Martha Petry, 3/94, on being asked in an interview if she uses Storyspace because it helps students develop their ideas more fully.)

If we take those two ideas, Storyspace as an "idea processor" which supports a "sorting, stumbling, discovering, moving forward process" and as an "environment" that "takes away the constraints of beginnings," allowing

students to use a different process to write, we can begin to see how it can be used with writing students, both as tool and as instrument.

In this class, Sessions 11 through 17 (7 class sessions, 3 1/2 class weeks with spring break in the middle) are primarily devoted to work which uses Storyspace as its major writing environment; Session 18 is set aside for peer group reading and critique of the work produced through Storyspace and translated into Microsoft Word. Throughout this time, students learn to manipulate the software as they are working with their writing, integrating their learning in much the same way as happened during earlier class periods. Early sessions spend more time on overt basic instruction, while in later ones the little time that is spent on software-related instruction is dedicated to more sophisticated moves like linking.

Initial class sessions are devoted to beginning and to developing “a rich and vivid and descriptive kind of writing” (Petty in class session 11). Once students have developed this richness, attention is devoted to the sorting and moving forward part of writing by helping them focus on strong beginnings, strong endings, organization, and coherence. The discussion which follows includes interpretation of pedagogical approaches for these two phases of writing as well as interpretations of the teacher’s positioning of Storyspace as tool or instrument in both phases. I have quoted liberally from Martha’s commentary to the students and have included some of the comments and questions students made because I think it is important to show how Storyspace and the assignment are presented and how students become involved. Later in the discussion, the focus shifts to students’ comments and perceptions, with most details coming from the five focus students.

Part I: Developing Rich, Vivid, Descriptive Writing

The class session that most clearly shows a pedagogy for developing rich, vivid, descriptive writing is the Session during which the students are introduced to Storyspace. During Session 11 (2/15/94), students are starting the second paper. They have been asked to come to class with topic ideas: people or places that they find significant in their lives, that they would be willing to write and think about for the next 2 to 3 weeks. They have already brainstormed a topic list for this day's work, Martha has asked that they narrow the list to two choices, or "today . . . pretend that you have." In this session Martha uses a technique which by now is familiar to her students: moving back and forth between focusing on using the technology and focusing on the composing.

She begins with an explanation to the students of what they are doing and why, including what Storyspace will do for them:

Now. What I have to tell you so you that you don't freak out, and I know that some of you might, is that we're going to be working in, not Microsoft Word, [which is] our normal word processor. We're going to be working in a thing called Storyspace. . . . just listen first so I can explain why you're going to be working in Storyspace.

When Murray talks in our text about [making] really strong beginnings, and really strong endings, some of you had great difficulty making a strong beginning, and were not sure what to say next . . . and all of a sudden there are other things that occur to you to say [but you wonder] whether you should bring those things [in] . . . because, we write in linear fashion, starting with [the] beginning Storyspace is going to encourage you to write in writing chunks . . . rather than starting at the beginning and going to the end . . . chunks of writing about this person or place.

And I don't want you to have to think about where am I starting? . . . Where am I ending? Where is this going? . . . This process is very different than the kind of process that many of you have learned about writing. . . . So think of it as an experiment.

. . . . It will produce a really rich and vivid and descriptive kind of writing that you probably won't believe yourself. . . . [S]ome of you

have, you know, that inherent sort of hierarchical organization that this is the most important thing and this, then this, then this. Well, this [Storyspace] makes everything in the beginning equally important or equally significant. So I want you to trust yourself while you're doing this.

Martha, then, in her introduction to Storyspace has told the students that they will use the program to get away from the concerns about beginnings and about writing in a linear fashion, that they will instead write in chunks. She has indicated that this is a different kind of a process and that it will produce “a really rich and vivid and descriptive kind of writing.” This is positioning Storyspace as an instrument.

She also recognizes the difficulty but suggests that the results will be worth it:

. . . [T]his process may seem very uncomfortable for you. But it may also open you up to other kinds of considerations that you haven't experienced as a writer. So I want you to trust that. . . .

Again, she positions Storyspace as an instrument for growth or change for the writer.

After some set-up and fiddling with technical difficulties, she projects her own monitor to the large wall screen in order to walk students through the steps to set up Storyspace places in which they will write. She begins with a focus on using the technology; essentially she is explaining the Storyspace tools:

This is a Storyspace Tool Bar. . . .It means that the functions that you need to perform are made by selecting tools from this tool bar. . . . Watch. Don't do. The first tool I want to talk about is the Spacemaker. I'm going to double click on it. Don't do anything. You notice how I now have a thing that looks like a little box? Would you please double click on this first tool in your upper left hand corner. It's called the place or space or box, any of those things.

At this point, there is a long pause--almost two minutes--while Martha and Trish move around the classroom looking at students' computer screens and answering their questions and concerns.

What I'd like you to do is click once, just once, click once. Now you've made a place. . . Please call this box Physical Features. . . P-H-Y-S-I-C-A-L features. Because your person or place [has] physical features. Correct?

The second, third, and fourth places are created in a similar way:

Martha demonstrating the procedure, telling students the name they are to assign to each box, then checking and answering concerns. Throughout this section students ask questions of Martha, of Trish, and of each other.

Martha: I would like you to create a next place. Click once again. Click once again. Everybody following me? Charles, are you with me? Make another place by clicking? And this one I'd like you to call (Martha types as she speaks) How The Body Moves.

Students talking and laughing, Martha in background answering questions.

Martha: Everybody got two places now? How The Body Moves and Physical Features. Even though you only see Physical. Or, you only see How The Body. Yes?

More conversation and comments.

Martha: I would like you to click twice more, make a new place. Put your box down anywhere on your sheet of paper as it were, and this time I would like you to call it Voice. Voice. V-O-I-C-E. All right. Could you, would you please make a fourth box? And I would like you to call this-- you can call it either thing-- either of these two things. You can call it idiosyncrasies or you can call it weird things.

When the students have four places labeled--Physical Features, How the Body Moves, Voice, and Idiosyncrasies (Weird Things)--Martha stops to review what they have done and explain, place by place, more about what she means by each title and what the students can do with each of these boxes. When she does this, she is moving the students from a focus on the physical aspects of the technology to a focus on the composing. The students have used the technology at her direction and will continue to use this technology to accomplish some composing goals. The following selection shows Martha using

her own thinking about these places as a way of modeling a thinking process that students might use as they begin to write:

Now. Think about the person or the place that you're describing. . . . Just sit and think. Don't do anything in Storyspace so far. . . . I've just sort of listed some things that might be important to talk about if you were describing a person. Can I just talk about those for a little while?

Physical Features. Size, shape, that kind of thing. Okay? And that goes for a place too. If you're talking about a cornfield that you would have it in a [inaudible word] and that you want to return to, or if it's your favorite tree house, or whatever it is, it's got a size and shape and it's got physical features, correct? Okay.

How the body moves. . . . This may be a harder thing to explain. But imagine any two of your friends. Any two of them. . . . Think about how this person inhabits their body. How do they move? How the body moves. Think about, how many of you have been to Detroit or Chicago? How the city moves. Either of those. In comparison to how Jackson moves. . . . So, if you were writing about Jamaica, there's an altogether different feel about how that place is. . . . So you all understand how the body moves, right? This person or this place has a movement about it. It's not static. . . .

Martha continues to explain each of these storyspaces in a similar fashion, brainstorming questions for the students to consider as they proceed with their writing. In this way she begins to show them how to develop the richness and vividness in their writing that she has previously told students they could achieve by use of this program.

To this point, Martha has been fairly directive in her work with students on Storyspace. She has attempted to focus their attention first on the workings of the technology, then on the writing they will be doing as they use the technology. During the focus on the workings of the technology, she has walked them through step-by-step, often cautioning them, "Watch, don't do," before she asked them to take an action.³ While the physical manipulation may be considered as tool use, it's not quite that simple. She has very clearly established that the topic headings with which they label their boxes are

aspects of their composing (thinking/writing) with which she wishes them to be concerned. These are categories-to-think-by that Martha is modeling for the students; they serve a heuristic purpose. She projects not only the boxes with their labels to the large screen, but also her own thinking for the students to see. In that sense, the labels and labeling can be thought of as an instrumental use of the program.

Next, she moves to involve the students more in naming places, in developing categories-to-think-by. She asks them to reflect on two stories they were assigned to read in their text, and based on that reflection, decide what other things they think they may need to write about. In the exchanges that follow, Martha initiates a process of moving students from functioning as audience for her thinking to doing their own. First, Heather suggests “Emotions,” which Martha emends to “Emotional States.” After a pause of a few minutes and some probing questions from Martha, another student makes a suggestion which Martha uses but modifies. There is a transfer of power and authority in process here, which is notable throughout the exchange, but particularly so as one student takes Martha’s suggestion, but puts her own interpretation on it.

Student (male voice): *Actions.*

Martha: *Actions? Okay. Let's do action. Can we...actions...can we call those stories? I mean, you know, like, if you said, you know, one of the characters is my father and he's constantly angry. I would say to you, tell me a time when his anger was most noticeable. You know what I mean? Tell me a story. Which is like, how do I see him? How do I know that? . . .so, . . . would you make a new place called story. . . .*

Background conversation

Student (female): *I put in action here.*

Martha: *Oh, that's okay.*

After a few minutes during which Martha and Trish make sure everyone is up to speed, Martha asks again for other suggestions, and the response is as follows:

Sally: *Atmosphere.*

Martha: *Atmosphere? Is that what you...*

Sally: *Surroundings.*

Martha: *Oh, atmosphere and surroundings. I think you might get to those Sally, some of you are doing places, you might put these into physical features and into voice.*

Sally's suggestion is not used as is, but is incorporated as part of another space.

Martha herself makes the final suggestion.

Your seventh box . . . just type in Significance. Why this person or place is important to you. Don't you think that's important? What is the connection to this? Not just in terms of it's relationship, but why write about them? You had 50 million choices, some of you, on that brainstorming list.

Whether they can develop place names or not, Martha has at least attempted to move them in this exchange from following directions exactly in regard to the technology (which is what she asked for at first), to thinking about how to use the technology to support their writing and to trying to generate categories that relate to their own writing.

The next move in this activity is for the students to begin writing. Martha demonstrates how to name the document they are working on, and then how to begin writing in a defined "place." Each student picks one place, any place, in which he/she is comfortable beginning, and each student writes.

I suggest that in this segment, Martha is showing students how to use the tools of Storyspace, especially its ease of re-arrangement, not only to suit themselves, but also to look at things from different perspectives, which is a way of turning a tool into an instrument. When she goes on to "create a new

place called. . .voice story” and “move[s] that voice story to this place called emotional states ‘cause . . .it’s a story about the anger,” she is demonstrating to her students the connections they can make, the ways this tool will allow them to see new connections. Again, the tool becomes an instrument. When she tells them, “. . .it allows you to move material . . . without you even worrying about it yet. Right now I don’t want you to worry about where things move,” she is pointing to this as tool, but also emphasizing the freedom and flexibility that she mentioned earlier. When she follows the reassurance with this comment: “If. . . tomorrow, you feel like, oh, I need a place for writing. . . this, you just create a new box, you know, and start writing in it,” she points the students to the choices they have and their own responsibility to be involved in this activity.

In Session 11 Martha has again used the method of moving back and forth between focus on technology and focus on writing. She has explained the why and what and how of Storyspace. She is very directive in her assignment of title headings for the places but also very detailed in her explanations of the many ways each place can be used, modeling her thinking and beginning to engage the students in using this process for their own thinking. By the end of this class session, everyone has a Storyspace document set up and is beginning to draft a piece in at least one of the spaces/places they have established.

Over the next several weeks, students are encouraged to take what could be a computer tool (Storyspace) and use it as an instrument to expand their thinking. During Session 13, Martha shows students another way of using the capabilities of Storyspace as an instrument to enrich and expand their writing. Storyspace has a note feature which allows a writer to highlight a word and attach a note to it, a note which does not show in the main text but

can be called up by double clicking on the highlighted word. Martha explains it to her students as follows:

When I press two p's, option, and apple, it forms a wire frame. . . . It automatically does that. . . . And by clicking in that wire frame, . . . I'm using this double navigate icon, it will take me to that note, and if I click it again, it will take me right back to the writing.

The usefulness to the writer is phrased in instrumental terms:

[T]aking and using the note function is a way, to, yes, reflect about the writing, but also. . . to create another little space where you can talk about something that isn't quite as central, [but] that you want to make room for.

From here, Martha uses her own writing as an example of how, where, and why a writer might use the note function of Storyspace--another example of modeling--and engages the students by asking them to think of questions they might have about what she has written.

Although it is available to them and has been demonstrated, very few students actively use the note function of Storyspace; however, most students do use the Storyspace places to draft their second paper.

Part II: Organization, Coherence, Strong Beginnings and Endings

At the beginning of this writing assignment, Martha's stated reasons for using Storyspace were to "take away the constraints of beginnings" and to help develop "rich and vivid and descriptive writing." However, once the students have spent some time working with Storyspace in this way, it is necessary to pay attention to other aspects of composing. During Session 13 Martha reminds the students:

I want you to feel the freedom just to write a lot, a lot, a lot about this person or place, without thinking, how am I going to make this all come together? . . . But making it all come together is a different aspect of the writing process. . . .this is now much later in your writing process.

It's like you have all of these little puzzle pieces

With these comments, Martha begins drawing students' attention to this other aspect of composing: organizing for coherence and strongest effect. This aspect of composing is addressed in two stages as students first print and look at the material they have generated in order to develop a plan. Within the framework of developing a plan, they search for strong beginnings and look for an appropriate way to end. The second stage involves using Storyspace as a tool (perhaps a tool moving to an instrument) to make links between the parts they have generated, then converting the Storyspace document to a Microsoft Word document.

During Session 13, Martha points out that soon they must begin to make decisions about the organization of their pieces.

Thursday when we see each other, I will want you to print the entire document. I will want you to take it home over Spring Break. I will want you to think about which chunk goes first. . . [and]. . . how to organize all your chunks.

During Session 14, students print out a copy for their use with directions from Martha to spend some time over spring break looking at their Storyspace work and thinking about organizational strategies. She has selected some textbook pages about planning and organizing material which they are to read. Then she directs them to begin annotating their copy as follows:

You've got writing chunks, I want you to feel like you can be messy, write all over the margins, do this first, and from that I'd like to go to here, number your chunks, this could opening, or maybe you have two openings. You can asterisk chunks, you can circle them--this is 2a, this could be 2b. So, you're going to print out a version for you before you go and then you're going to do this messy annotation, meaning it doesn't have to be exactly fixed. And you're also going to send me a copy in my folder so I can see what you've got.

To help the students organize their chunks of writing, Martha points them very directly to something she avoided at the outset of this assignment but promised they would deal with--effective beginnings. In the following

examples, Martha directs their attention to the possibilities that might emerge as they look at their Storyspace work. She suggests ways they might be thinking, points them to at least four different ways of beginning effectively:

There may be part of it . . . that you want to start with--the way this person smiled or the way they walked or some things they say. You could start . . . with "This person is outrageous." And talk about how they do [something]. . . You can start a wonderful paper with a detailed [description]. more interesting than saying, "I want to talk about my best friend." A particular moment might grab our attention. "This is the guy who always. . .

On another day, she makes similar suggestions:

[M]aybe you have this beautiful paragraph that says, her smile is like sunshine. . . . And then it's a description of, of a face. . . rather than . . . starting a paper that's saying, this person is my best friend. That's not a very effective opening. But you might have chunks that you know, just would really bloom as an opening. . . . And . . . from there you'll figure out where to go.

The above comments direct students to look at the chunks and into the chunks for effective beginnings, working with the assumption that since students have now generated sufficient material, they will find those effective pieces of writing.

In much the same way that she has talked about ending other pieces and in similar fashion to the suggestions she has made about journal entries, Martha also provides suggestions about appropriate ways to end this writing. Martha has consistently suggested that the writer needs to become reflective in all her writing. In the Storyspace paper, one of the boxes is labeled significance. Martha suggests that students may want to end with the lesson involved or the significance of this person or place, with the "so what?" of this experience.

However, she doesn't limit their reflection to the end or to the significance box.

I want this to be a healthy and developed and wonderfully rich, exciting, full paper. And that reflective stuff might be addressed in significance or might come up in another of your boxes, places. Feel free to make new places for new ideas.

In all cases, she emphasizes the writer's choice of beginnings, the writer's choice of where to stop.

To move to the second stage of this work, students were to have taken their work home, looked at it, tried to pick the best spots for beginnings, and annotated it so that when they came back after spring break, Martha could show them how to use Storyspace to link one part with another and then how to convert to Microsoft Word to continue their work. Looking hard at writing and making decisions about placement of parts is intimately related to an instrumental use of the technology even though this activity takes place off the computer. Martha explains it this way:

The reason it was so important for you to do all those annotational organizational strategies at home, to mark things 1 A, 1 B, 1 C, to think about where you want to begin, where you want to stop, all of those things is because this process will become much much easier if you have thought through that. If you haven't thought through it, it will take, I would say, maybe two hours of critical thinking time, at least. Oh if I'm going to start with the person's voice, if that would capture the mood first, then where do I go from there? Those are the kind of questions [you should be asking]. . . .

Martha characterizes the time spent making choices as "critical thinking time." During this class period, when Martha shows students how to use the tools of Storyspace to link between parts, and then subsequently how to convert to Microsoft Word, she is positioning the computer as an tool which students can use to manipulate their text. However, this tool use is based on, indeed would not be possible without, the earlier instrumental use of the computer.

In this class, students have the option of either turning in their Storyspace work on disk in Storyspace format or converting their work from Storyspace to Microsoft Word. Going back to MSWord is an alternative provided for the students, taught, and encouraged by Martha, at least partly to prepare them for the next class in English and the more traditional approaches required by other classes they may take. Converting from Storyspace to

Microsoft Word might be viewed as a retrograde activity if the goal had been to teach the students to write a hypertext. However, it's not as simple as that.

Consider that the thinking involved in each of these situations may be similar. In keeping the work in Storyspace, the students must do what other Storyspace authors do: decide on a beginning point, determine how these pieces are (or could be) connected, and make links that the reader can follow. In moving the work to Microsoft Word, the students must still take same actions or analogous actions: decide on a beginning point, determine the order in which the pieces should be read, and write transitions between one section and another. Making a link and writing a transition are analogous even though they actually involve different activities. A link is simply a pathway, while a transition is a written road marker explaining the connection. Linking is a hypertext concept, while writing a transition is from an older tradition. So whichever method they chose to develop their work, they are gaining insight into their activity by making obvious the ordering and the connections between the various pieces of writing they have done.

Students Using Storyspace

All pedagogical changes have an effect on students' work. While it is relatively easy to examine the pedagogy in operation in this setting, it is also necessary and possible (though more difficult) to examine some of the effects of this program on students. Given my own limitations as not-a-student, I will attempt to do this by looking, first, to the teacher's assessment of how students use Storyspace and its effects on their writing and, secondly, to the students' comments and their papers produced in conjunction with Storyspace.

Using Storyspace: Teacher's Assessment

In the context of this particular class, I contend that Storyspace is not primarily a tool to create hypertext, but an instrument by which students can do these two things: 1) write more richly and with greater depth and detail; and 2) gain insight into their activities and choices as writers. While Martha does not specifically use these terms, her comments support my contention. On writing more richly, she says:

... When I looked at those comments from their process writing, ... they say things like, I can't believe I'm writing so much about this person. I never believed I had so much to say. ... And so I think that they're seeing, what it's like to write completely and fully, but not from a beginning point. Not from a starting point ... that first sentence that puts them on the track. ... I think that generally speaking, I could say that 90 percent of my students will end up doing a better writing in Storyspace, or because of that, than had they not done it in Storyspace, and that they will understand that and internalize that without my saying it to them. (From telephone interview, 3/94)

On gaining insight into their activities as writers, she says:

What begins to happen, I think, using Storyspace. ... when they've got enough writing ... they'll really be actively thinking about organization and development and, and what flows ... from here and here and here, in a way that they've never done ... before. They're understanding the integration of description and story at the same time. ... I think that, because it ... enacts a different process for them, it becomes conscious rather than, 'this is the way I've always done it,' which is an unconscious process.

As Martha sees it then, not only do students begin to write more richly by using Storyspace, they also begin to consciously think about connections and actively make them rather than simply assuming they will happen.

Using Storyspace: Students' Reaction

While the teacher's interpretation is helpful, what the students say about Storyspace through written comments, in interviews, and by way of papers generated by means of Storyspace, is also pertinent to understanding

the effects of this tool/instrument. During Session 12, the second day in which students work with Storyspace, Martha asks all students to establish a special new place: "What I want you to call this new place is . . . 'My Writing Process'. . . ." This space, akin to the journals which they entered on computer in earlier classes, will be used to write about how they felt using Storyspace, what difficulties they encountered, what successes they achieved. Martha tells the students: "I . . . want to understand what's happening to you as a writer when you're working in Storyspace." At the close of each session 12-17, students are asked to comment in their writing process spaces about how their work went on that particular day. I collected printouts of those entries from most of the students and will incorporate them into this discussion. In addition I asked the students I interviewed to comment about Storyspace. Those comments will also form part of the discussion here. The major portion of the following discussion focuses on the comments and work of five students, four who worked with Storyspace--Charlene, Karen, Heather, and Nick--and one--Sara--whose comments are valuable because she chose not to work with Storyspace. Karen, Charlene, and Heather are all Group 3 members, and were involved in reading each other's work. Neither Nick nor Sara were very involved with their groups, Nick because his group members often didn't come, Sara because of her own absences.

When writing in the Writing Process boxes, students were asked to simply write without regard to spelling or mechanical concerns. In the interest of clarity, I have edited their comments, including making a few changes in spacing, eliminating extra letters (Kknow) and adding spelling in square brackets where I think it might be misunderstood; however, I did not seek to change things that seem easy enough to understand even though not consistent with convention. (See Appendix D for the complete transcripts of

students comments as they entered them. Appendix E contains the printouts of students' work in Storyspace. Appendix F contains the portfolio pieces generated based on work in Storyspace.)

Charlene. Charlene is writing about someone close to her and wants very much to be able to "find just the right words" because she wants to be "so specific or perfect about this person." Her initial assessment, as she writes in the writing process box is "[t]he story space i think makes it easier to write being able to write about the various things throughout the course of the story." From her comments in her writing process box, each day seems to get a little easier. On 2/22 she writes that "the writing today has come a little easier and smoother for me," and on 2/24 "the writing today went at a much better pace." These kinds of comments continue throughout the time she works with Storyspace. She also comments on the freeing quality of writing in this hypertext program. On 2/22 she writes: "I like being able to express my thoughts as they come to my mind in intervals. It seems to be much easier for me to write being able to write freely." At the next session she makes a curious comment. "This being able to write in chunks i think has helped me a great deal to become more efficient [sic]." I wonder what she means here by efficient. I suspect her meaning is more closely aligned with getting lots of work done without pauses, for the next time she writes: "the writing seems as though it is coming alot easier for me as i think i am beginning to get the concept of how the writing should flow," another comment related to the freeing quality of this approach.

Charlene's assessment of the program as she is coming to the end of her Storyspace writing is positive. She writes: "It was easier for me to write the parts of the story individually, rather than all together. I could really

concentrate on the specifics [I] was writing about doing everything one at a time.” And a few days later she comments in a way that assigns almost magical qualities to the program when she writes: “After working on this for a [few?] weeks the different chunks formed and come together to help me make a good story.” She writes as though the chunks formed themselves into a good story without effort on her part.

When I interviewed Charlene at the end of the semester, it was clear that time had not changed her view; if anything she was more convinced than ever that using Storyspace had been an effective approach for her. She wrote her favorite piece of writing, a story about her mother, in Storyspace. In her comments she re-iterates and expands some of what she wrote as she was going through the experience. She begins with her assessment of the advantages of writing in chunks, including the connection with revision:

... I liked the way we were able to take and put the chunks ... like physical features and emotional states ... that you could chunk right[write?] in there, about each one of them ... I could take a certain section, and once I got started on it ... could just write my paper.... And then, when I went to the next one, it was easier for me, and I think it was easier for me when ... I s[a]t down and really said, okay, now I've got to put the story together. ... I've got to put it in a right order, ... when I revised it, I think it made it easier. I think it helped me more on that story. It seemed like I was able to maybe bring out more.

Then she compares her use of Storyspace to what she thinks might have happened had she used a traditional approach:

*You know, if I'd have just sat down to write the story, and instead of being able to do it like we done it in the chunking process and write, I don't think it would have been as lengthy, and I don't think ... it would have consisted with as much information as it did. ... sure, I could have wrote ... about the physical features, but spontaneously, I don't know if I would have, where **when I had that time and that space to do it on the computer**, ... it seemed like I done it with no problem. And I could just write, you know, and write, and say what I wanted to say. And then I had it*

all there. You know, when I printed it out, it was all there. I just went back and kind of put it in order. . . .” (Emphasis mine.)

Charlene specifically comments on the time and space made available in conjunction with use of the computer. She used all the spaces identified by Martha and the class and added one of her own. She also said: “I thought it was easy, and . . . I think it made the class kind of fun too, . . . using them, learning what you could do with them . . . , what you could do with your work.”

In looking at the paper Charlene generated through Storyspace, I can see some of what she talked about. The paper is rich in loving detail about her mother’s face, hair, and physical being, about her voice, and about the way she carried herself. Charlene includes comments on her mother’s idiosyncrasies, such as putting her tongue on a battery to see if it’s good and pulling out her chin hairs, even though they are barely noticeable. She writes about an emotional low point in her mother’s life when Charlene father left her and she had a nervous breakdown and had to “overcome the many obstacles and made herself and her family much stronger.” She ends the paper with a particularly funny story about shopping at K-Mart with her mother and brother for pants for her brother to wear to a high school dance. Her mother spotted the perfect pair on a mannequin and hollered for them to come check out the material.

Rounding the corner there she was with her hand a hold of this pair of pants between the knee and groin area. Getting closer she said, “Look kids this is a great pair of pants.” “Ron would you like to try them on” she asked. Then suddenly we noticed the mannequin move, and realized this was actually one of the sales people who worked in that department. My brother and I [took] off in different directions, my Mother busted out laughing.

After apologizing to the young man, she had to hunt down her children and take them to another store “to find that perfect pair of pants.” Charlene writes, “To this day I still laugh as I think of what she done and the look on her face afterward.”

Charlene uses some of Martha's advice about organizing; for example, she numbers the chunks on her rough draft in the order in which she thinks they will go in the final copy; in the final copy she sticks to that order. She works ideas about the significance of her mother's life into several places in the paper. However, the main point about the significance of writing about her mother is presented in the opening paragraph of the paper rather than at the end where, in my opinion, it would have made a stronger finish. Charlene did use almost all of her material, but polished it and cut out excess words in moving from Storyspace to finished product.

Karen. Karen's initial reaction to Storyspace is also positive. The same freeing quality that Charlene noticed comes out in Karen's comments during early sessions using Storyspace. She writes: "I can just write what comes to mind and put it together later ." And "I like writing in story space. I can jump all around and write little bits and pieces and when I remember a story I can stop whatever I'm doing and write about it." She also notes: "It is easier for me to write in class this way."

However, at the same time she is experiencing this freedom, she is also expressing concerns about what she is doing. On the first day of writing process boxes, she comments: "I'm not sure I picked the best subject I dont' find my self writng about Hawaii I seem to be writing more about how I felt going there and my fears and anxieties while I was there and the trip to and from Hawaii." A week later she writes: "Ther[e] is still alot I haven't said. I am anxious to see what kind of story I can write from all these writing I have done." Her final comment is "I still have more writing to do I'm still not sure I'm doing what you want." Through these comments, we see Karen struggling with typical student concerns: subject choice, organizing the writing, getting

enough done, and doing it right (pleasing the teacher). Even as she notes the freedom to just write, she is interested in the outcome, looking ahead and worrying about the need to organize and make something of this.

During the interview, I asked Karen how Storyspace had been helpful to her. She expanded and clarified the comments she made during the process of writing by telling me the rest of her story. First she describes the process she used:

Well, you could just write. . . Like, this story, I wrote different events, as they come to mind, and I put them in different places, and then I took them and put them all together, and then made a story out of them. . .

Then she explains the outcome of her work:

and it . . . it didn't come out any way like I'd planned, because . . . when I first started writing, I was just going to write about Hawaii, describe it and everything, and then . . . after I started describing it, I looked at it, and it had more expressions of how I felt when I was there, than it did for the description of Hawaii, so I, I thought well, this is the way it's going to go I guess. . . . So I just put it all together in that perspective instead of, of describing and making a picture of Hawaii, the way I saw it.

The story didn't come out as she had planned when she started, but she seemed flexible enough to change her perspective to adjust to that turn of events. Karen began with one idea in mind but found herself still comfortable when the story developed a different way.

In looking at the writing Karen did, I noticed some interesting things. First of all, Karen's printout of her work in Storyspace contains several of the detailed story pieces that show up in her final piece, but also shows some boxes with only very brief comments in them. Additionally, there are marginal notes from Martha and from Karen's group readers that suggest changes and additions she could make. There is also a note from Karen herself that

indicates she “didn’t get to the end” and has more to write, and a second note that indicates that her readers wanted to hear more of the story.

While Hawaii is the ostensible focus, Karen’s paper is actually about a trip she took in 1970 to meet her husband, who was stationed in Vietnam, on his R & R in Hawaii. She begins with a description of her plane trip, of meeting local people, of waiting for her husband’s flight to come in, not knowing if he actually was going to be able to be there, of finally meeting his plane, of seeing the island, of saying good-bye to her husband as he flew back to Vietnam, and of taking her own flight home. She ends this way:

It will soon be our 25th wedding anniversary. We have decided to take a trip. We weren’t sure where we wanted to go. So Mike has left it up to me to make the decision. I think after writing this paper, I have decided to go back to Hawaii. To see it without all the fears and anxieties.

The final piece is a 5-page story (about 1300 words) with description woven into it, so Karen’s hesitation about whether she was doing what the teacher wanted is perhaps justified. It’s not a purely descriptive piece. However, it is organized, clear, well-written. While Charlene’s paper practically wrote itself when she filled the boxes, Karen spent much time organizing, revising, and continuing to write after she moved out of the Storyspace environment. Although each of her Storyspace boxes contained at least a brief comment, probably an additional 1/3 of her material was written outside of Storyspace. I think time was a factor here because one of Karen’s last comments in the writing process space was about still having much more to write. And yet the writing that she did in Storyspace was exploratory, and led her to rethinking her experience. Since Karen went home to generate material off-line, she did not experience much of the final pushing around to make a product that is characteristic of tool use. When she did finish it, the final paragraph she wrote (quoted above) speaks to the value of the experience to

Karen. Storyspace was part of the writing process which she used as an instrument to develop her thoughts.

Heather. As did Charlene and Karen, Heather initially notes the ease of working with Storyspace and its potential for improving her writing: "Story space is fun and easy to do, I think it will help my writting have more life to it." She may be thinking of the rich and vivid description promised by Martha. By the second day of work, she seems to understand how using Storyspace can be similar to her own process. "I think that I will like this program of writingt because I useualy write in chunks and then draw arrows to w[h]ere I think this Paragraph should go." She recognizes, then, a way she can use Storyspace as a tool. Later, she makes a comment which points very directly to the value of Storyspace as an instrument for a richer writing experience: "This process is helping me remember things that I have forgotten or have taken [for] granted. . . ." She also comments in a more general way about computer use: "I wish I had more time to use the computer because [I] write alot more using the computer." Time is a theme which both Charlene and Karen have touched on.

Like Karen, she also expresses some hesitations and concerns, first about "doing it right." On 2/22 she writes: "I dont know if I am doing this right because I start to wright [sic]about a feature about the lake and then I end up going into a story." She expresses concern about how much she has left to do but also continues her previous theme through her entire entry on 2/24:

Today didnt go as good as i hoped. i got some writting [done] but not as much as I needed. I still feel that I have a lot of work to do. I thought I understood how this was going to come to gether but now I'm not sure. I feel that all I am doing is telling little storys and not enough about what the lake looks like feels like, how it makes you feel when you are their. I know that I could write about these things but I dont' know what box to put them in.

Her comment that she needs to write more about how the lake looks and how she feels when she is there shows particular insight into the requirements of a descriptive piece. The final line “I know that I could write about these things but I don’t know what box to put them in” points first to a confidence in herself to cope with the requirements but also to a disturbing quality that she sees in the Storyspace experience; namely, that Storyspace has boxes into which her description must fit. (She has previously expressed concern about doing it right.) Although Martha has positioned Storyspace as freeing and suggests they use and make new spaces, this does not help Heather at this point. Other students speak about the freeing quality of working with Storyspace and, initially, Heather talks about Storyspace as being easy and helpful in recalling details; however, after she has written in some of these places, Heather begins to recognize and struggle with some difficulties. Her final entry on 3/8 is not very positive:

I didn’t get much down today. I am confused on how to describe how the lake looks. I feel that I’m just writing stories and don’t know how they’re going to fit together into a great writing. I’m going to try to work on this problem at home over the weekend. I hope that I get a lot more done.

She does indicate that she will continue to struggle with the problem. Part of the problem that Heather is struggling with is the problem all writers have with material--what to put where or how to “fit [it] together into a great writing.” Storyspace is not magical for Heather as it seemed to be for Charlene. The story did not write itself. Instead, Storyspace drew Heather’s attention to problems she would struggle with--primarily problems of organization.

At the end of the term when I asked Heather about Storyspace, her comments contradict the generally positive reaction she expressed in her

writing process box on the first day. When we talked, she indicated that at first she didn't like it. She explained her difficulty:

[W]riting chunks, that bothered me. Not being able to see it all on the page. And . . . I couldn't visualize how it was put together in my mind. . . . [T]o me, it seemed like, instead of telling one big story, all I was doing was telling little clips. . . . I didn't, I couldn't see how it was going to hook together when I was just writing about, about . . . the lake, what it looked like, or, different things that we did there. It was just all chunky.

From the beginning, at least as she remembers it, she seemed to be anticipating the plan for a final draft and couldn't wrap her mind around the whole of the piece. However, eventually she changed her mind:

But, it fit together very well in the end, after I got everything put together. . . . It worked really well. So, I mean, it turned out to be a good process as far as being more, putting more things. . . visual in it. Telling what something looks like or feels like is better that way, I think. More descriptive things in there instead of just skipping and saying oh, yeah, the lake was really nice and good weather, I drug it out . . . because, you could feel . . . that's what you were expected to do.

Heather's initial trepidation at the chunkiness of the piece gave way as she realized that she was able to put more descriptiveness in it by using Storyspace this way and that eventually she could and did "hook it together." She does evince one lingering negative: "[I]t took me a lot longer to do it that way than if I would have just typed it out, but it got me more descriptive details, so..." At this point in our conversation, Heather shrugged, which I took to mean that it seemed like a fair trade to her. Her general reaction, in hindsight, was a positive one.

In her work with Storyspace, she added one category:

Traditions. Things that you do year after year that, it wouldn't be the same without them, and then you tell about . . . making homemade ice cream, and Fourth of Julys and things like that. . . . I probably could put them under stories but it really wasn't stories, just traditions we used.

She didn't use one of the class's categories:

Feelings. I don't think I used that. Because I, I didn't know how you could describe a feeling. Emotional something, I think it was. I kept looking at it wishing I could think of something to put in there. 'Cause . . . I felt bad leaving it blank, like, well maybe this would help me more, but I just . . . couldn't think of anything more.

When she describes leaving the category blank, she doesn't characterize her lack of action in terms of "should," but instead in terms of what would have helped her, indicating an internalization of the entire process rather than trying to please the teacher or "do it right."

In looking at Heather's printed work on this piece, it becomes clear that she not only spent time writing, she spent time revising her work. She is one of the few people who have several different versions of printouts of her Storyspace work. Her early printouts of Storyspace boxes show lengthy passages under several headings; in later printouts all boxes have a considerable amount of writing in them and she has added some categories. Her printouts also have marginal notes such as 'beginning,' '2nd,' '3rd,' 'end with this'; later versions have some of the same notes but some of them in different places, as though she were re-thinking her earlier decisions. The next-to-last draft has places crossed out, numbering again, and comments from her readers and from Martha about how she should proceed.

The final piece which she turned in for her portfolio is a 4-page (about 1300 words) highly descriptive evocation of a place around which many of her childhood memories turn, *The Lake*:

In the morning if your lucky enough to get up before everyone else the lake is calm and quite. The water looks like a glass mirror reflecting the rising sun and the trees that surround it's beautiful shores. As a fisherman glides by in his boat you sit and wonder what this day will bring. The ducks come up to you in hopes to get some bread the stillness of the morning is broken by the sound of little feet running on the grass yelling at there mom to hurry up so they can get into the water.

This lake has been the place of my summer vacations since I was five. When I was young my mom my sister Jennifer and I spent the whole summer there at the lake in Syracuse, Indiana. This is where I learned how to ski, I was six and it was our second summer at the lake. My grandpa went out and bought a pair of youth skis for his grandchildren. My cousin Josh and my sister are both two years older than me. I was the first one to volunteer to try it first. I put on the yellow and orange life vest, even though it was a small it was still too large on me. I jumped into the water, it felt good on the hot summer day. While my grandpa attached the rope to the boat I put on my skis. My uncle Mark was in the water with me giving me instructions on what to do when the boat started to pull me out of the water. . . . The fourth time I got up. "I made it!" I was so excited that I was skiing that I forgot that I had to keep my legs together, so what happened was my ski's slowly started to spread apart. By the time I noticed it was too late. I fell right on my face. I was fine only a mouth full of water. Now I am a seasoned skier.

Heather talks also about the majestic homes surrounding the lake, the beach at the park where she was never allowed to play, the storm on a particular 4th of July, traditions at the lake, and ends with:

The wind blows softly across the still water as I sit on the patio watching the sun set and the sky fill up with stars thinking to myself there isn't this many stars in the sky in the city. The lake is a place where you want to stay because of how peaceful it is at anytime during the year. The lake will stay close to my heart for all time.

Heather's writing on this piece is strongly descriptive, evokes a picture, and shows her emotional reaction to this place. Her beginning and end are both effective. From what I can see of her process and approach, she used Storyspace both as a tool and as an instrument to develop her writing in this piece.

Nick. Nick's approach to commentary on writing with Storyspace is somewhat different from the previous writers. Rather than brief comments (or in Charlene's case, not so brief) at the close of each session, he made only one lengthy comment, which is dated 2/17, the second day of using Storyspace, the

day in which they established the writing process boxes. The comment is substantive and critical. The first part notes the positive potential for using Storyspace while the second part examines the difficulty Nick suspects he will have with this program. On the positive side:

I think the story space startup really helps to concentrate on the different parts of my writing and I when I write about some specific part I only concentrate on that part and [am] able to write about in details. I don't have that problem of how to start my story and how to end it, I don't have to keep all my thought[s] in my head and link all the different parts together, and the main advantage of that programm is that I don't have a problem of choosing the things to write because usually before I start to write I have so many thing[s] to talk about I didn't know how to put all of them together.

Nick, then, expresses in different words the same positives that Martha explained--it allows for concentration on one part, it eliminates concern about beginnings and ending, it gives a place for simply spilling out thoughts.

However, Nick also expresses his concerns:

But what I don't like is that I don't know how I connect all the parts after I am done, I will have to find the ways to put them all together as one story, how to make the smooth interaction between two parts of storyspace startup. And I also noticed that in my different folders of the storyspace sometimes I wrote about the same things so it will probably create a slight problem when I will make it as a one story because of the repetition of thoughts.

His concerns are very similar to the concerns mentioned by Heather and Karen, how to connect these parts, except that he is expressing this very early in the process, much earlier than either of them do. He also is concerned about repeating himself. He has noticed that he is writing the same things in different folders. At this point he seems either not yet aware that they will be able to edit their pieces or concerned with doing extra work.

When I talked with Nick, he was very articulate about Storyspace and his reaction to it. He said: "Storyspace. . . it's got a lot of parts which [are very] complicated. . . . it takes a long time to absorb all these tools." Here

again is the issue of time which Charlene, Karen, Heather all touch on-- they need more time to work with and absorb these tools. Nick's initial reaction to Storyspace was positive, however, as he continued to work with the program, he encountered difficulty in working within the boxes:

...[W]hen I started . . . first I thought, oh, it would be good, we just concentrate on that part. "And then I sat down, and I wrote one or two sentences, and I just kind of...was out of ideas.

He explained:

She [Martha] said, concentrate only on that [one] you have to create. . . like, how the body moves. And I found that, in that section it was kind of hard for me to write only about how the body moves. So I was . . . sitting down for [hours] to write all about how the body moves.

Nick evidences a somewhat rigid attitude toward this tool/instrument. He gets stuck in thinking he must fill every box no matter how long it takes. Then he ran into difficulty with connecting:

And then I had the problem connecting them. . .with each other. Because you have to make the transition from how the body moves to . . . the other part, which was . . .how they look or [something] so, we have to make those connections between those two parts and the third part and . . . all that stuff.

Nick found that the approach he had already developed worked better for him. He explained his approach and compared it with a limitation he saw with Storyspace:

I kind of found it easier for me just to write, . . .just sit down and write, one piece. Without writing different parts. And . . . those descriptions which I could use in my writing, if I didn't use the Storyspace, [I could put them] in the beginning, and I could see the parts of the middle, and [end]. They can be . . .spread out . . . It can be, anywhere. And the Storyspace. . .you have . . . to make them in only one section, and then . . .you just write, concentrate only on that writing, . . only . . . on that part.

Unlike the previously discussed writers, Nick did not like working with Storyspace. After careful analysis, he said: "I found it easier to write . . .

without Storyspace.” He found Storyspace confining and brought up an issue that Heather mentioned, putting things in the right boxes. Nick seemed to feel constrained rather than freed by this approach. His own approach may have allowed him a fluidity that he felt denied when he worked with Storyspace.

When, with my regular writing, . . . it can come to my head, then, it can appear in one section and then it can come, you know, another idea will come to you in the middle of my section and the end of my [writing]. And then, I don't have a problem connecting them then, with each other.

His “regular writing” seems, to him, already connected.

In comparing Nick’s printout of the Storyspace box material with his finished paper, I am struck by how different the two are, particularly when comparing his work with the work of previous writers. Charlene used almost all her material as it was, adding only transitions. Heather cut some material and reorganized and polished. Karen enlarged her material by 1/3 but still used most of what she had completed in Storyspace. But Nick did none of that. His Storyspace entries seem complete; he has something, often a substantial something, in every box, but the only thing the Storyspace entry and the final paper have in common is the title and general topic--orphanages. In Storyspace he writes about his experience of seeing children in orphanages. His entries in Storyspace include much descriptive material about the drab clothing the children wore, the fear in their voices, the unusual relationships between orphans and supervisors based on fear, the lack of toys, lack of joy or energy, and some entries about the emotional needs of children. The following is an example under how the body moves:

I remember when I was a kid how much energy I had and would play outside untill dark and my parents had to drag me home. I noticed that those children didn't have that energy, they were not like other children. . . . their behavior was artificial compare to the childhood behavior of other children. They never felt secure and felt that they would be punished in some sense for every

misbehavior. I never hear them screaming with joy when they played with each other. I never saw the wondering and exploring look of children of their age. They played with toys which, I think should be thrown away, they were so old. . .

Nick did similar things in other Storyspace places, generating enough material to fill almost three pages (about 1100 words) printed. However, when it came time to write the story, something happened. The completed story is a similar length, 2 1/2 pages (about 1000 words long), but contains very little of the material that was in his printout. Instead, most of the written material extols the virtues of family and decries those who would abandon their children. The above passage was one of the few that remained in any form, and it had been changed to the following:

Have you ever noticed when you see a happy child how energetic he or she is, how they try to explore things and how their eyes always move around trying to find something new or you always see their smiling faces which change their shape every time. But I saw those orphans I saw that their faces never changes, they are so empty and I can only see their look which doesn't mean anything. They are not very energetic and are not very excited about something new, you can't see their childhood energy and wonder.

The changes in this passage are not bad, but this is the only passage in his final piece that describes the children or the orphanage at all. In his transfer from a Storyspace document (a system he didn't like) to a paper text, he removed and rewrote most of what he had done in the original environment in a way that diluted the strong promise of his Storyspace document. The irony in this is that Martha's comment on his Storyspace printout was "Excellent Storyspace work," after which she suggested they work in a one-to-one conference to deal with "verb tense consistency and some awkward 2nd language conversions." The work Nick did in Storyspace contained rich, descriptive detail. The work he turned in for this assignment in his final

portfolio, though on the same topic, was lacking much of that detail. But Nick did not care to work in Storyspace.

Martha did suggest, in my conversation with her, that Nick already had an idea of how he wanted to write his paper and that Storyspace asked him to change that idea and because he did not want to make that change, he couldn't work with Storyspace. Actually, he could and did work with Storyspace, but he didn't count that as part of the real work of writing this paper. I found some support for Martha's statement in looking at Nick's other work. In an exercise called 5-minute moments which Nick did in the early weeks of the course, he writes about a visit to an orphanage. The first three paragraphs are almost word-for-word the same as those he uses in his final paper on the orphanage. I suspect that Nick saw those paragraphs as the beginning of his next paper before he ever started the Storyspace project. He drew the idea of writing about the orphanage from his earlier writing, but once he had begun in this other way, he could not make the shift to a different approach; he was either unable or unwilling to meld the two. Instead he used Storyspace in much the same way some students use outlining--he fit his ideas into the form he was given after he has already written his beginning. The instrument works for Nick, in that he gets much good detail out, but fails for him because he cannot use that material. Yet, it could be used. I can see how the two could be combined. But what I can see doesn't matter. Nick couldn't and so it was neither tool nor instrument, but encumbrance.

Sara. Sara's work provides us with a contrast from the four previous writers: there is no information from Sara about her writing process in Storyspace, for Sara did not use Storyspace. She tried it the day that Martha taught it and then: "...the next day I went into it, and I said, this is not going to work for

me.” So she worked on this assignment using Microsoft Word. Her problem with Storyspace, Sara said in an interview, was that

I couldn't tell a story. It was all in chunks, and then I had to take those chunks and put it in the right space, and to me, it was like, too many thoughts. . . just like scattered thoughts, and how am I going to put it in a story? I would rather just tell a story about what it is I've got to tell, and then go through and see what I believe is missing.

She rejected the tool/instrument Storyspace as being not for her. She did suggest that it might have worked for other people who write in a different way than she does. But for her, she said, “to think in chunks like that, it’s mind-boggling. Too much to think about. I would have one direction and . . . I’m going that way, you know?” Sara says the same kinds of things that Nick and even Heather mention as concerns: the chunkiness of Storyspace. But where both Nick and Heather try it (with varying results), Sara felt it to be too great a change from her normal approach and was unwilling to make the change.

However, she did use Martha’s categories-to-think-by: “. . . the little cards that we had done in Storyspace, I wrote that on the side of some of my stories to see whether I had it in there. If I didn’t, then I could go back and write it in.” She used the heuristic as a formula for judging her writing, applying it not only to this assignment but, her choice of the word “some” would imply, possibly to other work as well.

Because Sara did not use Storyspace for this assignment, it is not really possible to talk directly about the effect of using Storyspace on her work. However, because she did the same assignment as the rest of the class, it is possible to discuss her work as a contrast to those who worked with Storyspace. There are no printouts of Storyspace boxes to look at, nor were there any rough drafts (although I suspect she did write a draft, I did not receive one)--just the piece she put in her portfolio. In this piece, Sara writes

about her best friend. The piece is 5 pages, double-spaced, roughly 1100 words, so it is as lengthy as anyone else's. She begins this way:

Every friend I have ever had has proved to me that they could not be trusted. After only a few months, sometimes weeks, something happens to where I know I should no longer trust them again. Sure, I can still talk in generals to them, but that becomes the extent of the friendship from that point on.

Then there is Donna, my best friend in the world...

She describes Donna generally and then tells several stories-- about how they met and became friends, about instances where Donna has proved a true friend through difficult times for both of them such as problems at home, early marriage, divorce--then she moves into speculation about what keeps friends together and about the new challenges they are now facing as friends.

Sara wrote an adequate and effective paper without using Storyspace. Aside from a tendency to ramble a bit, the only true difficulty with this paper is a lack of description, a problem that was also evidenced in Nick's finished piece. Charlene, Karen, and Heather all used description to varying degrees in their finished pieces. When we look back to the Storyspace work that Nick generated, the description is there; it is rich and it is there, it just didn't make it into the final work. Perhaps, then, what truly distinguishes Sara's piece and even Nick's piece from papers written in this class with the help of Storyspace is what they lack: rich, detailed, extended description.

Other Students. The balance of the reaction to Storyspace was mixed.

Charles, like Sara, simply did not use it. He said: "... with Storyspace, ...for me, I had no use for it. So I said, well, I'm not going to worry about this. I'm going to have to do this the way. . .that's most comfortable for me, so that's what I did."

Several students tried it but did not like the results they got: Lani, Josh, Mark, Margy. Lani complained that it “chopped out everything I wrote, and then when I tried to put it back together, I felt, if I just rewrote it, it would be better. . . . It made me feel like . . . each one of those boxes was a different story, and it wouldn’t fit together.” Lani eventually gave up on the story and did not include it in her portfolio.

Josh found it superfluous and distracting. He said:

I didn’t like all the side tracks you could get onto. . . like tributaries leading to a different-- I can write my writing . . . the way I want the first time in pieces . . . without using [those] little sections.”

He organizes in his head and was quite comfortable simply adding things as he needed. He did, however, wonder if the activity of “setting up the categories might have helped.”

Mark was not as negative about Storyspace as Lani, in fact he comments on his second day of using Storyspace (in his writing process box), “Today the words just fell out of my head right on to the screen. I think I like story space but I’m not sure yet.” Then a week later, he says, “There’s a million stories to tell I just have to find the most interesting ones. . . .” Again, this is a comment on the freeing quality of Storyspace. In the interview he indicated that it wouldn’t be his first choice for writing a story. He said that he could work with it, and that “it helped a lot with . . .description stuff” but he found himself “being lost at the focus point.” His assessment was as follows:

. . . [I]t’d be better for . . . pre-story, like a first draft copy, to generate all . . . your ideas and your characteristics, and . . . things you want to put into it, and then kind of read over that and lead off of that to write your paper on. I wouldn’t suggest to use it . . . to make a story out of it. ‘Cause you do [end up with]. . . a lot of description and . . . a lot of facts that you wouldn’t have included in the paper if you would have just been writing it.

Without realizing it, Mark has identified precisely the way Martha intended Storyspace to be used.

Margy simply said that she didn't like Storyspace as well as Microsoft Word, but she brought up an interesting issue: time and experience. She said: "[W]e didn't work long enough in that, I don't think, to really experience. . . what you use it all for. . . . if I had spent more time with it." Again the issue of time and experience is brought up.

In general, the students note the way in which Storyspace allowed them to write, to fill in detail and then revise it later. It seemed that the things that some liked about Storyspace were the very things others disliked: that it was in chunks, that you could do one chunk at a time, that a pre-determined pattern was not necessary or that it might actually get in the way.

To help illuminate the different reactions expressed by these students, I turn to Martha's comments about writers in Storyspace. According to her,

Writers who are already comfortable with how...they work through what it is that they want to write and have a strong sense of focus at the get-go, they are the ones, generally, who find Storyspace most perplexing. Because, it's asking them to consider a different way to write. . . .

In my creative writing class, when I introduce Storyspace, it is my most post-modern, if I can call it, students, who are willing to take risks and chances who are most attracted to Storyspace. . . . it's probably my most experimental writers who understand the possibilities right away that it gives them. . . .

[With beginning writers] I think they discover the possibilities as they proceed.

It may be then, as Martha suggests, that those who already have a plan or a system are less comfortable trying this, while those students who are more willing to take risks, for whatever reasons, find Storyspace an attractive instrument for working with their writing. Those who can see (immediately or eventually) how to use it as an instrument are more likely to be happy with it.

Nick, who knew where his story was going and had a system to get it there, was not happy using Storyspace. Sara did not want to explore a new method because she already had one with which she was comfortable, so she didn't use it. Karen who used Storyspace, began with one idea in mind but found herself still comfortable when the story developed a different way. Charlene and Heather both found themselves writing more and developing richer understandings through the use of Storyspace. Even Mark, who wouldn't choose to use it to write a story (because he likes to just sit down and write whatever he's going to do and be done with it), recognized its potential as a place to "generate all your ideas."

It may also be, that in this situation where more students are beginning writers, the support of their peers leads them to discover the potential. Perhaps those writers who work closely with others who are successful with the system are also more willing to try it and find ways of being successful with it. Heather, Karen, and Charlene were the only ones in this class who felt close as a group. They worked with each other on reading and providing advice on each other's papers. They all liked Storyspace. Conversely, those students who were most out of the loop, most on the fringes, most frustrated were also most likely to dislike or not even really try it, for example, Sara, Lani, Charles.

However, those students who did not use Storyspace or did not like it, did not necessarily produce inferior writing. Neither Nick nor Josh judged Storyspace as being helpful but both managed to create writing they were pleased with, writing that was evaluated in the portfolio as effective. Sara, who didn't use Storyspace, generated as much material as anyone in the class. Her portfolio was also evaluated as effective, in fact she received the same score on it as Heather who used and liked Storyspace.

Thoughts on Storyspace

The comments by students and by Martha support my view of Storyspace serving as an instrument for learning. When a student spends time generating richly detailed text, she may learn to look in different ways. In any event, she has much to choose from as she shapes her text, something that has not been part of the experience of many of these students. When that student re-reads her work, looking for the best beginning, determining which parts stay and which will be left out, deciding the best order for these parts, she is gaining insight into a particular part of the writing process. In this sense, then, Storyspace and the activities surrounding Storyspace are used not simply as tools for improving students' writing but as instruments by means of which students gain insight into their process and their writing.

Storyspace is not the only hypertext program on the market, just the one that was used in this classroom. It is also not the only way to approach using the technology as an instrument by means of which students can gain insight into their writing. But it is one means by which some of these writers enhanced and enriched their understanding of what it was they were doing.

¹ It was suggested to me that the pencil-paper spreading-connecting of everything might be an advantage because then a writer could "see everything at once." With Storyspace, it is possible to view the nodes with their connecting links. One can't see the material in the nodes but can read the headings. However, that may not be good enough. And of course one loses the colored yarn.

² Currently there do not seem to be any studies of professional writers composing with hypertext.

³ She made a direct reference to this approach early in the session. She characterizes Storyspace as a "difficult and complicated program" and suggests that although she knows they are "wise, mature adults," it will still be better if they stay right with her in this piece

of instruction. In effect, she recognizes that she may be treating them like children and asks their cooperation in enduring this. I detected no signs of resentment on the part of the students. On the contrary they seemed to welcome the support.

CHAPTER 5

STUDENT REFLECTIONS: GROWTH, COMPUTERS, POWER

An ethnographer could ask for no better class to study than one in which reflexivity is encouraged. From the beginning of this class, time and activities are planned for students to reflect on such topics as who they are as writers and what they most fear about writing. As the semester unfolds, students use venues such as the in-class journals and the writing process box connected with work in Storyspace (discussed earlier) to reflect on their writing.

Five sources form the basis for my discussion of the students' reflection on their experience of the course--an early journal assignment called "Who Am I as a Writer?", the midterm evaluation and the final evaluation given to students by Martha, the cover letter that each student turned in with his/her portfolio, and the final interviews that I conducted with students. This discussion will focus on students' sense of themselves as writers, the impact of computers, and the students' assessment of the power relationships within the classroom.

In order that we may understand something about the information gathered and insights garnered, I would like to briefly characterize each of the previously mentioned vehicles. "Who Am I as a Writer" was a journal assignment given during the first week of class. The midterm evaluation came in the seventh week of class and was titled "Self and Course Evaluation: A Temperature Check and Pulse Reading." It listed seven questions to which the students were to respond by thinking of the course in terms of their own progress to that time, including questions that asked them to recall special

moments of the class, to comment on the greatest challenge, the accomplishment of which they were most proud, the most important thing they had learned, and to describe the course as a journey. (See Appendix G for the questions.)

The final evaluation included open questions for reflection, some of them similar to midterm questions (questions about the most important thing they learned and what was most helpful and least helpful appeared on both evaluations), but the final evaluation also asked what advice they would give to people just starting the class, what they would remember three months or three years from now, and provided some closed questions, questions that involved ranking/rating the themes of the class, the course experiences, and their classmates. (See Appendix H for the questions.)

In the portfolio cover letter, students were to address the following:

. . . who you have become as a writer because of this course, your interaction with other writers in this class, and your experiences as a writer as you have drafted, revised, and edited papers for your portfolio.

They were also to discuss their reasons for selecting the pieces they chose and something of the strengths and weaknesses of the selected pieces. The portfolios, with their cover letters, did not go to Martha but to other teachers within the department for evaluation.

None of these teacher-designed vehicles for reflection asked any questions that directly addressed either the process or the effects of the technology. However, at the end of the semester, after the portfolios had been turned in but before they had been read or graded, I interviewed ten of the thirteen students who completed the class and asked directly about the effects of the computer as the students perceived them.¹ In these interviews I also asked specifically about their reaction to Storyspace (which was discussed in

the previous chapter) and inquired about other major issues, such as, their general experience in 131, the most difficult and most beneficial aspects of the class, the instructor's role in their learning, and the role of the group. Although specific questions shaped the interviews (see Appendix I), I tried to let each interview develop along its own lines, weaving the questions in where it seem appropriate, taking my cues from the student, and giving the student ample opportunity to discuss issues in his/her own way.

The specific areas addressed in this discussion are as follows: how students' sense of themselves as writers has changed during the course of the semester, how computers affected or were implicated in the changes, how the students assess the power relationships within the classroom--with Martha, with groups. I will follow the five students whose work we looked at in Storyspace--Heather, Charlene, Karen, Nick, and Sara--but I will also incorporate comments from other students when appropriate.

Seeing Themselves As Writers: Writing Growth, Personal Growth, Emerging Intellectual Identities

Perhaps because it is billed as a class based on personal experience, writing growth and personal growth are inextricably linked in the comments students made about the class. Comments about growth bubble up through the evaluations and interviews even though no direct question was asked. Many students position this class as revelatory, even life-changing. Josh, for example, writes: "The moments that come to mind when I think about this class is when I opened my mind into a whole new writing stage in my life, which I kind of didn't know that I had." From this class, Karen will remember that she learned a lot about herself, while Sara writes of remembering "how I grew

as a person.” One of the issues that emerges early in this class is the question of what it means to be a writer.

Beginning of Semester

In the journal entry with which they began this class, “Who Am I As A Writer,” each of the five students I’m closely following expressed varying degrees of ambivalence over whether that appellation could appropriately be applied to him/herself.

Karen. Karen was perhaps the most concerned, as she wrote, in abbreviated, fashion, appropriate for a journal entry:

Who you are as a writer
why you are or aren’t

Not very good at writing , cannot express myself very well.
Mind goes blank when told to just write. Cannot sit in front of
window and write, my thoughts all go to what I see outside.

As a writing [writer?] I think I am just me trying to learn and
broaden my horizons.

In the past I have had trouble writing letters not knowing
what to say.

Haven’t written very much, didn’t think I was very good at it.

Heather. Heather expresses doubts about her ability but she also traces these doubts to fear and the fear back to teachers and grading.

I don’t believe that I am a very good writer. I have a very hard
time expressing my feelings out loud and on paper. I can have a
great idea in my mind but it never seems to come out right no
matter how hard I try. I believe my writing fears stem from
teachers paying more attention to correct spelling and grammar
than the[y] did to what I was trying to say. It seemed that I
would always get poor grades on my writing so I just stopped
writing, unless I had to for a class.

She ends this entry with a statement of her goals:

I would really like to become the sort of writer that can easily
transfer their thoughts to paper. I know that won’t be easily
accomplished, that’s why I’m taking this class in hopes to

improve both my writing and the way I preceive [perceive?] writting.

Sara. Sara begins her journal entry with a similar statement: "I've never considered myself as a 'writer'." However, she immediately goes on to discuss the use she does make of writing, a use that is quite in keeping with the "writing to learn" philosophy:

Yet I have always written out my thoughts to help me solve problems, get them out of head, at least for the time being. I usually have so much to do and not enough time to do it in. Yet when I have the time to sit down and write it all, it helps. I'm not sure intirely why. Then the paper is lost and then when I come across it again, it is either funny, sad or whatever--depending on whether or not it is still related to my life or not.

She also indicates that she likes to write and "sometimes write[s] poetry (not very well but want to)." Her final statement addresses what she sees as a past and continuing difficulty:

"Brainstorming" use to be so hard for me, how could I brainstorm when I talked very little, thought about nothing much of anything. What's to write about w/not much but rutein [routine?] things going on.

The irony in her final statement is that at the end of the semester, she turned in a 40-page portfolio showing a great deal of her personal and intellectual struggle, well over the 12-15 page suggested limit.

Nick. As did Karen, Heather, and Sara, Nick begins his entry with a disclaimer:

I dont' really consider myself as a writer. I always have that great ideas in my mind and I think that my work will be one of the best but when it comes to writing I just can't [put] my thought into words or the whole story will just sound awkward.

However, he recognizes that is not always the case, sometimes even he likes his writing:

But there are exceptions, on some days I just have that flow of ideas which I admire them myself, I can't even stop writing and when I finish and somebody reads it to me I can't even believe that I wrote it. But it happens very rare.

The rarity of his experience leads him to talk about the more common pattern:

Most of the times I just have one or two ideas and I start to build a body around them by writing things which can be inappropriate or I'll use words or expressions which are very strong in their meaning but used so much in nowadays that you feel that you stole that expression from someone -- you are not expressing your true ideas but using what is always used.

He paints his common pattern in primarily negative terms and also generalizes by moving from first person to second person.

Charlene. Charlene is the only one of these five students to begin with a positive statement, yet even she quickly states her ambivalence:

"A writer, to be or not to be" I think there are times when I can write. And times when I couldn't. [S]ometimes if the mood and setting are right it seems as though a story can come really easy to me. [I wouldn't] be able to write all the time or for a living it would be hard. I write better with a spur of the moment thinking or a brainstorm idea. Writing has never come easy for me as I write alot like I speak and my english is not real good. I do enjoy writing short stories or just stories for fun. It a challenge for me to make a story sound good, be a little humorous and yet get the point across. But from a proffesional point I would never be a writer.

Charlene moves, sentence to sentence, between the positive and negative, between what she can and can't do, between what she likes and doesn't like and comes down firmly on the negative.

At the beginning of the semester, not one of these students is willing to call him/herself a writer. All express misgivings about their abilities, even as they mention times they could write and set goals for themselves in this class.

Middle of Semester

Midway through the term, as the students reflect back on the class and comment on their own experience of it, attitudes have changed.

Karen. In her midterm evaluation Karen addresses the same themes she wrote about in her journal, but her sense of herself as a writer has changed. She writes: "I didn't think I could write but now it is easier for me to write what I think about." She states: "I can write if I can get my brain working." She also notes an increase in her confidence. When asked to reflect on the course as a journey, she states, very simply: "This course is a beginning for me."

Heather. Heather also notes a major change in her attitude: "I know now that I have underestimated myself. I am doing alot better than I thought. . . . My writting has come more easily than it did in high school." She also comments that "my writing can be emotional not just for me but for the people reading my work." Since the students have received no grades at this point, Heather's estimate that she is "doing alot better" is based on her feelings about her work, and taking into consideration her final comment, the reactions of her audience.

Sara. Sara has made use of this class in keeping with her own needs:

It has brought my mind to ponder, in detail, about many things.
In doing this, I answer my own questions in the way of me trying
to have the reader understand what is trying to be said.

Sara does not recognize a change in her writing, in that she still uses it to deal with her own questions, but the nature of the class validates that a "writer" may do that. By factoring in an audience, a reader, Sara positions herself as a writer. Sara's description of the class as a journey, shows both her ability to work metaphorically and her view of herself as a thinker:

This is a journey of the mind. On this journey I can soar as high as the sun, and beyond if I so desire. With many roads to follow, they lead me in many directions and sometimes they wind around and around. Wandering these roads I never know where they may take me, I know only that they never end. On this never ending journey I have seen many rainy days. Discovering the longer I follow a road I may climb mountains, mole hills or walk flat lands, never in sequence but always brighter the more I ponder.

Nick. Nick's middle of the term comments about his own writing changes relate to much more concrete experience than our other writers though he is still not specific. He has "learned some technices [techniques?] which I can use in my future writing. . . ." He also comments: "Learning english as a second language I learned a little more about how the writing in English language goes. Interestingly enough, Nick gives most credit for change in his writing to Storyspace.

It really helped me in my way of writing. In the past in my writing I had a lot of problem of keeping all the ideas in my head without forgetting them and the most difficult part was that I could not connect them together as one piece of writing. I could not make a smooth transition from one part to another or when I finish with one part and go to another there will always be an idea which will come to my head when the part where it belongs was already completed.

He seems to be indicating that Storyspace is changing this aspect of his writing. This is another irony: midterm he sees great promise for Storyspace in regard to an area he considers problematic, but his final comments about Storyspace indicate that it didn't solve his problem.

Charlene. In thinking back over the first half of the course, Charlene remembers "the writing coming easy" and indicates that means to her that she "can write about anything if I just put my mind to it." She feels that she has learned to put her thoughts into words and sees a change in the variety of subjects she can find to write about. However, she still has some hesitation

about whether she can “go into my inner self deep enough to reflect my feelings.” She still addresses the themes she began with, but seems to indicate a growth in confidence.

Confidence, in fact, is the recurring theme of all of our writers. They have taken a risk which is beginning to pay off in a stronger belief in their ability. From struggling to think of “surprising facts,” that is, something interesting or significant about themselves on the first day of class, the students now at midterm feel confident that their lives are worth writing about and that they might be able to learn to write. From tentative superficial interactions on the first day, they have found in each other a strong sense of audience. All of them believe, at the midterm, that they are growing as writers, which for them involves not only this new sense of audience, but also greater ease and facility with the act of writing, the development of writing voice(s) and beginning intellectual identities.

End of Semester

At the end of the semester, we have three vehicles by which to judge their work: the cover letter they attached to portfolios, the final evaluation, and the interview I conducted with each of them at the end of the semester.

Karen. In her final evaluation, Karen states quite simply “I learned that I can write. I have more confidence in myself,” a statement which is echoed in both her interview with me and in her portfolio letter. In her portfolio letter, Karen’s reflects on the changes she sees in herself and her writing:

When I first started this class I was not very good at writing. I could not express myself very well. When I tried to write my mind would go blank. I have learned a lot in this class. How to start a story with actions and end it by asking “So What.” My journal has really helped me too. I now enjoy writing. I have also enjoyed this class. . . .

Karen expresses her sense of the change as a change both in ability and attitude. She points to two specific techniques she has learned, beginning with action and ending with the significance of the story, as valuable to her. Both require a strong sense of audience. She is also able to recognize and articulate areas which she needs to work on, as indicated when she writes:

As I edited and revised my writings I learned I need to work on my punctuation. I also need to work on the way I put things together.

In choosing pieces for her portfolio, she demonstrates confidence in her work and articulates at least one criterion by which she picked the best:

I have selected these writings. Because I think they are my best writings. I think if you follow the directions I gave to teach a dog to retrieve, your dog will retrieve.

The comment also reflects her sense of audience.

Her final comments round out the letter, speaking again to improvement, confidence, and growth. In all, Karen seems pleased with herself and convinced she has grown as a writer. Her positive, buoyant, knowledgeable comments at the end of the semester are in stark contrast to her tentative beginnings.

Heather. In her final evaluation, Heather notes changes the course has made in her writing with the comment that she has learned not to be afraid “to just write, let it flow. Then go back and edit and spell check.” She has also learned to include her “true feelings” because they “made my stories better.” Her final portfolio letter points to her sense of a major change in attitude over the course of the semester:

I had never liked to write very much because I felt that I had nothing to write about. This class proved me wrong, I learned how to brainstorm which was very helpful in finding things to write about. Even though I still need work in this area I have improved a lot.

She credits this change to brainstorming. When she writes about the pieces in her portfolio, it is clear that she takes a very personal approach to the writing in this class:

The pieces in my portfolio are very close to me. These topics kept coming up in my daily journal, it started to seem that I wrote about nothing else. The story of my father was very difficult to write, but it was good for me to write my feelings down. I feel that this is my strongest writing, and if I kept working at it I am sure that it would get even better. This actually started out as two separate papers. . . . Martha suggested that I try putting the two of them together, and it worked out good. This story sounds better as one than it did as two separate stories.

Heather has begun to sound like a writer crafting work: she comments on a technical move she made, combining stories, and she indicates both an awareness that writing is never really finished and a willingness to continue. Writing, for Heather, served as a personal release; her feelings made the stories stronger.

Sara. Sara's comments sound much like Heather's. In the final evaluation, Sara writes:

Of course, I believe you know this course was hardly a writting[sic] class to me. . . meaning I have learned many things about myself and my own line of thin[kin]g. Learning how to ponder teaches many things.

This comment is in line with her earlier statements about the way she generally uses writing, as a means of thinking through her problems.

In her cover letter, Sara comes back to earlier comments and talks specifically about her use of this class:

On this cover letter I would like to address what this class has done for me as a writer.

I have never considered myself as a writer, but had always written my problems out on paper to help myself see things clearly after rereading what I had written.

In this class I had done the same, and in trying to have my writings be understandable to the reader I understood my problems more clearly myself.

I have chosen these particular writings because they are true and state that you learn from all experiences, good or bad.

She still does not talk about herself as though she were a writer, but she does recognize a value to having an audience; that is, in trying to make something clear to the reader, she understands it herself. She says something similar in my interview with her. She has always written down her problems, and did the same with this class:

... in writing it in the class, trying to clarify the meaning to the reader, I clarified a lot to myself. . . . To me that's what it [the class] was. Not only just writing and all that, but, that's what it was to me. That's what I used it for.

Both Heather and Sara use this class as a means of personal growth, and their writing as an instrument to see into their own lives.

Charlene. Charlene began the class with a certain amount of confidence in her writing and ends it with even more. She recognized both at the beginning and at the end the ambivalence of her relationship with writing. In her cover letter, she begins:

Writing, perhaps the easiest, but yet the hardest thing for me to do. To be a writer I can always feel the ideas flowing for the stories, but the difficulty comes for me as I try to actually put the ideas into words, and then down on paper. As a writer I think I have the many credentials for writing short stories and stories for my school work. . . .

She ends the letter with this statement:

I feel I have made several good accomplishments toward my writing abilities. First of all, I can now write with better ideas and put the language of my stories in a better perspective.

Charlene and I began the interview that we had by discussing why a researcher would want to collect all of a person's writing over a semester. Without my prompting, Charlene made the following remarks:

Charlene: *I guess writing would tell a lot about a-- I mean, you know, over a semester, really. I know I greatly improved, you know, in the class.*

Nancy: *Did you?*

Charlene: *I think . . . I have a better perspective on writing now, and I think I can take, and write easier, where, it used to, you know, I mean, I, I can have the ideas come to me, but to actually sit down and write it . . . and put it on paper, it was harder. But I think now it's a little bit easier for me to do.*

When I asked her what had caused this change, she said:

Charlene: *Well, I kind of like to write too. So, I think it made the, you know, the class was a little, I mean, it was fun for me too, but it was a good experience to get a little better . . . when I first started in here . . . I'd write like, some of the first few stories in there [the collection of all of her writing] or even the ones that . . . I've done them for my portfolio. The pieces. And I revised them and stuff like that. But, they were, you know, there were some, work that had to be done on them, you know, and all of that, but I think now, you know, if I had to sit down and write something, I know pretty much how to . . . I know more how to write it, you know, and, she [Martha] helped me . . . quite a bit on like, punctuation and paragraphing and stuff, and I think I've done a whole lot better. . . .*

Charlene didn't seem to be altogether certain what caused the change, but she attributes it partly to her liking to write, to her sense of the class as being fun, to revising her work, and to Martha's help with technical aspects of writing.

Nick. In his cover letter, Nick clearly addresses what he sees as the changes in his writing process:

This course was my second English writing course. Considering the fact that English is my second language. I started to feel that my writing process became, I wouldn't say easier, but I would say more experienced.

Then he makes a distinction between the process he experienced and the way other people may read his work, reflecting a very strong sense of the role of audience:

To answer the question who am I as a writer will be difficult because only the people who read the pieces of the writing have a right to judge,

He goes on to address the nature of learning to write, recognizing it as a continuing process:

and the process of learning how to write is endless and you can't say that you are a good writer because there will always be something new to learn.

Finally, he addresses what he sees in his own writing and very specifically explains how his writing has changed, again emphasizing the role and importance of audience:

When I look at my early writings I see that they are all different in its essence, some of them I consider as the my best pieces of writing and some of them I would have written differently. The most important thing I learned for myself is the process of starting the writing. The 80%, I think of your writing depends from the way you start your writing, the beginning of your writing will decide weather the reader will be concentrated and interested in your further writing. At the very start of your story you have to attract the readers attention by using unordinary statements of phrases.

In his final evaluation, Nick wrote about the most important thing he learned from the class:

I found my own way of writing. I never realized it before I read all my pieces together. They all had something in common, the flow of events, the descriptions were so mine. And I think that was because of my way of writing.

Prior to this class, Nick did not recognize his own way of writing and did not view his work as a body, as part of his intellectual growth. By the close of the semester, he was recognizing commonalities in his pieces. Nick didn't say it, but this might be considered finding his voice, particularly when coupled with his comments in the interview on earlier approaches to writing he has experienced:

First of all, it's kind of easy when they tell you how to write, but then when you write you see that it's not your writing, it's like, then, it's your writing, but you see the structure instead of, they told you how to make the structure.

He goes on to explain that Martha's directions are much more open:

... sometimes she just gives you an idea, and then I have to start, sit down and write, and I just, you don't follow any introduction, any paragraph, usually I just write. . . .

In some ways, Nick indicates, this is harder, but he does it and explains through a lengthy example how he does it. Nick's recognition of this change and his ability to use this approach are signs that he has discovered the need for and the ability to develop his own writing voice, which is a part of his developing intellectual identity.

Summary

The importance of this class to these students goes beyond brainstorming for ideas, organizing a paper, and the mechanics of manipulating the computer. In their responses, the students regularly position this class as a growth experience: growth in writing and growth through writing. Growth means several things. First, they have taken risks and developed confidence that their lives are worth writing about and that they, having developed some ease and facility with the act of writing, are capable of living up to the challenge. Furthermore, they have developed a sense of audience based on community. Finally, they are beginning to establish for themselves writing voices connected to fledgling intellectual identities.

The Impact of Computers: Tool for Revision, Instrument of Thought

As mentioned earlier, none of the four vehicles designated by the teacher for reflection by the students contains any questions or instructions that would directly lead the students to speak about computers. Nevertheless, comments about computers emerge in the evaluations in the same way comments about growth did. When Karen is asked to pick out moments that come to mind

regarding the class--the good, the bad, and the perplexing--all the comments she makes are related to computers:

Perplexing moments. The first day of class when I came into a room full of computers I didn't even know how to turn on. Bad moments. When the computers went blank and we lost everything we had written in Storyspace. . . . Good moments. When I could get into the computer and work with[out] having to ask anyone for help.

Heather writes of her first day reaction:

Nervous, extremely nervous walking into class for the first time. . . a computer for our writings, that through [sic] me for a loop. . . I was thinking, what have I got myself into?"

Lani managed to work comments about computers into both the midterm and final evaluations. For her, learning the Apple computer was the most important thing about the class because by using it she "learned to think on one." She also rated it the most beneficial aspect of the class. She said: ". . . it allowed me to write more. When I tried to do it at home, I'd end up in the computer lab. . . ." And in answer to a question about what she will remember in three months or three years, she wrote: "the idea of writing class on computers."

Nick, in ranking important themes of the class, included the computer as one of those themes: "Learning about the computer software . . . was helpful in our process of writing." Andy ranked learning the computer programs on a par with brainstorming as most important thing he learned in the class.

Both Heather and Sara make suggestions for changes to the class that are related to computers: both wanted more time in class to write on the computer, with Sara suggesting longer class hours because, ". . . class seemed too short to write a complete thought." Sara also suggested that it would improve the class if a day were set aside to "let the students 'play' with

Storyspace and Word [processing programs]. 'How-to' will stick in your mind when you do it yourself." She seems to be unaware that is exactly the approach upon which this class is predicated. Margy is the one person who has negative comments about the computer. Even though she has a computer at home, it was a different system and she had not used it for composing, so she found working on the computer the most difficult part of the class.

Computers, then, are very much a part of this classroom, in that students comment--mostly positively but not exclusively so--even when they are not specifically asked about the computer. The fact that students' comments about computers were so embedded in their comments about the class is evidence of how fully integrated the technology was in this classroom.

In talking with students about the computer's effects on their writing, I found this same embedded quality operating. The computer's effects were almost always embedded in a larger complex of factors including students' attitude and the way they used the computer. Because of this, when I talked with students about working with the computer, we usually talked in more general terms before I asked what effect working on the computer had on their writing. As I discuss these effects I will include the context of the conversation I had with students. Once again, I will look primarily at our five focus students but also at comments from three others.

Karen. Karen is a new user, taking her first class in college after a 25-year absence from school. Her comments about computers began as a response to my question about what she thought of the class.

Karen: [W]hen I first walked in the class, like I told Martha on one of my papers, I walked in and saw computers, and I thought, I'm in the wrong classroom. . . . I've never touched a computer. Well, not really to do anything with one. I didn't know where the button was to even turn it on. And I was, oh, this is going to be nice, and I [have] to learn this machine that I know nothing about. . .

everything was all new to me . . . then after I sat down and got comfortable, and I saw that I wasn't the only one that didn't know how . . . that makes it [a little better]. Because I thought, everybody's going to be ahead of me, because I know nothing. . . . And there was a lot of people that didn't know anything. And it, and it comes [out] . . . I really liked it. And I could see where . . . the computer would be a lot better [than my typewriter at home]. . . .

When I asked her specifically what effect the computers had on her writing, she said:

Karen: Well, at first it slowed me down a little bit, because I was, I was kind of intimidated, with everything being so new. And I thought ahhh! What'll I do now? Will it be right? Will I sound stupid? You know...as stupid as I feel.

Nancy: . . . Did it change your writing at all, do you think? Or the way you went about writing things?

Karen: I don't know. I found myself, you know, when I first started, I would write, and I got to where I was more comfortable if I could write it, and then you can, like, put it on the machine, and then do it. And then, copy it off and then you can go through and correct your mistakes and it's a lot easier. . . . I got to where I could take it [text] out and move it all around and do whatever I wanted--after I got comfortable with the computer, I could.

Karen's growth with computers, in some ways parallels her growth in writing. Early in the class, she was uncomfortable both with her writing ability and with her computer ability. She relaxed somewhat when she saw others like her, a community of the uninitiated, so to speak, both in terms of computer ability and in conjunction with writing ability. She speaks of the process she went through, initially (hand)writing her work, then putting it on the machine and printing it for correction and eventually managing more sophisticated moves with the machine. As she used the computers more, she became more comfortable with them. Karen's comments point to a tool use of the computer, especially early in the class, as she was getting more comfortable with it. However, as we saw in her comments about using Storyspace, that program allowed her to use the computer as an instrument.

Heather. Heather is also a neophyte computer user. Like Karen, she began our conversation with comments about the computer. When I asked her to characterize her experience in the class, she told me it was her first class, ever, and:

I never used a computer before. . . . So I walked in the first day scared to death. Oh, I didn't know we had to use a computer. . . . But Martha made it really easy to learn. And now I wish I had one at home, to do more things on. . . . You can't really mess up the computer. Which I found out. That was nice. . . . I didn't know that until-- I thought if I touched one button, the whole thing would just shut down. . . . [I liked] seeing how versatile it is and an everyday user can use it. . . .

In regard to how it changed her experience of writing, we had the following conversation:

Heather: I think it helped, as far as my learning and my writing, 'cause, I can't sit down at, look at a blank piece of paper. Now, on a computer screen, . . . it doesn't bother me.

Nancy: And it doesn't seem like a blank piece of paper to you.

Heather: No. And then . . . I can go back, and if I don't want it there, I can just take it out. And, this is not a mess, it just is gone. It just disappears.

The only negative she noted was lack of time--she wanted more.

Heather: . . . I wish I could just have sat there all day. 'Cause, at home, I didn't . . . get anything accomplished, having the two kids and everything, it's just the only time I got anything accomplished for class was in class. . . . I came to school afterwards and worked on the computer. . . .

Nancy: Maybe you could handwrite [your work].

Heather: I'd handwrite it and I'd just . . . sit there and I'd think about what I should be writing or how I should put it together before I put it down. On the computer I just type it in and then I drag it from place to place--which on the paper I couldn't do.

This is an amazing distinction that Heather draws. She cannot look at a blank piece of paper, but the blank screen is different; she can write on a blank screen. When she throws something away, it's gone. Somehow this tool must

appeal to a certain longing for neatness and order in Heather's personality. This comment is in keeping with her earlier comments about hating the red pencil marks made by previous teachers on her papers. This tool, the computer, allows Heather to do several things she cannot do with paper, sit down and just write, drag material from place to place, get rid of messes easily. It changes her writing process. Is it a tool or an instrument? In looking back at the comments she made about putting her feelings into her stories and at combining two stories to make one better one and at learning that she can "just write, let it flow," I would say it is tool becoming instrument. Her comments on how she used Storyspace support a view of the computer as instrument.

Charlene. Charlene worked with computers years before, liked them, and so was not put off by having them in her writing class. In fact she had high praise for computers: "Now, [in] a class like this, they're excellent, I think, for the writing aspect of it. . . . I think they work wonders there." She found they made writing, especially the early writing, easier and more comfortable for her. Her reasoning follows:

Charlene: Because, you can work yourself. I mean, even though . . . we could send something to her [Martha], you know, as far as our writing or stuff, but I kind of felt that, that when you was working at the computer, and especially when I was trying to write a story, or . . . put something together, I found it easier being able to I think when I was working on something . . . I felt more at ease, because . . . I could do it. It was here and it was in front of me, but, it was easier for me to do it that way. I think at the beginning, especially, you know, to really get started and, get on a good road, I think it was better for me in the beginning. It was good in the end, but I think I was a little more, at ease and a little more-- you know what I'm saying?

I think Charlene is saying that while she knew she could ask the teacher for help, she liked being able to do the initial work herself, without interference.

She saw the computer as allowing her to work independently and “get on a good road.” Considering Charlene’s comments from early in the class when she said she likes to write and thinks that she has some ability but can’t always get the stories out, and also remembering her concern about writing the way she talks (lazy, she said), this reading makes sense. The computer allows her to try ideas and phrasings and fix them without showing them to an “authority.” The computer is an effective tool for Charlene, as well as being an instrument that allows her to see her work.

Sara. Like Charlene, Sara has had some experience working with computers. She has a Tandy PC at home and said:

I love computers. I came in one day just to play with it, in the Mac lab, just so I could figure it out more.

Sara never spoke directly to the issue of the computer’s impact on her writing. However, she did talk about her struggle with the class:

I wish we had more time in class. A longer class hour to write . . . I had a hard time, I had to spend a lot of time coming back. I mean, I spent so much time on my computer at home and writing . . . I'm just saying that the computer takes a little bit longer to work with. It makes everything look better, but, it takes longer to work with, so I think that the class hour should be a little bit longer. I didn't find very much time to write in class. As a matter of fact, if you look in my file, that I have in there from that class, it, it's pretty much almost nothing. And then if you take my disk that I have done at home, it's like, well, this isn't finished, and it's not a finished spot to me, and I have to, I'll go home and work on it and end up writing what I wrote in class, then what else I had to continue with. . . . I know that I do tend to talk a little much about things once I get started, but I just feel like, you should, you should have time to have a finished thought.

Sara was the only student who suggested a longer class hour although Holly wanted more time on computers, and to be fair, on most class days I observed students tapping on computers past the end of the 75-minute period. Sara did not find sufficient time to write in class; she did most of her writing at home on

a computer which was not compatible with the school's computers so she had to re-key everything. This may account for her comment that it takes longer to work with computers. Although she used the computer as a tool, to make "things look better," she used the writing itself as an instrument and was very concerned with "time to have a finished thought."

Nick. Nick also had experience with the computers, having used the same model in English the semester before, and having the same kind at home.

When I asked him the value of the computers in the class, he said:

They're quite an essential part. I see a difference when you write on paper and then [go to computer] so . . . I did very few writings on the paper. Most of my writings . . . they were done on the computer. . . . I'll just . . . start writing in class and then I'll just save it on a disk and come home and just continue writing . . . some of the journal entries I made on paper. But . . . most of them I did on the computer.

Unlike Sara, Nick was able to continue the work he began in class on his computer at home. He did most writing on computer and explained his writing process to me. He talks about the process as being his own and being rather different from the one Martha taught, but when considered with comments he made in the cover letter, he appears to have absorbed many of the concepts that were central to her teaching. In particular, he learned a great deal about the value of reflecting upon a body of work and rethinking.

Nick: . . . I'm kind of, I have my own way of writing, so I just, sometimes I sit down and just, then, the flow of, flow of thoughts just, flow of ideas, so I just, once I start writing them, I can-- the flow of ideas just starts to-- I don't know. I just, I never write, I never write any scratch paper. I usually don't write any, on the scratch paper and then redo it. I usually write it right on the, right on the paper. [Earlier, Nick indicated that he did most of his writing on computer, so when he says "paper" I think he means screen.]

Nancy: *So you already have the ideas coming . . .*

Nick: *No, I don't have any ideas, I just, I have a, she, she just tells me the topic, and then I, I just started writing, and, I could have a few ideas, and then, in the process of writing, I just have, I will just start, I will just start typing . . . and then it comes to, it just starts to come out and then, and then I just keep writing, and then, I don't . . . [take] it all back and redo the whole thing and whole, just change some, throw something out and then put something in.*

Nancy: *Do you find yourself not doing much revising then?*

Nick: *I do revising in the sense of, that I can change the, like, I type it out and then I leave, and maybe something I don't like, like the way it's done, so I'll be, the way the sentence is, is, I'll change it and then, like if it doesn't sound good, I'll just change . . . the sentence. But, I don't usually like, throw out the whole paragraph or, I just, I can add some one or two, three sentences and that's it.*

While Nick indicates that he does very little revising, his definition of revising seems based on the idea of throwing large parts out and redoing the whole thing. In his discussion of his process of writing, he shows that he does in fact revise, but he revises as he works at the computer. Like Heather, Nick's process is changing because of the computer. Couple this with the comments he made in regard to seeing his work as a body of writing for the first time, and I think we have significant growth and change happening for Nick.

Others. Three students other than the five focus students made comments about working with computers which touch on issues that further illuminate our discussion.

Charles said:

I love the computer. . . . I like going back in the computer, going over things. Plus, [with] the computer, . . . I'm sort of storywriting, and I might decide in the middle of the writing to go off into Neverneverland someplace. And if I do, on the computer, if it's on there, I can take it and place it wherever it needs to be. Otherwise, if I'm typing . . . on a regular typewriter, I have to go back and redo all of it in order to put your paragraph, you know, where it's supposed to go. So, I feel that the computer makes it much easier.

Charles' comment appears directed at the tool aspect of computers, the ease with which a writer can move text and put it "where it's supposed to go." However, when he says "with the computer. . . . I might decide in the middle of the writing to go off into Neverneverland someplace," I also hear him saying that without the computer he might not make that decision. Thus the computer allows a change in process for Charles, more freedom.

Lani, as I've already mentioned, felt that learning computers was the best thing about the class:

[T]he computers . . . allowed me to write more. When I tried to do it at home, I'd end up in the computer lab. . . . I can write more on a computer because I didn't have to handwrite it out and then if I wanted to revise I could just go in and cut out what I didn't want. . . [with computers] it was like two classes in one."

For Lani, it's more writing.

Mark had experience with Commodores from his work in high school and a semester of work on IBMs , so he only felt a little lost at the beginning of class. He, like Nick, drafts almost everything on computer. When I asked him what effect the computers had on his writing, he said:

On the writing itself not too much, but . . . I'm left handed, and I'm kind of sloppy writing, and I wasn't a real good typer, but you tend to two-finger type real fast by the end of the semester. . . . So I think it's a lot better for turning in papers so the teacher can have an easier time reading it, plus it's easier, you can add in stuff and . . . spell check, and I'm a horrible speller. . . . Grammar, you can go through it all and it just kind of, it gives you more confidence, probably, than just writing it out . . . you can get it all typed up and you just move to the top of the page through it and read through it, and then find all the words that you keep repeating and, just delete one of them and put in a secondary choice word, and, you know, with just a couple of overviews, you can have a pretty decent paper, by just scrambling stuff around a little bit.

In his comment Mark starts by saying the computer didn't have much effect on the writing itself, but by the end of his comment he has named aspects of writing that lead to a product--spellchecking, legibility, adding "stuff,"

grammar, moving text, changing words--as things the computer does affect. He evidences concern for his audience, which he primarily names as teacher. He seems to be positioning the computer as a tool, and a particularly useful tool for him because he is left-handed. I would speculate that being able to see his own work better may mean this tool can be edging toward becoming an instrument.

Summary

This group of emerging writers did not all use computers in the same way, did not all value precisely the same qualities of the computer. Some valued the computer because it allowed them to manipulate text, others because it gave them insight into their work, a few seemed not to recognize much difference. Those who used it as a tool were pleased with the results it gave, as were those who used it as an instrument. Using the computer was a growth process, too. Both Karen and Heather point out their initial trepidation and indicate their increasing comfort. Comments by Heather and Nick suggest that computers may move students away from the habit of having to think before they write-- in similar fashion to freewriting but with a new technology. Additionally, it seems that because the computer is initially a tool for some of these writers, it may also become an instrument.

Power, Authority, Responsibility in the Classroom

This discussion of power began in Chapter 2 when I suggested that on the first day of class, Martha was actively engaged in distributing both power and responsibility among students and others in the classroom. Martha began the class by pointing out that students had a responsibility to take an active role in shaping the classroom community. While she never abdicated her power and authority, she defined it carefully for the students as responsibility,

even listing in the course descriptions her responsibilities, students' responsibilities, and joint responsibilities. She moved the students' attention from herself and what she might have represented as authority and refocused it in several directions: on others in the classroom, including technical support staff and guests, on the technology, on each other, and on themselves in relation to all of these others. That active de-centering of the class from the traditional locus of power and authority, the teacher, continued through the semester (for example, see my discussion of the use of collaboration and groups in Chapter 3). One form this refocusing took was her refusal to be the only reader for a students' work; she simply insisted that every piece of writing other than journal entries have a peer response before she would read it. Peer response groups were established to provide this support and this audience. Another place in which we see Martha illuminating the idea of authority was in the paper assignment for which the students were to draw on their own authority ("I am an authority in _____.") to explain how to accomplish a task or participate in an activity.

Three strands intertwine to foster this de-centering of power: Martha's approach to working with students, the collaborative atmosphere and use of groups, and the technology in this classroom.

Instructor's Approach

Students' description of Martha's role in their learning experience during this semester point to a de-centering of her power and authority. In their end-of-semester interview comments, they paint her as coach, helper, mentor, even friend and admirer,² rather than strong authority figure. Some of the shorter comments merely hint at this sharing of authority, but they are telling in what they don't say. For example, Charlene described Martha's role as one

of “. . .help[ing] me to become a better writer.” Margy characterized her as “. . . helpful if you ask her to help.” A helper, not a boss and then if you ask, implying perhaps that she didn’t interfere when not asked. Karen said: “. . . she makes you feel like she’s talking to you.” while Lani said: “. . .she was a good teacher . . . she interacted a lot.” A friend, someone who considers you, who talks and works with you, rather than telling you what to do. Heather described Martha in conjunction with computers, “. . .she’s real comfortable. Not real, [compared with] teachers in high school, strict . . . she’s a little flexible. I wasn’t afraid to say, hey, I d[o]n’t know how to do this.” Heather compares Martha to other teachers she has known; she’s not strict but flexible, willing to share information, someone who didn’t make you afraid. to ask questions. These students depict her as helpful, supportive, approachable but not bossy, involved but not controlling.

What these students suggest about Martha’s sharing of power, about Martha’s persona as a teacher, is made more explicit by the metaphors and explanations of them given by three of the students. In these metaphors the “implied” authority/teacher above takes a definite shape as a contrast to the image which Martha presents for her students, one of openness, student choice, guidance as opposed to force.

Mark called her “a guardian” and described it thus:

. . . she didn’t force anything upon you. She left it real open to give you choices of what you wanted to write about. . . . she let you pick your own style . . . and then she kind of walked around and made sure everybody was doing all right

Sara called her “a teacher” and then described the role:

. she open[s] it up for you, and make[s] it interesting. She’s letting you be the way you want to be, and then going from there and saying, well, maybe this and maybe that. You’re still making your own decision.

Nick called her “not a teacher,” because for Nick, a teacher is someone who lectures to the class and tells them what to do, and he didn’t see Martha playing that role. He characterized her instead as “a lighthouse,” someone who lit up the night, pointed out the rocks, and didn’t let you crash.

She wouldn’t say write this one or write that one. . . she gave me the basic . . . tools . . . to develop [my] writing. . . . [S]he set up . . . and. . . created the whole atmosphere of writing. . . . [S]he [provided] feedback.

The students saw Martha as creating and maintaining an atmosphere of helpfulness and support. They saw her as pointing them in the direction of what they might do and pointing out problems for them without telling them what to do. They saw themselves as retaining rights of choice in regard to their own writing. They did not describe any abdication of responsibility, rather, a willingness to share responsibility with them.

Collaborative Atmosphere and Use of Groups

The complement to the decentering of power and authority is the responsibility placed on students for their own learning and the learning of the community. As noted in earlier chapters, this classroom was designed to be a collaborative classroom in which groups would play a major role. To that end, student work space is arranged in pods, clusters of five computer stations grouped so that students in the pod face each other, and projects and assignments are developed that take advantage of the groups and collaborative software. However, as the students point out in midterm and final evaluations, groups don’t work well if people don’t come. None of the groups in this class ended up the semester with a full complement of the members with which they began. In addition, attendance was spotty so that even those who finished the class and turned in a portfolio may not have been a functional part of their group. In asking about their work with a group, I also

attempted to find out something about how they worked with other people since it was already obvious to me that the groups were not functioning the way they were intended.

Group 3. Group 3, the group I observed for the discussion of collaborative work with Timbuktu®, was the only group whose members rated it effective. It began with five members who were pretty good about attendance, Karen, Charlene, Heather, Andy, and Jim. Jim disappeared shortly after the middle of the term. Andy's attendance was spotty throughout the term, but he finished the semester and turned in a portfolio and did seem to make an effort to be included in some of the work of the group. Karen, Charlene, and Heather worked together to the end of the semester.

When I asked Karen about groups, she responded as follows:

Nancy: . . . *[I]t's pretty obvious to me . . . that the class is . . . designed to work in groups. . . . But, yours was actually the only group that really ended up--*

Karen: *Being there.*

Immediately, Karen identified the problem: it's not much of a group if people aren't there. I asked her how the group worked for her, and she evaluated and explained how it functioned:

Karen: *I think it worked good. I think we got to know each other better too, being in a group. . . . It's like I found myself knowing them better than I did . . . the other people. At the end we were starting to get to know the other people, but we knew these more because . . . we interacted more within ourselves.*

Part of working well, for Karen, meant knowing each other well.

Nancy: *Did you read each other's papers?*

Karen: *Um hum.*

Nancy: *Okay. What kinds of help did you get from people? With your papers. . . .*

Karen: Just input as to where . . . like I had trouble with, expressing, oh, describing stuff . . . description. [They] told me "you should describe that more so you can-- so we can understand what you're talking about. . . or so we can see the picture."

The group, then, functioned not only socially but also as audience. Or perhaps it functioned as audience because it functioned socially. The audience provided specific feedback.

My next question to Karen was designed to elicit some kind of response about what type of role Karen saw herself taking in this group. However, Karen's response leads in a different direction:

Nancy: Okay. Were you able to give the same kind of help to other people or did you find that the help you were giving was maybe a little different?

Karen: Yes and no. . . . I guess when I read somebody else's, it's easier to see somebody else's than it is your own. I don't know why. . . . One of the girls in the other groups . . . she'd missed some classes, and she gave me one of her papers, and she gave one of the other girls a paper to read.

Nancy: Sara?

Karen: . . . yeah. . . . And, I could . . . tell her . . . her writing was good, but this spot here was confusing to me. . . .

Karen's response leads not to her role in her own group but to a connection with someone else in the class, Sara, whose group was not functioning as well for her as Karen's group was for Karen. Karen has developed some authority in that she is able to identify problem areas in other writers' work.

Charlene's first comments about the group work are about the no-shows:

Charlene: . . .there was a lot of them that didn't [come back], and we were just talking about that this morning. We said, well, there was about 8 or 9 maybe that actually just really stuck with the class, you know? . . . So, you know, it was kind of hard to work. . . . [In our group, Andy] didn't really come that much, and, but us three, Karen and Heather and I, you know, we hung in there. . . .

Then she goes on to answer my question about how the group worked:

Nancy: Did you help each other? Did you find yourself, you know, reading each other's papers and--

Charlene: Oh, yeah. Yeah . . . yeah, definitely. 'Cause, there's a lot of things that, sometimes I think when you do your own paper up and you read it, that you don't catch. You know? That somebody else does. So . . . we swapped papers quite a bit, and I know through the portfolio, there were several of the ones that Heather was doing that she had us read, to see what we thought about it and stuff. So, you know, we swapped quite a bit.

Charlene not only states very firmly that they did indeed swap papers, but in giving the reasoning for (or the result of) this swapping, echoes Karen's comments--when you do your own papers, you don't catch things that other people will.

Nancy: What kind of help did you find yourself getting from other people?

Charlene: Well, I think, well, I got a lot of feedback . . . they'd read the story and . . . they would usually . . . tell me if . . . it had good description . . . or maybe that it had good description, but it sort of needed to be rearranged, like . . . a paragraph of it here, and then. . . maybe a couple or three paragraphs another one . . . and then, oh, a lot of insight on, if they thought it was. . . something they felt, like the piece that I done for my portfolio . . . on my mother. Now, they really liked that one. I think maybe because . . . I probably brought out a lot in that one. . . . But they give me a lot of insight on, this was a really good piece . . . you must have really had a lot into this. So, I got a lot of, of that kind of . . . to help me as I went along. . . .

Nancy: So when you read someone else's pieces, did you find you were able to do the same kinds of things for them that they were doing for you or did you find you did different things for them?

Charlene: Pretty much [the same] . . . I know that one last piece that I read of Heather's which was a pretty good piece, and she had a really good descriptive . . . part in it, and I think basically pretty much the same thing. I did catch myself on . . . quotations, and where she should have had quotations. . . . I think . . . because one story I had done, I know Martha really. . . . pounded with me on the quotations and like, you know when you're writing a story and somebody says something . . . so I think I noticed that a lot more. . .

Nancy: So you passed that on . . . ?

Charlene: Like, when she was doing hers, there was parts in there that somebody had said . . . and I told her, "Be sure you go back . . . and put in quotations, because they'll notice it" . . . I mean, I never noticed in my own writing until somebody showed me, you know, and then, when you do get to read it and you look at it, you think you know, "yeah, it's got to be changed. . . ."

Charlene was able to articulate in great detail and very specifically how the group helped her and what she had been able to do for the group, her small community. In addition, she mentioned the things the group liked about her work. She also factored Martha into the community, or at least brought the information Martha had shared with her individually, back to the others in her group. The comments of both Charlene and Karen speak to the value of audience and community. Charlene spoke with authority about her own writing and about her support and responsibility for helping the others in her group.

When I asked Heather about groups, she began our conversation with a slightly different perspective on the group, which led me to speculate about groups and Heather to provide additional commentary:

Heather: I think the class helped out a lot as far as the large group interaction . . . giving feedback. I really liked that part. . . I thought that was more helpful than the . . . small group activities.

Nancy: . . . do you think that the large group took the place of the small group?

Heather: Yeah, I think so, because . . . everybody that stayed there were the ones that . . . were good in the class [and] were the ones that were there all the time, [and] we all just ended up as one big class instead of separate ones [groups], because . . . a lot of the people in our groups weren't there. And then, our group was probably the only one that everybody, all except one was [still there at the end].

This issue of the large group replacing the small group is voiced by others in the class, particularly those who were in non-functional groups. It was not something that happened in the pilot study. In the pilot study, nearly all of the

25 students who began the class, attended on a regular basis and finished the class. Groups functioned, some more effectively than others, but they did function during the semester of the pilot study. And because they functioned, there was really no space for the larger group to take over the role of the smaller one. The community was defined in different ways in the two semesters.

Because of Heather's initial statement about the large group, I was unsure as to how she positioned her small group in her learning experience.

Nancy: *Did you find yourself working within your group then?*

Heather: *Yeah. . . . yeah, really. I think, Charlene and Karen probably more than Andy. Andy wasn't there a lot. Even though he ended up staying with the class, which is good that he stuck with it. But, yeah, we worked a lot with each other and [they gave] their own opinions and helped out a lot as far as, reading their paper and letting them know, what they felt about it, and what they felt about ours.*

Nancy: *What kind of help did you get from them?*

Heather: *Well, they helped out as far as, things I didn't see, like on...writing the assignment using more than one voice, instead of "I" or "me" or "back then" or "now" or-- and how they thought things should go in order, if I had them, if they thought it was too chopped up, they showed me what they thought would work best, and a lot of times they were right. Something I didn't see.*

Nancy: *Did you do the same kind of thing for them or a different kind of thing?*

Heather: *Yeah, basically the same thing Charlene, was, was probably better at showing what she thought would go. She ended up [doing] fairly well. So, when it was time to read her papers we were going, "oh, it's fine. Looks fine to me." And that was hard, because I felt like I probably should give some advice, but to me . . . they looked really good.*

Heather did work with the small group and explained, in detail and with specificity, as did Charlene, what kind of work they did as a group. She also

expressed, as both Karen and Charlene did, the idea that the audience/community sees what the author does not.

Each of these students, in their conversations with me about groups, spoke as if she were in charge of her own work and as if she recognized her responsibility to the community and participated in that community. Each quoted the kinds of things group members said to each other and talked about the ways they gave and received help in very specific terms. Karen, Charlene, and Heather found their group helpful, supportive, necessary. However, they also recognized the larger community of which they were a part. They all realized that the groups were not routinely successful and attributed the lack of success to lack of attendance, which meant lack of participation. Heather points to the large group taking over for the small group in terms of giving support and a sense of community.

Other groups. None of the other groups functioned effectively as groups. That's what I observed, that's what their teacher thought, that's what the students said. Some of the students in these groups worked with one other person and received some support that way; however, for the most part these groups were non-functional.

Group 1. The group of which Sara was a part, Group 1, began with five members. By the close of the semester, two were coming regularly, Josh and Margy. Although Sara was part of this group and completed the course and turned in a portfolio, she had missed many class days before the last few weeks of school. She did not see the groups as working well: "The groups, that I was in, we were still mostly on our own." She did not, then, see herself as a group member, which she initially suggested was partly by her own choice. She said: "I . . . don't like to be in a group. I like to think on my own. . . . We did a writing in

a group, and . . . I did not like that at all.” However, she went on to suggest that her choice was related to comfort levels:

I wasn't comfortable myself, you know, interacting with some of the people. But it's only because I didn't know them. You don't know how to approach people when, if you don't know them. You know? . . . [You're] afraid you're going to criticize or, you're going to hurt their feelings, or at least you know where your boundaries are, if you know them a little bit better.

Her suggestion was that “something” be done earlier to make groups more comfortable with each other. She seems unaware that several “somethings” had been done early in the class. Likewise she seems unaware of her own responsibility for participating in the group to make this a community. However, she does recognize the need for people to be comfortable with each other in order to interact effectively and form a community, a comment that is in line with Karen’s ideas that part of working well is knowing each other well, something that is a function of time spent together.

Because Sara had no community, she had no audience for her writing. She gave papers to people outside her group, including Karen, Heather, and Nick. She found very few of the people who read her papers to be helpful. She complained that Karen and Heather had very few suggestions on the paper she asked them to read and that when Josh, who was in her group, read her story, “he didn’t write any comments or any . . . remarks or anything.” However, “Nick made the most sense.” Nick told her the details that were helpful to him and where he wanted to see more. When I asked Sara if she was able to make comments to other people on their papers, she said: “They hadn’t asked.”

In conversation, both Margy and Josh commented on Sara’s participation in the group. Margy thought she was intelligent and said: “She had some really interesting thoughts. . .but she just wasn’t there to do it.” Josh said: “She kind of . . . showed up whenever she wanted. . .you try to tell her

what was going on, but if you miss so many . . . you can't really say a lot. . . ."

Sara did not make herself part of the community, and while the group was polite, there was no real engagement between Sara and the others, either within the small group or as part of the larger group.

When I asked the remaining members of group 1 what role the groups played in their learning experiences, the answers, though in some ways similar to comments by members of group 3, speak to a very different experience.

Margy said, similarly to Karen's comments, "No one was there. . . . group projects . . . didn't work out." She did find it helpful to work with Josh:

. . . if I didn't know exactly what she [Martha] wanted or how to do something with the computer, I could ask him and he could show me. Or . . . he put down 'endured' for a trip he enjoyed, and I explained to him . . . if you use endured, that sounds like maybe . . . this was something that you had to do and didn't really want to do, so I said, maybe you could use enjoyed . . . little things like that we could help each other.

Josh's reaction to groups supports Margy's comments: the groups didn't work because no one was there. However,

. . . the lady that sits next to me, Margy, she helped me out a lot. . . . "Cause we were there every day, we knew what was going on and if one of us had a question, we asked each other and we helped each other out.

Margy helped him with his grammar and some revising of his papers, and he helped Margy in this way:

. . . she had trouble getting used to the computer and I work with computers every day, and I . . . know the basic stuff. . . and it helped her a little bit, I think. I read some of her papers. . . .

Josh also said that he doesn't make comments on people's papers
 ". . . because that's theirs and I don't want to discourage them."

While Margy and Josh helped each other in some ways, they were much less involved with each other than the members of group 3; they gave fewer specific details and included very little in the way of "writing craft" comments.

Josh, particularly, deliberately refrained from comments. They seemed to appreciate each other's presence, but still worked much more individually than group 3 members. They each recognized the effect that a larger community might have had on their work, for example, if Sara had been more involved, but found no way to develop that community.

Group 4. Group 4 began with just three members, Charles, Mark, and Ann. It swelled to four for two days and then dropped back to three. Before the middle of the term, it was regularly down to just Charles and Mark. In our interview, Charles and I did not talk about groups. Mark, however, indicated that the thing he found most difficult about the class was the small groups. When I suggested that he didn't have much of a group experience, he said:

We didn't have a group. . . . It was just me and Charles. And Charles is an all right guy, but he kind of gets caught up on his spelling, and he has to look every word up, and he gets confused, so I found myself doing most of the work. And then I didn't have anybody to really overview my paper.

As others did, Mark recognizes that you can't have a group experience without a group. However, he echoes Heather's comments about how the large group began to function toward the end of the semester. "The large group worked okay, 'cause we all gave good feedback." Mark's earlier comments that suggest he sees writing as a product for a teacher tie in with his experience in the groups--like Sara, he had no community to be an audience for his work, making it difficult for him to develop a sense of audience other than the teacher. He recognized the importance of a group that could give him good feedback and with the larger group toward the end of the class he was starting to get it.

Group 5. Group 5 was another difficult group. It began with three people, expanded briefly to four people, dropped back to three, Nick, Lani, and Jenny. Each of these three people finished the class and turned in a portfolio; however,

only Nick was consistently in attendance. Lani and Jenny seemed to take turns coming to class, so the two of them were not often in class on the same days. I interviewed both Nick and Lani at the close of the semester. Nick had very little to say about the group experience other than the obvious: "I was the only one in my group." Sometimes he did work with other groups, primarily Charles and Mark, but on the whole it was not a satisfactory experience. He did, however, connect somewhat with Sara. He read some of her papers and in fact commented, in response to the final evaluation that asked what he would remember in three years, that he would always remember the oral presentation of one student [Sara] who spoke very movingly about her personal confrontation and struggle with an unrecognized racism within herself.

When I asked Lani about her experience with the groups, she said something similar to Sara's comments: "What I did, I thought, I'd rather just work alone." She saw the group as more of a social thing and felt like nobody really reached out to be friendly with her.

I'm trying to be outgoing, but everybody else seems to have their own friends around here. . . and because they don't need to make new friends. . . they don't want to interact with anybody else.

The one day that she was involved with a group working on Timbuktu, she said ". . . we had a full group that day, but everybody seemed to argue about who was going to write and who was going to do what." The group was not productive for Lani. Lani's comment that nobody wanted to interact with her is similar to Sara's comments about not being comfortable. Both Sara and Lani were absent more than other students in the class which probably contributed to the difficulty they each had in getting comfortable.

Developing a community in this particular classroom was a struggle, primarily because of lack of commitment to the process, that is, lack of

attendance, lack of involvement with each other. The one group, Group 3, who most consistently had the most members present and involved, was the group who had the most to say about audience and collaboration. However, the lack of community did not go unremarked. Several people recognized that the groups did not work as well as they might have and lamented this fact. Those who had a working group were pleased with it; some of those who did not indicated regret. Even those who said they preferred to work alone, like Sara and Lani, indicated that they might have worked with someone if anyone had wanted to work with them. Indeed, due to the failure of the groups, students began to see the importance of community and the importance of taking responsibility for their own learning and the learning of community. In fact, several students noted that, toward the end of the semester, the large group was beginning to emerge as a community/audience. If the class had run several more weeks, this larger group as community would have had a more pronounced effect.

Technology and the De-centering of Power

When I begin to discuss technology and the de-centering of power, I have moved from topics on which the student can comment directly to areas in which direct questions were not posed and would not have yielded useful answers. In this section instead of reading student comments, I will be reading student behaviors. Thus much of the material in this section will be highly interpretive, although I have tried, like a good ethnographer, to ground my interpretation in observation.

The de-centering of power is supported not only by the teacher's approach, and by the use of collaboration and groups, but also by the technology in this classroom. The technology is one of the areas toward which

Martha directs students' attention when she is refocusing it away from traditional sources of power and authority, that is, the teacher and those in teacher roles. As demonstrated in Chapters 2 and 3, computers in this classroom are used to support the building of community and work done in groups. Martha specifically explains that computers provide another space in which students may collaborate and a method of collaboration that does not rely on the teacher, hence distributing power and responsibility.

In addition, the technology is another thing for students to collaborate about. This technology is new and vast. No one can know everything about it; even the teacher doesn't know everything and must, therefore, share power and authority and responsibility with technical support people and with students in order to make the best use of the resources. Power distribution, then, is mandated by the complexity of the technology.

No one can know everything about the technology, but everyone can use it. With a few hours of instruction, even the most inexperienced among these students was able to make and manipulate text. Again and again, students spoke to their initial trepidation followed by their confidence in using this complicated piece of machinery. They understood the power this technology gave them. With the computer available in class every class day and access available to his/her own files at times other than class times, each student was in charge of his/her own writing process, something noted earlier in comments by Charlene as well as being in charge of the production of text. With time provided in class to compose and access provided so that students could work outside of class, each student could operate at his/her own pace. The flexibility of the computers accommodated a number of different composing processes: from Nick, who had a free-form compose-and-revise-as-you-think, to Karen, who initially handwrote on paper, entered the text into the computer, then

printed it out to revise on paper, and re-entered her revisions. In addition, because of the ease of sharing text and printing text, each student was also in charge of the distribution of his/her own text. As the semester proceeded, it became more and more common to find students coming to class before the teacher, turning on the computers, opening their own files and beginning to work. They consulted from time to time with each other and occasionally with a technical support person in the lab next door, but they did not wait for the teacher's signal or her presence to begin composing. During the pilot study, Martha was out sick one day and the secretary forgot to come into class to announce her absence. The students worked for nearly 15 minutes before they questioned her absence. Once it was established that she would not be in, but that they could stay and work (or not), most stayed at least 3/4 of the class period. Within the context of this classroom, students in both terms took initiative, recognized their own authority in regard to their work, accepted (in some cases embraced) responsibility for their own learning. That's power.

To be sure, the technology in this classroom did not operate independently of its users. The way the technology was used depended on both the instructor and the students. The characteristics of the technology that were valued and stressed by the instructor were those that would support the goals of the classroom. The way the students used the technology depended both on what the instructor stressed and what the students saw as meeting their needs in this situation.

Summary

For the most part, these students saw themselves as actors, participants in the class. They saw their teacher as establishing a helpful and

supportive atmosphere without controlling them--the guide or, as one said, the lighthouse. They considered themselves as having and exercising choices and discovering their authority and responsibility in regard to their own writing. Some made more use of the collaborative atmosphere than others; some took more responsibility for the operation of the community than others, but most recognized their own power, authority, and responsibility in this classroom. From my observations, the way the technology was used, particularly the fact that they could use it, contributed to the students' sense of power.

Final Comments

From the students' comments, written and verbal, from their writing, from my own observations of their behavior, I draw the following conclusions regarding growth in writing, the effect of computers, and power in this classroom situation.

The five students I followed closely, and several others, all reported growth in their writing from the beginning to the end of the semester; one would expect that. However, what was striking was the dramatic difference in confidence that these students evidence from the beginning to middle to end of the semester. By the end of the semester, several were able to talk about crafting their writing and about their writing process, and they appeared to be forging an intellectual identity by means of their work with writing.

"The effect of the computer" is no more of a reality than "the writing process." Students in this class reported different reactions to the computers related partly to their own background and experience, but based more on the way they used the technology. Students used the computer as both tool and instrument, depending on what they needed. They saw great potential for its use and valued it positively.

Power in this classroom was likewise multi-faceted. An atmosphere of sharing power, authority, and responsibility was established by the teacher, taken up, used, and developed by the students, supported by the technology, or by the way the technology was positioned by teacher and used by students. In this way, although it is possible to separate facets for discussion purposes, the ultimate effect depends on a growth or building process.

In these students' commentaries, the various aspects of the classroom which have been part of this discussion were piled one on the other. Growth, responsibility, power, computers, groups were all part of the same pieces of conversation--embedded, as it were, in a whole. While it was necessary to separate these pieces for discussion, they are mixed into the conversation in much the same way that the themes of this classroom are mixed in practice. That mixing, interweaving, allows the various aspects of the classroom to work together, synergistically, to promote growth in its participants.

¹ I was unable to arrange a mutually convenient time to talk to the other three students.

² These ideas came up in the interviews although the terms were part of other conversations not within the context of this set of interviews directly. During my pilot study in the previous semester, these ideas and these specific terms were used to describe Martha's role in the students' learning experience.

CHAPTER 6

WHAT DO WE KNOW AND WHERE DO WE GO FROM HERE?: CONCLUSIONS AND RECOMMENDATIONS

This research project began with my question--what happens in a computer-supported writing classroom?--and proceeded along lines that I felt would help illuminate answers to that question. The question very quickly became contextualized by its particulars, i.e., what happens in this particular classroom, with this particular combination of students, teacher, technologies, and challenges? Now I would like to go back to the points I raised at the beginning and see what light was shed by this research. The areas I proposed to address were as follows:

- the pedagogical and learning approaches used in this classroom, including the ways in which computers were integrated into the experience of the classroom;
- the usefulness of a tool/instrument distinction for understanding various uses of the computer in this classroom;
- the nature of the interactions that took place within the computer-supported composition classroom, particularly those relating to power, authority, and responsibility;
- the impact of computers on the writing classroom;
- changing notions of text in this computer-supported writing classroom.

Although the interpretation which follows is neatly organized into categories that match the questions, no such neat division was possible in the experience of the classroom itself. As I stated at the beginning, the strands

overlap and intertwine. Therefore, placing the material was sometimes a judgment call and may even appear in more than one place.

Pedagogical Approaches, Learning Approaches, Integration Of Computers

Pedagogical approaches

Community and collaborative learning are valued in this classroom. During this semester, Martha encouraged her students to get to know each other, to share their work, to work together on projects and to read and respond to each other's writing. This approach was built into the functioning of the classroom: the first day involved sharing information about each other, chatting, working together, learning individually and in a group; the course description stressed working together, used "we" and "our" throughout ("Our responsibilities. What we make together in this classroom is most important!"), and refers to the class as "a community of writers (From *Course Description*, Appendix A); early writing activities, both on and off computer, involved small group work and sometimes large group sharing and feedback; later classroom activities involved large group sharing; throughout the term students were directed to each other as resources.

The teacher is a supportive part of this community rather than the central focus, which relates to the issue of power and authority, too. Martha wrote with the students; encouraged them to read each other's work, going so far as to refuse to comment on a draft until after someone else in the class had seen. People who were not properly part of the class, but were in some ways part of the community, were invited in to participate and share what they knew or in some cases what they didn't know (lab consultants, off-campus researchers, computer experts). Students retained authority over their own

work, both in the product sense of that work and in the process of doing the work.

A supportive environment in which people “will write about things they care about” and learn to develop their own multiple writing voices is also valued. Students were encouraged to think deeply and write in their daybook/journals about things that mattered to them so they would have a wealth of material on which to draw as they chose topics to pursue. Martha shared her own stories as well as the stories, in progress, that students wrote. They looked at examples of both professional writing and student writing.

Writing is understood as a process which takes both time and effort. Giving time and effort to becoming more comfortable with writing and confident in expressing oneself is considered important. Writing is also valued as a way of learning, of discovering what one thinks and how one understand things. Journal/daybooks, multiple drafts, workshopping papers, attention to the different parts of a piece of writing (strong beginnings, endings with a punch), special journal entries in which the students reflect on the process they use, mid-term and final evaluations in which students reflect on their experience, conferences with the teacher as works are in process, portfolios in which they gather and present their best work along with a personal evaluation of that work--all speak to the understanding that writing is a process of discovery as informing the pedagogy of the classroom.

Learning approaches

The students varied in their approaches to learning. Many of the people in this group came from learning situations in which they had not been successful. Due to these earlier experiences, some of the students expected to be asked to use approaches that included rote learning, mechanical application

of rules regarding language conventions, and lots of red penciling. Most of the students who completed the class seemed to appreciate the pedagogical approach employed by Martha in this class. Some took full advantage of it, using their daybook/journals, writing and reading drafts to other people, re-writing drafts based on comments from their peers and from Martha. Others found that some parts of the pedagogical approach did not suit them, and they did not use what didn't work but instead developed systems of their own. In the case of the collaborative approach, some students couldn't manage to make it work because of attendance problems within the class; others simply chose not to be involved. Almost all of them used the opportunities provided to choose their own topics, to retain control over their work, to re-write, and to use the computer.

Computers Integrated into the Pedagogy

Throughout the semester, the computer supported the writing work done in this class. Using the computer in this classroom was always presented in the context of a writing activity or experience. The students learned to log on after the first day in the context of writing journal entries about things that interested them. They learned to manipulate text using the mouse (and Microsoft Word), so that they could expand and enrich their writing, and later so that they could delete parts they didn't want. They used Timbuktu so they could explore collaboratively their writing fears and discover ways to cope with them, and later so that they could write a story collaboratively. They learned to work with Storyspace as a means of avoiding the constraints of beginnings and enabling them to simply write without worrying about the precise shape the finished product would later take.

Information about the details of operations done on the computer were presented at the point of need, often at a student's request for information. It

was not uncommon for Martha to say, "Heather had a good question. You may all want to know about this." She would go on to explain how to save to a disk or number a document or some such information. This was the same approach she used with information that was not computer-related. So computers were part of the total pedagogy and presented in the same way that other information was presented. In these respects then, the use of computer technology and information about the technology were woven into the fabric of the class.

Computer as Tool/Computer as Instrument

When it first occurred to me to question the metaphor of *tool* which had been applied to computers, I did not know if considering another metaphor, that of instrument, would be helpful. Tool, instrument, what's the difference? By training the tool/instrument lens on students' comments, behavior, and writing, I was able to see the significance of the distinction. There is a difference in using the computer as a tool to assist in the manufacture of writing *products* whether print product or hypermedia product and using the computer as an instrument to enhance or expand thinking and writing processes.

In this classroom, the computer was both a tool and an instrument. The instructor positioned it to serve in both capacities and demonstrated, modeled, and guided students in both uses. For some students, it was more tool. It helped move text around, make things look nice, and prevent them from having to retype their work--an appropriate use of the technology. For others, while they still used it as tool, it became an instrument at times; for some of them, like Charlene, Heather, and Karen, the instrument came to the fore in their use of Storyspace. For some, it became an instrument because it had been first a

tool. I'm thinking particularly of two students. First, Mark, a left-handed student with self-described "poor handwriting," found that he could read what he wrote better on computer than when he handwrote and, therefore, was more comfortable with his work, more able to look at it and work with it. The computer began as inscribing tool but became an instrument for him to see and work with his ideas. In similar fashion, Heather, who panics at a blank sheet of paper and at the thought of messy hand-freewriting and having to cross out, can freewrite on the computer because she knows that she can easily add to her work or make parts of it disappear. Without the computer, she would not see her writing, certainly not see it in the same way. Whenever it was used to expand and complicate or enrich thinking or writing processes, the computer became an instrument.

Nature of the Interactions--Power, Authority, Responsibility

While many different kinds of interactions took place within this computer-supported composition classroom, I was particularly interested in those related to power, authority, and responsibility. I have organized my comments around two categories of interaction: teacher to student(s) and student to student

Teacher/student

As I noted in Chapters 2 and 5, Martha refused to be the only focus of authority for her students. She involved other people in her class; she empowered the students by giving them knowledge about the technology and about writing; she seemed to intend to leave the power over students' work in the hands of the students themselves. The interactions I noted in Chapter 2 show Martha as involving students, encouraging them to speak, both to her and to each other, i.e., supportive interaction. This kind of interaction

continues throughout the semester. Students indicated, by comment or action (as I noted in Chapter 5), that they felt free to ask questions; to solicit and take (or refuse) advice; to question Martha's statements. They talk about themselves as making choices in their writing. They position Martha as a guide or a helper, rather than a strong authority figure.

Student/student

It's much harder to generalize about student interactions with each other. In Group 3, which I observed at the beginning of the semester, members of the group seemed to depend on each other from the beginning; each found a role she/he could play and contributed to the group in that way. In this group, that type of interaction continued--generally supportive and friendly--both informally and in writing-focused work. Not everyone in the class had this experience. Some worked with only one other person, while others seemed to work individually. In their comments about groups and interactions with other people, they recognized that the collaboration and group experience was lacking. Some of those who ended up working individually complained about the quality of interaction; but others indicated they preferred it that way. However, I noted, as did several students, one interesting phenomenon in regard to group interaction. Sometime after spring break, in the second half of the semester, people began to interact across groups, something that had not happened in the pilot group the previous semester. Toward the end of the semester, the group as a whole was moving toward more interaction within the larger group. Several people noted in their final interviews with me that the large group started functioning in place of the small groups. Everyone who noted this indicated the positive value of this phenomenon.

**The Impact Of Computers On The Writing Classroom:
Students' and Teacher's Views**

Students' views

Although I invited students to speak to both negative and positive effects of the computer, apart from admitting to initial trepidation, very few of the students had anything negative to say about impact of computers on their work in the writing classroom. For the most part students saw great value in computers in the classroom. Several indicated that they were pleased to see them when they walked into the room. Students found that computer made revising easier; some indicated that they found the act of writing itself physically easier or less messy or more complete with the computers. Several suggested that they found their writing process and/or product to be different when using the computer.

Teacher's view

The teacher, of course, has the advantage of historical perspective. She has worked with computers in teaching writing for a number of years; hence, she speaks from a broader range of experience. In general, she sees the impact of computers in her writing classrooms in several areas: 1) computers make it easier for the students to revise; 2) computers with collaborative software such as Timbuktu give the students an extra venue by which to foster collaboration; 3) even without collaborative software, students help each other on the computers; 4) software such as Storyspace helps take away some of the constraints of beginnings and allows students to break from a linear patterned mode of writing, thus giving their writing a richness and detail not always found among writers in first-year composition classes; and 5) all of

these combine to move the locus of power from the teacher and to give students' power and authority over their own work.

Changing Notions Of Text

It's appropriate that changing notions of text comes last because what I have to offer in regard to this issue is sheer speculation. When I began my research and included this question, I did it because there was much conversation in the field about the topic. E-mail, World Wide Web, hypertext, hypermedia, multi-media--all were exciting new concepts which promised (or threatened) to change the way we understood text and the making of text. However, the "we" in my previous sentence is problematic. Who is the "we?" Ethnographic research teaches "us" to define "we" carefully. The "we" implied above seems to me to be "those who deal with text on a professional level," such as writers, composition teachers, and a certain population of readers, or it may be "those who are in the know" or "those who already have an understanding of text." It may be that this "we" could at some point be "the general public," but not right now.

And who is the "we" that describes the students in Martha Petry's Winter, 1994, 8:00 a.m. Writing Experience class? Their notions of what text is are probably very different from those who have been part of this discussion as writing professionals. My thoughts on changing notions of text are speculative at least partly because of the difficulty of knowing what these students' notions of text really are. With those caveats in place, I will now speculate.

Let me begin by considering the making of text on computers. Coming into this class, many of these students had no conception of themselves as creators of text. Text for many of them was associated with professional writers; it was "other," not of themselves. Work in this classroom has begun to

move students to consider text and the creating of text as less the exclusive province of professional writers and more an area in which they can be involved. In the case of students like Charlene, Karen, Heather, the computer and special computer programs, such as Storyspace, are significant factors in this shift. Because writers of text are also readers of text, these factors come together to influence notions of text.

What the students saw as text on computer may contradict what they have thought of as text. I believe that students, in their work as writers, identified several characteristics of text on computers. Virtual text is more fluid, more malleable, less messy than print. Several students mentioned these differences in conjunction with their use of the computer. Text in hypertext programs like Storyspace is less linear than text in books or papers, and, although none of the students left the text they created in its Storyspace form, they experienced their work in this less linear state and they heard about the potential for making different kinds of connections with Storyspace. Storyspace and other hypertext program are often mentioned as the levers for change in notions of text. I cannot determine whether students do or do not see this, but I think it's possible.

And because of these possibilities, as teachers, we need to look at the potential and implications of working in an environment in which notions of text are changing. In our teaching methods, we (writing professionals) must begin to recognize these changes and use our understanding of the changes and of our students to inform our pedagogy. As with any change, there will be those who embrace it and grapple with it--both teachers and students, and those who deny it--again both teachers and students. One response may be to deny that any artifact that does not meet certain prescribed standards is in fact a text. (From teachers one might hear, "That's not a text; it's got video in it," of

“That’s not a decent text; it has no transitions, only links. From students, the comment might more likely be “That’s not a text; it’s just something I wrote.”)

I think the responses and behaviors of students point toward change, a change writing professionals may want to foster. I think it would behoove “those of us in the know” to look at this situation carefully.

Conclusions

Studying one classroom intensely over the period of one school year confirmed some of the things I have suspected about computer- supported classrooms. They are not magic: as in all classrooms, some things work and some things don’t work. Simply adding computers to a writing classroom will not guarantee success for writers. Writing improvement is actually writing growth and remains dependent on many factors including time, effort, the ability to be reflexive, and a variety of factors within the context of the total writing environment. What happens in this classroom is not necessarily what would happen in any other classroom; what happened was dependent not on the computers alone but on the total pedagogical approach. Computers are used as part of that pedagogy. When integrated into the pedagogical approach as they are here, they can and do support the work of the writing classroom. Did computers in this writing classroom make a difference? To this question, I would say “yes, but. . .” Yes, the computers made a difference, but not in terms of improving the old methods of teaching and learning writing, rather in allowing the evolution of new methods of teaching and learning writing.

Suggestions for Further Study

I spoke earlier of the potential for computers to become not only tools of revision, but instruments of thought by virtue of their ability to be used to expand, complicate and enrich thinking processes. Expanding, complicating,

and enriching thinking processes is one of the most important functions of a writing classroom. Integrating computers into the pedagogy of a writing classroom so that they will serve this purpose seems to me to be a good and necessary direction for our profession to be moving. I would suggest that we can benefit from further research that explores classrooms that operate in this way. Also, it would be beneficial to investigate classrooms that make greater use of network capabilities, including synchronous and asynchronous conversations, on-line classrooms, and distance learning situations. As we do this, we must make a strong effort to contextualize our work, so that we may effectively develop complex theory to support our pedagogy.

The computer in use is surrounded by a complex of ideas and activities. There is room for difference, for diversity, in computer use. We must resist the categorizing of computers in a way that would make them curse or blessing or monolith. We must also recognize not only the right, but the responsibility of teachers and of students to use and connect with technology in different ways. For recognizing these differences allows for growth and change for all those whom we would empower through writing.

APPENDICES

APPENDIX A

APPENDIX A

Approval of UCRIHS

MICHIGAN STATE
UNIVERSITY

October 13, 1993

TO: Nancy S. Tucker
131 Brody HallRE: IRB #: 93-489
TITLE: INTERACTIONS AMONG TEACHER, STUDENTS AND COMPUTERS IN A
COMPUTER-SUPPORTED COMPOSITION CLASSROOM
REVISION REQUESTED: N/A
CATEGORY: 1-A,C
APPROVAL DATE: October 12, 1993

The University Committee on Research Involving Human Subjects' (UCRIHS) review of this project is complete. I am pleased to advise that the rights and welfare of the human subjects appear to be adequately protected and methods to obtain informed consent are appropriate. Therefore, the UCRIHS approved this project including any revision listed above.

Renewal: UCRIHS approval is valid for one calendar year, beginning with the approval date shown above. Investigators planning to continue a project beyond one year must use the enclosed form to seek updated certification. There is a maximum of four such expedited renewals possible. Investigators wishing to continue a project beyond that time need to submit it again for complete review.

Revisions: UCRIHS must review any changes in procedures involving human subjects, prior to initiation of the change. If this is done at the time of renewal, please use the enclosed form. To revise an approved protocol at any other time during the year, send your written request to the UCRIHS Chair, requesting revised approval and referencing the project's IRB # and title. Include in your request a description of the change and any revised instruments, consent forms or advertisements that are applicable. the year, please outline the proposed revisions in a letter to the Committee.

OFFICE OF
RESEARCH
AND
GRADUATE
STUDIESUniversity Committee on
Research Involving
Human Subjects
(UCRIHS)Michigan State University
225 Administration Building
East Lansing, Michigan
48824-1046
517/355-2180
FAX 517/336-1171**Problems/
Changes:**

Should either of the following arise during the course of the work, investigators must notify UCRIHS promptly: (1) problems (unexpected side effects, complaints, etc) involving human subjects or (2) changes in the research environment or new information indicating greater risk to the human subjects than existed when the protocol was previously reviewed and approved.

If we can be of any future help, please do not hesitate to contact us at (517) 355-2180 or FAX (517) 336-1171.

Sincerely,

David E. Wright, Ph.D.
UCRIHS Chair

DEW:pjm

cc: Dr. Kathleen Geussler

APPENDIX B

APPENDIX B

Course Description

English 131 Writing Experience

Martha Petry Joyce, Instructor

Winter 1994, 3 Credits, BW 205, 8:00-9:25 am, TR

Office: BW 234, Hours: 11am-1pm T/R, 9am-2pm W and By Appointment

Course Description. The business of this class is writing. We will write about so many subjects in so many ways, contexts, varieties, styles and forms that writing will, I am certain, become a more natural activity. We'll explore in our own and in each other's writings a whole range of ways that the written language is used, depending on what we're writing, how we feel about the subject, whom we are writing to, why we're writing, and even how we feel about the writing itself.

Being comfortable and confident with our writing is no easy task, yet it is where we must begin if we are to become better writers. I think all of us after 12 years or more of education have had, of course, lots of writing experiences--some successful and some not-so successful. Some of you have already discovered that writing can be a wondrous activity, useful for thinking critically, for expressing your ideas and imaginings creatively, for self-expression. Others of you may have been so diligently drilled about all the things you do incorrectly (spelling, punctuation, grammar, sentence structure, etc.) that you no longer dare to even touch your pen or pencil to paper at all. Some of your writing experiences may fall somewhere in-between. But, getting over whatever roadblocks short-circuit our ability to write well and with confidence is where we will begin. And in a way, it's where we will end-- for the goal of this Writing Experience class is for each of you to become better and more confident writers.

We'll also learn to talk about our writing in a variety of settings and locations. Sometimes you will talk to yourself about the thinking and creating that a particular writing demands while you dance or listen to music or take a solitary walk. Sometimes we'll talk about writing strategies in class in small and large groups. Sometimes you will talk about writing with your friends. What you say and what you write will reveal (not only to me and to members of this class, but to yourself) something of your spirit, your habits, your likes and dislikes, your biases, and the ways you see the world. You cannot write and remain incognito. That is the risky part. Throughout the WRITING PROCESS, we'll find out some stuff about writing, some stuff about ourselves and each other, and some stuff about the world at large and at JCC.

Your responsibilities. Your main task as writers will be discovering, using, and improving your own writing voices. I think you will discover your own personal writing problems and their solutions as well as the strengths you possess as we write and talk about our writing and as we read and respond to each other's writings. Attention will be given to the mechanics of writing in revising, but it is not our primary focus as we begin this course. Some writing will be done in class: some writing will take place in your daybook/journal; other writing will be assigned by me and will be worked on both in and outside of class.

My responsibilities. I'll be reading and responding to all the things you'll be so busy scribbling, jotting, writing. We'll use class time to talk about ideas for writing, to talk about each other's writings, and to write itself. Sometimes we'll break into pairs or small groups for sharing and responding to each other's writing. Sometimes I'll informally lecture--for me, a way to see where we're going as a group and where we've been. Sometimes we'll use literature (stories, essays, poetry, anecdotes), films and videos to spark writing ideas and topics. One conference about your writing will be required; more conferences are better. I want to help you develop a thoughtful and perceptive intelligence about your own writing and others.

Our responsibilities. What we make together in this classroom is most important!

What we use. The Resources of this Macintosh Computer Classroom. The MacClassroom is a wonderfully useful facility for learning about writing, for drafting and revising papers, for ease in workshopping papers, and for getting to know each other as a community of writers. We'll gradually learn Microsoft Word, how to use Storyspace for inventing and organizing and brainstorming ideas, seeing connections and making links between ideas. We'll use a program called Timbuktu to draft collaborative projects.

You will need to purchase a 3 1/2" Mac disk, Available in the Lab (next door).

Our text for this class is Donald Murray's book, *Write to Learn*.

Most importantly, we'll use our writing, yours and mine. You'll need a folder to keep your in-class writings and papers in and a spiral notebook for your daybook/journal entries.

Attendance. Regular class attendance is essential to completing this course. I expect you to let me know when you are unable to attend class.

Late Work. Reading and daily work need to be completed on time for you to participate well in class. Drafts and revisions need to be completed when assigned so that you and your group or your partner(s) can work effectively. I will make every effort to accommodate your schedule when there are conflicts between work and school, family and school, this class and others you are

taking. In return, I expect you to make every effort to submit your work on time and to let me know in advance when you need an extension.

Grading. Your final grade for this course will be determined by totaling your grades on the Writer's Daybook/Journal (35%) and Portfolio (45%) and adding your grade for participation in your writer's group[and class discussion (20%).
The Writer's Daybook/Journal

Your Writer's Daybook/Journal is the starting point for all the writing you will do this semester. In it, you will record your insights, questions, arguments in response to the "texts" we read and see. You will also plan, draft, and write ideas for writing. You will detail your responses to class discussion as well as note your own writing process. Think of your Writer's Daybook/Journal as the place to think aloud, ponder, dream, question and write about your experiences, your observations, your encounters with the world.

Your Writer's Daybook/Journal will be collected three times during the semester: **Tues. January 18; Tues., February 15; and Tues. Mar 15.** Your Writer's Daybook/Journal will count as 35% of your final grade.

The Portfolio

Your Portfolio is a collection of your finished* writings submitted to show the variety and quality of your best work. It should contain a variety of forms (possibilities include: analyses, arguments, definitions, descriptions, interviews, letters, personal experience narratives, reviews, reflections, creative work) and voices; ideally it should be 12-15 pages (typed, double-spaced) in length. Your Portfolio serves as a final exam for English 131 and should demonstrate both the strength of your writing skills and your improvement over the semester. **Your Portfolio is due Thursday, April 14.**

Your portfolio will be evaluated by colleagues, [Professor A, Professor B, Professor C] whose students are also enrolled in Eng 131 and who will be using the same criteria in gathering their best work. I will evaluate their students' portfolios. Your portfolio will count for 45% of your final grade.

*In the context of our class, "finished" means that it has been read by your teacher and at least two other members of your writing group and revised as many times as necessary. "Finished" writing is as complete, polished, and correct as you are able to make it and demonstrates a strong sense of purpose and audience.

Some of the entries that you make in your Writer's Daybook/Journal will evolve to become longer pieces of writing. As the semester continues, you will shape these longer pieces of writing into essays with distinct purposes and audiences. You will share these essays with me and with your writing group. You will select some of these essays to revise for your Portfolio.

The Writer's Daybook/Journal contains writing in all stages of completion, from lists and brainstormings, to short paragraphs, to longer and more thoroughly organized entries. The Portfolio contains finished writing.

Please let me know what I can do to help you in your learning or comfort.

APPENDIX C

APPENDIX C

Directions for Collaborative Learning Project

Eng. 131 Collaborative Learning Project #1

Look around you at the five people who form your computer pod. This is your working group. Please re-introduce yourselves to each other and then decide on a name for your writing group, rather than Group #1, 2, etc. which are how you are named in your classroom folders. After doing this, agree on one person who will today record the views expressed in your group. It will be the recorder's responsibility to draft group notes in a software program called Timbaktu). Another member of your group will serve as spokesperson for the group. Another member of your group should be the "encourage of others" and a fourth should serve as the "clarifier of ideas."

One person other than the recorder and spokesperson please read aloud all of the following instructions to the rest of the group.

1. In your free writing today, you discovered some of the fears surrounding your own writing process. Verbally share some of the fears you wrote about.
2. Working collaboratively, list the fears that your group has discussed and others that you come up with as you talk.
3. Using your list, try to come to agreement on the question--which of these fears is most destructive to you generating a writing that you are satisfied with. Rank your fears in order of importance.
4. Again, working collaboratively, discuss how you think this fear could be alleviated or lessened.
5. Help your recorder prepare your group's report. If you couldn't all agree on any of all of the questions above, make sure that minority views are also explained.

APPENDIX D

APPENDIX D

Calendar of Week-by-Week Activities

CALENDAR OF FIRST TWO WEEKS ACTIVITIES:
WRITING EXPERIENCE

- January 4** Introductions. Course Description. Learning how to log on the Network. Brainstorming: My Childhood. Group Feedback on a surprising, compelling, strange item that they'd like to know more about. Calendar of Activities handout.
Assignment: Write about the item selected by other students. Read over Course Description and Calendar Handout--not any Questions/discoveries/problems/concerns and bring to class on Thursday. **A Reminder: please purchase your text. *Write to Learn*, and read pp. 1-10 and 16-20.
- January 6** Review of Logging onto Appleshare and Classroom Folders. Discuss Course Concerns. Daybook/Journal Writing, pp. 10-16. An Illustrations from Martha. In class Free Writing: Fears About Writing. 1st Collaborative Learning Task.
Assignment: Write in your daybook as much as you can during the next week. Also complete this specific assignment there: Write for 15 minutes about who you are as a writer. This will be a rough draft. Write to discover, just as in today's free writing. This writing is for you to gain a clear view of yourself as a writer--not a teacher's view, not an idealized view, but your own view of how you see yourself as a writer. Read pp. 16-17--these writing territories may help you explore writing for your daybook if you have difficulty facing the blank page. Also read pp. 24-28.
- January 11** Complete 1st Collaborative Project, edit group projects, and oral group presentation about fears and possible solutions. In-class Readings about "A Scene from Life," (Eyewitness Account from Vietnam, Five Seconds to Go, Morning) Review pp. 21.24. Mapping. Free Writing, Making a Tree
Assignment: Mapping (Neighborhood), Free Writing (High School), Making a Tree (Adult). Try writing some "Five Minute Moments" but also be willing to let the writing take you where it will. Also read pp. 32-40.
- January 13** In-Class Writing Activity: Sensory Descriptive Writings. Adding Details. Dialogue. Beginnings. Endings. Consider voice (who you are and how you are) as well as what you see, hear, taste, touch, feel. Share these writings.
Assignment: Explore your own personal narratives, stories that are worth telling, that need writing about, that you can

recall and replay in your mind's eye. Show me what that experience was like.

****Reminder: Daybook/Journal Due: January 18**

CALENDAR OF THIRD, FOURTH, FIFTH, AND SIXTH WEEKS ACTIVITIES WRITING EXPERIENCE

- January 18** In Class Writing before collecting journals: Writing Process about the Journal. Collect Journals. In-Class Writing Activity: More about the Microsoft Word Program and Formatting. Small Descriptive Writing about Winter Blizzard, Snow, Freezing Weather. Review of Brainstorming, Mapping, Making a Tree. Assignment: Continue Writing. Explore stories you want to tell, moments that have shaped the person you are and are becoming.
- January 20** In Class: Telling Stories--a way to pre-write. Share a story of an embarrassing moment or a time when you felt you were facing death. Select another topic if these don't work for you. Then write the story remembering to include sensory description (sight, taste, sound, smell, touch), dialogue. Think about whether your scene has a moment of climax, does it build suspense? Assignment: If you haven't completed this writing, continue to work on it over the weekend. **Bring your draft (in whatever shape it's in) to class on Tuesday to share with your partner(s).**
- January 25** In Class: Read together "All My Roads Lead Backward," 8, 9 (description, detail, focus). Then share narrative writings from last Thursday's assignment. **Peer Group Responding.** Make whatever revisions you'd like (note areas you'd like to develop, etc.) in response to your group feedback. Add inserts or delete sections. Assignment: Make whatever revisions you'd like (note areas you'd like to develop, etc.) in response to your group feedback to this narrative about an embarrassing moment or fear of impending death. Add inserts or delete sections. Complete Writing Activity #12, p. 40. Read pages 41-53.
- January 27** In Class: Return Journals with Comments, Questions, Discuss Problems/Successes/Suggestions/Strategies Select one "story" that you'd like to continue revising. Discuss Sample Drafts from the Class. Brainstorming about People Who Intrigue, Fascinate, Anger. Assignment: Begin working on this Paper # 1, A Scene from Life/A Narrative Moment. Also begin again to attend to your Journal/Daybook writing now and during the next five days about some of those people who appeared on lists. Of course, your

journal should also include whatever you'd like to write about, reflect, ponder, dream, react, record, question.

- February 1** In Class: Work on **Draft of Paper #1. Even though still a draft, with plenty of opportunity for revision throughout the semester, this paper should be in the best shape possible when you turn it in, February 3.**
Assignment: Work on Paper #1--Don't forget suspense, sensory description, details, sense of why you are telling this story. Consider effective Beginnings (Read pp. 102-8) and Endings (Read pp. 109-10).
- February 3** Collect Papers at start of class. Generating Fictional Stories. Word Lists. Group Collaborative Writing.
Assignment: select another group of words that your group was not assigned and write a fictional story, using those words. Remember dialogue, setting, character, conflict, suspense, wrapping things up in the ending. **This is due February 8.** Don't forget to continue making your own personal Journal/Daybook entries.
- February 8** Share individual and group fictional stories. Pull out brainstorming about people, places that intrigue, fascinate, perplex you. Use this list to help find a topic for your next writing. Read together in class, "Absentee Father," 67-70 and "Simple Birch Grove," 94-97.
Assignment: Read "The Student's Account" by Joseph Pearce and reread "Absentee Father," 60-70. Also read Sarah Hansen's "The Student's Account" and reread her paper, 90-96. respond to these in your journal/daybook with your own stories, questions, concerns, memories, experiences.
- February 10** In Class: Video/Film.
Assignment: Respond to this viewing in your journal/daybook. continue to write personal entries as well in your journal/daybook.
****A reminder, your journal is due February 15.**

CALENDAR OF SEVENTH AND EIGHTH WEEKS ACTIVITIES WRITING EXPERIENCE

- February 15** In Class: Introduction to Storyspace as a writing tool. Making places: voice, physical features, stories, weird things, emotional states, how the body moves, significance, writing process. Using text tool to write within those "boxes."
Assignment: continue to write in journal/daybook. Explore stories you want to tell, moments that have shaped the person you are and are becoming. Review "Absentee Father," 60-70 and

"Simple Birch Grove", 90-7, as models for your papers that delve into a person or a place.

February 17 In Class: Continue drafting your paper on a person or place, using Storyspace. Create more place-boxes as you need.
Assignment: Continue to write in journal/daybook. Also use this time to explore more aspects about the person or place that you have selected as the topic for your paper.

February 22 In Class: Exploring the note-link storyspace tool and also the linking tool. continue to draft this paper in class. Print out a copy for your own work in planning organizational strategies.
Assignment: Don't forget to write in your journal/daybook. Add reflections, reactions, responses to TV shows and films you watch, plays or concerts you attend, observations and incidents you observe. Your journal should be rich with your impressions, experiences, stories. **Remember! Your journal is due February 24. No late journals will be accepted. I will need to respond to them during spring break.**

February 24 In Class: Writing Process about the Journal/Daybook. Work in Storyspace--Linking, Notetaking, Writing. Drop a copy of your storyspace document in my classroom folder. Print out copy, for you use in organizing, developing and revising.
Assignment: Read "Plan," 108-32. Make marginal indicators about possible openings, endings, and interior movement between storyspace chunks. This is due March 8.

Feb. 28-March 5 Have a wonderful spring break in winter!

CALENDAR OF NINTH, TENTH, ELEVENTH WEEKS ACTIVITIES WRITING EXPERIENCE

March 8 In Class: Writing on Person/Place Continues in Storyspace--Linking, Notetaking, Planning Organizational Hierarchy. Drop a copy of your storyspace document in my classroom folder. Print out a copy for your use in organizing, developing, and revising.
Assignment: Continue to write in Journal/Daybook.
React/respond/think about movies you attend; television shows; documentaries; editorials; newspaper articles. Use your journal as a place to write about global concerns, individual experiences. Also work on revising any of your other papers and continuing to note places that need further development and/or writing in your storyspace drafts.

March 10 In Class: Return journal/daybook with comments, suggestions for further writing entries. **The next and last time the**

Journal/Daybook is due is: Thursday, March 31st. No late journals accepted!

Schedule one-on-one writing conferences with me to be held during the week of March 14. Bring journal/daybook and all papers with you to this conference. begin text and place links in storyspace, convert into Microsoft Word documents. Begin annotation of organizational plan, with focused attention on transitions, beginning, and endings. **These are due for small peer group workshopping on March 17.**

Assignment: Continue to write in Journal/Daybook. Plan to write at least three to four times every week for at least 20 to 25 minutes per entry. Continue revision of papers. Continue development of Person/Place papers. Complete Self and Course Evaluation. Read in Murray text, pp. 127-132. Write about loss (or mourning) in your journal.

- March 15 In Class: Turn in Self-Evaluation. Demonstrate text links in Storyspace. Convert documents after links are made into Microsoft Word.
Assignment: Continue to write in Journal/Daybook. Continue revision of papers. Remember your paper on person/place should be as developed and as organized as you can possibly get it to be for peer group workshopping on March 17th. It is important that you have other writers respond to your paper (with questions and suggestions) and it is important that you be in class to respond to and learn from other writers' words. Read Murray, 185-196. Pay particular attention to the Checklist for Editing as you edit and revise your pieces for the portfolio.
- March 17 In Class: Review together pp. 195-196 before workshopping each other's papers on Person/Place. Turn in your paper with workshopping comments at the end of class.
Assignment: Continue to write in Journal/Daybook. Continue revision of papers. Begin to make choices for papers to be included in portfolio as we discussed in conferences. Read in Murray, pp. 196-204. Also read 26 Treatments for Writer's Block, pp. 156-161.
- March 22 In Class: Introduction to Authority Lists (brainstorming) and to Things You've Always Wanted to Know About But Were Afraid to Ask. Using research methods: one's own experience/observation, interview, information searches.
Assignment: Continue to write in Journal/Daybook. Continue revision of papers. Select topic/focus for next writing...

**CALENDAR TWELFTH THROUGH FIFTEENTH WEEKS
ENG 131 WRITING EXPERIENCE**

- March 22** In Class: Introduction to Authority Lists (brainstorming) and to Things You've Always Wanted to Know About But Were Afraid to Ask. Using research methods: one's own experience/observation, interview, information searches.
Assignment: Continue to write in Journal/Daybook. Continue revision of papers. Select topic/focus for next writing...
- March 24** In Class: Begin informative paper about your authority topic. Some choices that have been made by writers in this class include: changing diapers, building a fire, training bird dogs, playing softball, teaching the rudiments of golf to neophytes. Share these writings in class.
Assignment: Read Murray text on Research, 77-81, 204-206. Review Checklists for Revising and for Editing 187-194 as you begin to revise and edit your papers for your portfolio. Continue writing in daybook/journal.
- March 29** In Class: Continue large group sharing of information-process papers. Listen for requests for information, appropriateness of voice, amount of information needed for the reader you address. Describe Cover Letter requirements for the Portfolio.
Assignments: **The last time the Journal/Daybook is due is: Thursday March 31st. No late journals accepted!** Continue revising, editing papers for your portfolio. Also decide what topic you will research for class presentation (note cards are needed as well as a completed bibliography list of seven sources).
- March 31** In Class: Collect journals. Return papers drafted in storyspace. Handout: Portfolio and Cover Letter Requirements. Use class time for work on your research topic (Also [two students have] papers [that] still need to be heard and responded to). For bibliography format, I will have examples from handbooks that you can use in class.
- April 5** In Class: Return journals. Work on Information-Process Writing and Research/Notes for your Oral Project, Bibliography
Assignment: Revise/edit.
- April 7** Revise/edit Papers for Portfolio. Use class time for Writing Conferences, Peer Response/Feedback
- April 12** Oral Project/Reports. Bibliography Due.
- April 14** Revise/edit Papers for Portfolio. Use class time for Writing Conferences, Peer Response/Feedback

April 19	Portfolio Due.
April 21	Peer/Course/Self Evaluation.

APPENDIX E

APPENDIX E

Storyspace Writing Process Boxes

Nick

my writing process

2/17/94

I think the story space startup really helps to concentrate on the different parts of my writing and I when I write about some specific part I only concentrate on that part and able to write about in details. I don't have that problem of how to start my story and how to end it, I don't have to keep all my thought in my head and link all the different parts together, and the main advantage of that programm is that I don't have a problem of choosing the things to write because usually before I start to write I have so many thing to talk about I didn't know how to put all of them together.

But what I don't like is that I don't know how I connect all the parts after I am done, I will have to find the way to put them all together as one story, how to make the smooth interaction between two parts of storyspace startup. And I also noticed that in my different folders of the storyspace sometimes I wrote about the same things so it will probably create a slight problem when I will make it as a one story because of the repetition of thoughts.

Karen

My writing process

2-17-94

I like Story space I can just write what comes to mind and put it together later I'm not sure I picked the best subject I don't find my self writing about Hawaii I seem to be writing more about how I felt going there and my fears and anxieties while I was there and the trip to and from Hawaii.

2-22-94

I started out jumping around alot but finally started writing. I like writing in story space. I can jump all around and write little bits and pieces and when I remember a story I can stop what ever I'm doing and write about it.

2-24-94

There is still alot I haven't said. I am anxious to see what kind of story I can write from all these writing I have done. It is easier for me to write in class this way.

3-8-94

I did not get very much writing done today, but I did get some done over vacation.

3-10-94

I still have more writing to do I'm still not sure I'm doing what you want.

Charlene

MY WRITING PRCESS

2-17-94 THIS STORY I THINK WILL COME ALONG VERY WELL FOR ME. SO FAR THE WRITING HAS SEEMED TO JUST BE ABLE TO COME TOGETHER AND WILL CONTINUE BECAUSE THE PERSON THAT I AM WRITING ABOUT WAS VERY DEAR TO ME AND WILL ALWAYS BE VERY CLOSE IN MY HEART. THERE ARE TIME IT IS HARD TO FIND JUST THE RIGHT WORDS TO SAY OR HOW TO PUT THEM DOWN ON PAPER BECAUSE YOU WANT TO BE SO SPECIFIC OR PERFECT ABOUT THIS PERSON. I FEEL THER IS SO MUCH I COULD WRITE IN ALOT OF DIFFERENT AREAS THAT COULD REALLY MAKE AN EXCELLENT STORY. THE SUBJECT BEING SO VERY WELL CHOSEN AND THOUGH OUT CAN MAKE FOR A REMARKABLE DIFFERENCE. THE STORY SPACE I THINKK MAKES IT EASIER TO WRITE BEING ABLE TO WRITE ABOUT THE VARIOUS THINGSS THROUGHOUT THE COURSE OF THE STORY. I BELEIVE THIS WILL HELP ME TO PUT TOGETHER A MORE EFFECIENT AND SUSPENSE STORY.

2-22-94 I THINK THE WRITING TODAY HAS COME A LITTLE EASIER AND SMOOTHER FOR ME.THE TOPICS SEEM AS THOUGH THEY ARE SOMEWHAT EASIER TO WRITE ABOUT.I LIKE BEING ABLE TO EXPRESS MY THOUGHTS AS THEY COME TO MY MIND IN INTERVALS.IT SEEMS TO BE MUCH EASIER FOR ME TO WRITE BEING ABLE TO WRITE FREELY.

2-24-94 I THINK THE WRITING TODAY WENT AT A MUCH BETTER PACE. THE ONLY THING THAT I HAD A TOUGH PROBLEM WITH WAS THE PART OF THE STORY ON HOW THE BODY MOVES. I FOUND THIS TO BE RATHER DIFFICULT FOR ME TO WRITE. THE REST OF THE WRITING SEEMED TO JUST FLOW ALONG AND COME TOGETHER. THIS BEING ABLE TO WRITE IN CHUNKS I THINK HAS HELPED ME A GREAT DEAL TO BECOEM MORE EFFICENT.

3-8-94 THE WRITING SEEMS AS THOUGH IT IS COMING ALOT EASIER FOR ME AS I THINK I AM BEGINNING TO BET THE CONCEPT OF HOW THE WEITING SHOULD FLOW. BEING REFRESHED FROM THE SPRING BREAK THERE ARE PLENTY OF THINGS TO WRITE ABOUT THAT HAS WENT ON THIS WEEK FOR MY NEXT JOURNAL.

3-10-94 I THINK THE WRITING FOR THIS STORY WENT VERY WELL FOR ME. IT WAS EASIER FOR ME TO WRITE THE PARTS OF THE STORY INDIVIDUALLY, RATHER THAN ALL TOGETHER. I COULD REALLY CONCENTRATE ON THE SPECIFICS IWAS WRITING ABOUT DOING EVERY THING ONE A A TIME. NOW I AM HOPING THE REVISING THIS STORY AND PUTTING IT IN ORDER WILL HELP MAKE THIS A GOOD PEICE FOR MY PORTFOLIO.

3-15-94 I THINK THE WRITING OF THIS PEICE COME ALONG VERY WELL AND WILL MAKE A GOOD STORY FOR MY PORTFOLIO. AFTER WORKING ON THIS FOR A WEEKS THE DIFFERENT CHUNKS FORMED AND COME TOGETHER TO HELP ME MAKE A GOOD STORY. ONCE IT IS PUT TOGETHER THE WAY IT SHOULD BE AND EVERYTHING REVISED IT WILL BE A GREAT PORTFOLIO PEICE.

Heather

my writing process

2-17-94

Doing this is going a lot better than it did thursday. I changed my subject that I was writing on, so after I got started on it I was writing a lot. I think that I will like this program of writing because I usually write in chunks and then draw arrows to where I think this Paragraph should go. I didn't understand at first on how it would all come together but now I have a better understanding of it. I wish I had more time to use the computer because I write a lot more using the computer. Story space is fun and easy to do, I think it will help my writing have more life to it, but being able to arrange my writing in a more efficient manner.

2-22-94

My writing was going really well until the computer went down and it didn't save anything that I wrote. So when I got back on I had to start all over again, that took all of my time. I don't know if I am doing this right because I start to write about a feature about the lake and then I end up going into a story. This process is helping me remember things that I have forgotten or have taken for granted, like how calm and beautiful the lake is in the early morning hours. ...

2-24-94

Today didn't go as good as I hoped. I got some writing but not as much as I needed. I still feel that I have a lot of work to do. I thought I understood how this was going to come together but now I'm not sure. I feel that all I am doing is telling little stories and not enough about what the lake looks like feels like, how it makes you feel when you are there. I know that I could write about these things but I don't know what box to put them in.

3-10-94

I didn't get much done today. I am confused on how to describe how the lake looks. I feel that I'm just writing stories and don't know how they're going to fit together into a great writing. I'm going to try to work on this problem at home over the weekend I hope that I get a lot more done.

APPENDIX F

APPENDIX F

Storyspace Working Printouts

Nick's Working Printout

orphanage-nick**1 how the body moves**

I remember when I was a kid how much energy I had and would play outside untill dark and my parents had to drag me home. I noticed that those children **didn't** have that energy, they were not like other children. I can even say that their movements were to some extent artificial to their age. I can make a comparison to the animals, I always saw on TV or read in books that when an animal is born it would go through the process of learning with its parent, a parent will teach it how to hunt and how to servive in this world. In this case I witnessed that those children were placed in environment where taught them how to live, they were taught by the system not by parents, they never experienced the wormth of parental love, and I say that their behavior was artificial compare to the childhood behavior of the other children. They never felt secure and felt that they would be punished in some sense for every misbehavior. I never heard them screaming with joy when they played with each other, I never saw the wondering and exploring look of children of their age. They played with toys which, I think, should be thrown away, they were so old and monotonous, were in very poor colors and they were toys of a very simple structure and matter. At that age they should toys which would teach them and help to develop their thinking, which should be picked up for them by their parents not by the system.

2 voice

The voice of those children contained fear and unsureness. They are so young and little but they already experienced so much, so much fear and sorrow. Their voices were not like others children voices, the way they talked, the way they communicated with each other was in their own way created in the buildings of that orphanage. Most of the time they prefered to be quiet or when they talked to each other they tried to produce as less noice as they could. Or when they respond to your question they always look for your feedback and if you disagree with them they will change they viewpoit right away, as they were afraid to upsat you by opposing to your principles.

3 emotional states

Emotions are the features which defer us from the anymals and we learn those emotions alone our life cycle. But from whom do we learn those emotions? Who is your first and most needed teacher when you are just a little kid? It's our parents! It was meant to be that way that parents who have all the knowledge and skills will teach you and who will care about you when you are so unprotected. So what kind of emotional states will those orphans have if they don't have anybody who will teach them. Who will teach

them what to do and what not to do? Who will teach them to walk on the green light through a street? Who will teach them how to live?

4 stories

Their stories sometimes just terrified me. They didn't tell stories about their trip to the lake or how they went hiking, because they never went to the lake or went hiking and they wouldn't probably have them. Their stories were so simple and casual and they were about such simple things because they never had anything about which they could tell a story. So they talked about how their teachers took them several times to the park or they told us about an accident which happened in their cafeteria and it was one of the most exciting moments...

I remember when I was a child my father or my mother or my grandmother would always read me some fairytales of the famous children writers and it is a part of everybody's childhood. I saw that those orphans some of them were ten years old would tell me that somebody read them one of those stories which should be read to them a long time ago I felt so sorry for them because that there is nobody who would spend some time with them and read them those stories which every child should hear if not from their parents but from somebody else.

5 physical features

the first thing which just jumps into the sight of your attention is the outfit of those children. I couldn't see all those different and bright clothes which you would give to your children, but those children were dressed in very old and cheap clothes. They were all gathered in one group and by looking at their actions I could tell that they were afraid of something. They were only about 5 or 6 years old but they always asked their supervisor what to do.

6 weird things

While I was there I noticed that there was some kind of strange relationship between the orphans and their supervisors. They were "afraid" of them or maybe I am wrong, but the weird thing I saw was that everytime when there was somekind of contact between orphans and their supervisor I could feel that there was something wrong in that relationship. I heard that in many orphanages orphans were beaten by their supervisors and one day I even asked them whether it was true or not but I never got an answer, maybe because they were afraid to say it to me. Every time when there was some kind of a contact between them and their supervisor unlike the other children they never argued with them, they always what they were told to do, they never even said a word to them when they had to do something which they wouldn't like to do, and I know that other children who have parents will always try to do the opposite of their parents will, they have the kind of a personality which has opinions and evaluations of what they are told to do, but orphans didn't have that feature they were afraid to contradict to their supervisors.

7 significance

Some of us have little brothers or sisters and someone of us already have our own children, and we all care about so much, but those children they don't have anybody who will care about them, who will teach them the way to live. There is nobody who will show them the life, who will have the happiest moments of their life with them and because there is nobody their to do all those tasks the don't know what to do and how to live once they get to the world out there.

The moment I saw them I felt so much sorrow for them. They all played together in groups with old toys and I even saw some smiles on their faces, some of them were watching TV and they saw a commercial about family product and they a happy family on TV, but they were so little and they probably didn't even understand, some of them asked where their dadyes and momyes were.

8 Notes

8.1 old toys

8.2 way to live

what do you mean "the way to live"? Please explain in more details.

Charlene's Working Printout -- Excerpts

2 STORIES

THERE ARE SO MANY STORIES THAT I COULD TELL ABOUT THE EXPERIENCES OVER THE YEARS WITH MY MOTHER. THE VARIETY COULD RANGE FROM THOSE FUNNY THINGS YOU DO TO THE SAD MOMENTS THAT ENCOUNTERED BOTH OUR LIVES. THIS ONE PARTICULAR STORY I WANT TO SHARE IS A VERY HILARIOUS ONE.

IT BEGAN AS WE WENT SHOPPING ONE DAY TO FIND MY OLDER BROTHER A PAIR OF DRESS PANTS TO WEAR TO A HIGH SCHOOL DANCE THAT HE WAS TO ATTEND ON FRIDAY NIGHT. AT THE TIME HE WAS FIFTEEN I WAS THIRTEEN. WE HAD DECIDED OR I SHOULD SAY MY MOTHER HAD DECIDED THAT WE SHOULD GO TO K-MART AND LOOK AROUND. WHEN WE ARRIVED AT THE STORE GOING INSIDE WE WENT STRAIGHT BACK TO THE MENS DEPARTMENT TO TRY TO FIND THE PERFECT PAIR OF PANTS FOR HIM TO WEAR TO THIS DANCE, OF COURSE THEY HAD TO BE ABLE TO MAKE THE GREAT IMPRESSION ON THE GIRLS.

AS WE WERE GOING UP AND DOWN THE ISLES LOOKING AT THE RACKS OF PANTS MY MOTHER HAD GONE TO THE END OF AN ISLE TO LOOK FOR HIM A SHIRT ALSO. AT THE END OF THIS ISLE STOOD WHAT SHE THOUGHT AT THE TIME WAS A MANNEQUIN. AS SHE APPROACHED SHE SEEN THIS PAIR OF PANTS THAT SHE THOUGHT WAS PERFECT. AS SHE BEGAN TO GET A CLOSER LOOK AND TO ALSO CHECK OUT THE MATERIAL SHE HAD HOLLERED AT MY BROTHER AND ME TO ALSO COME OVER TO CHECK THEM OUT. AS WE ROUNDED THE CORNER THERE SHE WAS WITH HER HAND A HOLD OF THESE PANTS BETWEEN THE KNEE AND THE GROIN AREA. GETTING CLOSER SHE SAID LOOK KIDS THIS IS A REALLY NICE PAIR OF PANTS, RON WOULD YOU LIKE TO TRY THEM ON. THEN SUDDENLY WE NOTICED THE MANNEQUIN MOVE AND WE REALIZED THIS WAS ACTUALLY ONE OF THE SALES PEOPLE WHO WORKED IN THE DEPARTMENT. AS MY BROTHER AND I WENT SEPARATE DIRECTIONS MY MOTHER BUSTED OUT LAUGHING. REALIZING WHAT SHE HAD DONE NOT ONLY WAS SHE TRULY EMBARRASED, BUT TRYING TO APOLOGIZE TO THE YOUNG MAN. SHE HAD TO HUNT THE WHOLE STORE TO FIND MY BROTHER AND I. WE HAD FOUND THIS TO BE REALLY QUIET FUNNY, BUT ALSO EMBARRISING. NEEDLESS TO SAY WE DID LEAVE AND GO TO ANOTHER STORE TO LOOK FOR THAT PERFECT PAIR OF PANTS. THIS WAS ONE EXPERIENCE THAT WE LAUGHED ABOUT FOR A LONG TIME, AND TO THIS DAY I STILL LAUGH ABOUT IT AS I TELL MY CHILDREN THINGS ABOUT THEIR GRANDMOTHER.

3 EMOTIONAL STATES

I CAN REMEMBER A TIME IN PARTICULAR THAT MY MOTHER WAS GOING THROUGH A VERY EMOTINAL STATE. I WAS ABOUT THE AGE OF 5 AND WAS NOT REALLY SURE WHAT WAS GOING ON OR AT THAT TIME EVEN KNEW WHAT IT WAS ALL ABOUT. IT WAS A THING CALLED THE CHANGE OF LIFE. THIS WAS A BIG CRISIS FOR HER AS WELL AS FOR US AND TRYING TO ADJUST TO WHAT WAS HAPPENING TO HER. THERE WERE TIMES THAT I THOUGHT SHE WAS ABSOULTELY GOING OUT OF HER MIND. SHE WOULD BE AS NICE AS PIE ONE MINUTE AND LOOK THE NEXT COULD BECOME A TOTAL DISASTER. SHE WOULD FLY OFF THE HANDLE AND THROW DISHES AND SCREAM UNCONTROLABLY. IT WAS A VERY FRIGHTING EXPERIENCE. ALSO WHEN SHE HAD HER NERVOUS BREAKDOWN IT WAS A VERY TRYING TIME. AFTER 33 YEARS OF MARRIAGE, AND THREE CHILDREN MY FATHER DECIDES IT IS TIME TO MOVE ON WITH HIS LIFE, AND ANOTHER WOMAN OF COURSE. THIS WAS A VERY DIFFICULT TIME IN MY MOTHERS LIFE, AND PERHAPS THE ONE I WILL NEVER FORGET. BEING AT

THE AGE OF 18 I COULD VERY MUCH UNDERSTAND WHAT HAD HAPPENED AND THE PAIN SHE MUST HAVE BEEN ENDURING. . . . THIS REALLY TOOK ITS TOLL ON US CHILDREN AS WELL AS WHAT IT DONE TO MY MOTHER. BUT THE BEST OUTCOME WAS SHE FINALLY OVERCOME HER OBSTACLES AND IT MADE US A MUCH STRONGER FAMILY ALTOGETHER. THIS IS PROBABLY ONE OF THE MAIN REASONS THAT MY MOTHER MEANT SO MUCH TO ME.

8 SIGNIFIGANCE

THERE IS A GREAT SIGNIFIGANCE IN THE STORY I HAVE CHOSE TO WRITE ABOUT. THE MOST SIGNIFIGANT THAT STANDS OUT IN MY MIND IS THE MORALS AND VALUES THAT WAS TAUGHT TO ME BY MY MOTHER. I THINKK I HAVE ALWAYS BENEFITED FROM THESE LESSONS. EVEN DURING THE TIMES OF MY LIFE WHEN I WAS DOWN AND OUT THE MOST I THINK THESE WORDS OF ADVICE HELPED ME TO PICK UP AND GO ON AND CHALLENGE WHATEVER CAME MY WAY. EVEN NOW WHEN I FEEL A CHALLENGE I CAN STILL HEAR HER VOICE IN THE BACK OF MY MIND LEADING ME IN THE RIGHT DIRECTION. SHE WOULD SAY TO ME SISTER NEVER GIVE UP ON ANYTHING YOU ARE TRYING TO ACCOPLISH IN LIFE, AND THIS I AM TRYING TO PASS ON TO MY CHILDREN. UNDERSTANDING AND CONCEPTING THE IDEAS OF THESE LESSONS TAUGHT ARE A WAY THAT WILL HELP YOU TO ALWAYS RESPECT EVERY INDIVIDUAL AND NOT LET THERE BE A CONFLICT OF DIFFERENCE BETWEEN YOU. I THINK I LEARNED THAT YOU NEVER TREAT ANYONE ANY DIFFERENT FROM THE NEXT. TO ALWAYS RESPECT AND VALUE OTHER PEOPLES OPINOINS. THIS IS ONE GREAT SINIFIGANCE THAT I WILL ALWAYS HAVE WITH ME.

Karen's Working Printout -- Excerpt**1 Emotional States**

I was very scared and nervous this was my first trip away from home also my first time to fly in an airplane I was only 18 years old I was very anxious to see my husband he had been in Vietnam for 7 months I was would not go swimming in the ocean although I love to swim because I was afraid of sharks I did not see any but I was sure they were in every wave that rolled in. I could see those large jaws opening up and their sharp jagged teeth coming together twisting and turning it's entire body taking large pieces of flesh as it jerked you under the bloody waters. I know we would enjoy hawaii more if we were to go back now we no longer would always have in the back of our minds the end of the vacation where I go home alone and my husband goes back to Vietnam.

APPENDIX G

APPENDIX G

Portfolio Pieces Generated from Storyspace

Nick's Portfolio Piece

Orphanage - the way of living.

Did you ever have that feeling when you were a child that your Mom and Dad were so tall and big when they are only 5 foot 3 and 5 foot 5? When you walked down the dark street with your Dad, you were so calm because you knew that your Dad was the strongest person in this world, or if you had a fight with some kid on the street you would always tell them, "My Dad will beat up your Dad." We all were proud of our fathers. They would always take us to the soccer games or take us hiking, we always felt so good and relaxed because we knew that we were somebody's son or daughter, that there would always be somebody home who would tell you, "How many times shall I wash your cloth, can't you play without digging the dirt." Even though it was an argument, it felt so good because there were people who cared about you. Sometimes I miss the voice of my mother so much saying "Wash your hands before dinner" or "That's enough TV for tonight, go to bed."

When you were growing up who was the one who taught you how to swim for the first time, who took you to the cinema or who took you on a long trip camping? It was your Mom and Dad. I think, that in this world it meant to be that way that there would always be somebody who is really close to you, who will take care of you and teach you along the life cycle. Who will teach you everything he or she knows, and who wishes the best for you, because they see their reflection in you, there is their blood circulating in your body and when they see you as a grown up and mature man they say that the task of their life was fulfilled.

God created this world, people and families, and I think that the family in this world is the most precious and most valuable things you can have in this world. Our main purpose of life is to have family, to have kids and see our kids in good health and well-being, but when you see somebody leaving their children and giving them away, I consider that act as an act of crime and I think that a person who does such kind of an act should be punished in some kind of a way. I consider that act as a crime because there are two lives involved in that act and by giving away a child, mother in pursue of her own interests commits a crime towards a child, she takes away the best years of his or her life. He or she would never have the best time of their life, they would never have a childhood, they would never have their family homes, instead they will be living in an orphanage, have supervisors instead of parents and dozen of other orphans instead of brothers and sisters. How will they live in this world if there will be nobody behind them who will show and teach them the way of living. The only place they will know before they will become adults is an orphanage, which is closer in its structure to a formal public institution than a family.

When I visited an orphanage for the first time I was so frustrated and mad at the parents of those children who left them when they were so young. These children needed parents who would teach them and care about them in the times when they need them the most.

When I saw them the first thing I noticed were their eyes. They were so empty and so different from the eyes of the other children who have parents. Have you ever noticed when you saw a happy child how energetic he or she was, how they tried to explore things and how their eyes always moved around trying to find something new or you always see their smiling faces which change their shape everytime. But when I saw those orphans I saw that their faces never changed, they were so empty and I could only see their look which didn't mean anything to me. They were not very energetic and weren't very excited about anything new, I couldn't see their childhood energy and wonder.

My friend and I felt so sorry for those orphans and felt hate towards the **parents** who left them. We had the feeling that we ought to do something about it in order to change their way of living, to bring something different to their lives and bring happiness to them even if it would be just a little. When we had some free time we would go to them and just spend some time together or would take them to the movies or to the zoo. Every time when we went there we tried to bring them some kind of surprise - cake, candies or toys. Such small things would always bring a smile on their faces and we felt better, because we knew that we did something to bring at least some kind of joy to their lives.

When I saw those orphans I tried to think about how it feels to be an orphan, and I couldn't because all the memories of my childhood would be completely erased from my mind, due to the fact that the best times of my childhood were connected to my family. So every time my younger brother and I went somewhere on vacations we always thought about those orphans and felt very sorry for them, because they never had any trips to the mountains, or to the lakes.

Charlene's Portfolio Piece

A STORY ABOUT MY MOTHER

There is a great significance in the story that I have chose to write about. My Mother being a very loving and kind person is the one who taught me the values and morals that I live, and everyday pass on to my children. The times in my life when I was down and out the words of her wisdom and advice has always come back to help me. The one thing she taught me was to always respect the value and opinion of other people.

My Mother was a very strong woman, but her face was that of a gentle breeze. She only stood about 5'2" tall, and was of a normal weight with hair the color of Maple syrup. She had eyes that were as blue as a summer sky, and a complexion that was as fair as a maiden, she was a very lovely person. Her hair was naturally curly, and laid against her head in ringlets. A smile as warm as the sun would brighten the day of anyone who was down. Being a very jolly person who seemed to know everything I would love to have her back in my life once again.

Having a voice that was very rugged, but yet stern you knew when she spoke to listen. She was also very kind in her voice and you could always hear the affection for others. The type of soothing voice that would comfort you in the event there had been a catastrophe, or were just looking for a little comfort. A voice that would echo like the sound in a canyon, and would ring in your mind for days after she had given you one of her famous cliches , or just a heart to heart with a lot of her wise advice. To this day even 8 years after her death I can still often hear her voice in my mind. This is a voice that I will have with me forever, and at times I can just sit quietly and will hear this most tremendous sound echoing in my mind saying you know what to do.

The body of my Mother was of that on the pleasingly plump side. It always seemed as though she walked so much faster than me, and I would always say to her, "hey Mom can you slow down?" But she had a very graceful way about her walk that made her have the appearance of a very strong physique. Although her moves were not as graceful as that of a Swan she did carry herself with much respect.

As a child I always wondered about those little things that my Mother would do. For instance, she would take and touch the end of a battery with her tongue to see if it were still good. Of course not knowing then what she was doing, and why it seemed to be anything but normal to do. At this time I could not seem to comprehend this sort of action. There was also this little habit of pulling the stiff hairs from her chin, because she said, "they bothered her." But why? They were so light you could never see them. I guess because she knew they were there, and it bothered her. Often times when she was doing this, I would hear this soft voice, and she was also talking to herself. This was really weird to me. I could never figure out why or how this all fit together

[This section, roughly 15 lines, is missing from the copy available to the researcher, apparently a copy machine failure.]

nervous breakdown. It took its toll on her, as well as us three kids. But the best outcome from this all was that she was able to overcome the many obstacles, and made herself and her family much stronger. This is probably one of the main reasons she meant so much to me.

Believe it or not there are many stories I could share with you, but there is one in particular that sticks out in my mind and is very funny.

It began as we went shopping one day to find my Brother a pair of dress pants to wear to a High School dance. At the time he was 15 and I was 13. We

had decided, or I should say she had decided to go to K-Mart and look around. When we arrived at the store going inside we went

[Again missing text, just a few lines]

come and check out the material. Rounding the corner there she was with her hand a hold of this pair of pants between the knee and groin area. Getting closer she said, "look kids this is a great pair of pants," "Ron would you like to try them on", she asked? Then suddenly we noticed the mannequin move, and realized this was actually one of the sales people who worked in that department. My brother and I taken off in different directions, my Mother busted out laughing. Realizing what she had done was she ever embarrassed, but still trying to apologize to the young man.

After hunting the store to find us kids, we left and went to another store to find that perfect pair of pants. To this day I still laugh as I think of what she done and the look on her face afterward.

Hopefully this sums up some of what my Mother meant to me and why. For I will never forget the wonderful things she did for me, and also the things she helped me accomplish in life. I loved her then, and still love now for

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Karen's Portfolio Piece

[The initial paragraph on Karen's piece was eaten by the copy machine.]
being seated by a window most of my fears seemed to vanish.

The time I spent on the airplane went fast. I watched movies, and listened to music. I spent most of my time looking out the window. I could see the tops of the mountains sticking up into the large fluffy white clouds as we flew over them. They were beautiful. As the airplane was going in to land I could see the waves rolling into the shore one after another, white capping.

The wheels of the airplane finally hit the ground, the airplane jerked us forward a little and we came to a stop. I was in Hawaii. It seemed unreal to be here so fast.

As I stepped off the airplane I was greeted by a tall dark muscular man. He put a large necklace of pink and lavender flowers around my neck and kissed me on the cheek. Then he escorted me to what they called a limousine. To me it looked like a large station wagon. The driver put my luggage in the limousine. I was escorted to the back seat. My door was shut and I was on my way to the hotel. It seemed like it took hours to get to the hotel. I had never been in traffic like this before. Cars were bumper to bumper, going so slow at times I wondered if we were even moving. I finally arrived at the hotel. The driver got my luggage out and told me he would be back to get me on Monday at one o'clock.

The desk clerk took my luggage to my room. As I entered the room I was surprised to see it had a small complete kitchen. I opened the cupboard doors. There was a complete set of dishes, silverware, and pots and pans. There was also a table and chairs in the room. The room was much larger than I had expected.

I walked over to the bed to lay down. I was very tired. I hadn't slept on the airplane.

As I lay in my bed trying to go to sleep I started to worry about Mike. Had he received the money I sent him? he had to have two hundred and fifty dollars or he could not leave Vietnam. Would he arrive on the airplane tomorrow? Would I be here by myself not knowing what to do if he did not get off the airplane? I had not received a letter from him, since I sent him the money. Now I tossed and turned tormented by the thought that maybe the reason I hadn't heard from him was because he had been wounded or maybe killed. I got out of bed and turned on the television. The news was on. This didn't make me feel any better. They were telling how a man had been shot and killed a block from where I was staying. They showed him laying in the street limp and lifeless with blood puddling all around him. I turned the television off I had seen enough. I finally fell asleep.

I was awakened by the telephone at 6 am. I had asked the desk clerk to call and wake me. I hurriedly dressed and was on my way to meet Mike. As I walked into the building there were hundreds of people from all over the United States inside. I no longer felt so alone. All these people were just like me. They were waiting for a loved one coming from Vietnam.

The airplanes were starting to arrive. One at a time the soldiers came down an area like a runway between the people. You greeted them as they got to you. Finally I could see him coming. He was very thin. He had lost 25 to 30 pounds. He was wearing his dress green uniform. I was so happy to see all I could do was cry. I asked Mike, "Why didn't you let me know that you received the money I sent you?" He replied, "My platoon was traveling and there was no way I could send a letter to you before we left." I could stop worrying for a little while.

We walked back across the street to our hotel. Mike changed into some clothes that I had brought from home. We left the hotel and walked down the street to a gift shop. There were many beautiful souvenirs. We purchased a grass skirt for my sister, and some figurines sculpted from molten lava. We left the gift shop and walked farther down the street. As we walked on there were many beautiful restaurants. One of them had a man standing at the door way dressed as an ancient warrior, holding a spear. He appeared to be a statue. He wore a brightly colored feathered head piece, leather sandals, a brightly colored feathered cape, and a leather skirt with up both sides. As we passed a motorcycle shop. Mike said, "Let's rent a motorcycle and see Hawaii by ourselves. I don't really want to go on tours or fly to the other islands. I was on the airplane for 14 hours." I replied, "I don't want to travel anymore either." So we rented a motorcycle.

We rode the motorcycle and went for long walks. As we drove along we passed many hotels one after another. To my surprise there were many more in different phases of construction. Everything was so beautiful. This place looked like a whole different world. The trees didn't even look anything like the ones at home. They looked like telephone poles with huge green plants setting on top of them. We walked to the beach and watched the surfers. Oh, how I would have liked to try this. But every time a wave rolled in. I could see a shark in it, jerking me under the water. Tearing chunks of flesh from my body, as it jerked me back and forth like a rag doll. We enjoyed Hawaii. The time flew.

Now it was time to leave. A time neither of us wanted to come. Because Mike had to go back to Vietnam. I walked across the street for the last time. To say good by and watch Mike's airplane leave. Then I went back to the hotel and called a taxi. Because my limousine driver did not show up. I got to the airport just in time.

The trip home seemed shorter than the trip to Hawaii. I slept most of the way home.

It will soon be our 25th wedding anniversary. We have decided to take a trip. We weren't sure where we wanted to go. So Mike has left it up to me to make the decision. I think after writing this paper, I have decided to go back to Hawaii. To see it without all the fear and anxieties.

Heather's Portfolio Piece

The Lake

In the morning if your lucky enough to get up before everyone else the lake is calm and quite. The water looks like a glass mirror reflecting the rising sun and the trees that surround it's beautiful shores. As a fisherman glides by in his boat you sit and wonder what this day will bring. The ducks come up to you in hopes to get some bread the stillness of the morning is broken by the sound of little feet running on the grass yelling at there mom to hurry up so they can get into the water.

This lake has been the place of my summer vacations since I was five. When I was young my mom my sister Jennifer and I spent the whole summer their at the lake in Syracuse, Indiana. This is where I learned how to ski, I was six and it was our second summer at the lake. My grandpa went out and bought a pair of youth skis for his grandchilderen. My cousin Jason and my sister are both two years older than me. I was the first one to volunteer to try it first. I put on the yellow and orange life vest, eventhough it was a small it was still to large on me. I jumped into the water, it felt good on the hot summer day. While my grandpa attached the rope to the boat I put on my skis. My uncle Mark was in the water with me giving me instructions on what to do when the boat started to pull me out of the water. He told me that it was like getting out of a rocking chair and to let the boat pull you up don't try to pull yourself out of the water. The first couple of times I couldn't get up, all that happened was I got a mouth full of water. The fourth time I got up, "I made it!." I was so excited that I was skiing that I forgot that I had to keep my legs together, so what happened was my ski's slowly started to spread apart, By the time I noticed it was to late. I fell right on my face. I was fine only a mouth full of water. Now I am a seasoned skier.

As a child I stayed in the water from sunrise to sunset only to get out to eat. No matter what the weather was like or how cold the water was it didn't seem to make a bit of difference, every day was the same. Now that I am an adult and have children of my own the water seems cold all the time. Now I understand why no one wanted to swim with me it was too cold. Because the water was my favorite place to be I didn't seem to notice the chattering of my teeth or that my skin was turning blue.

The lake is surrounded by majestic homes with their rolling hills emptying into the waters. The lake is just the right size, not too big where you feel intimidated by the size. It is the size where you can do any water activity and there isn't any overcrowding of too many boats, because if you don't live on the lake you can't have a boat on it. There is a park at the end of the lake, it has swing sets, jungle gyms and best of all a beach. The lake house has sea walls and a dock, no beaches, so if you want to go swimming you have to jump in, you can't just walk in like at the beach. I was never allowed to go down to the park and play, my grandma would say "Why would you want to go down there with all of those people when you can play and swim right out here with your family." (Any kid would rather play down at a park where they could play on the toys and build sand castles.) My kids haven't asked to go down to the park yet but when they do I'll go with them and play.

The weather at the lake is calm the majority of the time but one summer when I was about ten, it must have been around the fourth of July because my dad was with us and this was the only time that he was down there with us. This particular day was bad on and off all day long. The news said to watch out for a severe thunder storm. Every one went to bed except for my mom and my grandma. As the night went on the storm grew worse and one by one it woke up everyone that was sleeping except for my dad and me. Everyone

decided that it would be safer if they slept downstairs for the rest of the night, forgetting about the two of us left upstairs. The next morning we woke up to a big mess. In the night a tornado hit the town. There were power lines down Trees through homes and right behind the house near the room were my dad and I were sleeping there was a large oak tree that had fallen over and flattened two of the cars that were parked in the driveway. Luckily no one was hurt and it took only a few weeks to get things back to some sense of normal.

There are traditions we have at the lake that if we didn't do them the lake wouldn't be the same. On the fourth of July the lake association puts on a fireworks show. You can see them go off from the dock but we like to load everyone up in the boat with food, pop and blankets to keep us warm. We anchor the boat out in the middle of the lake so when the fireworks go off in the sky you feel as if they're going to land on top of you. My favorite tradition is Grandpa making his homemade ice cream. The first thing that we have to do after grandpa has all of the ingredients mixed and ready to go is to find the marble to go into the bottom of the mixing barrel to give it something to rotate on. My job was to sit on top of the barrel to give it some weight so it would turn. It was cold and wet because of the ice that surrounds the inner container holding the ice-cream mixture. Even though it was cold and wet I volunteered every time he made it. He now uses one of those electric ones because the manual one is too hard. The old mixer now sits on the back shelf reminding me each time I see it of how much fun we had with it.

The wind blows softly across the still water as I sit on the patio watching the sun set and the sky fill up with stars thinking to myself there isn't this many stars in the sky in the city. The lake is a place where you want to stay because of how peaceful it is at anytime during the year. The lake will stay close to my heart for all time.

APPENDIX H

APPENDIX H**Midterm Evaluation Questions****Self and Course Evaluation: A Temperature Check and Pulse Reading**

1a. Which moments come to mind when you think back over the class? Good moments? Bad moments? Perplexing moments? Quickly sketch a small handful of such moments.

1b. What do these moments tell you about you as a student, about me as a teacher and about the course itself?

2. What are you most proud of about your own effort or accomplishment in the course? What are you not satisfied with, or what do you want to work on improving?

3. What's been the greatest challenge for you?

4. What has been the most important thing you have learned?

5. What aspects in you has this course brought out? What aspects has it left untapped or unnoticed?

6. Imagine this course as a journey. Where is it taking you? Describe the climate and weather, the terrain, the road or highway.

7. Do you have any suggestions about how the course could be made more helpful for you? Please explain.

APPENDIX I

APPENDIX I

Final Evaluation Questions

Final Evaluation

1. If you could be here at the start of this class, what one single piece of advice would you give students at the first meeting of this class?
2. If you had to teach this course the next time it was offered, what would you talk about on the first day?
3. Rank the major course themes (from 1-4 or 5, if you add another, with 1 being the highest) according to their importance to the course and your learning. Tell why you rank them so in the space below.
 - Keeping a Writer's Notebook/Journal
 - Becoming a Community of Writers
 - Finding One's Own Voice
 - Building a Portfolio
 - Other?
4. Rank these course experiences in the order in which you benefited most and why (with 1 being the highest):
 - Individual Writing Conferences
 - Written Responses to Your Work
 - Exploratory Brainstorming in Class
 - Small Group Work
 - Large Group Workshopping
5. Were you to take this course again (I know, just imagine it!! No moans and groans, please!), what suggestions do you have that I could use to make this a better course?
6. Write the single most important [thing] you learned in this course and why it is important to you.
7. What did you like most about your work in this class? Why?
8. What did you like least about your work in this class? Why?
9. What do you think you will remember about this course three months from now? three years from now?
10. You have 25 points to distribute among your fellow writers, in any way you choose. Points may be awarded on the basis of how helpful, critical, thoughtful, responsive, funny, articulate, intelligent, emotionally honest, etc. or because of any other attitudes that fostered your learning and enjoyment of this class.

Points may be given on the basis, too, of what you learned about them from sharing their writings and responses in this collaborative writing/learning process. Write the number of points awarded after a student's name and then note why you have given him/her those points. The members of this class are: [list of students follows]

APPENDIX J

APPENDIX J**Questions for Final Interview**

How would you characterize your experience in 131 English Composition this term? positives? negatives?

What did you find most difficult about the class? Most beneficial?

Tell me about the group experience. Did you rely on anyone for help?

What was your instructor's role in your learning experience this semester?

What effect do you think using the computer had on what you learned?

In what ways do you think the computer enhanced your learning experience? detracted from the experience?

What did you think about Storyspace?

Would you take another class that worked with computers?

What else should I ask you about?

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