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ABSTRACT

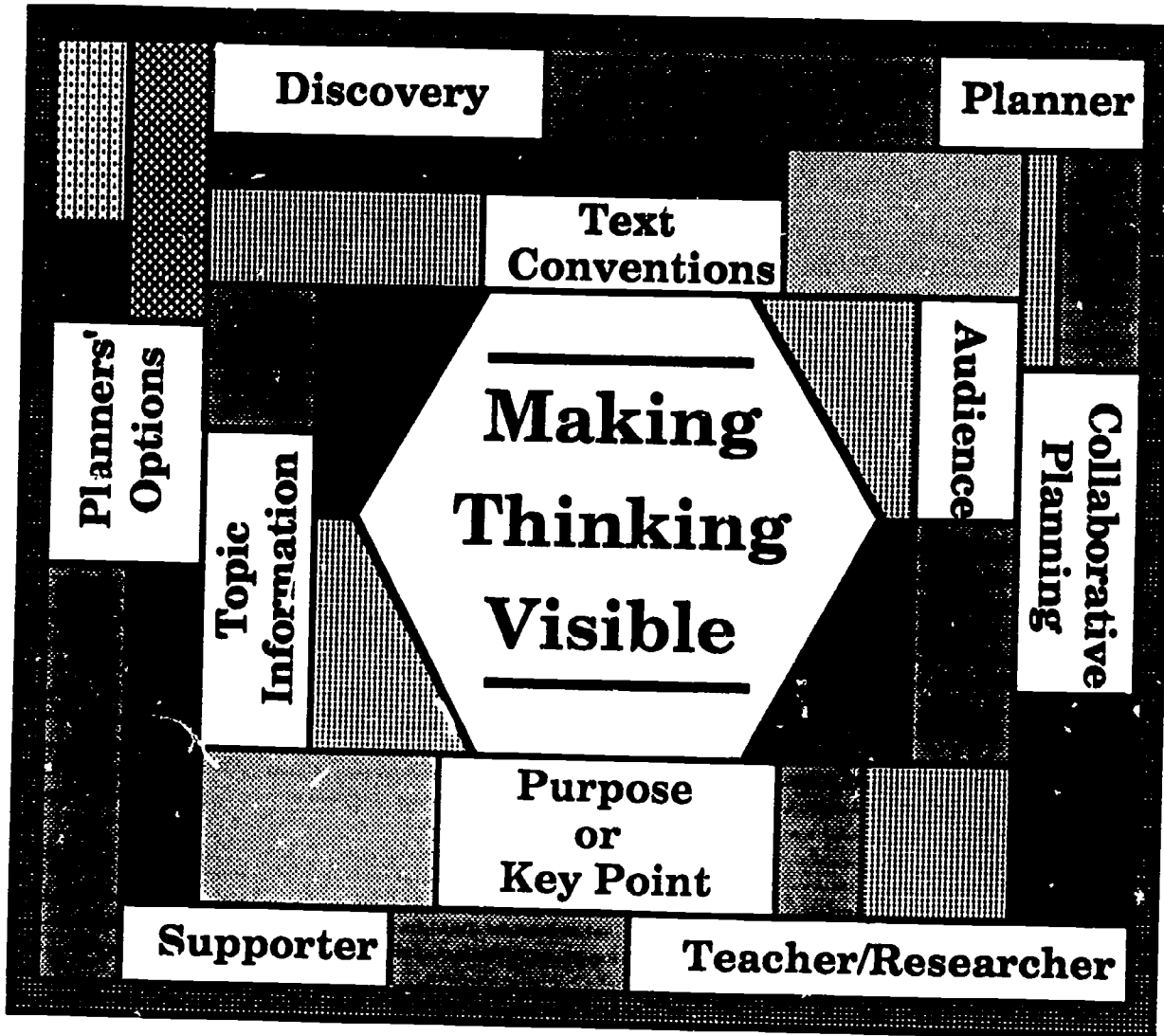
This casebook is part of a set of materials written by the members of the Making Thinking Visible Project. It offers high school, college, and community college teachers' multiple perspectives on the teaching and learning of collaborative planning, and on classroom inquiry and practice. The casebook explains collaborative planning (a writing strategy that helps students develop a piece of writing by discussing key rhetorical considerations with a partner) and suggests ways that teachers may want to use this technique as part of the way they teach writing. It offers 14 articles in 3 sections. The first section, "Clarifying Concepts," includes "Introduction to Collaborative Planning and the Making Thinking Visible Project" (Linda Flower and others); "Reflecting Upon Our Project" (Nancy Nelson Spivey); "Writers Planning: Snapshots from Research That Helped To Frame Collaborative Planning" (Linda Flower); and "Engaged, Involved Supporters: Keys to Effective Collaboration" (Rebecca E. Burnett). The second section, "Tracing Processes," includes "An Investigation into the Process of Critical Thinking and Collaborative Planning" (Leonard R. Donaldson); "The Right Metaphor" (Michael A. Benedict); "Planners' Options: A Collaborative Planning Tool Helping Inexperienced Writers/Planners Make Thinking Visible" (Thomas Hajduk); "Transforming Topic Knowledge: Six Portraits of Collaborative Planning" (David L. Wallace); "Transferring Talk to Text" (Jane Zachary Gargaro); "Student Teachers and Collaborative Planning: Transfer and Adaptation from Representation to Practice" (Linda Norris); and "Collaborative Planning and the Classroom Context: Tracking, Banking, and Transformation" (Jean A. Aston). The final section, "Adapting Assignments," contains "A Beginner's Map: From Collaboration to Collaborative Planning" (Leslie Byrd Evans); "Actual Classroom Experiences Using Collaborative Planning" (Andrea S. Martine); and "A Reflective Look at Teaching Planning in High School" (Karen Gist). Notes on the editors and contributors are attached. (PRA)

COLLABORATIVE PLANNING

CONCEPTS, PROCESSES, AND ASSIGNMENTS

A CASEBOOK

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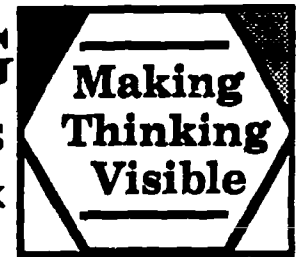
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COLLABORATIVE PLANNING

CONCEPTS, PROCESSES, AND ASSIGNMENTS

A CASEBOOK



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COLLABORATIVE PLANNING
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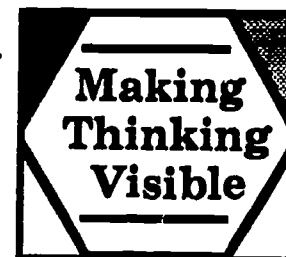


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**COLLABORATIVE PLANNING
CONCEPTS, PROCESSES, AND ASSIGNMENTS**

PREFACE AND ACKNOWLEDGMENTS

This casebook is composed of fourteen papers on classroom inquiry and practice and reflects the three main goals of the Making Thinking Visible Project in its query into collaborative planning:

- to help students develop a repertoire of strategies for planning and writing
- to encourage students to become more reflective and more aware of themselves as problem solvers and critical thinkers
- to discover ways that classroom inquiry can enhance the teaching and learning of composition.

The papers in this collection represent a range of classroom settings (college, community college and high school), disciplines (English and social studies), and questions about writing pedagogy and process. The members of this diverse group share the common denominator of discoveries about the teaching and learning of collaborative planning, a writing technique developed by Linda Flower at the Center for the Study of Writing, Carnegie Mellon University.

When you look closely at the front cover of this casebook, what you see depends upon what you observe. Some will notice the graphics, some the print, some the texture and/or color of the cover. Those who notice the design may see it as rectangles within a larger square, or as different shaded boxes placed neatly side-by-side, and some may even see it as a multi-design patchwork quilt. People bring different perspectives to what they observe. Just as the cover of this book can be seen from a variety of angles, this casebook presents our readers with multiple perspectives on collaborative planning. Each teacher-researcher in our project spent all of last year carefully examining a question or set of questions he or she wanted to address while using collaborative planning with a group of student writers. The papers in this collection present the perspectives of each project member: our work in progress, our observations, reflections, and discoveries about collaborative planning. Some describe how they used it, why they used it, and what they found out about it. Others provide background information about collaborative planning, examples of writers planning, and analyses of specific student planning sessions. Still others examine issues of pedagogy, transfer of knowledge, and the movement from planning collaboratively to producing texts.

Project members' discovery papers are categorized under the following headings in the Table of Contents: Clarifying Concepts, Tracing Processes, and Adapting Assignments. For those who may be unfamiliar with collaborative planning and the Making Thinking Visible Project, the opening chapter of Section One describes the technique and provides background information about the project itself. Nancy Spivey's paper follows, providing an overview of the specific methods project members used to conduct their inquiries and to reflect on their student writers and themselves as writing teachers. Clarifying Concepts also includes papers which provide some background and explanation of the history of collaborative planning and of doing classroom research, and which define the roles of planners and supporters. Section Two, Tracing Processes, includes papers which track the development of writers in light of a specific issue or issues. And Section Three, Adapting Assignments, contains three papers written by classroom teachers who adapted collaborative planning to their particular classroom situation and to an already-determined curriculum.

We would like to thank all of the members of the Making Thinking Visible Project for writing these papers and for allowing us to place them in this casebook for others, especially those interested in writing and classroom research, to read. We would also like to thank Mike Benedict, English teacher at Fox Chapel Area High School, for putting the casebook together on the Aldus Page-Maker[®] program. And we would like to thank our families for their encouragement and devotion while we took time this summer and fall to edit this casebook.

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SECTION ONE: CLARIFYING CONCEPTS

Section One of this casebook addresses fundamental information about the Making Thinking Visible Project and about the collaborative planning technique used by the project members to conduct their classroom inquiry. The first paper is a preview for those not familiar with collaborative planning or this project—its focus is what this technique is all about and what the goals of the project are.

Nancy Nelson Spivey's paper follows as a foreword of sorts for the papers which follow. She describes several of the methods used by the project members to conduct their inquiries and highlights the substance and purpose of each of the casebook papers.

Linda Flower's paper provides background on the project itself as well as theory and concepts based on research about writers' planning and thinking processes. Through five different portraits of student writers, Flower addresses the issues of helping writers to monitor their own thinking and of moving writers from knowledge-driven planning to constructive planning.

Rebecca E. Burnett's paper focuses on the nature of the supporter in the collaborative planning session and the important differences that involved, engaged supporters make in a variety of writing situations. All of these papers help to clarify what collaborative planning is and what it may contribute to making writers' thinking more visible.

INTRODUCTION TO COLLABORATIVE PLANNING AND THE MAKING THINKING VISIBLE PROJECT

LINDA FLOWER, REBECCA E. BURNETT, THOMAS HAJDUK,
DAVID L. WALLACE, LINDA NORRIS,
WAYNE C. PECK, NANCY NELSON SPIVEY

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The larger implications of making this process teachable go beyond instructional methods. They involve a new way to see and diagnose problems that gets at fundamental difficulties students face in their thinking and writing processes. And they show how we can capitalize on the real abilities of students, including those at risk in the schools. . . .

WHAT IS COLLABORATIVE PLANNING?

Collaborative planning is a way to help writers to use planning, at various stages in the writing process, to explore and develop their own plans for writing. Collaborative planning is a loosely structured planning process in which a writer explains and elaborates a plan to a supporter. The supporter listens, asks questions, and encourages the writer to develop his or her plan. The writer (planner) and supporter may then switch roles, and the second writer has an opportunity to talk out a plan for his or her own paper. Collaborative planning is a process which uses the metaphor of a planner's blackboard (shown on the following pages) which helps students visualize the areas of topic, audience, purpose, and text conventions which they need to plan.

PRINCIPLES OF COLLABORATIVE PLANNING

Collaborative planning takes many forms, from conversations in the hall, to informal sessions in a dorm room or in class, to scheduled meetings or conferences where a planner lays out ideas to a group. For collaborative planning to be effective, students must adapt it to the specific writing task they face. Students can use collaborative planning before they write, in the middle of a draft, or as part of reviewing a text. However, when they design their planning sessions, three principles should apply:

- **Authority (and the "floor") belongs to the writer as a planner and thinker.**

Collaborative planning is a chance for the writer to talk, think, and explore options. Focusing on the writer as a thinker (rather than on the text or a reader's response) encourages the writer to articulate and elaborate ideas, to recognize problems, and to build a plan based on his or her own ideas and emerging intentions.

- **The aim of this planning process is to build a richer network of goals, plans, ideas, and possibilities that are connected to one another across all areas of planning.**

The Planner's Blackboard (see the section titled, "The Planner's Blackboard: A Conceptual Framework for Building Better Plans") should help students become more aware of their own ideas and planning process. It also prompts them to elaborate their goals, to build "how-to" plans for the text, and to discover connections among their ideas.

- **The supporter creates a collaborative social context that encourages the writer to shape his or her own purpose and build a more reflective plan for turning those goals into text.**

Although the supporter may see problems and offer criticism or suggestions as well as draw the writer out, he or she works in a spirit of collaboration to help the writer develop the writer's plan.

BASIC ELEMENTS OF COLLABORATIVE PLANNING

Collaborative planning needs only three things: a planner, a supporter, and a tentative plan. You can explain to student writers that they might want to use the following process when they are in the role of the planner. (This explanation of the process is addressed directly to writers as planners.)

• **THINK OVER YOUR PLAN FOR YOUR PAPER.** Get a sense of key ideas, main point, purpose, organization, and so on. You may want to jot notes or even draft pieces of text. Meet with your partner or supporter when you are ready to talk about your plan.

• **TAKE CHARGE OF YOUR PLANNING SESSION.** Tell your supporter how he or she might help you most. Do you want to use your collaborative session to brainstorm, to let you try out ideas in a loose and informal way? Do you need to talk out your understanding of the assignment? Or do you want your supporter to listen like a reader (or your instructor) might, to spot problems, to notice gaps?

Since writers need different kinds of help at different times, design this session about what you need most. Make the planning session work for you. However, it is also important to be flexible and receptive; your supporter may notice problems or possibilities you don't see.

• **EXPLAIN, EXPLORE, ELABORATE YOUR PLAN.** Where should you start? If your plan is still sketchy, you might want to start by talking over the task as you see it or examining ideas you find interesting and want to include. Tell your supporter about tentative ideas, alternatives, things you would like to accomplish; talk about what you think your readers might expect or how they might respond. If your plan is more developed, you might jump right in by explaining your purpose and goals for this paper and zeroing in on key points.

The Planner's Blackboard gives you a way to visualize key elements that experienced writers often include in their planning. Use the Planner's Blackboard as a prompt to be sure you have covered the important things that need to be in a good plan. Your supporter can play a critical role here by noticing where you need to think about what your reader needs, where your purpose seems unclear, or where you could start planning how to translate a good idea into text using different conventions, formats, or techniques, such as problem/purpose statements, examples or headings. But be careful not to let the blackboard become a straitjacket or to let your planning session turn into a rigid question-and-answer session. Although the goal is to explore your whole plan, you may want to focus on a special area. Remember that you, as the planner, have to take charge of this session and make it to work for you.

• **OBSERVE AND THEN REFLECT ON YOUR OWN PLANNING.** Collaborative planning gives you an exceptional window on your planning process that lets you discover strategies that work well for you as well as decisions or strategies that may cause trouble. The best reflection comes when you can actually observe (not just remember) what you and your supporter said and did. You may want to use a tape recorder (placed unobtrusively) to make a tape of the entire planning session. Just turn it on and ignore it until you are done, as your private, silent scribe. Listening to your tape after the session can help you give a name to some effective "things you have always done without thinking about it." But it may also reveal some things which surprise you.

AN EXAMPLE OF COLLABORATIVE PLANNING

When your students do collaborative planning, you might hear an exchange like this one between two college freshmen planning a paper. In this excerpt from a planning session, a student writer works with a supporter to identify examples that the audience will respond to.

Planner: And my audience... they're probably gonna expect a lot of examples. I'm gonna have to use a lot of examples to prove, to prove it to them that different writing styles exist, and I want my audience to be able to relate their own experiences to this and maybe see how it affects them.

Supporter: So, what kind of examples are you gonna use? Can you give me an example? An example...

Planner: Um... Okay. I'll give you a real big example. Switching from high school writing to college writing. [The writer goes on to elaborate his idea.]

Supporter: Great... It's excellent. Um... But... Okay, so that's an example for one of your points. What about an example for [your other idea of] how writing varies?

Notice that the supporter not only encourages the writer to elaborate his ideas and then assesses them, but also helps him keep track of where he is in his planning.

SOME BENEFITS OF COLLABORATIVE PLANNING

One of the most effective ways to get ideas and to improve writing is for the writer to talk over the plan with a good listener. You can explain to students that when they talk about their plan, four important things can happen.

- As you explain and explore your ideas, your purpose, your point, you are actually elaborating and developing your plan. You may even have breakthroughs to new ideas and see new connections.
- Talking out your plans to someone else helps you stand back, see the big picture, and test

ideas before you produce draft that you might be reluctant to change.

- Your partner can respond in a variety of specific ways, depending on what you need—giving you support and encouragement by noting what works well, asking questions that help you elaborate parts of the plan (such as imagining how a reader will respond), making suggestions, or responding like a reader or sounding board on which to test this plan for your paper.
- Finally, doing collaborative planning (and making notes or a tape) lets you observe your own thinking and problem-solving process in action—it lets you reflect on the strategies that work for you and become more aware of your own writing process.

THE ROLE OF THE SUPPORTER

Supporters play a critical role in making a collaborative planning session work. Supporters differ from critics, peer editors, or teachers: their job is not to find faults or to tell the writer “how you would do it.” Supporters *help the writers develop and elaborate their own plans*. Good supporters listen carefully to the writer’s plan and figure out how to help the planner keep thinking. We have found that the following comments and strategies, addressed directly to students, are effective for introducing the supporter’s role.

HOW CAN YOU BE A GOOD SUPPORTER? Because you are the one who gets to sit and listen, you will be able to keep the goals of the Planner’s Blackboard in mind. Try to figure out how you can encourage your planner to build a better or more developed plan, especially in the key areas of the blackboard. Here are some things good supporters do. But you will have to decide which of these supporting strategies will help your planner most.

- Listen carefully and reflect the “gist” of what you heard back: “What I hear you saying is that _____. Am I hearing you right?”
- Ask the planner to elaborate. “You just said _____; tell me more about _____ [what you mean or why you said that].”
- Ask about key parts of the blackboard that the planner has only explained in a sketchy way. “If your purpose is _____, how are you going to do that? What are your other goals?”
- Ask—from time to time—how different parts of the plan are connected, especially when you see possible links or problems. “If your key point here is _____, how do you think your readers will respond to that?” Or “Is there any link between your purpose and the format you plan to use?”

- Share your perception of the task or alternative strategies the writer might consider. “I saw the assignment a little differently; let’s talk about what our options are.” Or, “You might use an example here.” Or “That’s an important point you could emphasize.”
- Let the writer know when you feel confused or see a problem. You don’t need to have a solution; just give feedback about how the plan works for you. “I feel lost at this point; why did you say that?” “I don’t know what you mean when you say _____.” “Can you tell me how this part of the paper is linked to that part?” Your feedback as a “live reader/listener” (rather than as a critic or advice-giver) can help the writer begin to imagine how other readers might respond and start to plan with them in mind.

THE PLANNER’S BLACKBOARD: A CONCEPTUAL FRAMEWORK FOR BUILDING BETTER PLANS

What does a good plan look like? A “good plan” is going to be unique and specific to the writer’s purpose. However, the plans that experienced writers build often look different from those of less experienced writers in two ways: first, they focus on three key areas (purpose, audience, and text conventions) in addition to what the writer wants to say (topic/content). Second, these expert plans are more elaborated and developed with more links between different parts of the plan.

For example, when student writers plan, they often use brainstorming or freewriting to develop lots of ideas. These are good strategies, but a good plan includes more than ideas about the topic or “things to say” in the text. When expert writers plan, they spend a good deal of their time not only on *topic* knowledge, but thinking about *what* their *key points* should be and deciding on their *purpose* or *goals* (things they want to accomplish in writing this paper).

They also try to imagine their *readers*: Expert writers often ask themselves questions such as “What do my readers expect? What do they already know? How will they respond to my plan, to my ideas, or my presentation?”

Experienced writers then go a step further: they think about different ways they could carry out their goals in text—ways to emphasize a key point, to convince a reader, or to develop a paragraph. They think about the different *conventions of written text* they might use such as the genre features of a journal entry or an editorial, organizing plans such as comparison/contrast, rhetorical techniques like examples and quotation, and ways to format and present a text such as using headings to organize, italics to emphasize, or bullets to list.

Finally, these writers not only build a more elaborate plan, with ideas in all of these four areas, they also think about *links* between these parts of their plan. For example, they talk about text conventions that might dramatize their key point. They come up with ideas that anticipate questions a reader might have. And they develop their own goals and plans by imagining what their reader already knows or thinks or expects.

PURPOSE, AUDIENCE, TEXT, AND TOPIC. These are only four areas, but they can add up to a lot to keep in mind for a student writer who is planning a paper. And sometimes writers find it hard to tear themselves away from just generating things to say (topic information). The Planner's Blackboard is a graphic reminder to build a plan that covers all of these areas. We have found the following comments are one useful way of introducing and explaining the Planner's Blackboard:

Imagine that you have a set of mental blackboards in the back of your mind, waiting to be filled with plans and ideas—the more the better. Whenever you come with an idea or think about the reader, or visualize the way your text might be organized, you have just posted another idea on one of these blackboards. Whenever you see a link between your purpose and audience or between a text convention and your key point, you have drawn a new link between those blackboards. Your goal is a mental blackboard filled with scribbled notes and lines.

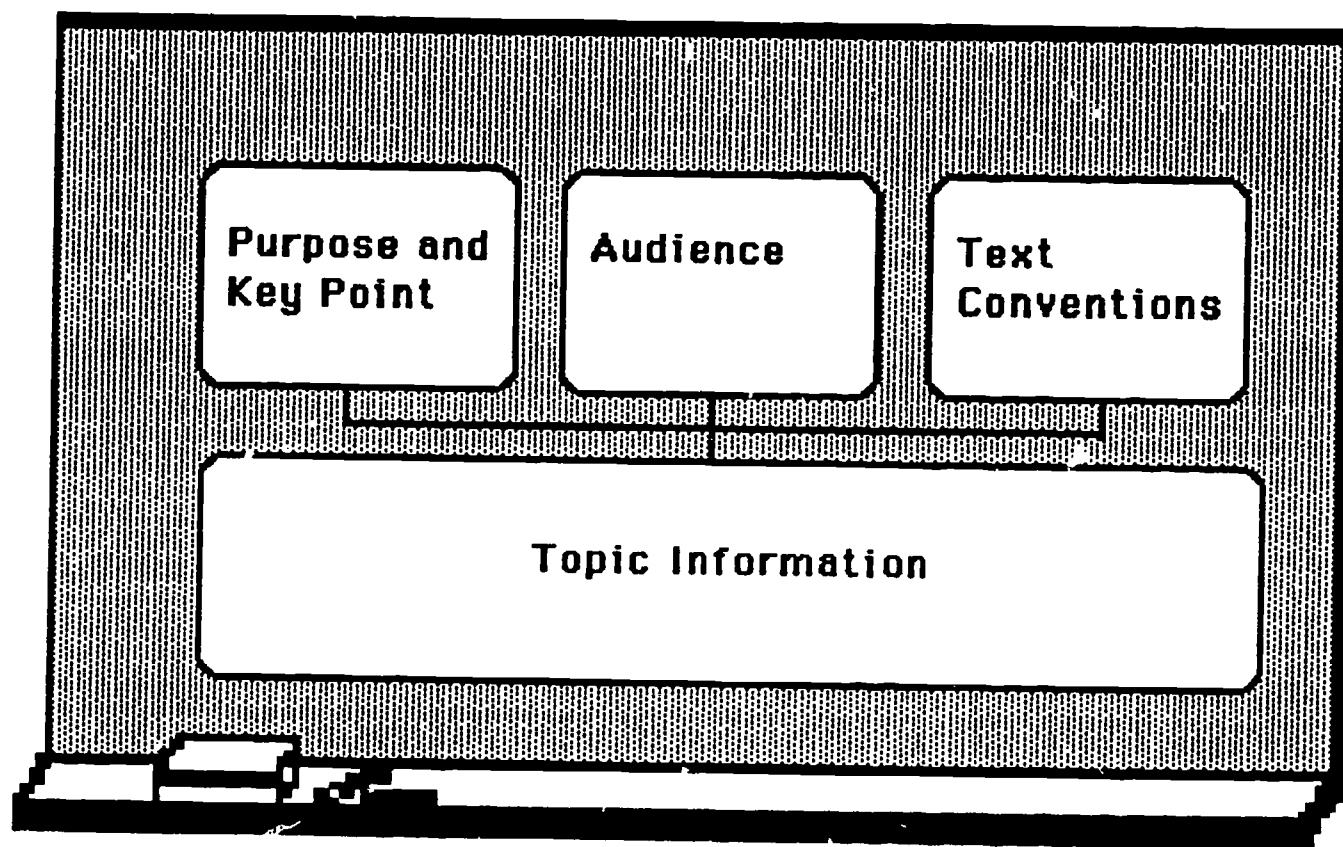
How should you use the Planner's Blackboard?

Think of it as a prompt—a visual metaphor that reminds you to think about the four areas of topic information, purpose, audience, and text contentions when you are planning. Or use it to review your plan-as-it-now stands: Where is it elaborated and where does it seem skimpy or even blank? Or when you are a supporter, listen with the blackboards in mind: What areas could you encourage the writer to elaborate on?

You don't need to have a literal blackboard with blank spaces; you can jot your ideas on any sheet of paper or computer. The blackboard image is to remind you to consider a variety of important elements in your planning. When they first see the blackboards, some writers use them as a kind of outline—actually writing little notes to themselves in the different boxes. For most writers, however, the tiny space on the blackboards is a rather rigid straitjacket on their ideas, and they prefer the freedom of talking out ideas and taking notes in a more normal way.

Encourage your students to treat the Planner's Blackboard as an imaginary, metaphorical blackboard and a prompt, rather than a check sheet to fill in or a recipe to follow.

The following figures illustrate three ways to visualize the Planner's Blackboard. Showing your students different representations enables them to understand that the Planner's Blackboard is a flexible concept, not a rigid prescription. In fact, you can encourage them to construct a representation of their own Planner's Blackboard.



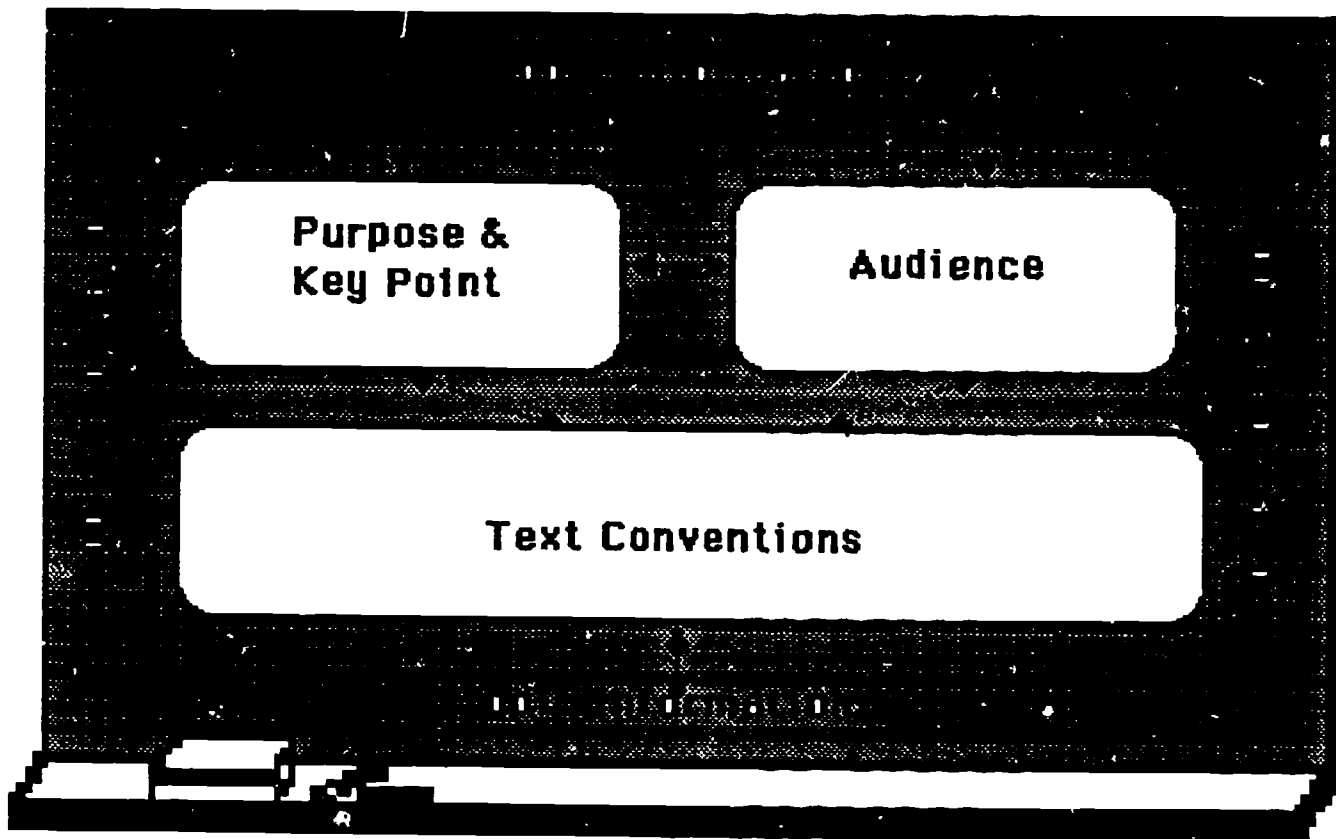


Figure 1 shows four planning areas that writers need to consider in separate, clearly defined areas, reminding students that they need to give attention to each during their planning. The linking line reminds them that these areas are not isolated; rather, they are interdependent. For example, decisions about what content to include are certainly influenced with the audience. And identification of audience influences conventions such as organization of the content.

Figure 2 lets you imagine that the topic information is the background you start with. On top of this topic information, you need to make decisions about your purpose and key point, your audience, and the text conventions you plan to use. Once you have selected the topic information and determined the purpose and key point, the audience, and the text conventions, you begin to establish links between the blackboards, represented by the arrows on the figure. Following the figure are a list of the kinds of ideas that writers can post on their own mental blackboards.

Figure 3 illustrates another way to depict the same information in a Writer's Maze, part of a computer program called Planner's Options. This representation of a Planner's Blackboard (actually a screen that students see on their computer) shows that there is no one correct path to follow when planning and discussing ideas about purpose, audience, topic, text convention, and task definition. Students determine which planning space to explore by clicking on a planning area and invoking a "planning assistant" that provides prompts and questions for planners to discuss and also allows them to record their responses.

Students find it very helpful to learn about the kinds of information that they can post on their mental blackboards—regardless of how they represent it—as they take notes on their own paper or write at their computer workstation.

TOPIC INFORMATION BLACKBOARD

- Interesting ideas, relevant points you want to include
- Specific words, phrases, draft sentences

PURPOSE AND KEY POINT BLACKBOARD

- The main purpose of the paper
- The supporting goals, plans, or things you hope to accomplish
- The key point you want to get across

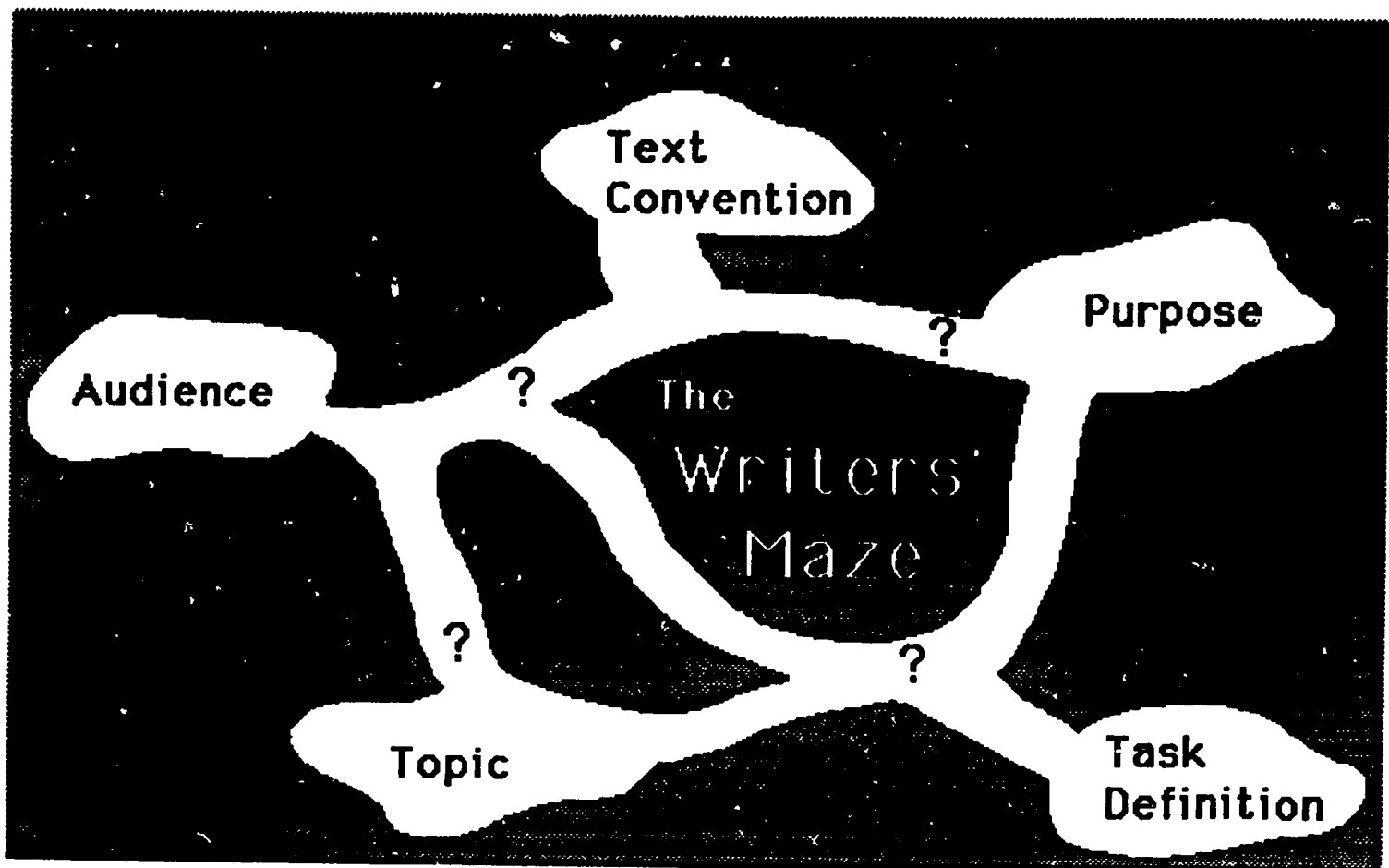
AUDIENCE BLACKBOARD

- Things your reader expects or needs to know
- What you want someone to think after reading the paper
- Ways your reader might respond to what you have just said

TEXT CONVENTIONS

(THE HOW-TO-DO-IT-IN-WRITING) BLACKBOARD

- Features of different genres that fit your purpose (e. g. a problem/purpose statement, citation of sources, dialogue, a news "lead," a graph, an anecdote)
- Conventional patterns of organization and development (e.g., topic sentences, summaries,



definitions, comparisons, reasons, examples, transitions)

- Visual cues to the reader (e.g., headings, sections, italics, bullets)

LINKS BETWEEN BLACKBOARDS

- Ideas that involve Information, Purpose, Audience, and/or Text
- Reasons for one plan based on another blackboard (e. g., setting a goal or using a text convention because of the audience)

(For more description of collaborative planning and the planning blackboard, see issues of *Planning to Write*, the project newsletter, February, 1989 and Fall, 1989 and *Making Thinking Visible: Classroom Inquiry in Collaborative Planning*, Project Book, 1990.)

WHAT IS THE MAKING THINKING VISIBLE PROJECT?

Making Thinking Visible is a classroom research project in which teachers and students use collaborative planning as a window through which to view the processes of thinking and writing. The purposes are threefold:

- to help students develop a repertoire of strategies for planning and writing
- to encourage students to reflect on their own problem-solving strategies and become more aware of themselves as thinkers

- to discover ways classroom inquiry conducted by teachers and students can enhance teaching and help make the processes of thinking, planning, and writing more visible.

WHAT ARE THE OVERALL OBJECTIVES OF THE PROJECT?

The primary objective for the project is ambitious but simple. By working together, we want to explore a new way of thinking about teaching writing that puts thinking processes in the forefront of instruction. If we can make thinking processes in writing visible in dramatic and well-articulated ways, we can make them teachable. That is, we can reduce some of the mystery that surrounds effective writing in the minds of teachers and students. And we can make sensible problem-solving strategies that successful writers use more available to our students.

The larger implications of making this process teachable go beyond instructional methods. They involve a new way to see and diagnose problems that gets at fundamental difficulties students face in their thinking and writing processes. And they show how we can capitalize on the real abilities of students, including those at risk in the schools, by giving them more and earlier experiences of being self-aware problem solvers, effective communicators, and successful learners.

To help achieve this objective, this group has formed an educational experiment in making thinking

visible throughout the greater-Pittsburgh area. The focus is on writing as the area of instruction and a new technique called collaborative planning, in which students use and reflect upon their own problem-solving strategies in planning to write. As students use collaborative planning, we demonstrate both their untapped potential and the strategies of literacy they need to learn.

At the same time, we are helping establish a cooperative structure that supports this change. This structure, which links teachers and community leaders as well as schools, colleges, and community centers, will help to create a climate of opinion in Pittsburgh area schools in which writing is treated as thinking, enabling teachers and students to approach literate acts as problem-solving. We hope this educational structure will expand into an informed network of teacher-researchers throughout the area.

WHAT ARE THE ORIGINS OF THE PROJECT?

This project has its roots in inquiry, research, and teaching that started at Carnegie Mellon and has come to involve teachers throughout Pittsburgh. In the last ten years of research in education, the "cognitive revolution" has given us a new picture of how humans behave—of how experts solve problems, of how novices struggle, and of how students learn. Since much of the pioneering work in understanding writing as a thinking process has been done at Carnegie Mellon, this is a good time and place to take the process a step further. This research has provided some theoretical models and detailed observations of the strategies and mental processes that highly skilled writers use when they face new and difficult writing tasks. We believe these models provide invaluable help for guiding less experienced writers. However, we hope to discover a good deal more about the different ways teachers and students can apply this knowledge in the classroom.

Even though the Pittsburgh area has some of the best schools in the country, helping every student become fully literate is difficult. Many students who could become literate members of their community are lost, and many students who could become powerful, competent communicators never become effective writers. One way to give students the power of literacy is to explore the roots of the problem—treating writing as a dynamic thinking process and teaching the problem-solving strategies that give writers control over that process. The barrier we face in teaching literacy is the barrier we hit in teaching all basic skills: students need to have a sense of themselves as problem solvers. They need to see and understand what it means to be learners, to be communicators, to be writers, and to be thinkers. By taking advantage of the recent research on writing as a thinking process, we believe we can help students learn to better control their own thinking

processes so that they can achieve greater success in school and in their community.

Given all the constraints under which writing, like other basic skills, is currently taught, it makes sense to consider dramatic and workable innovations. Such innovations should question some traditional assumptions (e.g., seeing writing only in terms of correctness) and demonstrate what is possible by showing thinking processes in action—to students and teachers. One innovative method for making the thinking process more visible is collaborative planning. This technique allows students to work together while confronting real problems of communication. They can think through those problems and explore their own goals and strategies as writers—and in that process demonstrate what it means to have a reflective control of their own writing and problem-solving processes.

WHAT IS THE ROLE OF COLLABORATIVE PLANNING?

The educational innovation on which the project is based is collaborative planning—a process in which students carry out their problem solving and planning aloud with the help of a collaborator. As collaborators, students help each other by modeling the planning process. Supporters also encourage writers to clarify their plans, sometimes contribute to plans, and occasionally challenge plans. The structure that underpins these collaborative planning sessions is provided by a set of research-based planning strategies, prompted by the Planner's Blackboard. The Planner's Blackboard is a visual metaphor representing elements writers consider when planning and the way these elements are linked to one another.

This combination of a collaborative process and the structured approach of the Planner's Blackboard for prompting writers not only helps teach problem-solving and planning strategies, but it also helps make the process of writing more visible to students and encourages them to be open to reflection. Thus, collaborative planning provides a base for a variety of activities—teaching and learning new strategies for planning, observing one's own thinking, and reflecting on the thinking and writing processes.

Collaborative planning is based upon six years of basic research in planning by Linda Flower and John R. Hayes at Carnegie Mellon—work supported by the National Science Foundation and the National Institute of Education—that examined how expert writers' planning strategies differed from those of novices. In addition to this research on expert/novice planning, collaborative planning is also the subject of two other major research projects at the Center for the Study of Writing at Carnegie Mellon. Although these studies are ongoing, it is clear that students tend to do relatively little problem solving or evaluation of their ideas

on their own; however, a partner's direct prompting to plan makes a significant difference in what students can do, and these collaborative planning sessions stimulate far more self-aware thinking.

WHAT ARE THE OBJECTIVES AND GOALS?

The first objective is to *create a visible change in the quality of students' thinking*. Recent research shows that inexperienced writers who plan at all concentrate their thinking on the topic—thinking of things to say. However, to be strategic thinkers and effective communicators, they need to consider the whole problem in a writing task—to think about their purpose and audience, to anticipate how other people respond, and to use their knowledge of textual conventions to achieve a purpose. They need to have control of their own thinking that leads them to review and consolidate plans in the way we now see only in more experienced writers.

Therefore, achieving the first objective includes prompting and documenting visible changes in the kind and quality of planning that students are able to do. Using video and audio tapes allows us to monitor students' growth as they learn to use more of their own potential, providing early information about students who need more or different kinds of help. Unlike most educational projects, we have the enormous advantage of looking directly at thinking and intervening directly in that process.

A second objective is to *enable students to become more self-aware problem solvers*. Learning new strategies for thinking about communication problems isn't enough if students don't transfer them to new situations. Schools can improve the chances for such transfer by teaching strategies in a variety of contexts. Helping students themselves become more aware of their own strategies is a second way.

Achieving the second objective involves promoting and documenting an increase in students' own reflectiveness and self-aware control of their own problem solving. Various techniques including self-interviews, taped collaboration sessions, video letters, and a computer program developed for collaboration allow teachers to monitor (and show others) both the process of self-aware problem solving and the growth in students' sense of options and control.

A third objective is to *understand how collaborative planning can be adapted to meet the needs of developing writers in a variety of high school, college, and community contexts*. Meeting this objective requires an in-depth understanding of these diverse social and educational contexts. Thus, a major goal of this project is to understand how collaborative planning can be adapted to help student writers develop both more sophisticated writing strategies and an increased sense of awareness about their own thinking processes.

One result of the observations that teachers in this project make will be a series of brief discovery memos that will be shared with other members of the project. These memos will record and comment on classroom observations, giving everyone an on-going story of the students.

WHAT ARE THE CRITERIA FOR JOINING THE PROJECT?

When you join *The Making Thinking Visible Project*, you become a Fellow of the Center for the Study of Writing and work with a collaborative planning team. Unlike teachers asked to pilot a curriculum, everyone on this project is a full collaborator who will naturally want to adapt the ideas and methods developed so far to fit their own teaching or institutional goals and their own students. Becoming a member of this working group of teachers who conduct classroom inquiry is based on the following criteria:

- an interest in finding new ways to support and teach writing and an interest in classroom inquiry
- a determination to discover something about your own students such as how they plan, how writers collaborating can help each other, how writers adapt to different assignments, or how students might use technology (audio and video tapes or computers) in planning to write
- an enthusiasm for looking closely at what your students actually do and for encouraging them to look at their own writing processes and problem-solving strategies
- a willingness to share your observations, discoveries, and reflections in writing and discussion with other teachers.

WHAT ARE COMMITMENTS OF TEACHERS JOINING THE PROJECT?

Being a Fellow of the Center and working on this project entails the following commitments:

- attending a colloquium on collaborative planning and classroom inquiry early in the school year
- initiating collaborative planning in at least one of your classes each term so that you have opportunities to observe your students' planning
- scheduling time for your students to observe, reflect, and write about their own planning and writing processes
- collecting data on what your students are doing and saying in collaborative planning sessions; typically, in this kind of classroom inquiry, data collection includes observing your students and taking notes, making some audio or video

recordings of students who are collaborating, or gathering copies of students' assignments and written reflections about writing

- joining a monthly seminar at the Center for the Study of Writing where Fellows from all the teams help each other by talking about ways to conduct classroom inquiry, making suggestions on lesson plans and assignments, and presenting their observations about teaching collaborative planning and the discoveries being made by their students
- reflecting on your own observations and sharing them with the other members of the project in brief but regular discovery memos
- meeting as needed with your team for planning and discussion sessions
- consolidating your discovery memos and summarizing the results of your inquiry at the end of the year. Different ways teachers are already sharing ideas include writing an article for teachers unfamiliar with collaborative planning, writing a report for publication by the Center, submitting an article to an educational journal, presenting at an educational conference.

Project members will have support in their inquiry through on-going consultation with other members of their project team and access to a variety of relevant resources.

HOW HAS THE PROJECT BEEN SUPPORTED AND DEVELOPED?

The Making Thinking Visible Project has grown out of work at the Center for the Study of Writing at Carnegie Mellon—one of fifteen national research centers supported by the U. S. Office of Education (Office of Educational Research and Improvement). The Center for the Study of Writing, a collaboration of the University of California at Berkeley and Carnegie Mellon, conducts research on how people learn to write, on how strategies are used by different writers, and on how teaching, learning and writing itself fit into the social context of school and community. Making Thinking Visible was envisioned as a way to translate this research into action in the Pittsburgh schools.

The pilot year of planning for this project involved both school and community leaders. We explored ways for new ideas to work within schools in talks with the Pittsburgh Board of Public Education's Superintendent of Schools and the Director of Writing and Speaking. In addition to the Pittsburgh Public Schools, our early collaboration also involved the Allegheny Presbyterian Center on Pittsburgh's North Side, which is concerned with ways in which problem

solving and planning can contribute to community literacy in settings outside of school.

Support for this initiative to promote educational change through Making Thinking Visible has come from the Howard Heinz Endowment of the Pittsburgh Foundation, which has helped create a network of educators interested in innovative, thinking-based literacy education, linking elementary, middle, and high schools, colleges, and community centers in metropolitan Pittsburgh. In the 1989-1990 project year, this network included teachers and group leaders from the Pittsburgh Public Schools, Fox Chapel School District, Steel Valley School District, Allegheny Presbyterian Center, Robert Morris College, Community College of Allegheny County, University of Pittsburgh, and Carnegie Mellon University. The 1990-91 project group consists of 24 teacher-researchers from the same locations as the 1989-90 group and also includes an English teacher from the North Hills School District and two teachers from Iroquois High School in Erie, Pennsylvania.

HOW WILL THE IMPACT OF THE PROJECT BE ASSESSED?

The project will be evaluated for its effectiveness in making thinking visible. The project evaluation focuses on the influences that collaborative planning has on students' thinking, planning, and writing, and it examines the usefulness and adaptability of collaborative planning in the teaching of writing. The evaluation procedures also document the impact of the project on the Pittsburgh educational community and its impact on the academic community beyond the city.

To assess the effectiveness of the project, we are using a variety of methods, including interviews, questionnaires, think-aloud protocols, an attitudinal measure for student writers, field notes, and detailed records. We found data from the pilot year to be quite informative in planning subsequent years of the project.

In addition to these planned evaluation procedures, we are also keeping track of surprises—unexpected spin-offs from the project, effects that we had not anticipated. All project participants help keep these records.

REFLECTING UPON OUR PROJECT

NANCY NELSON SPIVEY
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Another goal for our project is for the project itself to be reflective—for us to study ourselves collectively. Together we study the process of collaboration that is manifested in the project, and it becomes an object for our reflection.

MAKING THINKING VISIBLE. This is the name of our project and is also a statement of the mission of our project—a very parsimonious way, I think, to say what we are all about as a project team. We are using collaborative planning to make thought processes in writing “visible,” to make them objects for reflection on the part of students and teachers alike. What do we hope to accomplish by making thinking visible? What specific methods do we use to record writers’ thoughts so that they are visible? What are we “seeing” when we look at thinking? In writing this paper, as I reflect upon this first year of the project, I seek to provide some answers to these questions by considering different purposes for using collaborative planning and various methods that can be used to provide objects for reflection—and insights into the processes that we are studying. In doing so, I will consider three dimensions of reflectivity that are essential to this project: students’ reflecting about their composing and planning processes, teachers’ reflecting about their students’ learning and about their own teaching, and the collaborative reflecting of project participants about the process of the project itself—its evolution and development.

STUDENTS’ REFLECTIONS AND REFLECTIVITY

One goal of the project is to help students become more reflective about their own writing. Reflective writers are self-conscious about their own processes, are self-conscious about themselves as writers; they consider what is involved in their writing, what works, what does not work, what might be changed. Reflective writers are investigators, conducting their own inquiry (with themselves as subjects) by asking questions, collecting data, and interpreting what they “see.” To reflect upon their processes, they must have some kind of recording of those processes. The processes must become objects that can be reflected upon. A mental record—a memory—may be enough sometimes, but a more “visible” (or audible) product can facilitate reflection. In the Making Thinking Visible Project, teachers encourage students to use various means of recording and interpreting their own processes.

AUDIOTAPES OF PLANNING SESSIONS. Probably the most common method that we use for deriving an object for reflection from the planning process is audiotaping. Students’ planning sessions are audiotaped so that students can play them back and reflect upon what happened during the session. Occasionally some sessions are transcribed in written form to allow for reading, rereading, and intensive study of the sessions. What do students listen for (or look for, in the case of a typewritten transcript)? That can depend upon a particular teacher’s purposes in using the recordings. Sometimes a teacher may be nondirective in order to see what students themselves notice without the teacher’s guidance; other times a teacher may want to give students more direction, such as looking for particular aspects of the composing process or particular kinds of interactions between the planner and the supporter. Throughout this casebook, the authors of these discovery papers use excerpts from transcripts of students’ planning sessions to illustrate particular points.

WRITTEN RESPONSES. Various kinds of written responses are also useful. After a planning session (or after listening to a planning session on tape), students might produce some kind of response statement. The intent is for students to produce a written record of the major outcomes of the planning session and to formulate their impressions of it. Or, instead of summarizing and evaluating a single session, students might produce a written statement of their reflections on the role of collaborative planning in the total process of writing a major paper. This is a method that Karen Gist describes in her discovery paper. She had her students write "reflection papers" in which they responded to such questions as "At what point(s) did you feel CP was or could've been most helpful to you?" and "What effect did the CP process have on the final outcome of your paper?"

IMPRESSIONS OF A MODELED SESSION. Another way to get students to reflect upon the composing process is to have a planner and a supporter model collaborative planning. The modeled session provides a common experience for all students to represent in memory (though there will be differences in how they remember it); and they can discuss what they remember—what they have "seen" in the planning session. When Pam Turley, one teacher in our project and an editor for this casebook, models planning with a partner for her students, she sometimes has her students, as they listen and watch, focus on different elements of the planning blackboard. Some students might listen for consideration of audience, others for consideration of text conventions, others for presentation of topic information, and so on. Then Turley leads a discussion in which students report and reflect upon what they have noted for their particular planning element.

JOURNALS. Students can keep their own reflective records in journals. This is one of the methods that Linda Norris used in her study of "Student Teachers and Collaborative Planning" and discusses in her paper. Journal-keeping is now quite common in writing pedagogy, but Norris had a special, unique purpose for the journals her student teachers kept. Their journals were for their reactions to collaborative planning and for their reflections about collaborative planning.

PRINTOUTS FROM PLANNERS' OPTIONS. The computer can offer yet another way to make thinking visible. Tom Hajduk, in "Planners' Options: A Collaborative Planning Tool," describes the computer program he is developing to provide a context in which the computer is an additional participant in the collaborative planning process. The printouts from information students enter as they plan can serve as objects for reflection: Which elements did a particular writer attend to? What patterns can be seen in the planning episodes? How does this episode compare to other instances of collaborative planning?

As we've seen here, one dimension of reflection is that performed by students as a result of collaborative planning. There are a number of ways in which teachers can elicit reflections from their students. Now I'll turn to another dimension of reflection—the reflections of teachers through their own inquiries.

TEACHERS' REFLECTIONS AND REFLECTIVITY

Another goal of our project is to help ourselves as teachers become more reflective about our teaching and about our students' learning. All of us in the project are conducting our own inquiries: asking questions, collecting data, and using that data for reflection and interpretation as we write about our discoveries. We are each trying out collaborative planning in our classrooms and conducting a focused investigation into some aspect of writing or learning.

All of us make strong use of collaborative planning and writing in our own inquiries. We work in collaborative planning pairs or groups to plan our studies and our writing, and we reflect upon our own planning. We use writing as a way of making sense of what we are finding and as a way of recording the inquiry process, particularly in the discovery memos we produce. At each of our monthly seminars, we share the memos that we have written—brief reports of the progress of our inquiry at that particular point, whether it is refining a question or analyzing data or drawing conclusions. These discovery memos move us toward our final discovery paper. The papers for 1989-90 make up this casebook, but some of them have traces of discoveries made during the previous year, which was the pilot year.

Leonard Donaldson's paper, "An Inquiry into the Processes of Critical Thinking and Collaborative Planning," is an example of how the inquiry process can develop over time, how one question can lead to another. Donaldson, who entered the project during the pilot year, shows how the question that he asked this past academic year builds upon work that he did previously. Rebecca Burnett's continuing inquiries into the role of the supporter are evident in her paper, "Engaged, Involved Supporters: Keys to Effective Collaboration." She discusses, among other things, the kinds of moves that supporters can make and the kinds of scaffolding they can provide.

For our own inquiries, we (as teachers, writers, and project participants) turn the data from the students' reflections into data for our own reflections. For example, in Leslie Evans' discovery paper, "A Beginners' Map," we can read her reflections upon her own learning process as she collected her students' responses. Andrea Martine's "Actual Classroom Experiences Using Classroom Planning" is a record of her four experiences using collaborative planning and her reflections upon what happened. Linda Norris' study of student

teachers provides a detailed record of her own inquiry process as she investigated how student teachers interpret and use collaborative planning in their own teaching. Her data from journals, surveys, predictions, observations, and interviews help uncover some patterns associated with their acceptance or rejection of collaborative planning.

It is interesting to note the importance of metaphors in our discoveries. Michael Benedict makes readers very aware of his own search for "the right metaphor," which results in his discovering an important distinction between collaborative planning sessions that are "mirror sessions" and those that are "window sessions." Particularly noticeable in several of the discoveries are what participants have called "snapshots" or "portraits"—which are, in most cases, descriptions of individual students or descriptions of pairs of students. Jane Zachary Gargaro, in "Transforming Talk to Text," uses her snapshots to illustrate junctions and disjunctions between students' planning sessions and their texts: how writers use some of the comments and suggestions made by their supporters and fail to use others. In "Transforming Topic Knowledge," David Wallace's portraits illustrate the complexity of writing tasks and the difficulties that particular students can have in dealing with the interacting task constraints. Jean Aston's "Collaborative Planning and the Classroom Context: Tracking, Banking, and Transformations" uses portraits to illustrate how the complex beliefs students hold underlie their behavior.

Thus, teachers' reflections build upon students' reflections, with teachers using the products of their students' reflections as objects for their own.

COLLECTIVE REFLECTIONS AND REFLECTIVITY

Even though we as individuals each conduct our own classroom inquiries, we are all participants in a collaborative inquiry—the Making Thinking Visible Project itself. Another goal for our project is for the project itself to be reflective—for us to study ourselves collectively. Together we study the process of collaboration that is manifested in the project, and it becomes an object for our reflection. Our approach is quite similar to what Peter Reason (1988; Reason & Rowan, 1981) calls "co-operative inquiry," which is described in the following way: "[T]he essence of co-operative experiential inquiry is an aware and self-critical movement between experience and reflection which goes through several cycles as ideas, practice, and experience are systematically honed and refined" (Reason, 1988, p. 6). In such an approach participants are both the conductors and the subjects of inquiry.

DATA FOR REFLECTION. To trace the process that is our own project, we collect various kinds of data, some of which are quite similar to those that we use with our students. For instance, project participants write re-

sponse statements at the end of all of our seminars. These are used in planning subsequent seminars. We also use all the individual discovery memos to keep track of the various dimensions of planning and writing that participants are exploring. In addition, we all provide responses to questionnaires at the end of each year giving our perceptions of the current status of the project—our ideas about its accomplishments and its direction and our suggestions for improvement. These sources of data are used in planning project activities.

WRITING ATTITUDE SURVEYS. In addition to the more qualitative data, we are also collecting Writing Attitude Surveys (developed by project participants) from all students who are being taught collaborative planning through this project. These surveys ask students to indicate the extent of their agreement to thirty statements about writing, planning, and collaborative processes. Students take the survey at the beginning and at the end of their course.

INDICATORS OF IMPACT. As a demonstration project that has just completed its first year, we are keeping track of various indicators of the impact that we are beginning to have on education. Indicators we record include such things as our presentations, publications, and contacts. We present papers at regional and national conferences, such as the Western Pennsylvania Teachers of English, the National Council of Teachers of English, and the Conference on College Composition and Communication, and also conduct faculty development workshops. We are getting started on several new publications for the educational community to add to the two we already have, the *Planning to Write* newsletter and the Project Handbook, and we keep counts of the numbers of teachers and administrators who contact us about the project and its materials.

SURPRISES. Although individual participants in the project conduct inquiry focused on particular questions and they report their discoveries, there are always unexpected discoveries, which are not the subject of any inquiry but are relevant to the project. Participants keep records of these surprises throughout the year and we collect these records. Some surprises are related to our participants' professional lives, such as one participant's winning a grant from her school district to do work related to collaborative planning and another participant's being selected to be one of the planners for curriculum innovations in the city's schools, in part, because of her involvement in the project. Most surprises come through our students. For instance, one group of young people decided, on their own, to use collaborative planning when they started on a new assignment. Students in another class started paying more attention to their own use of language after they listened to audiotapes of their collaborative planning sessions.

It is in these ways that we reflect collectively upon our own work as an inquiry team. This dimension of reflectivity builds upon the other two, our students' reflections and our own reflections as teachers and learners.

CONCLUSION

What we have in this casebook is an interesting set of discovery papers written during the first year of the project, 1989-90 (which followed the pilot year, 1988-89). And the discoveries are just beginning. In her discovery paper, "Writers Planning: Snapshots from Research That Helped to Frame Collaborative Planning," Linda Flower, the Project Director, provides an historical context for the project, describing some key studies that led to inquiry for the Making Thinking Visible Project. She provides a *genealogy* for the project. What our inquiry team is beginning to provide, through this and other publications, is a *biography* of the project—a record of its growth and development.

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WRITERS PLANNING: SNAPSHOTS FROM RESEARCH THAT HELPED TO FRAME COLLABORATIVE PLANNING

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Having shared knowledge, assumptions, and expectations does not, however, mean we begin with a belief that these initial assumptions are correct or relevant to our different settings, or that our expectations (and even hopes) will pan out, or that our hypotheses are the accurate ones. This shared knowledge functions as a springboard for inquiry. It sets an agenda for questioning and observation that is also common property....

THE FAMILY HISTORY OF AN INQUIRY

Family histories are always rather arbitrary constructions. They take a spot in time, where the writer happens to be standing, and call it a watershed, the point toward which all prior events had been yearning and from which all else would lead. This history is no different in that we are presenting a story that is still in the making. We have spent three years in which we have tried to discover what a theory-guided classroom inquiry project could be; however, the project itself is part of such larger initiative that goes under names such as teacher professionalism, classroom research, and reflective teaching. It grows out of a commitment to build what we could call observation-based theories about writing—that is, insights and “grounded” theory which spring from close observation of both the practice and the thinking of actual writers. Our ways of talking about collaborative planning and many features of this project are clearly the children of problem-solving theory, cognitive rhetoric, process-tracing research and process-focused teaching, and we owe much to recent educational research in teaching problem-solving strategies and metacognition. However, it would be wrong to read the background and history of collaborative planning as a path leading to a necessary conclusion, or to see it as an accumulation of conclusions that culminated in certainties for practice. Such an image would distort the way research, theory and practice really interact, and suggest a limited and weakened model of how teachers could use prior research to improve teaching and increase their own knowledge.

In this brief family history of collaborative planning I would like to do two things:

First, I want to provide some snapshots of the ideas that are part of both the history and the meaning of collaborative planning. This family album starts with a series of descriptive, exploratory research projects which set out to see how writers think. In the process, they conceptualized the writer's process in some new ways, not only to understand it but to uncover more of the intriguing problem writing poses.

Secondly, I want to argue that what we are seeing in these snapshots is not a cumulative progression heading toward an answer, but is in fact a cycle of theory and interpretation which guides observations, which in turn lead to renewed, more informed, more focused observation which can both test, build on, or go beyond our previous understanding. This cycle of observation-based theory building can go on in a formal research setting which allows observations to have greater generality, reliability, and precision, because of the time and systematicity that go into collecting and analyzing observations. It can also go on in classroom inquiry, which can mount a more focused, problem-driven inquiry that leads to a clearer sense of what one's own students—within the critically important context of this class and one's own teaching goals—are doing, are needing, or are thinking. In both these settings, prior research and theory plays an essential role. The informed eye sees

and understand even familiar actions in a classroom in a new light. It opens our assumptions and actions up to fresh examination. And it helps us explain our own successes in more principled ways. Through the lens of this project, I would like to look at the way research, theory, observation, reflection and teaching can enter a sustained conversation with one another in the development of a particular theory-guided inquiry.

COLLABORATIVE CLASSROOM INQUIRY

The cycle of interpretation I am calling observation-based theory building plays an important, in some ways defining, role in our project in a number of ways. First, unlike some other, equally valuable ways teacher research can be structured, this is a collaborative inquiry. Prior research and theory, consolidated in the idea of collaborative planning, creates a background of shared knowledge about the writing process, of assumptions about what students need to learn and where some parts of the challenge lie, and of expectations/hypotheses about what might support this learning process. This shared knowledge makes collaboration easy and fruitful; it makes conversation about "what I'm doing" or "what I saw" purposeful and synergistic. And, ironically, it nurtures diversity by allowing teachers from different disciplines, with diverse student populations and sharply divergent teaching goals to not only speak with one another, but to contribute to a growing shared understanding.

Having shared knowledge, assumptions, and expectations does not, however, mean we begin with a belief that these initial assumptions are correct or relevant to our different settings, or that our expectations (and even hopes) will pan out, or that our hypotheses are the accurate ones. This shared knowledge functions as a springboard for inquiry. It sets an agenda for questioning and observation that is also common property, in the sense that what you discover is probably relevant to me too. For instance, what makes a good supporter and what do students (9th grade or college) need to learn to help other writers? At the same time, because we are interested in what Collins has called "situated cognition" each member of this group frames his or her own inquiry in terms of a particular class and set of goals.

FIVE SNAPSHOTS FROM RESEARCH

According to Coleridge, *Kubla Khan* was written in a "profound sleep" in which

all the images rose up before him as things, with a parallel production of correspondent expressions, without any sensation of consciousness of effort.

However, most texts do not spring fully realized from a spark of inspiration but emerge over time from acts of planning and revision—from the thinking writers do at the keyboard, in the shower, or on the way to work or school. The following snapshots from research

describe certain strategies writers use that seem to make a critical difference in their writing and some of the insights which helped shape the features of collaborative planning.

SNAPSHOT 1: LEARNING TO DO "CONCEPTUAL PLANNING"

What changes occur as young writers develop? Here are the notes and text from a 10 year-old writer asked to plan then write an essay on "Should students be able to chose the subjects they study in school?"

NOTES

I don't like language and art is a bore
I don't like novel study
And I think 4's and 3's should be split up.
I think we should do math.
I don't think we should do diary
I think we should do French

TEXT

I think children should be able to choose what subjects they want in school.

I don't think we should have to do language, and art is a bore a lot. I don't think we should do novel study every week. I really think 4's and 3's should be split up for gym. I think we should do a lot of math. I don't think we should do diary. I think we should do French.

Notice how the notes are complete sentences, which appear in the final text with little change in wording or order. These young writers do not distinguish between planning (e.g., abstract thinking about alternatives) and drafting text. Using a knowledge telling strategy to compose, they also found it hard to believe that anyone would think of an idea and then not use it.

By 14, however, students' notes begin to contain gists such as "what rights they have" which could be expanded into text and notes on intentions such as "give my opinion" which contain no content. They are starting to *transform* their planning notes in various ways by rearranging, expanding and condensing. Bereiter and Scardamalia (1987) described these changes as a growth in *conceptual planning*—in the ability to differentiate plans from text, to use abstract ideas, and to consider alternatives for thinking about writing.

This research revealed a key feature of growth in writing. In order to have some control over your own ideas you had to stand back from them, turn them into gists or transform them in light of your intentions. Your ideas had to become more plastic and you had to become a more self-conscious shaper. With this and other studies Bereiter and Scardamalia were showing how the young writers they observed were depending almost exclusively on what they called a "knowledge-telling" process. Instead of transforming information, this process allows a writer to select a topic, search memory for what he or she knows, using the rules of the genre and the assignment to filter out irrelevant infor-

mation, and to turn that knowledge directly into text. Moreover this turns out to be a highly efficient and effective strategy for writing many school papers. The catch is, it doesn't work for more demanding analytical or persuasive tasks and relying on knowledge-telling didn't help students develop the ability to transform knowledge.

Going beyond knowledge-telling to more abstract, conceptual planning was obviously a demanding, creative act. How could instruction, we asked, support this process or help writers do it better?

SNAPSHOT 2:

DIFFERENT PLANNING STRATEGIES

At the same time Bereiter and Scardamalia were working in Toronto with children, research at Carnegie Mellon with college students and adults began to build a converging picture of writers' thinking (Flower, et. al 1989). This work suggests that writers depend on three major planning strategies—each with advantages and limitations: *Knowledge-driven planning*, *Schema-driven planning*, and *Constructive-planning*. Each of these operates as an executive level planning strategy, which means that it guides and orchestrates how the writer goes about developing not only things to say but goals and criteria for how to say it.

In *Knowledge-driven planning* the writer relies on his or her knowledge about the topic knowledge to generate information, to organize ideas, and to choose what to say. Unlike the child's "knowledge-telling," it may involve significant conceptual thinking, but the plan is still guided by and focused on the structure of the available information. Knowledge-driven planning is a familiar and effective strategy for turning out committee reports, school themes and letters home. It is excellent for demonstrating learning on an essay exam. But it can also lead to writer-based prose that is not adapted to what readers might need. When assignments ask writers to transform their knowledge for a new purpose or a reader, a knowledge-driven plan (based on presenting what one knows, structured as one currently thinks about it) will not be up to the job.

In *Schema- (or convention-) driven planning*, the writer's goals and organizing plan are provided not by the topic but by a discourse convention or format (e.g., a five paragraph theme or a movie review). Topic knowledge always comes into play in writing, but when schema-driven planning takes over as the writer's executive strategy, the lion's share of planning can be done for the writer by available schemas or conventions. That is, they help generate ideas, select the relevant ones, set goals and criteria, and offer not only patterns of organization but appropriate language and phrasing. Experienced newswriters depend heavily on their schemas (like the 5Ws for a news story) to guide planning; but students may also turn to conventions

they know (like summary and response) to guide their planning, even if a given assignment calls for a somewhat different plan.

Schema-driven planning allows all one's past effort learning the conventions of a news story or school essay to pay off. Like knowledge-driven planning, it can be efficient and effective—if the conventions and knowledge one has fits the task. However, when one wants to *use* that committee report to mount an argument or to *use* a movie review to explore an idea—that is, to write with an adaptive, individual purpose—then available topic knowledge and conventions often aren't an adequate guide to planning.

In *Constructive-planning*, writers build an original plan which puts knowledge and conventions *to use*. With this executive strategy, writers must "read" the situation and create their own complex web of intentions. They must often consider alternatives and deal with conflicts as they develop a network of subgoals, plans and criteria. The plan and the text develop in a kind of dialectic where each can shape the other. (See "A Writer Using A Constructive Planning Strategy at the end of this paper.) Because this executive strategy allows writers literally to "construct the plan" that will guide writing, constructive planning lets writers adapt to a rhetorical situation and transform their knowledge. It is also more difficult to do.

Planning research suggests that many people (especially students engaged in conventional school assignments) learn to rely on knowledge-driven planning as a their default strategy—unless they are motivated to think in more rhetorical ways. Collaborative planning began, first of all as a response to this problem. This research had defined a set of powerful executive strategies that older writers appeared to move about among at will. Could we help developing writers expand their repertoire? In particular, how could we engage students in constructing and reflecting on their own writing plans?

SNAPSHOT 3: EXPERT WRITERS USING CONSTRUCTIVE PLANNING

It is one thing to know that experienced writers do things differently. But just how do experienced writers *construct* a plan? Are some parts of this process teachable? The transcript below of a writer thinking aloud shows some expert strategies we saw in both adults and good student writers. These writers *elaborate* a network of both major goals and "how-to-do it" subgoals and plans. They also review those goals during writing, not only to monitor progress but to *review* and *consolidate* (and revise) their plan. When they hit conflicts, as all writer do, they resolve conflicts by thinking about the plan nearly 40% of the time, compared to the 4% by novice writers who dealt with problems at the level of text.

These experts also pay attention to more parts of the picture. They spend their time thinking about not only content, but about purpose, organization and audience. Novices sometimes gave almost no thought to the reader or their purpose. And, on this task, the amount of planning time even predicted the quality of the paper. Extensive planners did a significantly better job on this assignment than minimal planners.

It was from this research that the Planner's Blackboard took shape as a metaphor to foreground how constructive planners give themselves goals, plans and ideas in each area. Asking writers to imagine their plan as a set of mental blackboards on which ideas were posted (or not) gave a sort of "local habitation and a name" to an elusive thought process. By visualizing ideas filling up blackboards and making links across them, we hoped to make these familiar abstractions more concrete, to help students see their own plan as a conceptual entity distinct from text. The Blackboard also offered a way to do what good teachers often do on a paper conference—to prompt writers to extend and elaborate their ideas and intuitions of purpose into a key point and a set of other rhetorical goals; to imagine a reader and that reader's response; to consider different textual options; and to review, revise and consolidate their plan.

SNAPSHOT 4: PLANNING WITH A PARTNER—OF SORTS

The Planner's Blackboard may be a useful metaphor, but it is hardly news. It reflects the kinds of rhetorical concerns composition teachers regularly teach. Although it might give writers a more integrated, memorable prompt, my own teaching experience had convinced me that presenting new strategies can open doors for some students, who wonder why "no one ever taught me this before" but it can have little effect on other writers who do not see how or why to incorporate a strategy into what they already do.

Why is it students do little constructive planning? A case of *can't* or *don't*? What if student writers were asked more directly to do such thinking, as they were composing? To answer this question, we developed a friendly if fictitious computer that would write a paper, but the student had to construct the plan. In this study the computer prompted students with hard questions such as, "Thank you, that was a good plan, but I was always told to consider alternatives. Can you think of another way?" and "How will you deal with the readers who disagree with you?" The Automatic Planner showed us more of what students *could* do, and with such prompting we saw freshmen doing extended constructive planning. Those students whose freshman course had also included direct instruction in planning did even better than the rest, performing as well as master's students on some measures. But the

bigger surprise was students who emerged from this demanding hour and a half planning experiment saying, "This would have helped me on my paper for psychology last week" and "Can my roommate be a subject in the study?"

If ever this creaky computer fiction could be such an effective prompt, what more could students do with a live respondent encouraging and prompting their thinking? Could a partner, whose attention is not consumed by planning, help a writer by (1) prompting her to consider new possibilities and then (2) at the next moment, reflecting back to the writer the shape, the strengths or the problems of her emerging plan? It was out of this experience that collaborative planning took shape.

SNAPSHOT 5: COLLABORATIVE PLANNING IN A FRESHMAN CLASS

Based on what we had seen so far we knew we wanted a forum for planning and writing that would give authority to the writer, helping the planner develop his or her own ideas. Therefore collaborative planning is unlike peer response which focuses on a text and a reader's response to that text. Even more importantly, we wanted students to see planning as a purposeful constructive process, and to see writing as an action people take in a social, rhetorical situation. So instead of asking students to evaluate or critique another student's text, we asked them to participate in a collaborative, social event, in which a partner takes on the role of a supporter, dedicated to helping a writer envision and carry out his or her own purposes.

Unlike many "unstructured collaborations," we also wanted this partnership to address the problem of moving from knowledge-driven to constructive planning, to help writers monitor their own thinking, and to address the issues of purpose, audience and textual/discourse conventions. Therefore the Blackboard metaphor was embedded in the process as a prompt and a goal both partners were aware of.

Finally, we wanted this collaborative event to do more than improve the paper at hand; it needed to help students become more aware of themselves as thinkers and to expand their repertoire of strategies for planning and writing. We had seen how the research techniques which were so revealing to us, based on observations of writers thinking aloud, could also give students a new window on their own thinking. So we saw collaborative planning as a way to make thinking visible. We wanted it to become a the basis for data-based observation—by students and teachers—and a springboard for reflection.

After some experiments in high school and college classes (discussed in Sitko and Flower), we introduced collaborative planning in a few sections of a

freshman writing course and took the opportunity to conduct a close analysis of what students were doing, by collecting a series of papers and collaborative planning tapes made outside of class over the semester. Our first question was predictable: Would CP lead students to go beyond the knowledge-driven planning we had seen in previous studies? Using the Blackboard categories to analyze the tapes we found that nearly 40% of the substantive comments were devoted to discussions of purpose, 19% to audience, 25% to text conventions, and 14% even involved consolidation—planning comments that linked ideas across one or more blackboard. Instead of the intense focus on generating things to say that we might have expected from the previous research, only 35% of the comments were devoted solely to topic information (unlinked to any other concern) (Flower, Higgins and Petraglia, in press). In addition, we saw that these sessions not only involved a substantial amount of reflection (43%), but that reflection was also related to the wholistic quality of the session as judged by teachers (Higgins, Flower, Petraglia, in press). This seemed like good news from an educator's point of view.

However, this close analysis yielded much more than a confirmation of some hopes. It showed us, for instance, that the ways students talked about purpose were not in the personal or rhetorical terms the instructors had imagined, but in terms of generic purposes, in this case tied to the assigned genre of doing a problem analysis. Although this concern with "genre-related" purposes was sensible, it wasn't all the instructors had intended. More disturbing, these tapes revealed that when students discussed audience the audience was often seen as simply a mirror image of their key point—the reader was defined as someone needing or eager to hear what the writer had to say (Petraglia, Flower, Higgins, in prep). It is clearly not enough to know that students are doing an activity unless you can also see how students are thinking and learn how they are interpreting and using that activity. Teachers (and researchers) we argued, need to understand the *strategic knowledge* students are invoking, that is, the *goals, strategies* and relative *awareness* behind what they do. This step in the story of collaborative planning not only told us about our students, but pointed a way to better teaching that started where the students were.

Sometimes studies of this sort look for patterns that represent what a "significant" proportion of the students are doing and stop. But this close analysis of the collaborative sessions revealed some compelling individual differences—students who didn't fit the pattern—and those differences led us to a some more theoretical insights about this whole process. One mark of success for a collaborative planning session would be effective rhetorical planning that leads to an improved text. However, if we look at this from the

logic of the learner, we see that the job of collaborative planning is not only to build a better representation of a *text*, but to build a better representation of the *task*. For some students who are still working on understanding what purposeful writing entails, the questions, prompts, and response of a partner may be helping develop a new image of goals to shoot for and of the expectations readers have—even when such learning does not lead to changes in the current text.

Secondly, collaborative planning gives us a unique window on some of the social/cognitive dynamics of writing. It lets us see how writers deal with the prompts and responses of readers, in a face to face way, as well as with the projected readers, teachers, critics, and graders student envision. Collaborative planning is a forum in which we can see students trying to "read the context" of school, college writing, this class, this assignment, where we can see interpretations being shaped and tested with a partner. This process shows us how a critical part of the social context in which writers participate is not the context that discourse communities, teachers, assignments *per se* create, but the context writers interpret and represent to themselves.

Collaborative planning shows, I think, that student writers are often engaged in not just "finding" or "expressing" a meaning, but in actively "constructing" what I will call a *negotiated meaning*. Collaborative planning lets us observe some of those moments in when conditions, constraints, and invitations by others, when prior texts and discourse communities, and when the writers' own goals and desires come into conflict or resist an easy integration. At such moments writers are drawn to devote active attention to the dilemmas in shaping knowledge. And we have an opportunity to understand what it means for writing to be an individual, cognitive process of constructing a complex, socially negotiated meaning.

This is a good place to end this essay, but the reciprocity between teaching, research and theory I have tried to highlight with these five snapshots is still very much in motion. Many of the relatively formal investigations described above were shaped in the beginning by informal classroom inquiry; and these studies have in turn led to experiments in teaching. In the same way many of the observations made in this casebook have led not only to immediate changes in practice but to a more general understanding of how different students view planning. They are showing us, for instance, what kinds of knowledge, assumptions, and ways of "reading" a situation students bring to writing. And they reveal different ways students and their partners build negotiated meanings. And finally, they suggest things we as teachers might do to support all of these processes. The particular reciprocity we have tried to achieve in writing these papers is

not just one in which as teachers we *share* stories of effective practice or *use* theory. Our collaborative focus on the theory and issues surrounding collaboration and planning allows our individual and informal observations to contribute to *developing* a broader, more diversely situated theory. And then the process continues: Guided by the observations of this year, I, like the other teachers in this project, have a new snapshot in the making. What would my students actually discover if I made observation-based reflection a key part of my assignments? Would their discoveries about themselves differ from what teachers and researchers have seen? Next year I expect to have some beginning answers.

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A WRITER USING A CONSTRUCTIVE PLANNING STRATEGY

This writer is thinking aloud as he writes a paper on "My Job" for *Seventeen Magazine*. His constructive planning strategy leads him to set his own goals for the "show-me" readers he imagines and to elaborate his intentions with more specific goals and plans for the text. Later he will recall these goals and monitor his progress on goals 48, 49, 50. (As you might predict, goal 52 sounds like a good idea, but turning it into prose leads later to another episode of alternative (and conflicting) "how-to" planning.)

CLAUSE #	COMMENT	ANALYSIS
	<i>Episode 3</i>	
45	All right, I'm an English teacher	
47	I know they are not going to be disposed to hear what I'm saying	AUDIENCE (draws an inference)
48	Partly for that reason and partly to put them in the right—the kind of frame of mind I want	GOAL/AUDIENCE (prepare reader)
49	I want to open with an implied question or a direct one	FORM (develops a skeleton structure for the text.)
50	and then put them in the middle of some situation	
51	and then expand from there more generally to talk about my job more generally	
52	and try to tie it in with their interest	GOAL/AUDIENCE (involve audience)
53	So one question is where to begin	FORM (plans introduction)
54	Start in the middle of—probably the first day of class	
55	They'd be interested	AUDIENCE (draws an inference, links to his goals)
56	They'd probably clue into that easily	
57	because they would identify with the first days of school.	
58	and my first days are raucous affairs	
59	It would immediately shake 'em up	GOALS (develops specific audience goals for the introduction)
60	and get them to think in a different context	

ENGAGED, INVOLVED SUPPORTERS: KEYS TO EFFECTIVE COLLABORATION

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. . . I see all approaches to collaboration as having at least one thing in common: peer support for student writers who are learning and using new concepts. Regardless of the form collaboration takes, the range of supporter behaviors seems to remain the same. Thus, students might be more effective collaborators if they learn more about working with a supporter and as a supporter.

Collaboration in the writing classroom is often viewed as a panacea for the problems students have with the work of writing: identifying fruitful ideas, creating workable plans, generating text, soliciting responses to their writing, and revising their own writing. But as frequently as collaboration works, it also has problems that lead to frustration in both teachers and students. In this paper, I attempt to reduce some of the frustration by cutting across theories, research studies, and disciplines to identify an element of collaboration—the *supporter*—that serves as common ground for exploration, both to advance knowledge of collaboration in writing and to help students be more effective collaborators.

Supporters are collaborators who prompt, challenge, direct, and contribute ideas to writers at any time during the writing process. Supporters can be temporary collaborators (not responsible for generating any text), team members, or coauthors. By defining the supporter as an element in all face-to-face and electronic collaboration, I encourage the development of a consistent vocabulary for describing the actions and interactions of collaborators and for discussing a diverse body of research. Equally important, learning about supporters may help us answer questions not only about how collaborators manage the work of writing and handle rhetorical elements but also how they deal with the context of the collaboration.

Collaboration is based on the idea that working together may be more productive than working individually. Underlying most classroom collaboration is the notion of a *zone of proximal development*, first proposed by Vygotsky in the 1920s, which suggests that support or assistance enables a person to complete tasks that would be too difficult to do individually. Specifically, Vygotsky said that, "The discrepancy between a child's actual mental age and the level he reaches in solving problems with assistance indicates the zone of his proximal development. . . . [T]he child with the larger zone of proximal development will do much better in school" (Vygotsky, 1986, p. 187). A large body of educational research supports the theory and practice of collaboration, of peer supporters who help each other bridge this zone of proximal development by acknowledging their classmates' efforts, offering productive ideas, challenging assumptions and practices, and providing direction (see especially Johnson & Johnson, 1987; Sharan, 1980, 1984, 1990; Slavin, 1980, 1990).

Collaboration is too often spoken of as if it were a single type of activity that writing classes can use. It's not. Great diversity exists not only in what is considered collaborative [e.g., "Students work together in groups to create a single piece of writing (Freedman, 1987, p. 6) versus "Feedback . . . can almost be considered *the* base of collaborative writing" (Gebhardt, 1980, p. 69)], but also in what theorists and researchers choose to investigate. Those investigating collaboration in writing classrooms do not fit neatly and conveniently into a single category. They approach their work with different backgrounds and biases,

creating a rich foundation of theory and research from a variety of allied disciplines, including composition, cognitive psychology, small group communication, education, and social psychology.

In this essay, I propose that the role of supporters is critical for examining this disparate body of theory and research. My rationale for examining supporters in collaboration comes from two sources: first, supporters are a common element across all forms of collaboration, and, second, learning about the relationship level of collaboration has strong pedagogical implications for improving collaboration in writing classrooms. For example, when classroom collaboration doesn't work, teachers often work to reduce frustration by refining the task (Louth, 1989), making it clearer, more directive, more interesting, and so on; however, their efforts might be more productive if they examined the relationships of the collaborators. The notion that collaboration won't work productively and comfortably unless the relationships among the collaborators are strong has been explored at length. Kraut, Galegher, and Edigo (1986) suggest that just as the task level of collaboration proceeds through several stages, so does the relationship; ignoring this relationship imperils the success of the collaboration.

In general, theorists and researchers have identified a number of benefits for writers who work collaboratively, that is with supporters. Observations based on several studies (e.g., Collins, Brown, and Newman, 1989; O'Donnell et al., 1985, 1987; Clifford, 1981) suggest that for mainstream secondary and college writers, working collaboratively with a supporter can be productive. Research in small group communication and social psychology suggests that collaboration will probably be more productive if the task is complex and not centrally structured (Gouran & Fisher, 1985). However, I believe that for less experienced secondary and college writers who tend to neglect rhetorical elements, having a supporter may be helpful even for fairly straightforward or routine writing tasks. Sometimes what is obvious to a teacher or experienced student writer is obscure or even invisible to those who are less experienced. Supporters (even those who are not themselves skillful writers) can help less experienced writers consider elements of writing that usually are ignored or given only cursory attention. Supporters seem to be most helpful if they balance a variety of verbal moves in purposeful sequences, including neutral prompts, challenging questions, and problem-solving that generates suggestions for the writer.

Collaboration takes many forms in English classes: collaborative planning; coauthoring a single document; peer group tutoring, editing, and revising; group investigating and reporting. The structure of collaborative writing groups also varies, from collaborations that are structured by the teacher, with assigned tasks,

roles, and goals and a prescriptive sequence of activities, to those that are structured by the student collaborators to meet a self-defined goal (Higgins, 1988). But despite these differences, I see all approaches to collaboration as having at least one thing in common: peer support for student writers who are learning and using new concepts. Regardless of the form collaboration takes, the range of supporter behaviors seems to remain the same. Thus, students might be more effective collaborators if they learn more about working *with* a supporter and *as* a supporter.

In this essay, I examine the roles that collaborators play as supporters in one form of collaboration, collaborative planning, by focusing on three key areas:

- (1) Defining supporters as unengaged, engaged, or involved
- (2) Identifying a repertoire of verbal moves and scaffolding sequences
- (3) Analyzing supporters' verbal moves and scaffolding sequences

I begin by establishing some broad generalizations about the nature of supporters. Although supporters are common to all collaboration, they differ in the ways they interact with writers. I define supporters as unengaged, engaged, or involved, thus giving teachers, researchers, and theorists a way to characterize and talk about the supporter role. These broad generalizations about supporters can be refined to identify supporters' verbal moves. All supporters, though more typically those who are engaged or involved, have a repertoire of verbal moves that form the components of their interactions with writers. Identifying these verbal moves is important because they provide a way to investigate any number of the broad types of collaboration (Lunsford & Ede, 1990; Morgan, 1988). However, knowing about these moves is not enough for students become effective supporters because in isolation, these verbal moves are inadequate for explaining the interaction of collaborators. I believe students can become effective supporters by learning ways to put these verbal moves together—integrating the components into larger patterns of interaction so that they create productive sequences of questions and then building on as well as contributing to the writer's plan. Learning to consolidate their repertoire into purposeful sequences can help students analyze what they *are* doing as supporters as well as anticipate what they *can* do.

DEFINING SUPPORTERS:

UNENGAGED, ENGAGED, OR INVOLVED¹

All supporters in collaboration in writing are not equally successful. In this section of the essay, I examine the interplay of *engagement* and *involvement* as two primary distinctions between unsuccessful and successful supporters. I define engagement as the attention a supporter gives to a writer, determined by comments and questions that indicate active listening. In-

volvement requires engagement, but it moves beyond by making the supporter an active participant who challenges the writer and offers thoughtful, purposeful, and productive contributions. I explore distinctions between ineffective supporters who are generally neither engaged nor involved and effective supporters who are generally engaged or involved.

UNENGAGED SUPPORTERS. Unengaged supporters are not active participants in the planning. They often don't listen carefully to writers, and they often move through a series of questions that they haven't tailored to the specific writer or task. They don't see themselves as collaborators who have an important role in helping writers shape their plan. As a result, they make few relevant or productive contributions and seldom probe or challenge inadequately developed ideas raised by writers.

Example 1, an excerpt from the collaborative planning session between two high school sophomores, clearly shows that the supporter, Clay, is unengaged. The writer, Avery, is planning an extended definition paper; he has selected root beer as his subject. In the excerpt, the conversational turns are labeled and numbered. (Throughout this essay, *S* will stand for supporter and *W* for writer.) The excerpt begins on conversational turn 23 of the planning session.

- [W]hat is the reader going to remember most from this paper? (S23)
- Do all the other points refer back to the main point? (S23)
- Audience, who are you talking to? (S27)
- What kind of language is appropriate for this audience? (S31)
- What will this audience find interesting? (S33)
- And text conventions. How long? (S35)

The questions themselves aren't the problem; if adapted to a specific writing task, they're appropriate questions that could generate useful planning information. Nor is the fact that the teacher provided a list of questions a problem; in fact, inexperienced collaborators often benefit by having generic questions that they can adapt and build on. The problem occurs in the way Clay uses the questions, as a list to be completed as quickly as possible rather than as a jumping-off point to explore the rhetorical elements of Avery's plan. Clay is a perfunctory supporter, never taking time to ask for elaboration, to probe and challenge, or to offer his own suggestions. He offers very little reinforcement to Avery; his only prompts label rhetorical topics (e.g., audience, language) rather than eliciting critical information about them. Clay is not even an active listener, and he does nothing to support Avery in moving beyond his superficial approach to the assignment.

S23	Clay	Um, what is the reader going to remember most from this paper? <i>[deleted off-topic comments]</i> Do all the other points refer back to the main point? Your main point that you love root beer?
W24	Avery	Yes. I think they do.
S25	Clay	Everything evolves around root beer.
W26	Avery	Yeh, I think, yeh, that works.
S27	Clay	Audience, who are you talking to? Your peers? Talking to someone. Your peers.
W28	Avery	Yeh, why?
S29	Clay	'Cause we have to.
W30	Avery	Why? Because root beer is good, and I feel everyone else should like it, too.
S31	Clay	Good. What kind of language is appropriate for this audience?
W32	Avery	Normal language.
S33	Clay	Don't worry about that. What will this audience find interesting? Your love for root
W34	Avery	Yes. They'll find it interesting and go out and buy a can.
S35	Clay	All right. Okay. And text conventions. How long?

EXAMPLE 1: EXCERPT FROM A COLLABORATIVE PLANNING SESSION WITH AN UNENGAGED SUPPORTER²

Unfortunately, throughout their planning, Clay and Avery depend solely on a teacher-generated list of suggested questions, which they do not adapt to their particular situation although they have been taught to do so; they never have any productive discussion about Avery's plan. Clay never even questions the appropriateness of the subject; instead, he moves through a series of generic questions:

Clay appears disinterested; he does not show any interest in helping Avery plan a better paper. As he goes through the superficial motions of being a supporter, Clay does nothing to make the activity productive for himself or Avery, and, in fact, appears to be ignoring, misunderstanding, or rejecting the potential benefits that accrue from working with and as a supporter. He appears to have no purpose other than getting through with the list of questions.

ENGAGED SUPPORTERS. In contrast to the disinterest of unengaged supporters, engaged supporters demonstrate their interest and attention by listening carefully and encouraging the writer to explain and clarify the plan. They generally provide clear indications that they are actively listening and trying to help the writer deal with rhetorical elements such as purpose, audience, and organization. Typically, engaged supporters encourage the writer to explore the plan by asking questions that require elaboration.

The excerpts in Examples 2A and 2B show two college students working in a collaborative planning session. Example 2A begins at conversational turn 5. Paula, the writer, is a senior working with her graduate-student supporter, Chuck, on a proposal for her business communication class in which she wants to recommend that a company change the way its products are packaged.

adapting questions about rhetorical elements to this specific situation. For example, he asks Paula to imagine that he is her audience who needs to be convinced about her recommendation:

Okay, why don't you, like I'm your audience, convince me now how . . . [that evidence leads] to the recommendation of going into plastic. . . (S33)

And a few turns later he asks her how she is going to present her recommendation, softening it for the probably negative readers she is addressing

How are you going to present this recommendation to soften it . . . ? (S47)

This is no cookie-cutter series of questions; Chuck is an engaged supporter who helps Paula consider her audience, support, and manner of presentation with his focused attention, and tailored questions. He's effective, and he makes a difference because he helps her consider rhetorical elements that influence the way she plans her recommendation.

- | | | |
|----|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| S5 | Chuck | What kind of support will you have for that [recommendation] or what will you say to try to convince them of that? |
| W6 | Paula | The decline in the market share, by showing them the market share graphs. |
| S7 | Chuck | Okay, and you think that has to do with—? |
| W8 | Paula | The change in consumer needs. |
| W9 | Chuck | Okay, how do you think your audience, how do you expect your audience will react to that? What will be some of their reactions, and how will you deal with those? |

EXAMPLE 2A: EXCERPT FROM A COLLABORATIVE PLANNING SESSION WITH AN ENGAGED SUPPORTER

Unlike Clay in Example 1 who is unengaged and reads a lock-step series of questions, Chuck is an engaged supporter who invites response. In the brief excerpt in Example 2a, he encourages Paula to consider the supporting evidence she might use (S5) and pursues issue of evidence by asking her what the evidence "has to do with—?" (S7). He urges Paula to elaborate, providing specific questions

. . . What will be some of their reactions, and how will you deal with those? (S9)

without inserting his own suggestions or opinions. Chuck is effective in getting Paula not only to consider her evidence, but to relate her selection, presentation, and adaptation of that evidence to the audience who'll read her recommendation. He asks her to establish connections between the rhetorical elements she is considering.

Chuck continues, in Example 2H, by urging Paula to clarify and elaborate her positions, but he does not add his own views. (Note: See the next page for Example 2B.)

As an active listener, Chuck accurately summarizes the position Paula has presented (S31). He does not ask generic questions as did the unengaged supporter in Example 1; instead, Chuck is engaged,

Paula however, wants more. In an interview after the proposal was completed, she commented that she wished her supporter had "told her more," helping her identify the weaknesses in her plan and suggesting ideas for a stronger, more feasible solution.

After she completed the assignment, Paula said she wanted her supporter to assume the role of critic and devil's advocate. For example, Chuck does not prompt Paula to identify any problems with her recommendation for moving from cardboard to plastic (e.g., enormous costs to the environment as well as in raw materials, manufacturing retooling, and personnel retraining). Nor does he prompt her to consider alternatives. In short, although Chuck is an engaged supporter, Paula wants a supporter to be involved in contributing to the development of her plan.

In a retrospective reaction in which she commented about the collaborative planning session with Chuck, Paula observes that working with a supporter did not by itself give her a workable plan; instead, it acted as a stimulus:

Most of my ideas came after the meeting with the supporter. It was then that I spent the longest time thinking about this paper. I began to question whether my evidence could support my ideas. I

- S31 Chuck Okay, your . . . general recommendation is to go from cardboard into plastic, and your supporting evidence is the graph about the projected per capita beverage consumption and projected per capita fruit consumption.
- W32 Paula Uh-huh.
- S33 Chuck Okay, why don't you, like I'm your audience, convince me now how . . . [that evidence leads] to the recommendation of going into plastic. How are you going to use, uh, follow that argument? Do you understand what I mean?
- Intervening turns clarify what Chuck is asking Paula to talk about.*
- W38 Paula I think plastic would be cheaper and, um, cleaner, not as messy ripping and—
- S39 Chuck Uh-huh.
- W40 Paula It doesn't destroy as easily, like it doesn't, like a lot of times when you pick up milk, it's wet at the bottom.
- S41 Chuck Uh-huh.
- W42 Paula It seeps through; plastic wouldn't. It would be better, and um, I'm gonna have to think about that.
- Intervening turns focus on the resistance her plan will meet in this family-owned business.*
- S47 Chuck How are you going to present this recommendation to soften it . . . ?
- W48 Paula Not demand it; suggest it.

EXAMPLE 2B: EXCERPT FROM A COLLABORATIVE PLANNING SESSION WITH AN ENGAGED SUPPORTER

also began to brainstorm other possible recommendations.

Clearly, then, working with a supporter helped Paula, but for her it seemed to be a starting place that helped her to focus and articulate her plans and reminded her to keep her probably negative readers in mind. After the collaborative planning session she continued to examine her plan, evaluating what she and Chuck had discussed. Eventually, she developed a workable plan that resulted in a good proposal; however, Paula believed that she could have created a plan more quickly if her supporter had taken a more active role by voicing criticism and offering suggestions.

INVOLVED SUPPORTERS. What Paula wanted was a supporter who was not only engaged, but who was also involved, that is, one who not only prompted and commented but also contributed and challenged. Involved supporters are engaged, but they also help a writer develop and elaborate a plan by not only asking effective questions about rhetorical concerns, but also by playing critic and devil's advocate, by prompting a writer to consider alternatives, and offering suggestions. For example, involved supporters offer comments that help the writer think about the plan's strengths and weaknesses, often suggesting relevant contributions to improve the plan. They do more than encourage the writer to explore; they ask probing questions and challenge the writer. They demonstrate their attentiveness and engagement by building on the writer's ideas and responses and by providing the help an inexperienced writer may need to reach a more advanced level of managing the rhetorical elements of her plan.

Engaged and involved supporters are *not* on a hierarchy; both kinds of supporters are equally important. For some situations, being an engaged supporter is appropriate. For example, assuming the role of an engaged supporter is a good starting place for inexperienced collaborators because offering prompts and comments is far easier than playing devil's advocate or making productive contributions. Acting as an engaged supporter is also appropriate if the writer needs a sense of control and would feel intimidated by the supporter's contributions or challenges. However, effective supporters soon discover that writers sometimes get off task, lose sight of their objectives, or run out of steam; in such situations, writers generally respond positively and productively to a supporter's contributions and challenges. Typically, an effective supporter (engaged and involved) often initially takes the role of an engaged supporter, allowing the writer to assume the authority of the session and set the agenda, and then integrates the role of an involved supporter by contributing and challenging.

Example 3 shows two college students working on the same assignment as Paula and Chuck. The writer, Jason, is a senior working with his graduate-student supporter, Darryl, on a proposal for his business communication class. Darryl is an involved supporter who contributes and challenges as they consider the audience for a report to recommend that the company change the way its products are packaged. The excerpt, which has been edited to eliminate repetition and elaboration, begins with the writer, Jason, on turn 6 of their collaborative planning session.

W6 Jason	I'm taking [<i>the task</i>] from the vantage [<i>of my position in public relations</i>] and addressing the report to the management group— [<i>omitted remarks about the audience</i>]
S23 Darryl	... One thing I was thinking is you might want to think about the other people in the public relations group ... [S25] as probably not the primary audience, but it probably is a secondary audience, because if you propose some new packaging sort of thing—
W26 Jason	Uh-huh.
S27 Darryl	You know, you might propose something that has an environmental impact.
W30 Jason	Right, so maybe I should be a little bit more tactful when I bring up new ideas within the project, or what are you suggesting about that?
S31 Darryl	I think I'm suggesting that your primary audience is probably right, but you don't want to just focus on them because chances are people within your own division or even in other divisions, it might be useful to anticipate counterarguments but, uh, things that they're really responsible for that might affect what you do. Say, for example, I'm sure there's somebody involved in advertising or sales—
W32 Jason	Oh, sure.
S33 Darryl	—that might impact your work, so it might be useful to think of them as audience as well.

EXAMPLE 3: EXCERPT FROM A COLLABORATIVE PLANNING SESSION WITH AN INVOLVED SUPPORTER

Clearly, Jason understands the task and has a clear sense of the primary audience, but hasn't yet considered the important secondary audience. Darryl, an involved supporter, waits until Jason demonstrates control of the situation and then, in turn 23, makes his first substantive contribution. He does more than prompt Jason (which an engaged supporter would do); instead, he challenges Jason to extend his sense of audience, and then he contributes a specific suggestion:

... you might want to think about ... people in the public relations group ... [S23] as probably ... a secondary audience. ... (S25)

Then Darryl reinforces his idea by suggesting an appropriate reason for identifying and addressing a secondary audience:

You know, you might propose something that has an environmental impact. (S27)

Jason agrees with Darryl about the importance of the secondary audience and recognizes that this modification will influence the way he presents the report; he suggests, "... maybe I should be a little bit more tactful" [W30]. Darryl reinforces Jason's ideas about the management group as the primary audience for the report, but challenges Jason not "to just focus on them" [S31] and contributes another idea by urging Jason to consider the usefulness of imagining a broader audience.

Not all involved supporters are as skillful as Darryl. The excerpt in Example 4 is more typical, showing two twelfth graders who are working on the writer's plan for a paper defining a hero. Lisa, the supporter, works with Shauna, the writer, who is planning to focus her paper on Gandhi. The excerpt in Example 4, (*next page*) from their second collaborative planning session, has been edited to delete some of their detailed elaborations and off-topic comments about lunch.

Although not as experienced as Darryl, Lisa is an involved supporter, prompting Shauna to be decisive about her point that "if someone's a hero, they've made a good change for themselves and other people" (W39); Lisa wonders if everybody can be heroic and admonishes Shauna to "... take a stand" (S40). Clearly, Lisa is listening and thinking about Shauna's plan because when Shauna responds that heroes could "make a change for themselves" (S41), Lisa makes a specific contribution, suggesting that "... you could fit that into your research, too. . ." (S42). A few turns later, Lisa reminds Shauna of a point she made earlier in the planning session about heroes acting unselfishly

Wait, you said [earlier], he— when's somebody is heroic, they are unselfish. They do it for themselves, but they are doing it for everybody. (S46)

and pushes Shauna to reconcile this point with the idea of doing something for themselves:

They can do it for themselves, too, though? (S48)

Lisa helps Shauna think about the problem of whether heroic actions can help the hero as well as others and suggests that maybe "anybody could be like Gandhi if they wanted to" (S52). Lisa then pursues whether there are "lots of methods for change" (W56) and encourages Shauna to explain Gandhi's nonviolence and then introduces the problem of whether a hero would ever use violence:

Why do you think Gandhi chose that method of change. I mean why do you think he chose to starve himself rather than do other things? (S58)

... He did it and it was non-violence. That was really good. Do you think that somebody who uses violence to change things, do you think he's less of a hero? (S60)

Lisa makes important contributions to Shauna's plan by pointing out potential contradictions and encouraging Shauna to synthesize her points.

- W39 Shauna I just think that if someone's a hero, they've made a good change for themselves and other people. I mean it doesn't have to be and other people because I think that everybody can be heroic.
- S40 Lisa You think that everybody can be heroic? Let's take a stand.
- W41 Shauna Yeah, I think that everybody can be heroic, I mean if they make a change for themselves and it's for the better.
- S42 Lisa Yeah, you could fit that into your research, too, somehow. You could say, like—
- W43 Shauna Yeah, I could talk about how [Gandhi] changed, wanted it for himself, too. And that could be a hero.
- S46 Lisa Wait, you said [earlier], he— when's somebody is heroic, they are unselfish. They do it for themselves, but they are doing it for everybody.
- W47 Shauna Yeah, but they don't have to just do it for everybody.
- S48 Lisa They can do it for themselves, too, though?
- W49 Shauna If you're heroic and are making a change, yeah. I don't consider that being selfish, if you're making a change for everybody—
- S52 Lisa Yeah, that's right. You could include that and maybe you could include toward the end that maybe anybody could be like Gandhi if they wanted to.
- W53 Shauna If they put their mind to it.
- S56 Lisa So you think that there's lots of methods for change?
- W57 Shauna Lots of methods for change? Oh my God yes. Excuse me. I mean there has to be, yeah.
- S58 Lisa Why do you think Gandhi chose that method of change. I mean why do you think he chose to starve himself rather than do other things?
- W59 Shauna Well, violence didn't get him anywhere. And plus, people could fight back anyway. And he just wanted to show people that you know, everybody could be independent. That's what I think for the time being. You know, I could change that later.
- S60 Lisa He did it and it was non-violence. That was really good. Do you think that somebody who uses violence to change things, do you think he's less of a hero?

EXAMPLE 4: EXCERPT FROM A COLLABORATIVE PLANNING SESSION WITH AN INVOLVED SUPPORTER

IDENTIFYING A REPERTOIRE OF VERBAL MOVES AND SCAFFOLDING SEQUENCES

The value of effective peer supporters in writing comes not from their great knowledge of content or tremendous skill in managing rhetorical elements, but, I believe, from their ability to assume a role that encourages, reinforces, and challenges the writer. Engaged supporters provide a second (or even third) voice, an external perspective that helps the writer gain control over the writing task and make decisions about relevant rhetorical elements. In addition, involved supporters also contribute to a writer's plan, offering new ideas as well as modifying, elaborating, and challenging the ideas.

The critical role of supporter is described in some way in nearly all of studies about collaboration. In this section of the essay, I review selected studies that deal with collaboration in writing to order to discuss the repertoire of verbal moves and scaffolding sequences that supporters use. In the first subsection that follows, I define kinds of verbal move and then cite studies that include supporters who use this move in some collaborative writing task. In the second subsection, I

suggest that scaffolding is the consolidation of verbal moves and present three classroom applications of scaffolding.

VERBAL MOVES IN COLLABORATION

Identifying the verbal moves supporters use, regardless of the kind of collaborative writing activity they are engaged in, gives us a way to examine any collaborative interaction. In this section, I focus on four categories of verbal moves that are present both in naturally occurring conversation and in planned collaboration:

- prompting the writer
- contributing information to the writer
- challenging the writer
- directing the writer

These four verbal moves are easily distinguished; I discuss them separately in order to highlight their distinctions. In an effort to become more effective supporters, students can learn to identify these moves in their own collaborative sessions, both to track the nature of their own verbal behavior and to help them make decisions about possible changes in their plans and text.

Engaged and involved supporters draw from a repertoire of verbal moves as they interact with writers. Seldom do these effective supporters use only one kind of move; most exhibit a balance. The choices supporters make depend on a number of variables: the goals of the collaborative session, the needs of the writer, the receptiveness of the writer, the task they're working on, the time available, their interpersonal relationship, and the experience and skill of the supporter. Several ways exist to categorize the content and linguistic function of these verbal moves. The content of supporters' verbal moves can be categorized according to task, group process, or rhetorical aspects of the text (cf. Gere & Stevens, 1985), while the linguistic functions include moves such as informing, contributing, directing, and challenging (cf. Gere & Abbott, 1985). Typically, the linguistic functions of engaged supporters include prompting and sometimes challenging writers, while the moves of involved supporters generally include contributing information, directing, and challenging writers.

OFFERING PROMPTS. Prompts are important, but often overlooked, supporter moves that consist primarily of neutral comments, encouraging comments, and clarifying questions that urge writers to say more, both about plans and about actual text. Such simple prompts as "Tell me more" and "What else could you consider?" as well as "Yeah, I see," "uh-huh," and "umm-uh" seem to encourage writers to keep talking about their planning and writing. For example, in a study that examined whether young children could engage in sustained planning, Scardamalia & Bereiter (1987) used a prompting strategy called "procedural facilitation." They reported that when young children receive planning cues for writing, they move beyond the "what next" strategy to attempt sustained planning.

Not only do prompts help, but specific kinds of prompts help more, as Matsushashi and Gordon (1985) reported in a study with college students. Some words and phrases seem to promote higher quality responses than others; for example, the more specific and directive prompt, "Add things to improve your essay," resulted in better revised texts than the prompt, "revise." Clearly then, simple prompts by supporters can stimulate more planning, and specific prompts seem to improve revision strategies.

While just asking a writer to "say more" is often valuable, prompts can sometimes be very assertive without making a contribution to content, as when Lisa prompts Shauna, "Let's take a stand" (Example 4). And prompts can be very sophisticated, as when Chuck said to Paula, "Okay, why don't you, like I'm your audience, convince me now how . . . [that evidence leads] to the recommendation of going into plastic" (Example 2b). A supporter who wanted to remain as neutral as possible could use prompts that, modified to specific situations,

would encourage writers to elaborate.

Prompts are useful skills for all supporters. They are a good beginning for inexperienced collaborators, but they are also integral for very skillful engaged and involved supporters.

CONTRIBUTING INFORMATION. While prompts tend to be neutral, offering little in the way of specific information, another important category of supporter moves provides writers with facts, observations, and suggestions. The information can also be a summary, synthesis, or a metacognitive reflection about the group, task, or text. In research with writing groups, Gere and her colleagues have identified "providing information" as one of the "three major language acts of functions" (Gere & Abbott, 1985, p. 367) students use in collaboration. Two related studies (Gere & Abbott, 1985; Gere & Stevens, 1985) report that the most frequent comments that supporters made informed writers about the content although some comments were made about context, form, process, and earlier remarks.

Students contribute information for social as well as cognitive reasons. Because "all cooperative learning share the idea that students work together to learn and are responsible for their teammates' learning as well as their own" (Slavin, 1990, p. 3), I believe that encouraging students to contribute information can reduce the likelihood that a student will be perceived as a "free-rider" (p. 16), which is a common frustration teachers encounter in their classes.

Peer group tutoring and related peer group activities such as editing and revising depend largely on sharing information; a variety of cooperative learning methods presume that student partners and teammates will contribute information to the dyad or group (Sharan, 1980), which is considered an essential part of the collaborative effort. Some of the excerpts from the collaborative planning sessions presented earlier in this essay provide examples of contributing information. A potentially fruitful contribution comes from Lisa who defines Gandhi's behavior as non-violent and asks Shauna to consider the relationship between heroism and violence. Without an exchange of information, whether summaries or provocative opinions, a collaborative effort is seriously hampered.

CHALLENGING THE WRITER. A highly productive supporter move involves asking critical questions, suggesting alternatives, and arguing opposing views. Gere and Abbott (1985) identify eliciting responses as a third category of language function that they observed in supporters. Although the eliciting comments they identified generally dealt with content, the comments also considered process, form, context, and reference to previous comments.

Little attention has been given in composition research to the value of supporters or to the importance of providing multiple perspectives, alternatives, and conflict; however, work in related disciplines (e.g., composition, cognitive psychology, small group communication, education, and social psychology) reinforces the importance of this kind of supporter behavior. For example, Putnam (1986) argues that substantive conflict about the issues and ideas under consideration can be highly productive. Slavin (1990) notes that the ability to take another perspective in a cooperative learning situation has benefits beyond the specific task; students generally demonstrate more positive social behavior by being more cooperative or altruistic. Sharan (1980) suggests that one critical distinction of group investigation is the problem-solving nature of the collaboration, which includes "critical interpretation of information" (p. 265).

A pair of exploratory studies (Burnett, 1988a, 1988b) investigated differences between working with supporters who offered neutral prompts versus supporters who challenged writers and contributed to their plans. These studies examined whether writers would respond differently to *neutral, clarifying supporters* (who asked questions such as "Could you explain the relation between X and Y?" or "How else might you explain this?") and to *challenging, problem-solving supporters* (who asked questions such as "I sense a conflict between X and Y. How are you planning to resolve it?" or "Have you considered using Z as a way to explain this?"). Clarifying supporters were instructed to ask only neutral questions that encourage the writer to *clarify* and elaborate, whereas problem-solving supporters were instructed to also *challenge* the writer's plan and *contribute* in ways that might improve it. Although writers responded to both supporters, they talked more with problem-solving supporters, especially about purpose and design and asked more questions about all rhetorical elements of their plan. Even though the clarifying supporters were able to get writers to comment more about development and synthesis of their document than the problem-solving supporters, the writers said they preferred working with the problem-solving supporters, who seemed more involved.

Involved supporters typically use prompts and often contribute in creative ways to a writer's plan, but they also actively challenge the writer. For example, Lisa challenged Shauna to rethink the role of selfishness in defining a hero (Example 4), which resulted in Shauna's revision of her plan. Supporters who challenge writers may do so because they recognize that the plan is flawed or skimpy, or they may simply have an insatiable curiosity or some deep-seated philosophical disagreement, or they may simply recognize the benefits that can accrue from playing devil's advocate.

DIRECTING THE WRITER. Another supporter behavior involves directing the writer to modify plans and or text by adding, changing, or deleting. Gere and Abbott (1985) report that directive comments, focused particularly on process, are the second largest category of supporter behavior. In a related study, Gere and Stevens (1985) report clear instances of students who are directive, sometimes politely and productively, but sometimes aggressively, even to the point of insult.

However, other research indicates that directing the writer is not a wide-spread student behavior in collaborative groups. For example, Freedman (1987) reports that students avoid evaluation of each other's writing, often negotiate conflicting answers on their writing activity sheets, and "rarely offer writers suggestions or advice" (p. 26), except in cases involving mechanics and form.

In collaborative planning, supporters occasionally are directive. Example 4, presented earlier in this essay, shows Lisa being gentle as she directs Shauna to "include toward the end [the point] that maybe anybody could be like Gandhi if they wanted to." As supporters get more comfortable with each other, they often find that occasional directive comments are an effective short-cut, eliminating a lengthy exchange that would end up with the writer agreeing with the supporter.

SCAFFOLDING IN COLLABORATION

These verbal moves—prompting the writer, contributing information to the writer, challenging the writer, and directing the writer—don't work effectively in isolation; they need to be combined into purposeful sequences, that is, scaffolding sequences.

Scaffolding is something that teachers often think of in terms of behavior they use with their students, but effective student collaborators also use scaffolding with each other. Scaffolding sequences are constructed by consolidating the basic verbal moves of prompting, contributing, challenging, and directing. Scaffolding was described by Bruner (1978) as a strategy in which capable peers helped their classmates extend their zone of proximal development. These scaffolding sequences are explicitly based on Vygotsky's notion that a supporter who provides assistance (i.e., scaffolding) enables a person to complete tasks that would be too difficult to do individually. A supporter—a classmate, teacher, parent—may be more knowledgeable or experienced with the specific task and, thus, provides scaffolding so that the student can understand the process and successfully complete the task. Or, a supporter may be a peer who is trained to remind the writer to consider and reconsider rhetorical elements that are not typically considered by writers at that particular level of development or experience.

While most collaborative relationships provide support that enables writers to accomplish goals that

they couldn't achieve alone, the support may be unsystematic; in contrast, scaffolding provides systematic sequences. Although scaffolding is present in naturally occurring conversation, in classrooms it is typically planned and usually the result of specific training. Naturally occurring scaffolding might take the form of a mother helping her young child move from saying, "Cookie!" to saying, "May I have a cookie, please?" In classrooms, scaffolding might take the form of a peer supporter using a series of carefully sequenced prompts and questions to help a classmate solve a problem (Brown & Palincsar, 1989).

Applebee and Langer use "the notion of instructional scaffolding as a way to describe essential aspects of instruction that are often missing in traditional approaches [to writing]. In this view, learning is a process of gradual internalization of routines and procedures available to the learner from the social and cultural context in which the learning takes place" (Applebee, 1986, p. 108). Working with a skillful supporter during collaborative planning can provide a writer with the scaffolding necessary to plan and draft more skillfully than she could have done independently. The scaffolding enables a writer to consider rhetorical elements and interrelationships among these elements that might otherwise be ignored.

The three collaborative pedagogical approaches discussed below—*reciprocal teaching*, *apprenticeship learning*, and *collaborative planning*—are intentionally, explicitly, and systematically built on scaffolding.

RECIPROCAL TEACHING. One form of scaffolding is *reciprocal teaching* (so called because the teacher and student take turns playing roles of the supporter who provides the scaffolding). It is a cooperative learning technique whose goal is to help students understand and recall text content through scaffolding. Even very young students are able to be successful supporters when the scaffolding role has been sufficiently modeled for them (Palincsar, 1986). "The group provides social support, shared experience, and role models. . . . [T]he teacher [or the student in the role of teacher] provides expert scaffolding. . . ." (Brown & Palincsar, 1989, p. 413) For example, once students understand the way to lead a discussion about a new text, they take turns with the teacher in leading discussions that routinely include four strategic activities: questioning, clarifying, summarizing, and predicting. "The procedure was designed to create a zone of proximal development for learners and to embody expert scaffolding and a cooperative learning environment. . . . The goal is joint construction of meaning" (p. 414). The sequence used in reciprocal teaching is one supporters may use, urging writers to question their own plan, clarify vague or ambiguous points, summarize and synthesize their plan, and predict audience reactions.

APPRENTICESHIP LEARNING. Another form of scaffolding is *apprenticeship learning* (Collins, Brown, & Newman, 1989), which "embeds the learning of skills and knowledge in their social and functional context" (p. 454). The apprenticeship method is "aimed primarily at teaching the processes that experts use to handle complex tasks" (p. 457). Traditional apprentices learn through "observation, coaching, and practice, or what we, from the teacher's point of view, call modeling, coaching, and fading" (pp. 455-56). Collins and his colleagues argue that writing is a skill particularly well-suited for apprenticeship learning and cite as evidence Brown and Palincsar's work in reciprocal teaching, which is centered on modeling and coaching, as well as Scardamalia and Bereiter's work in procedural facilitation. Procedural facilitation provides student writers with planning cues that model, coach, scaffold, and fade, in order to help them evaluate, diagnose, and revise their writing. Collins and his colleagues identify six teaching ways to use the apprenticeship method in the classroom: modeling, coaching, scaffolding, articulation, reflection, and exploration. Although they discuss how these methods work when a teacher is working with students, several of the methods could work equally well, with little modification, when students act as each other's supporters.

COLLABORATIVE PLANNING. A third form of scaffolding can be seen in *collaborative planning*, the form of collaboration that is illustrated in all the examples in this essay. As the examples of engaged and involved supporters show, in this loosely structured planning process, a writer explains and elaborates a plan to one or more supporters. Collaborative planning is based on research that describes constructive planning, one of the executive planning strategies used by experienced writers as they consider a range of rhetorical elements when planning to write (Flower, Schriver, Carey, Haas, & Hayes, 1989b). As the examples in this essay clearly show, the scaffolding in collaborative planning is both social and instructional. A writer works with a supporter who provides encouragement and as well as prompts, contributions, and challenges that help the writer explore and link rhetorical elements such as purpose and key point(s), audience, and organization rather than concentrating on content. Typically, the students switch roles, so that each student gets the opportunity to be a supporter, and each receives the benefits of having help in developing a plan. The aim of collaborative planning is to build a richer network of goals and possibilities, identifying and solving problems that can arise in planning. Students from fifth grade through graduate school appear to gain some benefit from collaborative planning—both working with a supporter and as a supporter (Flower, Burnett, Hajduk, Wallace, Norris, Peck, & Spivey, 1989a).

ANALYZING SUPPORTERS' VERBAL MOVES AND SCAFFOLDING SEQUENCES

In order to learn to be effective supporters, both engaged and involved, students need to consolidate their repertoire of verbal moves into larger patterns of interaction. As the preceding section of this essay illustrates, supporters can use many different discrete, definable moves that work together to create purposeful sequences. Effective supporters—those who are engaged and involved and have a repertoire of verbal moves and scaffolding sequences—can help writers manage both the task and the rhetorical elements of writing.

This section of the essay discusses and illustrates three important ways supporters can use scaffolding sequences of moves: asking a sequence of good questions, encouraging the writer to build on and elaborate ideas, and contributing useful suggestions to the writer's plan. These consolidations have been identified by reviewing the collaborative planning sessions (in-class observation, video tape, audio-tape, or transcriptions of the sessions) of many high school and college students involved in collaborative planning.

ASKING A SEQUENCE OF GOOD QUESTIONS

Asking a sequence of good questions is one important way a supporter can consolidate moves—not framing one or two good questions, but developing a *sequence* of good questions. Much of the research discussed in the preceding section stresses the importance of questions. For example, a diverse group of researchers in collaboration—Geer and her colleagues (1985, 1985), Matsuhashi and Gordon (1985), Scardamalia and Bereiter (1987), Burnett (1988a, 1988b), Dipardo and Freedman (1987, 1988), Brown and Palinscar (1989), Collins, Brown, and Newman (1989), Sharan (1990), and Slavin (1990)—all indicate that questioning plays a critical role in successful collaboration. Additionally, observations of collaborative planning sessions indicate that learning to ask good questions is one area students consistently need help with.

Examining the questions a supporter asks—without the responses the writer makes—can be very helpful in assessing the effectiveness of a supporter. The excerpt in Example 5 provides the questions and comments of an effective supporter, a high school senior, as he works with a particularly unfocused writer, a classmate planning a character sketch of her eighth-grade teacher.

In Example 5 (*on the next page*), the conversational turns are numbered and the responses of the writer have been deleted, leaving only an edited sequence of the supporter's questions; the excerpt begins on turn 11 of the collaborative planning conversation. The example shows an effective (engaged, involved) supporter who uses a variety of moves as he offers content

and planning prompts, general encouragement, content suggestions, critical observations and challenges, and gentle direction. The questions in Example 5 are boldfaced so they're easy to identify. (*Note: Please read Example 5 on the next page before reading the following discussion.*)

The supporter's questions to his classmate range from those seeking facts and elaboration (S13) to those encouraging the writer to consider important or difficult issues:

So what are you going to do with the fact that he punched this kid when he lost his temper? (S39)

The supporter's comments show him making thoughtful responses, from neutral prompts designed to elicit clarifying explanations—"Well, how..., okay, go ahead, tell me some more" (S11)—to synthesizing questions:

So you think he was a teacher who was not just concerned with his content, but he was concerned with kids? (S17)

The supporter offers his opinion in a variety of ways, from brief positive remarks (S19) to gently phrased disagreement in a question:

Well, I don't know if you want to ignore that. Do you really want to ignore that? (S41)

The supporter also makes important contributions to the writer's plan by asking questions that focus on the positive and negative aspects of the teacher's character

Well, do you think his methods came as a result of well thought out planning because he really wanted to move from the textbook and really see real life application, or do you think he was lazy and it was easier to come in, rather than giving good content, it was easier to come in and just say, you know, talk about feelings? (S55)

The supporter uses questions to urge clarification, offer contributions, make direct suggestions, and issue challenges, all of which help the writer to develop a more complete picture of the teacher she wants to describe.

ENCOURAGING THE WRITER TO BUILD ON AND ELABORATE IDEAS

Another way supporters can help writers is to encourage them to build on and elaborate their own ideas, a behavior stressed by a number of researchers (e.g., Burnett, 1988a, 1988b; Brown and Palinscar, 1989; Collins, Brown, and Newman, 1989; Sharan, 1990; and Slavin, 1990). The supporters' sequence of prompts, comments, questions, and directions should be built on the ideas presented by the writer. Observations of students in collaboration planning sessions suggest that writers are less responsive to supporters who ignore the writer's ideas.

In Example 6, an excerpt from a collaborative planning session of three high school students planning their character sketches, shows the questions of the two supporters and the responses by the writer. Penny, the writer, is working on her plan with supporters Casey and Jason. Penny has decided to write her

- S11: Well, how - okay, go ahead, tell me some more.
- S13: Well, I'm really not sure about your impression of this guy. Did you say earlier that he prepared you for high school?
- S17: So you feel like he was a teacher who was not just concerned with his content, but he was concerned with kids?
- S19: Now that's interesting. Are you saying that he lacked content?
- S23: It sounds like you appreciated him as a person in the interaction—you never met anybody like him. But I'm not sure what you learned besides getting a sense of your identification with the world and universal principles of peace and justice—
- S29: I can see how on one hand like he offered these things that other people didn't, but at the same time, was he helping you improve your skills?
- S39: So what are you going to do with the fact that he punched this kid when he lost his temper?
- S41: Well, I don't know if you want to ignore that. Do you really want to ignore that?
- S55: Well, do you think his methods came as a result of well thought out planning because he really wanted to move from the textbook and really see real life application, or do you think he was lazy and it was easier to come in, rather than giving good content, it was easier to come in and just say, you know, talk about feelings?
- S59: It sounds like you're still confused about this guy. You might use him as a symbol of what a good teacher is and is not. I mean, it could be that he was both a bad and a good teacher, that there was some aspects of his teaching that other teachers don't have that was good, but that the fact that he neglected content wasn't so good either, and they have to go hand in hand. I mean you could reach—through this character sketch, I'm saying—you could reach a decision about teaching as a profession. You could use this character to build a conclusion about what good teaching is.

EXAMPLE 5: A SEQUENCE OF QUESTIONS ASKED BY AN EFFECTIVE SUPPORTER

character sketch about Milancho, her exchange student "sister" whom she spent ten months with during the previous school year. At the beginning of the planning session, Penny considers what she should focus on: the adjustment of having a sibling? Milancho's influence on her? traits of Milancho? In Example 6, Penny's supporters encourage her to select a specific characteristic. (*Note: Example 6 is on the next page. Please read it before reading the following discussion.*)

Casey prompts Penny to focus on a dominant characteristic, a necessary initial step for writing a character sketch:

But what's her dominant characteristic? Is it about her kindness as a sibling, or about her? (S17)

Both supporters listen carefully and use Penny's responses to determine their questions, which leads Penny to develop a clearer sense of what she wants to focus on. For example, Jason (S47) remembers the idea of adaptability that Penny mentions much earlier (W25) and the new idea of liberation (W46) and asks Penny to decide on a focus:

Is your dominant impression going to be her adaptability or her liberation? (S47)

Jason and Casey pursue Penny's ill-defined and mushy ideas, urging her to refine, focus, and develop her ideas. The suggestions they offer build on the ideas Penny has already brought up:

Maybe you can make liberation a part of her adaptability. (S49)

Maybe that's why she adapted so well, because she was liberated. (S51)

They are effective supporters, not only asking Penny to clarify her plans, but encouraging her to make decisions and suggesting ways she can manage her ideas.

CONTRIBUTING TO A WRITER'S CONSIDERATION OF RHETORICAL ELEMENTS

Another way supporters can help writers is to contribute new ideas to extend the case the writer is trying to make or elaborating points already made by the writer. This contribution or elaboration may challenge the writer and urge reconsideration of rhetorical decisions as shown in Example 7 on the next page. In this excerpt, two college juniors, Ritika and Kirk, have just started working on a recommendation memo Ritika is planning for an advanced writing class.

The excerpt shows the writer, Ritika, considering the audience for the recommendation memo she is writing.

Where I have to start is first of all— First of all I should start— Well, I guess, who I'm sending this to—. (W9)

Although Ritika's supporter, Kirk, challenges her decision to consider audience before content

Well, I think you should decide what you want to say before you decide who you should send it to (S10),

he also questions her consideration of Judith as an appropriate audience (S12). Ritika explains her decision to send Judith a carbon copy of the memo and to exclude Lou (W13). Kirk offers her a way to word her memo so that Lou will not be offended:

- S17 Casey But what's her dominant characteristic? Is it about her kindness as a sibling, or about her?
It takes Penny until turn 25 to answer Calla's question.
- W25 Penny Okay, . . . the thing I've always found interesting is that she fit into my family really well, and we never had any conflicts then. But when I went to South America and lived with her family, it was so vastly different. I had no idea how much change she went through and how much she had to bend to our ways. . . . I didn't realize how different her setting was. . . . Well, I guess that my dominant impression of her is that she's adaptable.
- The intervening planning includes discussion about how Milancho dealt with questions about Colombia's drug problem, who the audience should be, where the character sketch could be situated (Pittsburgh? Colombia?), and what conventions to use (narrative? dialogue?).*
- W46 Penny . . . Something else I noticed when I was in South America is how—it's very . . . definitely not a feminist-oriented society, and what the women in South America know how to do is do their hands and fingernails and put the eye makeup on. . . . Milancho did all of these things. . . . but she still managed to be liberated and she knew what was going on. . . .
- S47 Jason Is your dominant impression going to be her adaptability or her liberation?
- W48 Penny I think it's her adaptability.
- S49 Jason Maybe you can make liberation a part of her adaptability.
- W50 Penny Yeah.
- S51 Casey Maybe that's why she adapted so well, because she was liberated.
- S52 Jason Could be.
- W53 Penny That's a good point. All rightie, what else.

**EXAMPLE 6: EXCERPT FROM A COLLABORATIVE PLANNING SESSION
 WITH EFFECTIVE SUPPORTERS BUILDING ON THE WRITER'S IDEAS**

- W9 Ritika: Where I have to start is first of all— First of all I should start— Well, I guess, who I'm sending this to—
- S10 Kirk: Well, I think you should decide what you want to say before you decide who you should send it to.
- W11 Ritika: Ok. It does matter. I would think it's going to be either Judith or Steve.
- S12 Kirk: Judith or Steve? Why Judith? Why do you think it's Judith?
- W13 Ritika: Well, it would be a carbon copy to her; she's above Steve. Steve's the manager, and Judith is the general manager. In any case, I'm not writing it to Lou because he didn't hire me; he just wrote this thing. I don't care whether he likes it or not. . . .
- [intervening off-topic comments]*
- W15 Ritika: So that's who I'm going to send it to, so I don't have to worry too much about how I phrase it as far as hurting Lou's feelings. Although Lou will probably read it, so I'm going to want to take that into account [laughter].
- S16 Kirk: I think you should really, um, take him into account. He's going to hear about it and you can't criticize him. You have to— When you say that— that it won't suit the customers' needs .. because the customers don't need— don't want facts, it's not that it's ... wrong— it's bad. You could just say it's factual, but it's not what the customers want. There's nothing wrong with what he wrote; it's the fact that, um, the customers want something different.
- W17 Ritika: That way I don't hurt his feelings.
- S18 Kirk: I agree.

**EXAMPLE 7: EXCERPT FROM A COLLABORATIVE PLANNING SESSION
 WITH AN EFFECTIVE SUPPORTER CONTRIBUTING TO A WRITER'S PLAN**

I think you should really, um, take him into account. He's going to hear about it and you can't criticize him. . . . You could just say it's factual, but it's not what the customers want. . . . (S16)

Kirk reinforces Ritika's awareness that she should take Lou into account, suggesting that Lou is more important than Ritika realizes.

CONCLUSION: SUPPORTERS AS CONTEXT

Drawing together the strands of this essay—(1) defining supporters as unengaged, engaged, or involved, (2) identifying a repertoire of verbal moves and scaffolding sequences, and (3) analyzing supporters' verbal moves and scaffolding sequences—suggests examining the broader context that supporters help create. In fact, one way to consider supporters is as substitutes for a broader audience that would, if the opportunity were available, comment on, contribute to, and challenge a writer's work. Working with a supporter encourages the rhetorical awareness that enables a writer to imagine these comments, contributions, and challenges as well as to see the constraints that they might impose. This sense of context—a reading of the rhetorical situation—depends in part on a supporter's ability to draw on a variety of verbal moves and consolidate them into appropriate scaffolding sequences.

Effective supporters can create and strengthen an awareness of social context. Simply the act of working in pairs or small groups offers a kind of support that helps students realize that learning about writing (or anything else) is not an isolated act. Both the struggle of learning to write and the writing itself are situated in an environment, a social context, that influences and is influenced by the writer and the writing. Collaborative interaction with an engaged or involved supporter removes a sense of isolation and reinforces the idea that writers and writing are socially situated. Awareness of social context is important because it lets inexperienced writers know they aren't alone in their frustration and insecurity, and it also helps them realize that they can get help (which isn't seen as cheating; rather, it's encouraged), that the writing itself is influenced and shaped by context, and that their writing has an audience that will be affected and can respond. This awareness may lead to consensus between the collaborators or it may "be a powerful instrument for students to generate differences, to identify the systems of authority that organize these differences, and to transform the relations of power that determine who may speak and what counts as a meaningful statement" (Trimbur, 1989, p. 603). In other words, awareness of social context creates a sense of community and support (Bruffee, 1984), but it also provokes conflict that, I believe, may lead to a productive exploration of issues that would otherwise be ignored. Awareness of social context also provides an opportunity for inexperienced writers to

define their task and exchange ideas, thus reducing problems that might not be so easily managed by them working individually.

In this essay, I have suggested that the *supporter* provides a way to talk about classroom collaboration and offered examples of ways in which the supporter can provide a focus for teachers and students alike as they explore and analyze collaboration. I have also tried to demonstrate why collaboration doesn't have to fall victim to pedagogical lore that urges consensus without guidance or reflection (Bruffee, 1984, 1986). Collaboration doesn't have to be the blind leading the blind; instead, students can learn to teach themselves and others. Using careful classroom observations to ground intentions and confirm intuitions about collaboration should go a long way in reducing teacher and student frustration when they use collaboration in writing.

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¹ I have selected all the examples in this essay from representative collaborative planning sessions of high school and college students who have been part of the first two years of the *Making Thinking Visible Project*, a four-year classroom inquiry project sponsored by the Center for the Study of Writing at Berkeley and Carnegie Mellon, and supported by the Heinz Endowment of the Pittsburgh Foundation. Participating teachers and students are from public schools, colleges, and universities in the greater Pittsburgh area. Although the collaborative planning students do most often occurs before they have generated a full draft, they also plan and re-plan during their composing, revising, and editing. In other words, students use collaborative planning throughout the writing process; the moves and behaviors discussed in this essay aren't necessarily restricted to pre-draft planning.

² All examples in this essay are excerpts from the transcripts of audio- or video-taped collaborative planning sessions.

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SECTION TWO: TRACING PROCESSES

One of the strengths of the Making Thinking Visible Project is that it transforms classroom teachers into classroom researchers. Not only do teachers in the project benefit by learning about collaborative planning and its uses in terms of their own pedagogies, but they benefit as well by entering into a process of classroom inquiry. The papers in Section Two of this casebook represent teachers tracing the processes by which writers come to know and use the rhetorical strategies of collaborative planning. How do they conduct their inquiry and trace these processes?

Several of the writers in this section use the transcripts from audio tapes they had their students make of their planning sessions to discover something about collaborative planning and classroom inquiry. Len Donaldson looks at how collaborative planning promotes critical thinking in his social studies class; he analyzes the audio taped planning sessions and response memos his students wrote to learn more about the role the supporter plays in promoting critical thinking on the part of the writer and to discover what might be gained from collaborative planning in the resultant texts produced by the student writers. Jane Zachary Gargaro had a similar query in mind when she used collaborative planning with her eleventh-grade English class. She looks carefully at transcriptions of student planning sessions and makes connections between what was said during planning and what was important enough to the writer that it appears in the final draft of the writing assignment. Mike Benedict, examining transcripts of his students' planning sessions, discovers that they may be using planning as a mirror or a window for their thoughts. David Wallace, largely through close reading of planning transcripts of college and high school students, traces the development of writers exposed to new writing tasks which place additional demands on them besides just gathering and organizing information.

Other writers in this section use additional means for conducting their inquiry. Tom Hajduk observes and describes a variety of moves that can be made in planning sessions using the print outs of logs done on a computer program designed to act as a third party to the writer and supporter. Linda Norris administers writing attitude surveys, reads the journals of student teachers, and conducts taped interviews with case studies to discover what preservice teachers think about collaborative planning and if they would use it in their own teaching. And Jean Aston traces the processes and development of her community college writers by examining their responses to questionnaires and oral interviews after they used collaborative planning for several writing assignments throughout the semester.

AN INVESTIGATION INTO THE PROCESSES OF CRITICAL THINKING AND COLLABORATIVE PLANNING

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In this instance, collaborative planning resulted, indirectly, in a more open classroom environment. Not only had students been willing to share their ideas and comments during the collaborative planning sessions, but our daily classroom dialogue was enriched by a more open and accepting atmosphere. In addition, the students became more adept at recognizing key points and frames of reference in documents which were analyzed in class.

Sherlock Holmes sat for some time in silence, with his head sunk forward and his eyes bent upon the red glow of the fire. Then he lit his pipe, and leaning back in his chair he watched the blue smoke-rings as they chased each other up to the ceiling.

"I think, Watson," he remarked at last, "that of all our cases we have had none more fascinating than this." *Five Orange Pips*

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"How often have I told you that when you have eliminated the impossible, whatever remains, however improbable, must be the truth?"

The Sign of Four, Chapter 6

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4. Planner, Supporter and Dynamic Process
5. Collaboration and the Provoking of Critical Thought
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1. THE NATURE OF THE PROBLEM

"Well, my boy, what do you make of this lot?" he asked, smiling at my expression.

"It is a curious collection."

"Very curious, and the story that hangs round it will strike you as being more curious still." *The Musgrave Ritual*

Critical thinking is an essential element of the social studies curriculum in the Pittsburgh Public Schools. It is a process in which students are directly involved in raising questions, analyzing data, and responding to teacher directed questions which require them to infer, predict, speculate, compare and evaluate. Development of reasoning skills is central to the process. These skills include: identifying central issues, recognizing underlying assumptions, recognizing stereotypes and cliches, distinguishing between verifiable and unverifiable data, relating cause and effect, and exhibiting explanatory skills. In essence, critical thinking exercises encourage the student to move from the literal phases of cognitive processing to the inferential and evaluative. By examining primary resources and discussing frames of reference, students endeavor to create a psychology of history whereby they grasp the motivation for action in historical context. Gaining such insights, the historical process unfolds not merely as a collection of dry and boring names and dates but as an exciting, dynamic drama of the human spirit in which they find themselves active participants. Role playing, philosophical discussion, and immersion in foreign cultural frameworks act to expand their frames of reference and challenge their perceptions and decision making abilities.

When I was introduced to Collaborative Planning at the beginning of the 1988-89 school year, I believed that the process could enhance the development of my students' critical thinking skills. In particular, collaborative planning appeared to provide a systematic and utilitarian procedure for the process of writing research papers. In the past, students appear to have encountered the most difficulty in developing a focus, central thesis, or key point to guide their research. As a result, their papers frequently floundered in a sea of confusion as they attempted to discuss what was, in essence, a nebulous concept at best. Their lack of a key point affected the organization of both their research and their writing. Perhaps collaborative planning could be a means to assist students in focusing and organizing their research as well as their writing.

During that school year, collaborative planning was utilized in both the development of the I. E. P. (Individualized Education Project) required of each student and in the writing of a formal term paper in the spring semester. The results of this experiment were very rewarding. The papers and I. E. P.s were focused, tightly constructed and textually sound, but there was another, perhaps in retrospect more significant, benefit to the process. The American Federation of Teachers in their AFT Critical Thinking Project state that "Critical Thinking requires an environment where inquiry is valued, where students are not afraid to take risks." How does one achieve such an atmosphere? In this instance, collaborative planning resulted, indirectly, in a more open classroom environment. Not only had students been willing to share their ideas and comments during the collaborative planning sessions, but our daily classroom dialogue was enriched by a more open and accepting atmosphere. In addition, the students became more adept at recognizing key points and frames of reference in documents which were analyzed in class.

These results encouraged me to use the process again during the 1989-90 school year. In the first semester, students engaged in collaborative sessions as they developed their I. E. P. projects. While engaged in collaborative planning, the students were animated, involved and on task. A positive dynamic was at work here, and at the end of each session I asked the students to express their ideas concerning the usefulness of collaboration. Their comments are very revealing:

"I believe this is very helpful. Many things which have not occurred to me are now revealed by discussing." — Krishnan N.

"It helped me focus my project. Up until now, I really hadn't had a concrete plan." — Deborah L.

"... this whole situation forced me to think in greater 'structure' about my [paper]." — Don C.

"I discovered that huge projects can be simplified just by organizing your ideas, which can be achieved

through collaborative planning." — Amy T.

"It was helpful to talk out my ideas, to see how much I *really* know. . . ." — Scott H.

"... he [the supporter] gave me a few approaches that I hadn't thought of. It helped me to further narrow my topic. . . I realized that it helps to have someone helping me by giving me suggestions" — Sara P.

As the above comments indicate, something positive was occurring as the result of the collaborative planning process. But what exactly was happening? That question remained a mystery. All the evidence gathered from the students using this method pointed to a substantive change in the manner in which they approached the writing process. Yet, it was still unclear to me exactly *how* immersion in collaborative planning promoted critical thinking. Were the positive student responses merely the results of "feel good" discussions where the students enjoyed the process of bouncing their ideas off one another yet which resulted in little substantive carry-over into the writing of the assigned papers? Since the goal of the CMU project was to "make thinking visible," and since my concern was to concretize the process by which critical thinking was enhanced, I resolved to conduct a more detailed investigation during the second semester, focusing on exactly how collaborative planning promotes critical thinking.

2. PROCESSES AND STRATEGIES

Sherlock Holmes had been leaning back in his chair with eyes half closed and his head sunk in a cushion, but he half opened his lids now and glanced across at his visitor. "Pray be precise as to details," said he.
The Adventure of the Speckled Band

During the second semester, my CAS World Cultures students were required to write a formal term paper. Utilizing this requirement as the vehicle for my study of collaborative planning, I fashioned the term paper project so that it would challenge each student's ability to think critically and would require each student to *demonstrate* that he/she had mastered elements of the critical thinking process.

The focus of this project was the concept of Leadership. In this assignment, the students were instructed to compare two individuals from history and to construct an argument as to which of the two was the *more effective* leader. In essence, the project required that the students move away from the simple biographical report to utilize their analytical skills to not only define effective leadership, but to apply their concept of leadership to given historical situations.

The term paper project was divided into three specific phases: the Proposal, the Overview and the Final Draft. In the first phase of the project, the students read "On Leadership" by Arthur Schlessinger, Jr. and did background reading on other concepts of leadership by eminent political scientists, sociologists, psy-

chologists and philosophers. They were then required to synthesize these ideas in a document, termed the Proposal, in which they: (1) defined their own concept of leadership, (2) explained their rationale for selecting this particular concept of leadership, and (3) outlined the criteria by which the two individuals would be measured to determine which was the more effective leader. The Proposal was edited and returned to the students with instructions to revise and elaborate on the concept of leadership as needed.

The second phase was the Overview. This phase emphasized the content area: the careers of the individuals selected and the argument to be made as to which was the more effective leader. The Overviews contained both a revised edition of the concept of leadership and a detailed outline of the paper's proposed structure.

Once they were returned to the students, the third phase of the project began: the writing of the Final Draft. Students were given three weeks to complete each phase of the project, so the total amount of time covered was one nine-week report period.

Collaborative planning sessions were held during each phase of the project. Since the students' research projects were to be used as a basis for tracing the development of critical thought, the emphasis of the collaborative sessions was on the development of the students' concepts of leadership and on the processes of argumentation necessary to prove their contention that one or another of the selected leaders was the more effective. By having the students struggle with the concepts first, their thought processes could be more precisely traced from vague notions to firmly stated contentions. To trace the development of their critical thinking, I devised the following methodology:

- taping each collaborative planning session using cassette recorders supplied by CMU
- following each session, having students provide a written response on the benefits, or lack thereof, of the particular session
- prior to the turning in of a given phase of the project, having students listen to their tapes and providing written comments on the usefulness of the tapes
- listening to the tapes myself, making personal observations, and comparing my perceptions of the usefulness of each session to the student's comments
- comparing the concepts and content of the term paper project assignments to the evidence on the tapes
- at the conclusion of the project, reviewing with the students the development of their ideas and discussing the utilization of collaborative planning for enhancing critical thinking.

The experiment I devised concentrated upon three fundamental questions:

1. How does collaborative planning promote the critical thinking process?
2. What role does the supporter have in the promotion of critical thinking during the collaborative process?
3. Can the process of critical thought be traced from the collaborative planning sessions, as reflected on the audio-tapes, to the text of the document produced as a result of the collaborative sessions?

Thus, my inquiry conducted in the second semester of the 1989-90 school year focused on establishing a concrete basis for determining the substantive results of collaborative sessions. In addition, the significant role of the supporter as a provocateur of critical thought is examined in detail. Therefore, the working premise behind the study was that collaborative planning does, indeed, promote critical thought and substantive change in a person's writing *and* that the supporter in a collaborative relationship plays a pivotal role in this development.

3. OF MEMOS, CONVERSATIONS AND AUDIO-TAPES

"In a morass, Watson?"

"I am at my wit's end."

"Tut, tut, we have solved some worse problems. At least we have plenty of material, if we can only use it." (*The Adventure of the Priory School*)

Although accumulating vast amounts of data is the essence of research, placing the gathered information into a workable framework is another issue altogether. Following the completion of the research project, a veritable mountain of material had to be examined: student response memos written following the conclusion of each collaborative session, student audio-tapes of each collaborative session, teacher field-notes of each collaborative session, and a trilogy of content related documents (Proposal, Overview and Term Paper). What evidence could be found within this data to verify that collaborative planning had improved the writing process and promoted critical thinking? Examination of the data did reveal that a most significant and dynamic process was taking place.

EVIDENCE IN THE DOCUMENTS

The students' term papers contained particular elements of interest. These papers were evaluated in seven categories: clarity of central theme, validity of evidence, depth of explanation, argumentation, depth of research, adherence to instructions, and standard written English. The first four of these are of interest in their relationship to the collaborative planning sessions held during the project. Although not every student achieved great success in each of these areas, there

were significant results for the group, as a whole, in each of these four categories. (Particular note must be taken of the fact that, despite their academic prowess, these students are 10th graders and somewhat unaccustomed to so challenging an assignment.)

A. CLARITY OF CENTRAL THEME

For the most part, the criteria for effective leadership was clearly stated and carefully delineated. Although concepts of leadership varied within the group, all of the students attempted to place their concept into a comprehensive, integrated structure, creating a rationale for their argument.

B. VALIDITY OF EVIDENCE

Data was factually accurate and based upon a solid description of circumstances and policies adopted by various leaders, supporting individual contentions as to which leader was the more effective.

C. DEPTH OF EXPLANATION

Presentations were thorough and well documented. Students made a concerted effort to analyze the situations faced by the leaders in question. In addition, the structure of their papers revealed attention to logical organization and rational thought.

D. ARGUMENTATION

In this domain, students again made a concerted attempt to apply the criteria for effective leadership established previously to each individual and to prove thereby which was the more effective. The validity of their selection was universally upheld by the thorough manner in which they applied the selected criteria.

What does all of this reveal? A careful reading of the papers reveals that to some degree the students have internalized the process of critical reflection and analysis. If the final documents are to be used as an indication of successful mastery of the skills inherent in the course, then the students exceeded my expectations.

EVIDENCE FROM THE MEMOS

Examination of the response memos written by the students at the end of each session appears to indicate that collaborative planning had a positive contribution to the success of the project. The comments about what took place during the sessions were almost universally positive. Jessica G. stated: "The reason I think it was helpful is because it really helped me organize my thoughts on the subject. Talking them out was beneficial." Amanda C. explained that, "Brian asked about the definition I chose and how it differed from the other choices. This helped me see why I chose what I did." Another benefit was revealed by Alice D. when she observed "it enabled you to hear what you were saying, and this indicates exactly how much sense you're making."

From the students' perspective, it is evident, as in the past, that something positive was occurring during these collaborative sessions. Don C. agreed that the

sessions had merit when he stated that: "There were some good questions asked - specifically on my concept of leadership." Examining the response memos indicates that the dynamic interchange between planner and supporter provokes some form of critical thought.

EVIDENCE OF THE AUDIO-TAPES

Believing that there must be a relationship between the ideas exchanged in the collaborative sessions and the students' successes in the final paper, I sought confirmation in the audio-tapes, searching for clearly traceable concepts or procedures. This was difficult to prove. While the evidence of the memos clearly indicates that the collaborative sessions were useful, and while the evidence of the documents clearly indicate that students had mastered the skills of rational thought and argumentation, the tapes established only an ambiguous relationship between *specific* textual patterns and the collaborative sessions. Perhaps this is due to the fact that a single collaborative session, while it provokes thought, does not reflect the concept or issue discussed in its final form. The sessions act as guideposts whereby one can witness clarification of issues and problem solving, but the actual writing process cannot be observed on audio-tape.

The audio-tapes do reveal that the students have developed a command of the terminology of the Blackboard Planner. The frequency with which they dealt with audience, key point, text conventions, and topic information *specifically* indicates a familiarity with the structural process underlying the Making Thinking Visible Project.

One consistent negative comment, however, must be noted. Many students felt somewhat inhibited by the presence of the tape recorders. Don C. stated, "In the past, I have found this very helpful. However, the tape recorder adds an element of fear, and collaborators are subsequently afraid to show lack of preparation." His comments reflected a general uneasiness on the part of the group. Realizing that I would be listening to the tapes, their conversations were a bit more restrained and formal, perhaps a result of, as Don intimated, not wanting to illustrate their lack of preparation or lack of mastery of the material.

4. PLANNER, SUPPORTER AND DYNAMIC PROCESS

We found Holmes pacing up and down in the field, his chin sunk upon his breast, and his hands thrust into his trousers pockets. "The matter grows in interest," said he. *The Reigate Puzzle*

After examining the audio-tapes and discovering that they did not contain that which I sought, it occurred to me that perhaps I was asking the wrong question. I was looking for confirmation of my preconceived notion that the process of collaborative generation of ideas was traceable from conversation to text. I was using the

tapes and memos to verify this hypothesis. In the process, however, I had overlooked the most significant question: for what purpose were the students using the collaborative sessions? A reappraisal of the tapes and memos based upon this question contains valuable insights into why collaborative planning works and why the response memos were so positive.

If collaborative planning is a tool to be used for the improvement of thinking and writing, then it must be examined from a utilitarian standpoint. Given that the students were utilizing the concepts of the Blackboard Planner, the question then becomes for what purpose were they using these tools? What specific benefits were gleaned by the individuals involved in these sessions? Why and/or how did this result in improved understanding of the issues at hand?

Earlier observations had revealed that essential components in the collaborative process were clarity of thought and expression on the part of the planner and critical listening skills on the part of the supporter. What the audio-tapes revealed is that a vital component to the success of the collaborative session had been previously overlooked: the intent of the planner upon entering the collaborative session. What was the planner seeking from this session, and how did the supporter provide the planner with that which was desired?

Approaching the audio-tapes with this utilitarian question in mind opens a window on the dynamics of collaboration. Once students have accepted that collaborative planning can be a beneficial process, they begin to approach the sessions with very specific goals in mind. It is the fusion of the planner's objectives and the supporter's willingness to provide the necessary support which makes for a successful session.

Although each student had somewhat divergent goals in the sessions, a general pattern can be discerned from examining the tapes. Planners approached the sessions from one of three particular viewpoints: those who believed they had a firm grasp of leadership and sought confirmation from a supporter for the validity of their argument; those who possessed a vague concept of leadership and who utilized the supporter as a means of clarifying their thoughts, and those who had very specific obstacles to overcome and sought specific advice from the supporter in overcoming these obstacles. It might be said that the success of the sessions was dependent upon: (1) clearly articulated goals and needs on the part of the planner, and (2) the capacity of the supporter to provide that which is deemed necessary by the planner.

The role of the supporter becomes very distinct within this framework. Generally, the students assumed roles as clarifying supporters, confirmational supporters, and problem solving supporters. By far the

most evident type of supporters in the first collaborative session were the confirmational and clarifying supporters. Amanda C. explained her concept of leadership to Brian G. and asked, "Does that sound clear to you?" The remainder of the conversation centered on clarifying and confirming her ideas, not in generating new concepts. In the same session, Jessica G. noted that her supporter "really didn't have to [ask questions] because I basically just used the session to express my thoughts on leadership." Joshua A. noted that, "We were both pretty much set in how we were going to judge our individual leaders." Supporters in these situations simply assumed the role of eliciting the ideas of the planner and provoking him/her to articulate these ideas clearly. Little attempt was made to generate new ideas, *per se*.

In a subsequent session, when the students were struggling with the application of the criteria for effective leadership to specific individuals, the necessity for the supporter to assume a problem solving role increased. One pair expressed this concept in the following manner:

- Alice: I'm uncertain. . .
Brian: That's the key - the impact.
Alice: Really?
Brian: Yeah. Like, in their accomplishments Did they accomplish what they wanted to. You got to, like, compare them to your criteria - like on leadership.
Alice: Yeah? OK.
Brian: You got to compare them direct-like on each aspect.
Alice: Yeah? OK. Cool.

Although the dialogue may leave much to be desired, the importance of the insights gained by Alice cannot be discounted. (Indeed, this analytical approach is exactly the process Alice adopted in her paper.) Scott W. noted that in this session his supporter asked questions that led him to discover deficiencies in his knowledge of the time periods with which he was dealing. He then remarked, "I think a supporter who gives you ideas is more helpful because then you can better your report with things you hadn't thought of." Dave B. agreed when he observed, "I believe this session was helpful because it helped me to realize which areas of my project were weaker than others. [My supporter] helped me to find deficient areas."

The tapes and memos appear to suggest that the role of the supporter is critical to the outcome of collaborative planning. If success is based upon having one's ideas confirmed and problems solved (for that is how the students appeared to be using the sessions) we are once again drawn to the importance of the supporter as the dynamic link in the collaborative process.

5. COLLABORATION AND THE PROVOKING OF CRITICAL THOUGHT

"Come, Watson, come!" he cried. "The game is afoot!" *The Adventure of the Abbey Grange*

By far the most significant facet of these collaborative sessions, as they were revealed by the memos and audio-tapes, is now collaborative planning reinforces and utilizes critical thinking skills. Since critical thinking is a commonly used buzzword in the educational community, it is essential to this project to clearly define the process as it applies to this particular classroom. A comprehensive analysis of critical thinking skills was developed by Rachel M. Lauer, director of the Straus Thinking and Learning Center at Pace University in New York. Dr. Lauer identified four general operational categories of critical thinking skills:

1. **OBSERVE** what is going on (WIGO) inside and outside our heads. That is, we must perceive objects, facts, events, feelings, issues, and need as they come and go in the patterns, sequences, trends of personal and group life, in the home, workplace, community, or media.

2. **EVALUATE** meanings and interpretations of whatever is going on. That is, we must be able to draw inferences and predictions, formulate opinions, recognize feelings, develop value priorities, identify causes and effects, make and test generalizations, induce and deduce, seek regularities and laws, formulate and test hypotheses, reflect upon results and re-evaluate, etc.

3. **DECIDE** what actions to take and avoid. That is, we must be competent with decision-making processes, weighing alternatives, using such skills as negotiation, creativity, compromise, consensus building, etc.

4. **IMPLEMENT** the actions decided upon. That is, having decided upon goals, directions, or purposes, we must have a range of skills to accomplish our ends. These include the abilities to get through to others by body language, speech and writing, theater, art, and math, to connect with others in empathy and synchrony, to discover, create, and marshal resources, etc.

While some may desire to substitute their specific terminology for Dr. Lauer's, her comments nonetheless address the essential elements of critical thinking as they have been introduced in my classroom. As I perused these categories of critical thinking, it became clear that the most important revelation of the memos and audio-tapes was that collaborative planning was acting as a vehicle in which students were applying these four operational processes in their own thinking,

speaking and writing. Students (both planners and supporters) observe and evaluate during the collaborative sessions, following which the planner must decide what actions to take and resolve to implement those suggestions or ideas generated by the conversation.

In her study of thinking and learning, Dr. Lauer delineated twenty-six specific critical thinking skills (see Appendix). In-depth analysis of the response memos, final documents, and audio-tapes indicates that students who have used collaborative planning engage in virtually all twenty-six of these mental processes during the collaborative sessions employed in the course of the school year. For example, one student remarked that in listening to the audio-tapes he could "hear tonal qualities in my partner's voice which demonstrated points that needed clarification or were controversial". This corresponds with the development of *Sensing* - using physical tools of observation: e.g., eyes, ears, nose, taste, skin, muscles, rhythmic resonance, spatial and temporal awareness.

Of even greater significance to collaboration as a process are the skills of *Intuiting*, *Trial-and-Error Experimenting*, *Perceiving Structure*, *Empathizing*, *Inferring*, *Generalizing*, *Recognizing Processes and Continua*, and *Reflecting upon Thinking*. If the goal of the collaborative effort is to literally "make thinking visible," then it has succeeded by provoking students to an awareness that they consistently utilize such thought processes while engaged in collaborative planning. If the supporter by virtue of his/her questioning provokes in the planner a realization of the depth needed or the level of analysis required, or if the collaborative partners engage in a brainstorming trial-and-error experiment, then it becomes evident that *critical thinking is the underlying mode of operation induced by the collaborative process*. When Brian G. was brought to the realization of "what I must do in order to make my research paper a well-organized and thought-out piece of art," we can note that he has achieved a degree of personal insight. Theresa F. concurred when she observed, "It gave us a chance to express our ideas in a different way. It gave me a better insight into the topic of leadership."

6. CONCLUDING OBSERVATIONS

"Holmes put his finger to his lips, replaced his hand in his breast pocket, and burst out laughing as we turned down the street. "Excellent!" said he. "Come, friend Watson, the curtain rings up for the last act." *The Adventure of the Second Stain*

At the conclusion of the research project, I administered the Writing Attitude Survey constructed at CMU as part of the "Making Thinking Visible" project. The comments written by the students in response to this survey are very gratifying:

"I take my writing more seriously now. . . . I have been introduced to many new strategies of writing this year so when I start writing I can take several different approaches to it." — Jessica G.

"I think more about my goals for a paper and the clarity of my ideas than I did before."

— Amanda C.

"This past year has given me more hatred for writing than I had before, but this past year has given me very, very, very useful strategies which help me overcome that hatred for writing." — Brian G.

"I've realized that it can be a public and a private enterprise at the same time. . . ." — Patricia S.

"My writing ability has improved since I use new and better techniques." — Amy T.

"I have, perhaps, changed some of my essay writing techniques in that I am more open to advice from my peers. . . ." — David B.

I would not be so presumptuous as to assume that a single class in World Cultures is totally responsible for such positive results. However, it is gratifying to note that considerable improvement in writing and critical thinking have been hallmarks of the last two years in which collaborative planning has been utilized in my classroom. Collaborative planning immerses students in the critical thinking process and thereby establishes the habit of applying the skills outlined by Dr. Lauer to their own thinking, speaking and writing. If the collaborative process provokes students into an awareness of themselves as critical thinkers, then it can be a dynamic force for personal discovery and intellectual growth.

"I should wish nothing better than to have some more of such experiences." *The Stock Broker's Clerk*

7. APPENDIX: SPECIFIC THINKING SKILLS (AS OUTLINED BY RACHEL M. LAUER, PH. D., STRAUS THINKING AND LEARNING CENTER)

"It opens a pleasing field for intelligent speculation." (*The Adventure of the Red Circle*)

- **Sensing:** using physical tools of observation; e.g., eyes, ears, nose, taste, skin, muscles, rhythmic resonance, spatial and temporal awareness:
 - using data from tools that extend macroscopic awareness; e.g., microscopes, telescopes, stethoscopes, X-rays, thermometers, electroencephalograms, etc.;
 - noting body changes that denote emotions of fear, anger, love, and pain, or that indicate physical needs and well-being.
- **Intuiting:** "tuning in" to hunches, emotions, guesses, random images and thoughts, allowing and noting the strange and unusual from the unconscious or non-rational sources.
- **Imagining and Fantasizing:** allowing and encouraging the production and uses of day and night dreams, mental images, speculations, odd

connections, free associations.

- **Symbolizing:** noting, creating, and using objects and ideas in representations, metaphors, analogies, rites and rituals, myths and narratives.
- **Wanting and Wishing:** "tuning in" to personal and group impulses, desires, values, motivations, needs, preferences, purposes, both positive and negative, asserting or denying as appropriate.
- **Trial-and-Error Experimenting:** deliberate "playing" with data, events, experiences, and relationships to see what happens, to formulate possibilities and to test boundaries.
- **Empathizing:** "tuning in," resonating with, understanding the realities of others, their ways of structuring, ordering, and relating feelings, thoughts, events, suspending self temporarily to "try on" another's way of being.
- **Defending:** recognizing and using as necessary the skills of inhibiting, rationalizing, denying, exaggerating, projecting, minimizing, compensating, displacing, deceiving, attacking, ingratiating, etc.
- **Detaching and Disidentifying:** recognizing and using, as necessary, the skills of withdrawing from people, events, ideas, ideologies and dogmas, involvements; gaining freedom, comfort, and solace from aloneness, and "tuning into" unencumbered consciousness as in meditation and contemplation.
- **Emoting:** recognizing and expressing various degrees of emotion (fear, anger, love, pain) towards objects, people, events, ideas. Distinguishing emotions from facts, opinions, inferences.
- **Perceiving Structure:** organizing observations into patterns, systems, models, paradigms, through recognizing similarities and dissimilarities of elements; e.g., perceiving wholes such as cells, trees, and animals, and groupings such as families, committees, nations, races, or planets, or thought structures such as duality and relationalism, belief and value systems.
- **Perceiving Sequences:** noting that events have order in time such as cycles, trends, processes, or all-at-onceness; e.g., noting what comes before, during, and after; recognizing causes and effects, actions and consequences.
- **Perceptual Relating:** recognizing and using patterns of relationship; e.g., above-below, near-far, dominance-submission, competition-cooperation, expanding-leveling-contracting; recognizing such complex relational patterns as psychological games, scenarios and life scripts, world views.
- **Describing with Language:** using words to name, define, and describe any observation, to say

what it might or might not be, to communicate WIGO (inner and outer events) so that others can approximate understanding. Recognizing that any given thing can have many names and that language can be only an approximate representation of what it refers to.

- **Classifying with Language:** verbally categorizing objects, events, and ideas according to their similarities of structure, order, or relationship. Being aware of using different levels of abstraction, e.g., the differences between apples, fruit, food, and organic matter, or between rules, axioms, and laws of nature.
- **Re-classifying with Language:** noting that any one object, event, or idea can be categorized in multiple ways for different purposes; e.g., that a person can be classified according to his name, gender, race, profession, or morality, etc., or that events can be discussed according to their context, their effects or purposes, etc. Eliminating "either-or" thinking (law of the excluded middle).
- **Inferring :** noting and using guesses, estimates, hypotheses, speculations, about something or someone described; deducing or predicting from a category a future event, e.g., Mary is a lawyer; therefore she's probably interested in law and will practice law. Or the gas tank is empty because the gauge reads zero. Or, the probabilities are that the crying baby is hungry. Distinguishing inferences from facts. Recognizing and using "if—, then—," logic.
- **Opining:** using language to express a personal or group judgment, i.e., liking-disliking, approving-disapproving, agreeing-disagreeing. Distinguishing opinions from facts and inferences.
- **Generalizing:** recognizing and using regularities as appropriate, distinguishing among and using concepts of never, sometimes, often, usually, and always. Specifying bases for conclusions, i.e., avoiding over-generalizing based on idiosyncratic evidence. Inducing; i.e., using specific data to build up to hypotheses or theories.
- **Understanding Cause and Effect:** that is, recognizing and using various ways of explaining what makes things happen, the "why" questions. Recognizing and using various sources of power or change agency, distinguishing among primitive and scientific causologies.
- **Recognizing processes and continua :** noting that static nouns refer to objects and events that are changing at different rates of speed and that adjectives refer to more or less of something, e.g., a person is always changing, and her qualities such as prettiness or athleticism are better

perceived in degrees or operationalized as on-going behaviors.

- **Time-binding:** being aware of differences between past, present, and future; noting how events are "packaged" as facts, narratives, fantasies, making use of past history and its records. Anticipating and preparing for future contingencies. Planning ways of structuring the present and future. Conceptualizing and using various spans of time to comprehend and plan.
- **Reflecting upon Thinking:** being aware of one's own and others' thought processes, recognizing how thought patterns inform and direct feelings and behaviors.
- **Disidentifying from Thought Patterns:** that is, noting that ideas, ideologies, belief systems, world views, and fleeting thoughts are human-made and are in the process of being re-made, learned and re-learned with varying consequences.
- **Acknowledging the Role of Human Filtering Processes:** recognizing one's own and others' inevitable biases in observing and evaluating. Recognizing that even the questions people raise are filtered through perceptual and judgmental processes.
- **Participating and Observing simultaneously :** being aware of sharing responsibility for one's own and others' on-going behaviors; choosing behaviors with thought-through intentions.

THE RIGHT METAPHOR

MICHAEL A. BENEDICT
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Talking about a planning session would allow writers to see the strengths and weaknesses of their planning and allow them to understand the relationship that a planner and supporter need to nurture.

In his book *Chaos*, James Gleick cites Robert Shaw, a physicist who works in the field of chaos science as saying, "You don't see something until you have the right metaphor to let you perceive it. . . ." (262) While Shaw was talking about science, those in the arts and humanities have long manipulated metaphors as a way of making meaning. This concept of metaphor is what attracted me to the working of The Center for the Study of Writing at Carnegie Mellon University. Linda Flower's concept behind "making thinking visible" was akin to the reading I was doing in quantum physics trying to find relationships between the metaphors used in that field and the metaphors I was searching for in order to talk about writing and the teaching of writing.

In analyzing the work I did this past year with collaborative planning, I began to see some things about writing and the planning of writing that I was not aware of before. The thrust of this paper, then, is to explore the work I did with the metaphors of collaborative planning's Planning Blackboards and Planners' Options[®] on Apple's HyperCard[®] developed by Thomas Hajduk of Carnegie Mellon University, and with the writers' work with both aspects of the project.

When we write, we make many decisions based on what we know or do not know. If we are writing for a particular audience, in a particular genre, or with a certain purpose, we make decisions which are pertinent to these areas. If I am writing for a particular audience, I need to be aware of what they might know and might not know about my subject matter. To add to this confusion a little, I might not be totally aware myself of what they know or do not know. I would then make some decisions based on false assumptions. The study of metacomprehension addresses these various levels of awareness. While metacomprehension looks at learning in general, I would like to apply it to planning a piece of writing.

In an ERIC *Digest* entitled "Metacomprehension," we find this definition: "Metacomprehension is the awareness of and conscious control over one's own understanding or lack of it." Figure 1, taken from the ERIC *Digest*, originally appeared in *Computers in the Classroom: A Primer for Teachers* by Sally N. Standiford, Kathleen Jaycox, and Anne Auten.

Looking at Figure 1, we need to think about what we

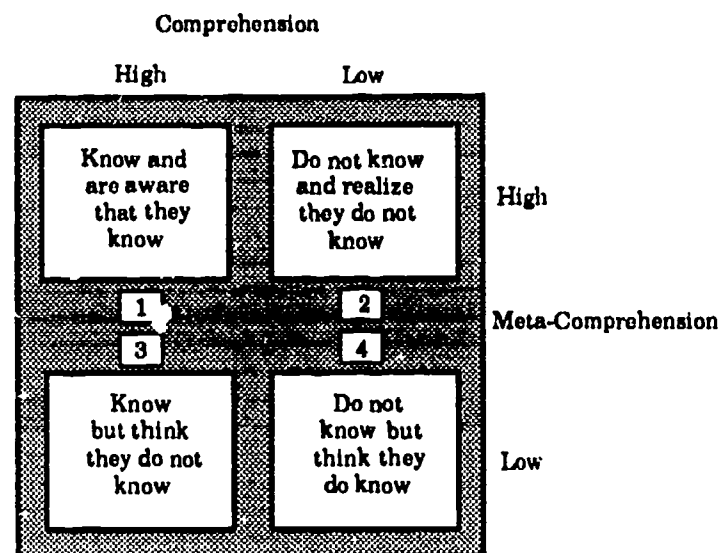


FIGURE 1. METACOMPREHENSION DIAGRAM

know or do not know about writing and the teaching of writing, about what we know or do not know about a topic under consideration for writing, and about what we might know or do not know about an audience. As writers, we need to move ourselves into Windows 1 and 2 as we develop a plan for writing or as we revise a piece of writing. With the aid of a good planning session and a good supporter, this movement is more readily accomplished. As I show later in this paper, using either the Planning Blackboards or Planners' Options[®] will assist the writer more fully to understand what he or she needs to know, learn and understand about a piece of writing under construction.

Too often when writers operate in Window Three and Four their papers become stilted and constrained. If we can help them move to Windows One and Two, they can increase the knowledge base needed to write better papers. This applies not only to their knowledge about the parameters of the assignment, but also to their knowledge about the writing process itself and about their own particular writing processes. Collaborative planning is one way to help writers attain a higher level of awareness about two concerns: their piece of writing and their writing process.

There are usually four questions that plague writers as they begin to write a piece:

1) What am I going to write about?

2) How am I going to write it?

3) Who is going to read it?

4) Why should I write it?

These four questions are at the core of collaborative planning. For each question there is a corresponding Planning Blackboard with its own set of exploratory questions.

• *What am I going to write about?* Often the answer to this question indicates what knowledge the writer has or does not have. In the schema of the Planning Blackboard, then, "Topic Information" addresses this question.

• *How am I going to write it?* In attempting to answer this question, the writer must come to terms with the chosen writing genre such as newspaper article, brochure, and so on, and must consider the parameters of that genre. The Planning Blackboard "Text Conventions" covers this concern.

• *Who is going to read this?* Too often writing assignments do not alert the writer to the audience who will read the writing. As we have seen through research, a writer needs to know this information in order to make certain rhetorical decisions. The Blackboard area "Audience" helps the planner do this.

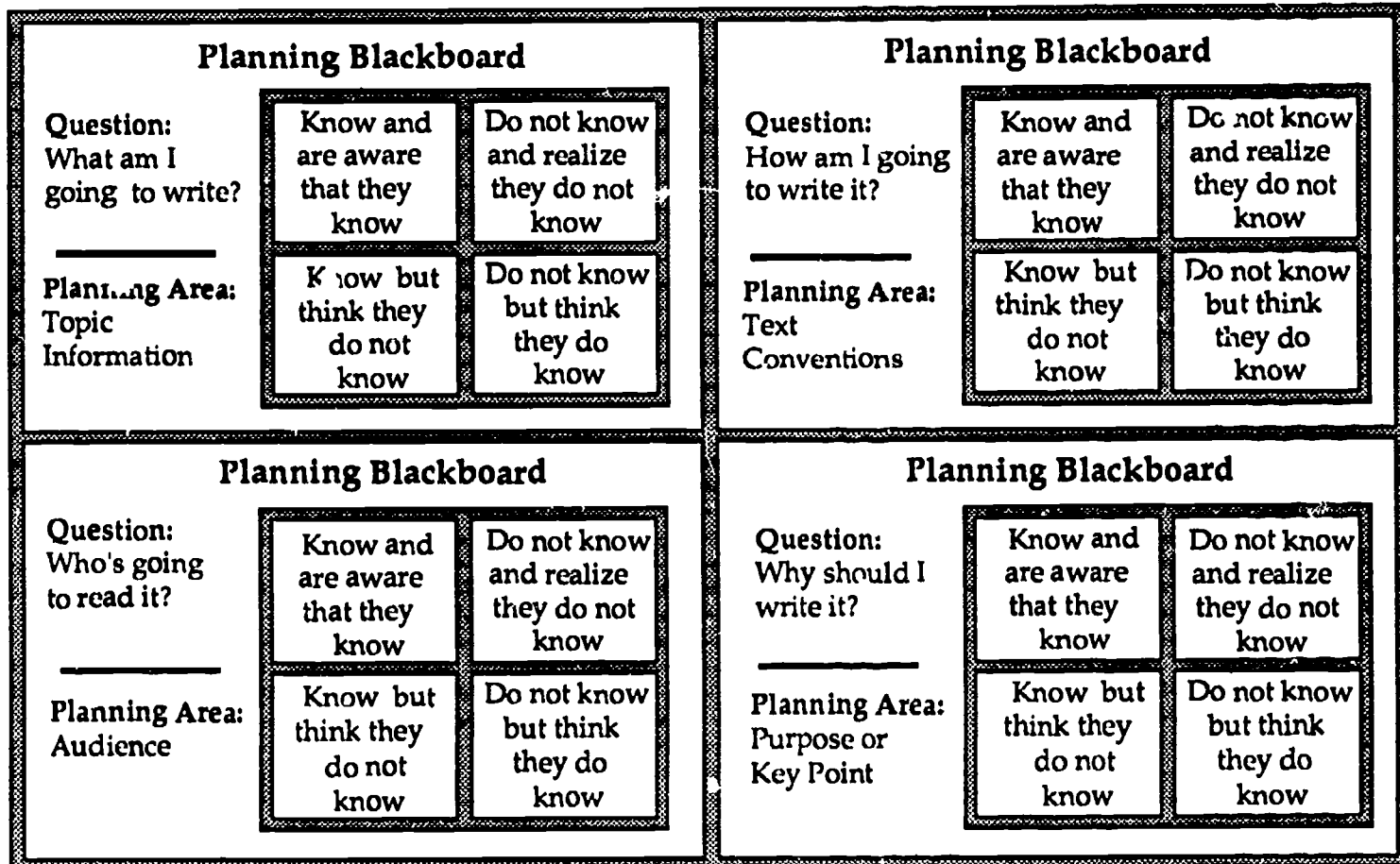


FIGURE 2. LAYERING OF METACOMPREHENSION DIAGRAM ONTO PLANNING BLACKBOARDS

• *Why should I write it?* Unconsciously or consciously, a classroom writer assumes that he or she is writing for a grade and a grade only. By working with the "Purpose and Key Point" Blackboard, the writer would be able to move away from that limited purpose and find more intrinsic purposes and key points to stress in the writing.

The questions in the respective Planning Blackboards will enable the planner to move from Windows 3 and 4 to Windows 1 and 2. The assistance of a good supporter facilitates this movement. The supporter, through questioning, active listening, and re-questioning is able to help the writer focus on various design and rhetorical elements in planning writing. In talking with the supporter, the planner has to verbalize his or her thoughts and this can lead to making other connections and generate other thoughts and directions.

It might, then, be helpful for both the planner and the supporter to understand the metacomprehension diagram in Figure 2 as they plan. They would begin to get a picture of their respective levels of understanding of both the assignment and of their own processes. Such an understanding would layer another level of dimensionality on the planning session and ultimately on the piece of writing itself.

Talking about the texture of a piece of writing is more than just a pun. The texture of writing comes from the interweaving of idea, form, purpose, and convention. We get, then, not a flat document, but a text laminated with layers of transparent dimensionality that go beyond the words on a page. This lamination occurs as the text is passed from writer to reader, with each adding his or her own respective layers. As the writer concentrates on the reader as well as on the writer, on a purpose beyond a grade, on text conventions that apply to the purpose, he or she laminates the final text. The reader, then, brings to the text his or her own concerns, thus adding more layers to the text.

Figure 2 superimposes the metacomprehension diagram of Figure 1 on both the four questions I posed earlier and their corresponding Planning Blackboards illustrating several layers that might apply to a planning session.

The windows of the metacomprehension diagram apply equally to the planner and to the supporter. I see the questions from both Planners' Options[®] and collaborative planning as the catalysts that shape or add form to the writer's ideas about a paper. These questions and the skillful techniques of the supporter would help the planner to move from Windows Three and Four to Windows One and Two. The supporter also gains from this interaction because he or she might have some stirring of an idea for his or her writing as I show later in this paper.

As I started working in the classroom with collaborative planning and Planners' Options[®], I did not seem to have any preconceived ideas or questions that I wanted to investigate. I tried to use several approaches in presenting the concepts and terminology associated with collaborative planning. Figure 3 shows the various approaches I used in presenting collaborative planning to my classes. There were no particular reasons behind the various approaches as I merely wanted to see what would work and what would not.

Course and Grade Level	Instructional Approach
English 10 (Sophomores)	Methodology No Explanation of CP
Advanced Placement (Seniors)	CP Explanation and Methodology
Composition I (Juniors and Seniors)	Planners' Options CP and Methodology

FIGURE 3. PRESENTATION METHODS

From the outset, I saw Planners' Options[®] as a computer metaphor for collaborative planning. Those familiar with Apple's HyperCard[®] program will realize the fluidity of what it can do. In fact I used Planners' Options[®] myself as I was preparing this paper. Planners' Options[®] uses the same types of questions and planning areas as does collaborative planning but adds the dimension of having the writers type in their responses after they talk about them. As with collaborative planning, the program works best with partners, with the supporter asking the question and the planner responding orally before typing in the response.

Figure 4 is one of the cards from Planners' Options[®]. A writer can work his or her way through different areas of Planners' Options[®], covering various writing concerns. The "Writer's Notepad" allows a writer to keep ideas that are germane to the paper, but not necessarily germane to a particular question.

The writer is able to move into the different planning areas by clicking on whatever button he or she chooses. To work on topic analysis, one would click on the area marked "Topic" and be presented with several questions such as:

- What are some of the ideas that you have been considering for the subject or topic of your paper?

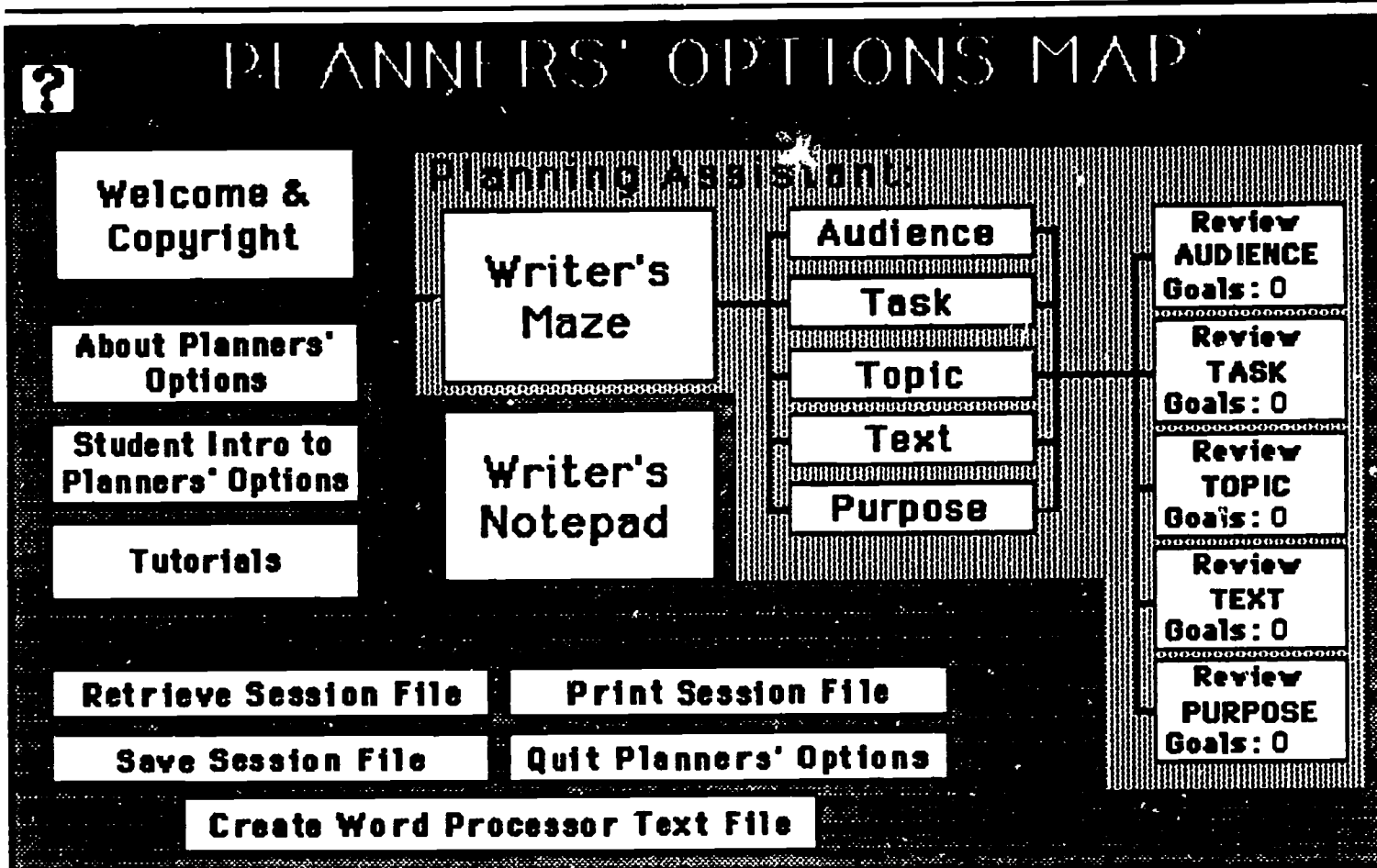


FIGURE 4. PLANNERS' OPTIONS[®] FIRST BOARD

- Often ideas that seem clear to a writer are unclear and confusing to readers; how do you plan to explain your topic ideas to your readers? Then, after you're finished ... writing, ask your supporter to comment on what you have said.
- What are some things that a reader would expect you to say about your topic?

In Composition I, an elective open to Juniors and Seniors, I had writers with a range of writing abilities and seriousness of purpose. Some were in the class to improve their writing, while others were there to satisfy an elective requirement. Some would write to the assignment; others would go beyond the assignment. One of the foci of the course was to get writers to use concrete and specific detail or images or any one of a number of devices to make their papers more substantial. Some of these writers interpreted using detail as nothing more than using another layer of generalization or adding superlative adjectives. The writers' seriousness of purpose carried over into their use of either Planners' Options[®] or collaborative planning. One conclusion I came to as the writers worked with either collaborative planning or Planners' Options[®] was that the successful use of either of these planning tools is dependent on the writers' attitudes and not necessarily on the approaches themselves. Several of the writers in Composition I and the Advanced Placement English class merely went through the motions of

using collaborative planning. As a result, their plans were weak and unsubstantial. Excuses ran the usual gamut from "This is dumb!" to "I really don't think this will work for me." Any heuristic may or may not work, but the problem is not inherent in the heuristic as much as it is in the person using it. Obviously not all heuristics are suited for all writers, but writers need to find those that will allow the development of substantive plans.

I had the writers in Composition I initially use Planners' Options[®] individually without partners because I wanted them to become familiar enough with the program without adding the dimension of having a partner. For this assignment, they were to develop an article for a magazine which catered to high school students who knew nothing about anything. Each writer was to select a topic which he or she knew intimately and write an article for this magazine.

As the writers worked their way through the questions under the different planning areas, they did so with varying levels of involvement. Some answered the questions perfunctorily while others went beyond the literalness of the questions. Some responded with only rote, textbookish answers. For example, in response to the question, "Explain what sort of things readers will see in your paper and find interesting," the following two writers responded with different levels of involvement.

Chris, a Junior, wrote: "I thing [sic] that being different is important so that the reader pays attention to what you are trying to say or get across to your audience. Also using unusual subjects will also get and hold the readers [sic] attention." JJ, also a Junior, wrote: "They'll find that the paper will be like having a conversation with the author (me) instead of the boring report format that they're used to reading." Chris responded literally to the question without really talking about his paper while JJ was talking about his paper and setting up a certain style that was evident when he wrote his final draft.

To the question "What do you plan to do to get the kind of reaction you want from your readers?" Chris responded, "I plan to use interesting topics to hold the readers [sic] attention and also thing [sic] about what I am going to write about before I write it." JJ, on the other hand, wrote, "I want the reader to understand and find humor in what he/she is reading, but at the same time I want [sic] them to take what they're reading seriously."

One thing that became evident in looking at the planning of these two writers is that Chris responded narrowly to a question and stayed within its literal parameters while JJ used a question to jiggle ideas around and to formulate directions for his paper. Chris's final product was just as narrow and constrained as were his answers within Planners' Options[®] while JJ's paper had the conversational tone that he was talking about in his planning session.

The following excerpts are the opening paragraphs from the first drafts of both Chris' and JJ's papers. Keep in mind that these were the first drafts and not the final drafts, although Chris's paper did not appreciably change even after some conferences on revision. All spelling and mechanical errors appear in the drafts.

Chris's opening paragraph:

In athletics many people who are familiar with sports do not realize how much time and desire is needed to excel. Sports are a great factor in many peoples lives today. Athletics such as football, soccer, basketball and swimming are time consuming and take a great deal of concentration and ahrd work. Most atheletes understand what it takes to be a winner, and do their best work to their fullest potential. People who do not have the greatest athletic ability often are great achievers because of their desire to win and do the best they can. Sports is a commitement just like work, "You only get out what you put in."

JJ's opening paragraph:

The 60's brought about many changes. Some in the way we look at things others in the way we think. When one sees a VW bus, the first things one thinks of is the hippie. When one sees a tye-dye, the first thing one thinks of is the hippie. When one

sees a long haired person wearing love beads and a tye-dye, they think of a hippy. Some consider the 60's culture a trend, for others its a way of life. They roam around America in there VW poptops in groups going where they want. Alot can be seen at Grateful Dead shows.

Chris's paper, even after revision, stayed as superficial and perfunctory as were his responses to the questions in Planners' Options[®]. JJ's first draft, however, had the flavor of what he was talking about in his responses to the questions in Planners' Options[®].

Looking at the metacomprehension diagram in Figure 1, we can see that Chris does not know what he is talking about in his responses to the questions in Planners' Options[®], but he thinks that he does. JJ, on the other hand, operated in both Window One and Two. His planning was more detailed and was focused on the assignment rather than on the questions.

For another paper, the writers in Composition I had the option of either using Planners' Options[®] with a partner or using collaborative planning with a partner. For this assignment, the writers had to describe their bedrooms in detail in order to capture the mood of the rooms. We read the "Cask of Amontillado" and looked at how Poe used specific and concrete detail to create and sustain certain moods. The writers selected two words that best described the mood of their bedrooms. In their writing, they were not to use these words, but had to use detail to convey these moods. During this planning time, they had to tape record their sessions.

Chris chose to use collaborative planning instead of Planners' Options[®] for this assignment. His responses to his supporter's questions in collaborative planning were as perfunctory as were his responses in his private use of Planners' Options[®]. Louann and Michele, who chose to use Planners' Options[®], provide a contrast to Chris and his supporter in the way they respectively approached collaborative planning.

The following dialogue between Michele and Louann illustrates a naturalness in the way Michele handles the role of supporter. She asks an initial question from Planners' Options[®] and then uses her own questions to prompt Louann.

Michele: What are some ideas that a reader would expect you to say about your topic?

Louann: [Laugh] Oh, uhm to describe it and tell what it is like without telling what the two words are we were supposed to pick...

Michele: What is the topic?

Louann: The topic is to describe...

Michele: Your room?

Louann: Yeah...to describe my room...with two words.

Michele: I guess you can't tell me what two words you picked [laugh].

Louann: No.

Michele: Okay. Running the whole time.

Michele: To explain it without saying what you're doing? Right?

Louann: [Typing] Yeah. I hate this thing [talking while typing the following] Some things that the readers would expect me to say in this paper is the feeling or mood when I go into my room.

Compare that exchange to the one between Chip and Chris to see a difference in questioning technique. Chip is the supporter and Chris is the planner. Chip first asks one question from a prepared list of questions that the writers were given. He then asks a question of his own that is assignment related and then moves on to another question from the list. Chip does not try to lead Chris as Michele did with Louann but instead asks a perfunctory question. Chris, as he did when using *Planners' Options*[®], gives a response that is marginally related to the assignment.

Chip: What are some things that reader would expect you say about your topic? Or your room in general?

Chris: Well I think many are about, you know, the same. There are not that many things different. They all basically have four walls, a ceiling, and a floor.

Chip: But you're trying to describe two certain qualities about your room?

Chris: Yes.

Chip: Like, okay...

Chris: Yes, I'm describing color, how it smells.

Chip: Okay. Next question.

The terseness of the exchange between Chris and Chip contrasts with the elaborating exchange between Michele and Louann. What is not noticeable in the transcript that is noticeable in listening to the tapes is the quality of the discussion. Michele and Louann are having a conversation while Chip and Chris are recording a static dialogue. Michele and Louann had a seriousness of purpose that was not evident with Chris and Chip. This is one of the key elements that would allow me to describe Louann's planning session as being more beneficial than was Chris's.

I feel that this attitude, this seriousness of purpose, also helps the supporter to define cognitively his or her role. In most cases, this definition may be a more intuitive decision rather than a conscious one. In this sense, I feel that Chip and Chris interpreted "supporter" to mean merely "Asker of Questions." Michele, on the other hand, defined "supporter" as "Collaborator/Assistant to the Writer." This difference in perceptions of the role of the supporter, then, would account for some of the differences in the types of planning sessions these four writers had. The concept of

metacomprehension is applicable here also. Chris and Chip did not really understand what a planning session should be like or what a supporter was to do, but they thought they did. Michele and Louann, on the other hand, behaved as if they knew what a planning session was to be like and what a supporter should do and their dialogue shows that they knew.

As I listened to the taped protocols of Michele and Louann, I started to get a sense of the symbiotic relationship between a planner and a supporter. Then in listening to the taped protocols of Anje and Todd, I found this relationship underscored and developed. These two sets of dialogues also suggested two additional metaphors for me to use in analyzing a planning session: mirror and window.

A mirror exchange is one in which the interaction between the planner and supporter allows the planner time for consideration, reflection and reconsideration. The following dialogue between Michele and Louann illustrates the concept of a mirror exchange.

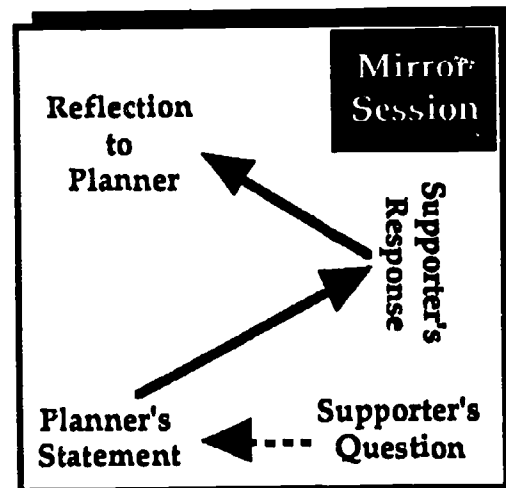


FIGURE 5. MIRROR EXCHANGE

Michele: Think about your assignment and give it your serious attention; then explain in your own words what you what you think you are supposed to be doing in this paper. [Question from *Planners' Options*[®]]

Louann: [Starts to type]

Michele: Say what you are going to type before you type it.

Louann: Okay...I feel that we are to bring in details...so that when the reader reads this so they will get the feeling of our room...

Michele: Are you... [Garbled]

Louann: Ah sh- [typing] [conversation with another group]...is the fact the we have to describe so that someone will have to know...

Michele: Will have to know?

Louann: Uh?

Michele: That someone else will have to know what?

Louann: That someone else will have to know what we are trying to describe...

Michele: Know without actually saying the words?

Louann: Hmmhmm. I lost my place...

Michele: Describe... Louann: To describe the room without telling the two words. Another question.

Michele asks Louann to reflect on the particulars of the assignment when she asks "Will have to know?" Her next several questions are prompting Louann's thinking and helping Louann to elaborate on her ideas.

A supporter could set up a mirror exchange by doing one or more of the following:

- Use reflective questions which cause the planner to think about the piece of writing under discussion.
- Ask Rogerian type questions such as, "Are you sure that is what you want to do." Todd does this in Segment 7 below when he asks Anje if she thought that her approach was the right one for her audience and so on.
- Re-state the planner's comments in such a way that the planner has to think about the comment and make some response.

A dialogue is a window exchange when it is transparent enough to allow the planner to see both sides of the wall and to get a clear vision of the "outside" of his or her mind or to see concerns about the paper beyond the immediate question or topic of conversation. It may also open up some concerns or questions for the supporter concerning his or her own paper. This exchange between Anje (planner) and Todd (supporter) illustrates the idea of a window exchange.

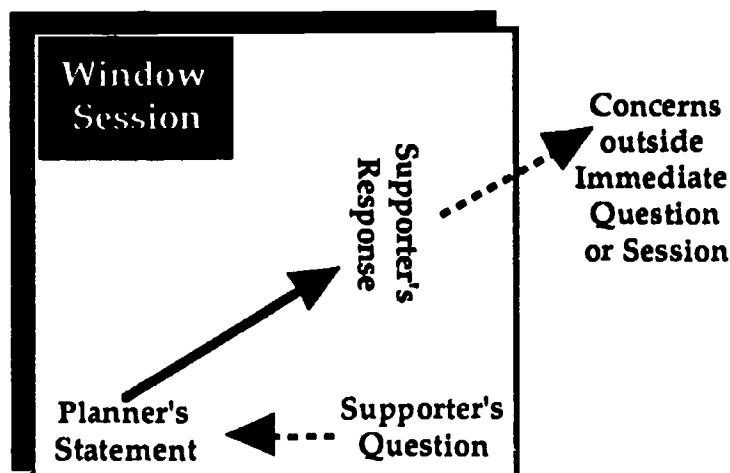


FIGURE 6. WINDOW EXCHANGE

Todd: Okay. What don't you understand about this assignment?

Anje: Well, it's not so much that I don't understand this assignment but I'm really afraid to make the same mistake as last time ...

Todd: Which was?

Anje: ...and...and put them in the wrong order.

Todd: Uh, yeah.

Anje: You know, basically. But I think I'll go with my initial feelings on this one.

Todd: Even though they betrayed you last time.

Anje: Yeah, exactly.

I would describe this as a window exchange because Anje is expressing some trepidation over her last assignment in which she took a risk. This is outside the immediate concern of this assignment and of the question Todd asked. While it has some bearing on the current task, it is still outside that task. Earlier in the year, I had asked the writers to take risks with their writing. I tried to create an atmosphere wherein this could happen, for example accepting a poem instead of a traditional essay. Anje's concerns, however, forced her to put some restraints on herself and her approach with this writing assignment. The *mistake* she made in the earlier assignment was that she incorrectly assessed the quality of three different short stories. The *risk* she took, however, was to write a poem instead of a "traditional essay."

A window exchange is one that does one or more of the following:

- Allows the dialogue to touch on concerns that are not pertinent to the immediate question or discussion. This is analogous to stream-of-consciousness. At times, this may lead the discussion away from the topic and side-track the planning session.
- Opens up an idea for the supporter for his or her paper. This is what happens to Todd in an exchange below when he gets an idea for his own paper and Anje acts as a supporter at that point.
- Helps the writer see concerns that are larger, outside issues or concerns. Unlike the first example I gave, this is not side-tracking. For example, Anje's concern about the grade she received on an earlier paper affects her current planning. These concerns are within the context of the paper, but not within the context of the current question or discussion.

For the writing assignment that formed the basis for their first planning session, my Advanced Placement class read two short stories: "The Hunger Artist" by Franz Kafka and "The Infant Prodigy" by Thomas Mann. I told them that both were respected stories, but critics valued one more than the other. They were to choose which was the better story and to defend their choice. For this session, I gave the supporters a list of possible questions compiled by Rebecca Burnett of Carnegie Mellon to use in the planning session. We

talked about the responsibilities of both the planner and the supporter. Todd, in his role as supporter, did not vary from that list often. What is evident, however, is his logical selection of questions that keeps Anje moving through this initial planning stage. This is different from Chip's questioning techniques with Chris where Chip just moved from question to question without considering the logic of the next question.

I look at the following six segments of Anje's planning session with Todd in terms of the mirror/window exchange. There are times when the two are within the same segment. In breaking the session into segments, I tried to keep a consistency of thoughts together rather than to break each exchange into either a mirror or window exchange.

SEGMENT 1

- Todd: What do you think you're supposed to do with this piece of writing?
- Anje: Well, I think it's supposed to be ... ah ... a technical analysis between the two pieces...um...mostly analyzing...um...the different aspects of the story like we're doing...
- Todd: Okay. How are you interpreting this assignment?
- Anje: Ahm. Basically the same way. Ahm...a technical analysis rather than something more creative.

In Segment 1, Anje defines what she sees as a difference between a technical analysis and a creative approach to the assignment. This is basically a mirror exchange. While Todd did not ask questions beyond the prepared list, he was still asking reflective questions which are the heart of collaborative planning. Anje's statement, "a technical analysis rather than something more creative," illustrates the concept of metacognitive comprehension. Anje, as I mentioned above, wrote a poem instead of a traditional essay for one of her assignments. This was the risk. She incorrectly assessed the quality of three short stories against a given rubric. This was the mistake. In her mind, she is equating the risk with the mistake and in so doing is actually operating in Window 4 of Figure 1. She thinks she knows what went wrong with the paper, but her equating the risk with the mistake shows that she does not. Todd also does not know this, so he is unable to move her into Window 1 concerning this confusion.

SEGMENT 2

- Todd: I see. [looking over list of questions] Ah! How do you think you'll organize your ideas?
- Anje: I think I'm probably going to go with aspects rather by story since I think there's a lot of material to be used...in...within the different aspects of the story...especially with the minor characters ... I think are important.

- Todd: Alright. Hem...hem...[looking over questions]. Is that the best way to organize this information? Now really, Anje?
- Anje: I really don't know...but...but that's probably what I'm going to go with...it depends how much I...how much material I really do come up with.
- Todd: And is there any other way of organizing it?
- Anje: Any other way of organizing it? Well...yeah. I could organize it by story. I could...could make it completely random and take a risk.
- Todd: Ohhhooohooohoooh. There ya go. There ya go. Put it all on the line.
- Anje: Yeah. I don't think I want to do that though. I want to make it understandable.

This segment is both a mirror and a window exchange. First, Todd asks Anje to consider her current plan for her paper's organization. He then leads her to reconsider this by asking if there might be an alternative. Because he is getting her to think about her organization, the exchange is a mirror. Then Anje opens the window on the concern of risk-taking again, sparked by Todd's questioning about other ways to organize the paper.

SEGMENT 3

- Todd: What is your purpose in writing this piece of writing?
- Anje: My purpose?...is basically...yeah...to [laugh] outdo my last effort which was rather miserable...ahm...basically I think...my purpose is [laugh]...to spend more...more time on this one to make it a more accurate analysis...more...a better thought-out analysis.
- Todd: [Deliberately] What do you want your reader to know when he or she is finished with this piece of writing?
- Anje: Ahn...I want him to understand...my reasons for...choosing the second story as the better one...ahm...and to agree...based on...based on my analysis of it.
- Todd: Okay. Who is your reader for this?
- Anje: Ahm...for now I'll say Mr. Benedict if I come up with something completely off the wall and interesting that I decide will work better. I'll probably do that.

This segment starts as a window exchange as Anje mentions her concerns about getting a better grade than the last time. It then becomes mirror exchange as she is led to think about her audience. The linkage between reader and purpose is an interesting point, especially Anje's comment about "off the wall." She will use me as the reader if she comes up with some approach that would be "off the wall" or risky. The inference I make here is that she will use a more staid reader for a less than risky approach.

SEGMENT 4

Todd: Like the authors themselves?
 Anje: [Laugh] Yeah.
 Todd: Heeey. There's a good ideaaaa!
 Anje: That is an idea.
 Todd: I should put that on my tape.
 Anje: Oh nooo! But that is your idea.
 Todd: Yeah. It is my idea. For the record it is my idea.

In this segment a window opens for Todd as he picks up on Anje's "off the wall" remark. He then generates an idea for his own paper which he altered somewhat when he wrote his paper. This is a case, as I mentioned earlier, where a window can open for the supporter as well as for the planner.

SEGMENT 5

Todd: What things does your reader need to know?
 Anje: What's he need to know? He needs to have...he...she needs to have read the story...and um...to have a basic understanding of like ah a short story...to know what theme is and so on.
 Todd: Okay...uh...um [looking over questions] How do you think your reader would respond to what you want to say?
 Anje: Hopefully in a VERY POSITIVE way. ahhhm...[laugh]
 Todd: In a positive numerical way...
 Anje: Yeah, [laugh] exactly...now, How do I think my reader will respond? Hopefully by understanding it...you know...

Again, what starts as a mirror exchange moves to a window exchange. It becomes more and more evident that Anje is allowing her concern over the bad showing she did on the last paper to put constraints on her planning. While she is going forward with the planning, she keeps shuttling back to her risk-mistake with the earlier paper.

SEGMENT 6

Todd: Yeah. What approach are you taking with this writing?
 Anje: I'm really not sure...I'm tending toward the traditional...essay.
 Todd: Why? You afraid to take a risk? Huh? HuhHuhHuh?
 Anje: Yeah. I am...I certainly am.
 Todd: [Laugh]
 Anje: and ahm...mostly because...the only...the best...the most plausible other way to do it would be as a review but that's already been done. I don't want to seem like...you know...cause that...that would not be a safe risk...or no risk at all.
 Todd: Yeah.

Anje: So...ahm.
 Todd: Safe risk [laugh] ain't a risk.
 Anje: Yeah. ah...
 Todd: Go ahead.
 Anje: So, it'll...it'll probably be a traditional essay.
 Todd: Is that approach appropriate for your key point?
 Anje: I think...it would be...yes.
 Todd: For your reader?
 Anje: ...maybe not, but...
 Todd: Yeah.
 Anje: I think...I think if I can be creative in at least one element of...of the paper I...if...if I at least change the audience...then ah...that might...be just as... just as effective as changing the format...the structure.
 Todd: The...for the information you have?
 Anje: Yeah...I think it's appropriate for the information I have.
 Todd: Is there a th...is it a hyehn [raspberry] Is there an alternative which would work better?
 Anje: Ah...I don't know...I don't how well doing a short story would work considering that both these writers are a great deal better than I am...I don't think I could outdo them.
 Todd: There's an approach...Write a story that's better than...better than all two of them together...
 Anje: Yeah...I know...I think...ahm...this would be the best way to do it.

Segment 6 is both a mirror and window exchange. The concern about risk-taking again surfaces and Todd taunts Anje about it. Anje, through Todd's selection of questions, re-thinks her audience. In Segment 3 Anje considers me her reader. In this segment, she hits on the possibility of changing her reader and then allows herself some latitude to take a risk. What is implicit in this segment is Anje's awareness that a change in audience would necessitate a change in how she would write the paper. She tests out the idea of writing a short story, rejects it, and reaffirms her initial decision to write a traditional essay. She leaves open the possibility of risk taking within this framework, however.

I feel that the metaphors of mirror and window allow me a different glimpse into what did take place in Anje's planning session. She was a dynamic writer who was not afraid to take risks with her writing when she felt comfortable with it. There are other analyses I could perform on this session, such as analyzing Todd's role as a supporter. One thing that must be noted, however, is the way he chose his questions to keep a direction going with Anje until he felt it was time to move on. This is especially true in Segment 6.

Todd was also a dynamic writer who took risks. During the school year he went through a self-perception change. At the beginning of the year, he thought he was an excellent writer, having contributed to the school's literary magazine and being an editor on the school newspaper. He had some setbacks with a few papers and changed this image of himself. Towards the end of the year, he realized that if he wanted to write he would have to take those setbacks and grow from them. Throughout the year, then, he moved into Window 1 of Figure 1 regarding his perception of himself as a writer.

As I mentioned earlier, I was attracted to the Making Thinking Visible project because it resonated a chord I had from my reading in the field of physics. In an article I wrote for *Bridges*, the journal for the Western Pennsylvania Council of Teachers of English, I said:

We maintain that writing and thinking are one and the same thing. Writing, however, presents a schema of thinking much the same way a bubble chamber in physics presents a schema of pion collisions instead of the actual collisions. A finished musical score, a painting, or a sculpture also present such schemata. (20)

Collaborative planning was the bubble chamber for the thinking the writers in my classes do when they plan or do not plan their writing. Because of this schema, I can now better diagnose the problems writers are having in thinking about their paper and help to prescribe before they write rather than try to remedy matters after they have written.

There are two questions that I have been reflecting on since my work with collaborative planning this year:

- What did I learn from my work with both Planners' Options[®] and collaborative planning?
- What am I going to do with this knowledge?

What did I learn from my work with both Planners' Options[®] and collaborative planning? I now have a working model of the relationship of the planner and supporter. I also have a better concept of the earmarks of a good planning session. What essentially happens in a good planning session is a dynamic and, in a sense, an organic process. Gleick, in talking about biology, said "Pattern born amid formlessness: that is biology's basic beauty and its mystery." (299) In a good planning session, we have pattern emerging from formlessness through the interaction of a planner who comes with at least a vague plan and a supporter who comes prepared to collaborate with that planner.

I said earlier that the successful use of these planning tools or any other planning tool is dependent on the attitude that writers bring to a planning session and not on the planning tools themselves. With Chris it did not matter whether he was using Planners' Options[®] by himself or collaborative planning with a partner. He

gave the same type of responses in either case. He did not have the seriousness of purpose that underlies both the Todd/Anje session and the Michele/Louann session.

In a collaborative learning classroom, the processing of an activity is just as important as the content of the activity. "How do you feel about what you just did?" "What did you learn from this session?" "What helped you in this session?" "What did not help?" These questions help a learner to internalize what he or she just did. While I did this with other activities, I neglected to do this consistently when I was working with either Planners' Options[®] or collaborative planning. I feel that if I did this debriefing consistently, I would lead the writers to understand the seriousness of purpose that is necessary for a good planning session. Talking about a planning session would allow writers to see the strengths and weakness of their planning and allow them to understand the relationship that a planner and supporter need to nurture.

What am I going to do with this knowledge? In *A Brief History of Time*, Stephen Hawking says:

In order to talk about the nature of the universe and to discuss questions such as whether it has a beginning or an end, you have to be clear about what a scientific theory is. I shall take the simple-minded view that a theory is just a model of the universe, or a restricted part of it, and a set of rules that relate quantities in the model to the observations that we make. It exists only in our minds and does not have any other reality (whatever that might mean). A theory is a good theory if it satisfies two requirements: It must accurately describe a large class of observations on the basis of a model that contains only a few arbitrary elements, and it must make definite predictions about the results of future observations. (9)

Collaborative planning has given me the model I need to talk about the nature of writing and the planning of writing with the writers in my classes. With that model, I can then start making some assumptions and start drawing some conclusions.

As a general statement, I would say that the quality of the planning session depends on the quality of the supporter. Leonard Donaldson, a history teacher at Peabody High School and a member of the Making Thinking Visible project, said this at one of our earlier meetings. I tucked that information away, not fully appreciating what he meant. With my own work this year, I now see the ramifications of his remarks. A good supporter is able to help the planner work with design and rhetorical concerns through questioning, active listening, and re-questioning. These skills, however, need to be modelled for the writers until they become proficient in using them.

What use am I going to make of my knowledge? I now have a tool to better diagnose my writers' think-

ing and planning patterns in order to help them to write better papers. I will now be able to structure my introduction to and presentation of collaborative planning and Planners' Options[®] in a more systematic way so the writers will be able see the underlying purpose in these heuristics and what is needed to make them work. I then have a model, not of the universe, but of how to view the thinking patterns of the various kinds of writers in my classroom.

By using the metacomprehension diagram, I can show writers how their planning sessions can help one another gain the knowledge they need for their writing. They should, then, come to an understanding of what they know, what they do not know and how to rectify this.

By using the mirror/window analogy, I can help my writers see the role a supporter plays in a planning session. Also, by reading protocols from previous planning sessions in conjunction with the mirror/window diagrams, writers should get a sense of the types of questions and comments that are beneficial for the planner and, by extension, for the supporter.

It is one thing to look at a finished product and to second guess the thinking behind it. It is quite another to watch that thinking in action and realize how it will affect the final product. Planning, to me now, is one of the more important parts of the writing process. This is underscored in the most recent publication of *The Nation's Report Card on Learning to Write in Our Nation's Schools*:

There appears to be a positive relationship between planning and writing performance, as students who said they engaged in planning more often demonstrated higher average writing achievement than their peers who reported less frequent planning. (24)

The concept of "making thinking visible" supplies me with Hawking's requirements for a good theory. It allows me to recognize which window of metacomprehension I was operating in this past year and how to tell where my writers might be. I can now make some predictions about what will happen next year when the writers in my classes use collaborative planning or Planners' Options[®].

In short, I now will be able to see something in these writers' thinking and planning because I have the right metaphor to let me perceive it.

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EXPLORING PLANNERS' OPTIONS[®]: A COLLABORATIVE PLANNING TOOL FOR INEXPERIENCED WRITERS

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CARNEGIE MELLON UNIVERSITY

... the more interesting entries tended to be those providing specific information and details about the plans or goals Whenever the written log entry contained specific and detailed written entries, it provided a window allowing a person to see more clearly what the writer was planning to do in the paper.

Helping inexperienced writers see writing as a complex process that begins with something that is inchoate and results in a tangible product can challenge us as writing instructors—and we are not always successful when we try to illustrate this process for our students. For many students, what occurs between the inchoate and the tangible remains an enigma.

We can explain to students that there are various elements and dimensions to this process we call writing that might include determining a workable topic, constructing a plan, shaping the plan through language, formulating ideas, making connections among these ideas, deliberating audience perspectives, anticipating readers' objections, generating text, pondering rhetorical objectives, discovering interesting associations, refining the topic(s), reshaping plans, revising text, weighing genre and text conventions, and so forth. However, many inexperienced writers are unaccustomed to thinking about writing in this mindful manner and attending to what often seems like an overwhelming number of time-consuming considerations.

If we look at the process experienced writers engage in as exemplifying a paradigm, we begin to discover some useful activities and strategies that can be shared with inexperienced writers. Recent research indicates that experienced writers tend to commit time and attention to planning their writing as a fundamental aspect of the writing process (Flower, Schriver, Carey, Haas, & Hayes, 1989). Often, when experienced writers are working with a familiar genre, they invoke well developed schema to help them plan a paper; experienced writers are also capable of constructing goals and plans for a paper from scratch if they have to. In marked contrast, inexperienced writers do little planning at all and tend to limit that planning to topic ideas and information; yet, trying to focus students' attention on this important dimension of the writing process (particularly, at the moment where initial planning occurs before a draft is composed) can often be perceived by students as an amorphous task. An important question, then, is how does a writing instructor set about portraying the subtleties and nuances of planning a paper?

Although the student-teacher conference frequently occurs between drafts of a text, this same sort of collaborative arrangement could offer perhaps one of the most effective methods of providing an inexperienced writer with a fruitful planning session. After all, who better to have collaborate with an inexperienced writer than an experienced writer who has a keen sense of the types of questions and concerns that need to be addressed. Yet, while this kind of dialectical interaction may be an extraordinarily successful way to help students come to understand some of the dimensions of the writing process in general and the planning process specifically, it represents an inefficient method of teaching students, given the large class sizes and a heavy paper load that most writing instructors face.

An alternative to the student-teacher conference that preserves the interactive dialectic is peer collaboration. Peer collaboration is a label that represents an assortment of activities in various forms and generates a lot of discussion among

people in the field of writing. Over the years, educators have looked at collaborative composing (Clifford, 1981), peer response groups (DiPardo & Freedman, 1988), and peer tutoring to name a few. And, inexperienced writers collaborating while they plan papers may present a viable approach to helping students with the planning process.

Much of the talk among teachers regarding collaborative projects centers on the students and weighs the advantages and disadvantages that might originate from having a collaborative setting in a typical classroom. But if you attend to these conversations closely, there are other principal issues that can be heard as well. For some teachers it is difficult to break out of the educational tradition of the solitary student doing his or her own work. Some worry that students doing collaborative work opens up new avenues for cheating, that students' work becomes more difficult to evaluate, that students' discussions will frequently stray off-task, or that the apparent "disorder" of multiple conversations in a conventional classroom reveals a lack of control on the part of the teacher.

In addition to these concerns, another factor that is usually overlooked is the teacher's own acclimation to new classroom circumstances. Teachers frequently experience some degree of difficulty while adjusting to any new approach in the classroom. Research indicates that introducing a new procedure, method or technique into a course, even when the teacher is a capable instructor, can disrupt the teacher to such an extent that students' learning is negatively affected (Smith, 1986). Teachers report that they feel anxious and uncomfortable with a new procedure and realize that it shows through in the class. In many instances, it is not uncommon for teachers to take up to a year to accommodate the new practice.

COLLABORATIVE PLANNING

In light of these key concerns, one creative method for helping students make their thinking and planning processes more visible while they attend to and reflect upon the various dimensions of writing is a technique called collaborative planning, which has a flexible structure that permits teachers to adapt the technique to their own teaching styles. Collaborative planning allows students to work together and investigate the various elements and dimensions of writing as they plan a paper. Typically, a writer collaborates with a partner called a supporter; together they think through problems and explore different goals and strategies for shaping the paper—and in that process discover what it means to be more aware of their own writing and problem-solving processes (Flower, Burnett, Hajduk, Wallace, Norris, Peck, & Spivey, 1990).

As the writer presents his or her tentative and sometimes sketchy plans for the paper, the supporter's responsibility is to help the writer by asking useful questions of the writer, eliciting clarifying information when necessary, contributing advice, raising meaningful objections, promoting divergent views, sharing opinions, and even encouraging the writer with compliments, if appropriate. However, the organization of the collaborative planning session is such that the authority for the paper rests with the writer during the planning sessions and decisions regarding content, style, etc. always remain under the writer's control.

Often the students' collaborative planning session can be facilitated using one of several operating metaphors, such as the Planning Blackboard or the Writer's Maze, which provide students with a functional way of structuring their planning session. These metaphors evoke commonplace images that can supply students with a conceptual framework that assists them in organizing their thoughts and ideas as they travel through the different planning spaces or areas signified by the blackboard or maze, which are illustrated in figures 1 & 2.

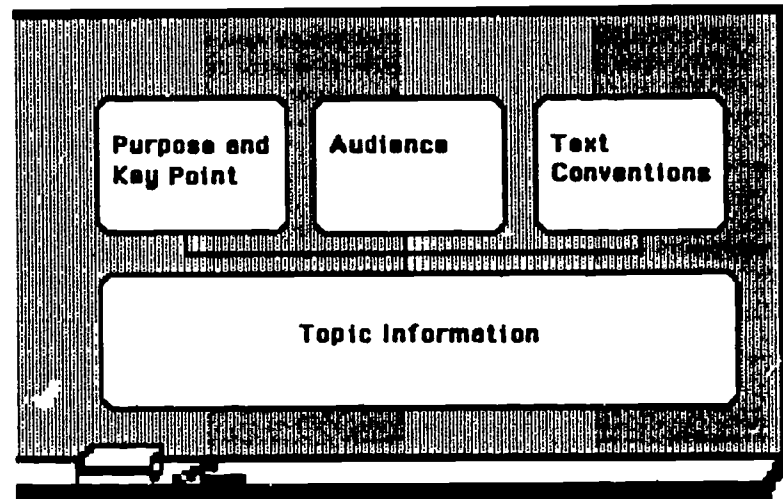


FIGURE 1. PLANNING BLACKBOARD

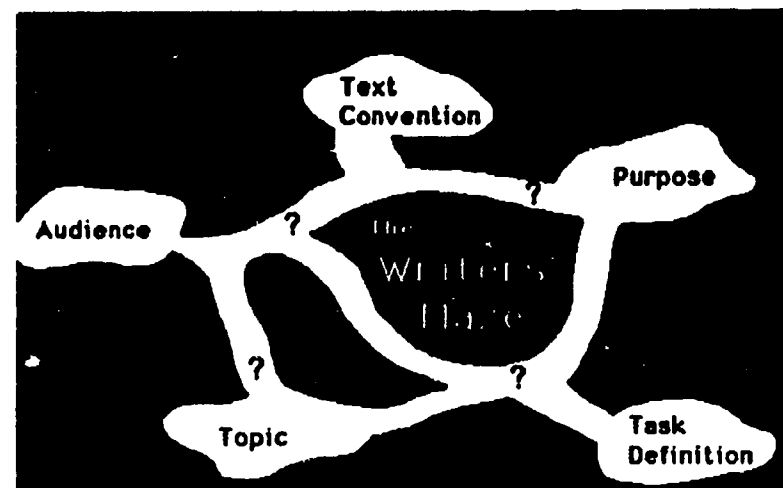


FIGURE 2. WRITER'S MAZE

For many inexperienced writers, the collaborative planning session gives them an opportunity to see new options and share alternative perspectives. In addition to creating a social environment for looking at this process, students planning together can begin to dissolve some of the mystery that surrounds writing by seeing some of the similarities or differences people have in approaching a writing task, appreciating the variations in thinking about an goal, noticing how another person responds or interprets a statement or explanation, or even reflecting upon the planning and writing process.

However, observations and field notes from several teacher/researchers participating in the Making Thinking Visible project, which is studying collaborative planning, suggests that some inexperienced writers are ill-equipped to step into the role of the supporter without some further guidance or direction. Usually, this type of supporter does not ask relevant and attentive questions. A typical prompt might be "What is your topic?" followed by "Who is your audience?" In other cases, the student supporter seems unable to become engaged in the planning session and offers the writer little assistance (Burnett, 1990).

Furthermore, if a writing instructor epitomizes the ideal collaborator as a person who can provide some direction for the planning session, how can we share with students—and, thus, provide a model for

them to emulate—the kinds of prompts, questions and suggestions that a writing instructor might offer in a conference? And, what can we do to try and make the goals and ideas students generate during the planning session more concrete?

The exploratory study described in this paper looks at the potential benefits of introducing a specially designed computer tool into collaborative planning sessions. This preliminary investigation examines only two aspects of the collaborative planning technique, namely, modeling and delivering a set of general prompts and questions for the student planners, and encouraging external representation (i.e., recording written notes about the writer's plans and goals) during the time students are involved in a planning session. Given the above concerns about students' ability to enact the role of the supporter, would the prompts and questions that the program delivers help stimulate conversations and help students become more engaged during the collaborative planning session? And second, what types of responses would students record on the computer log?

THE PLANNERS' OPTIONS® PROGRAM

As one attempt to address some of the problems outlined above and, perhaps most importantly, to help students visualize the role of the supporter, I designed a planning tool for the Macintosh® computer called Planners' Options®, which runs in a Hypercard® envi-

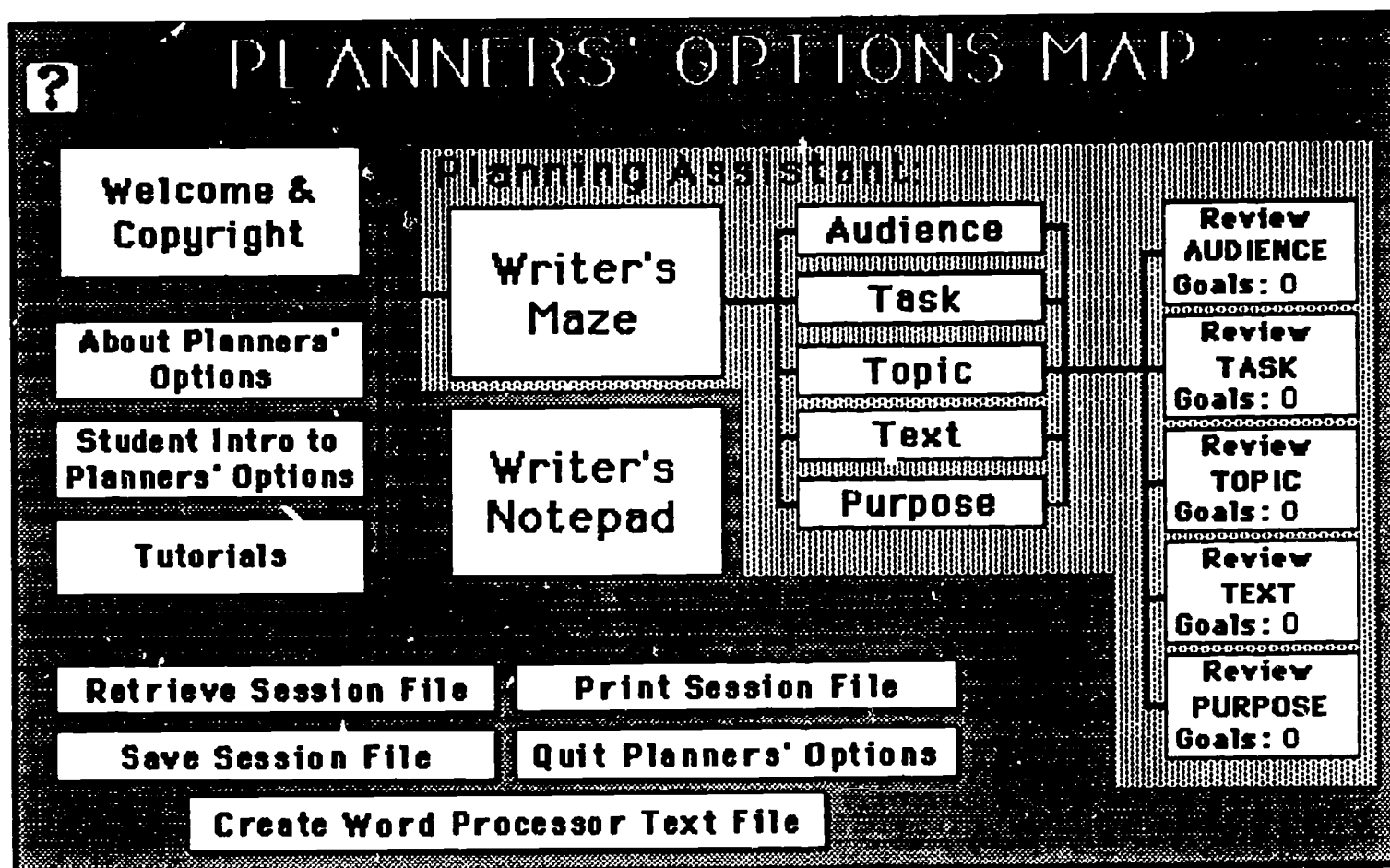


FIGURE 3. PLANNERS' OPTIONS MAP AND MENU

ronment. **Planners' Options**® was developed to try and facilitate the collaborative planning session by delivering different prompts, giving a pair of planners the opportunity to discuss possible responses, and then allowing students to record the gist of their responses via a computer keyboard. After students finish a collaborative planning session, they can save and subsequently print out a record of the ideas, goals and text they generated.

The nucleus of the program is the Planning Assistant, which, in effect, becomes a second supporter providing an additional degree of structure for the collaborative planning session by offering general or assignment-specific prompts and questions for the students to select, discuss, and respond to as they move through the different planning spaces contained in the program (see figure 3). Using the metaphor of *The Writer's Maze*, the software automatically and transparently invokes the conceptual framework that the planning spaces provide for the planners (The different planning spaces are present and available for the planners to use. Therefore, students benefit from the structure of such a framework. But students are free to attend to the questions and prompts while the software sustains the conceptual framework).

While the program provides an easy method of delivering various prompts and questions for students,

the Planning Assistant also exhibits and models the type of serious and thoughtful questions an experienced supporter might ask of a writer. In this respect, the Planning Assistant is dynamic in the sense that it allows teachers to 1) use general questions and prompts supplied with the program, 2) enter and record assignment-specific questions or prompts, and 3) allows the student supporter to enter and record session-specific questions and prompts that arise while the students are actually planning and collaborating. In a very practical way, when a teacher creates a set of assignment-specific prompts using the teacher-authoring mode, **Planners' Options**® allows the teacher to unobtrusively "join" each collaborative planning triad since he or she generates an original set of prompts and questions, which may be updated or modified as necessary.

The other aspect of this investigation is the role of external representation, i.e., using a written notation or record as a way of possibly enhancing the collaborative planning sessions. During a collaborative planning discussion, students may generate a lot of useful ideas and plans as they talk, yet these oral planning sessions might be strengthened if students were encouraged to record the gist of their conversations as they respond to different prompts.

Although a benefit often cited for collaboration is that participants bring different knowledge, experi-

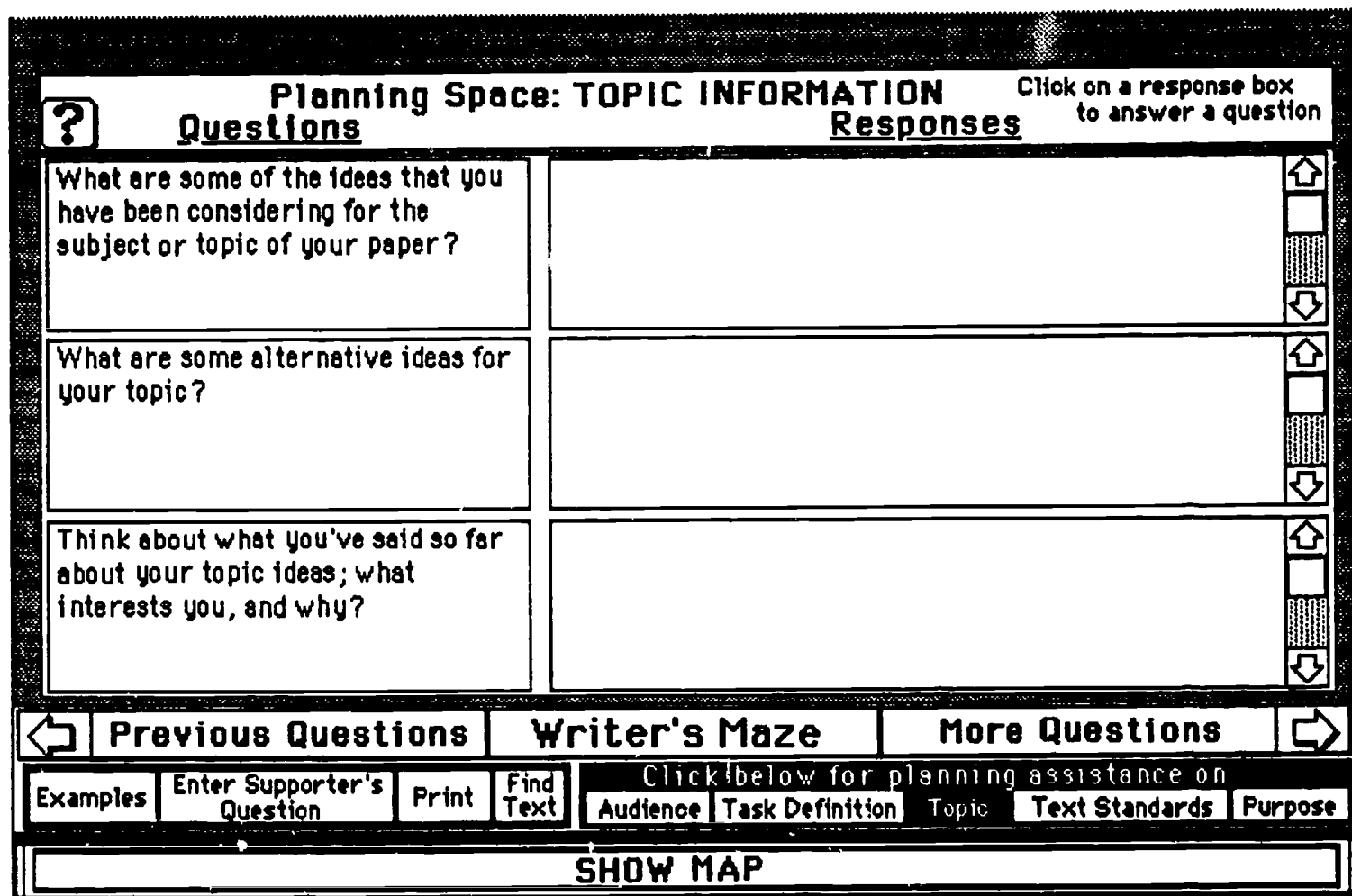


FIGURE 4. PLANNING SPACE SCREEN

ences and perspectives to the writing task; paradoxically, this may also be a source of difficulty for the students as well. Students operating with different knowledge, experiences and perspectives can create different or conflicting internal (or mental) representations of the collaborative interaction itself (i.e., two students planning together can develop and take away different understandings, plans and goals from a planning session). Further, because this collaborative interaction is usually verbal and ephemeral, it may be more difficult for the participants to compare and reflect on their interpretations of the interaction. Early exploratory research on between-draft collaboration suggests that writers in a face-to-face collaborative condition tend not to make notes of remarks with which they disagree and they tend not to address those points in revisions of their drafts (Neuwirth, Palmquist & Hajduk, 1990). Therefore, providing students with a simple way to externally represent the ideas and plans they have generated may furnish students with an easy way to review a "visible" record and engage in a more careful reflection of their plans.

Keeping this view of external representation in mind, the Planning Assistant in the Planners' Options[®] program was designed to provide students with a Review Area that may encourage them to track their progress, review their planning goals, and reflect upon their statements and notes. Moreover, since research demonstrates that writers have a difficult time developing a sense for the text whenever they read text on a smaller computer screen, that is, a screen showing less than full page, students can print out a computer log of the details they have recorded. The program can also generate a computer file that students can access via any standard (ASCII) word processing program—allowing them to cut and paste text that they generate during the planning sessions.

Finally, if a writer wishes, he or she can begin composing a draft of the paper using the Writer's Notepad area contained in the program; the text students enter here can also be printed out and referenced as a first draft, or the student can retrieve the text from a computer file later so it might be cut and pasted into any word processing program.

PARTICIPANTS AND PROCEDURES

Seventeen students from a freshman composition class at Carnegie Mellon University—a section which was taught in a computer classroom using Macintosh[®] equipment—agreed to field test a prototype of Planners' Options[®] by using the tool to plan one of the assignments for their course. All students had taken the university's required computer skills workshop during the previous term, so all the students were trained computer users.

The regular writing instructor maintained the general responsibility for the class; however, the re-

searcher worked to become an accepted member of the classroom community by giving several lectures and participating in discussions during the term before introducing collaborative planning. After an overview of the techniques of collaborative planning, using the Planning Blackboards metaphor, students saw a demonstration by two experienced writers who were planning a paper; a discussion then followed where students offered their initial impressions of collaborative planning, shared the various kinds of observations and notes they had made during the session, and talked about the benefits such collaboration might yield. In addition to receiving a two-page, "minimal," user's manual on Planners' Options[®], students saw the software demonstrated via an overhead projector and had the opportunity to ask any questions regarding operation of the program itself. Finally, the students watched another demonstration of collaborative planning between two experienced writers who used the software to guide their planning session.

To conserve classroom time, some students elected to carry out the collaborative planning session using the computers in the classroom; other students had the opportunity to meet with their partner in one of the campus computer clusters or in dorm rooms if a computer was available.

The procedural model used in this class asked students to employ a particular approach as they worked through their planning sessions. The strategy was to deliver a carefully constructed prompt or question for the students to read, have them discuss and debate possible responses to the prompt orally, ask one of the students to record the gist of the oral response on the computer, and finally print out a computer log of the planning session for reference. This model, then, has four components to it, as shown in figure 5.

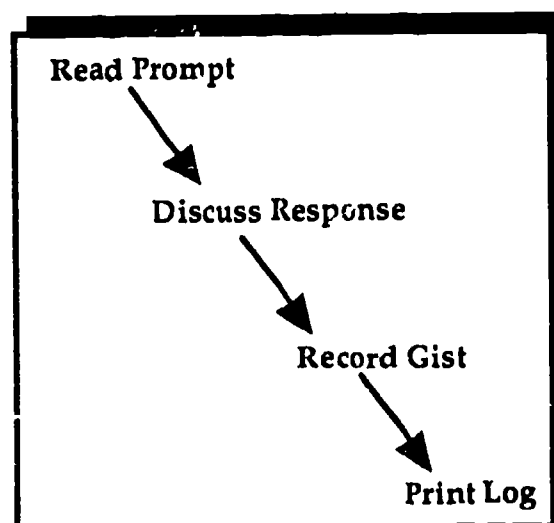


FIGURE 5. PROCEDURAL MODEL

Because this was the first time the software was ever used in a classroom, only the general prompts and questions were used (see example in figure 4); that is, we did not make use of the option that allows an instructor to generate and insert a set of assignment-specific prompts.

In order to discover the effect of: 1) this type of modeling and delivery of prompts, and 2) to evaluate the types of responses student planners decided to record, three types of data were collected. First, the conversations of some of the students' collaborative planning sessions were tape-recorded and transcribed. Second, the computer logs that the students generated while using Planners' Options[®] were captured and printed out for analysis. Finally, the students' last draft of the texts they had been planning were collected and reviewed.

DISCUSSION OF FINDINGS

One initial way to assess students' general level of engagement during the planning sessions is to tally the raw responses the planners entered into the computer for the prompts and questions in each of the five planning spaces. A review of the computer logs indicated that students did take the time to read and respond to most of the prompts and questions modeled and delivered by the program. A tally of all the computer logs shows that the planners responded to 86% of the task prompts, 77% of the purpose prompts, 76% of the audience prompts, 75% of the topic prompts, and 69% of the text prompts. Most students were fairly diligent about making a constructive response to each prompt, with only 5.5% of the student responses being unproductive (e.g., *We already answered this question*). Although some students clearly did disregard some prompts, especially in the text planning space, it seems, after talking with some of them, that several students neglected to retrieve the additional prompts in the planning spaces and limited their responses to only the first three prompts that are visible on the first planning space card—instead of moving on to the second and third cards—and this appears to be the reason why students did not respond to some of the prompts. Finally, although the software does not mark the length of time students spent on task planning their paper with a supporter, when students pilot-tested the Planners' Options[®] program in a lab setting prior to this current classroom study, the students' planning sessions lasted about ninety minutes. In the classroom setting, all the students began a planning session during a fifty-minute class period, but they all continued their planning sessions outside of the classroom. Thus, the students spent at least an hour planning with a supporter and recorded a response to most of the prompts and questions modeled and delivered by the program.

Another general measure that points to the level of students' engagement during the planning process is

achieved by looking at the conversational turns students take. By examining a typed transcript of a writer and supporter's planning conversation, teacher-researchers can often get a sense of how much planning is taking place as they count the number of turns students take while they discuss plans for the paper. Generally, the more turns on an planning space, issue, key point(s), topic idea(s) and so forth, the more likely it is that there is some interesting planning taking place. An examination of the transcripts in this study indicates that the number of turns the planners took during their dialogue for each of the five different planning spaces varied from a low of six turns for a task planning space to a high of forty-six turns for an audience planning space. However, the majority of responses ranged between twelve and twenty-one turns for each planning space, with more conversational turns taken while responding to the prompts in the audience planning space than in any of the other planning spaces.

Since the video tapes from the pilot-test of Planners' Options[®] showed students engaging in enthusiastic conversations after receiving most prompts, the expectation was that these same prompts and questions would generate a higher number of conversational turns than is reflected by the transcripts analyzed in this classroom study. One explanation might be that students in the current classroom study had more distractions in the computer classroom and in the computer clusters whereas the students in the pilot test completed the planning sessions in a private, closed lab.

Here is a typical exchange between two student planners who respond to four prompts as they move through the topic planning space in seventeen turns. They have agreed that Annie, who is the supporter, will read the prompts and questions from the computer screen. For comparison the transcript of their conversation is shown in the right column (figure 6), and the corresponding computer log entries are shown in the left column (figure 7). The recorded responses here tend to reflect and summarize the planners' conversations—except for the recorded response to the second prompt. Italicized text indicates text that was entered into the computer log by the planners. (Note: *Both figures are on the next page. Please refer to them before reading what follows below.*)

A close examination of the planning transcript allows us to make some interesting observations about how students are interacting with one another, how they are interacting with the program, and how they are responding and working with the prompts from the program—especially when compared to the notation the students made.

Quite often transcripts of two planners talking about their plans (and working without a computer) will reveal a resourceful supporter prompting and encouraging the writer to elaborate upon an issue or

3. Arnie: *[reading a prompt]* "What are some of the ideas that you are considering as the subject or topic of your paper?"
4. Alice: All right. Ah.... The article I took out was on urban development. And so ah.... The possibility of where it's going is... more of an environmental concern. I like the idea of a picture of a hostile environment. Those two thing together. Is that all right?
5. Arnie: Yeah. Yeah.
[pause, typing]
6. Arnie: More questions?
7. Alice: *[reading]* "What are some things people are going to expect you to say about your topic?" I don't think they would expect the two together actually.
8. Arnie: *[Reading]* Okay what do you think? Is this a widely known topic?
9. Alice: I think urban design is a fairly new thing. Usually you just build a building. You don't think about where it's situated. The whole idea is now in advancing cities and all that. I guess the explanation depends on the audience—and who the audience is.
[pause, typing]
10. Arnie: Okay, why don't we switch to Audience. What happened?
11. Alice: I think we hit the wrong button. Try... Yeah, that's good.
- [planners decide to move briefly to the audience planning space: 10 to 26]*
27. Alice: Okay. *[reading]* "What are some alternatives I could use for my topic?" We didn't think about that one.
28. Arnie: Are there divisions within architecture?
29. Alice: Yes.
30. Arnie: Or maybe even not architecture.
31. Alice: Yeah, you're right. There's all these other fields of architecture. I could do that.
32. Arnie: What kinds of fields are there?
33. Alice: There's planning the building, and commercial design, residential design, and re-construction?. That's where you take a building and add on to that...
34. Arnie: Oh, I know what you're talking about.
35. Alice: I can't remember it right now either. Re-something. *[pause, typing]*
36. Alice: *[reading]* Well, I'd like the general public to be informed about it.
37. Arnie: Are you going to be informative or are you trying to express your feelings about it too?
39. Alice: Yeah, I want to express my feeling too.
[pause, typing]

FIGURE 6. TRANSCRIPT EXCERPT

TOPIC PROMPT 1: What are some of the ideas that you have been considering for the subject or topic of you paper?

RESPONSE 1: *architecture and concerns with the environment. Urban design.*

[NO RESPONSE RECORDED]

TOPIC PROMPT 2. Think about what you've said so far about your topic ideas; what interests you, and why?

RESPONSE 2: *Personal interest in architecture, I've grown up in a growing suburbia, so I see a need for some type of planning additional to design. Frank Lloyd Wright's building, Falling Waters is an extreme of how a building can fit into it's environment, and how the design if the building is conceived with consideration of the surroundings.*

TOPIC PROMPT 3. What are some alternative ideas for your topic?

RESPONSE 3: *other fields of architecture. design, reconstruction, adding on to buildings, residential planning, etc*

TOPIC PROMPT 4. What are some things that a reader would expect you to say about your topic?

RESPONSE 4: *to be informative, how the environment and architecture are tied together. also how I feel about it. It is an issue that I am concerned about.*

FIGURE 7. COMPUTER LOG EXCERPT

point being discussed. The excerpt above shows that Arnie gives Alice encouragement in a number of places, and Arnie prompts Alice to augment and clarify her responses in several places (see turns 8, 28, 32 & 37). Yet, while Arnie does prompt Alice with questions that he generates on his own, this transcript also shows that the majority of the students' conversational turns involved one of the planners reading the prompt; and this happened in all the transcripts.

Additionally, in terms of the program itself, the transcript also points out that some planners had to spend a portion of their session time attending to the program and working within its structure. Occasionally, the transcripts revealed that some students had to spend some time recovering their "place" in the program after they would click on the wrong navigational button. For example, at turns 9 & 10, we hear that they have made a navigational error, but manage to recover from it rather quickly.

Finally, though the pauses for typing are noted in the transcript, the length of time is not recorded. Some of the transcripts indicate that the supporters remained attentive as the writer keyed in the responses. Some supporters helped by contributing or suggesting words and phrases, and in a few cases the supporter was heard dictating the response. For example, in the following excerpt, Sally types and records the responses that her supporter, Frank, suggests.

Sally:	(reading) "Why do think you're being asked to write this kind of paper?" I think that's hard to say.
Frank:	I think it's because slavery has not really been abolished (laugh) No, because it teaches us...you know this class isn't meant to be a writing class just for writing for the sake of writing. It's meant to help us in our fields.
Sally:	(typing) <i>This course is meant to help...not in writing alone, but writing to people in your own field—yeah.</i>
Frank:	At least in preparing students—because we're going to have to do it anyway.
Sally:	(typing) <i>At least to prepare us to do this in the future.</i>

FIGURE 8. TRANSCRIPT EXCERPT #2 (SALLY & FRANK)

However, as many of the responses are keyed into the computer, the only sound on the tape recorder was the sound of the clicking keyboard. And field notes taken in the classroom noted that some of the supporters would use the time to gaze around the room while responses were entered.

In comparing the transcript of their conversation with the entries of the computer log, it is interesting to notice that the written response to TOPIC PROMPT #2 is neither read aloud by either planner nor discussed. Yet, the written response provides a more complete picture of Alice's interest in architecture and a compelling example for the argument she is trying to make. And in her final paper, she does include this example of Wright's work to effectively illustrate her point.

In summarizing the analysis of the transcript above, students may have been constrained by having to 1) spend time reading the prompts the program generates, which may have taken time away that a resourceful supporter might have used, yet on the other hand, it could have facilitated some of the less resourceful supporters; 2) spend some time moving around in the program, although this task might also have given the planners some downtime to think and reflect while they executed the routine navigational procedures; and 3) spend time keying in the written entries, which interrupted the planners' dialogue. It is also important to keep in mind that the transcripts do not always provide a researcher with a complete view of the planning session; the elaborated response citing Wright, as noted, was not discussed in the transcript.

REVIEWING THE COMPUTER LOGS

The responses entered in the computer logs reflected the types of notations that students decided to record. These written entries in the computer logs seemed to reflect students using distinctive strategies to respond to the prompts and to the questions the software modeled and delivered. Quite often the students' written entries were "canonized" responses. In some ways, a canonized response might be viewed as the type that comes quickly to mind and suggests restricted thinking on the part of the planner(s); on the other hand, it might also be seen as one way students rehearse the material they are learning in the class. The first type of canonized response occurs whenever the planner parrots back a writing platitude or bromide. For example, consider Bobby's response to the following prompt. TOPIC PROMPT 4: Often ideas that seem clear to a writer are unclear and confusing to readers; how do you plan to explain your topic ideas to your readers? RESPONSE 4: *Use non-technical language. Present a broad over view of the topic to prevent confusion and disinterest among the readers.*

The other type of canonized response occurs whenever a student remembers something the writing instructor has said in a lecture, discussion, or comment. Here's an example from a student log that coincides with a remark made by the writing instructor: RESPONSE 3. *I will obviously be expected to display "good writing" as determined by our studies to date on the notion of good writing. I will also have to cite sources and speak from the viewpoint of an authority in my field.*

Although both of these canonized responses appear to present rather general and high-level plans for a paper, and these type of plans appeared in every computer log, they also suggest that students do understand or hear some of the things that the writing instructor is saying about the planning and writing process and could suggest that students are struggling to use this instruction as they plan their papers. However, this type of response is probably not functional as a writing plan and, thus, is difficult for the student to put into effect in a paper.

It was apparent, after a cursory reading of the computer logs, that the more interesting entries tended to be those providing specific information and details about the plans or goals, especially when contrasted with canonized responses. Whenever the written log entry contained specific and detailed written entries, it provided a window allowing a person to see more clearly what the writer was planning to do in the paper. And since this kind of specific, detailed description provides a better window for outsiders, like researchers and teachers, it seems reasonable to presume that it could also furnish the inexperienced writer with a clearer picture of how the paper was shaping up. Hence, the design for coding the students' computer logs attempted to determine: 1) whether students tended to make written entries using a single proposition versus multiple propositions (here propositions are distinguished from grammatically correct sentences), 2) whether student planners tended to make general versus specific written entries, and 3) whether the students tended to make elaborated written entries or not (see figure 9).

Since many planners used a mixture of fragments and complete sentences as they recorded their entries in the computer logs, coding the logs for the number of propositions provided a classification that showed whether planners typically generated only one idea, point, problem, goal, etc. as opposed to generating several. Here are two different responses to the same prompt that illustrate the classification of a single proposition (SP) response. AUDIENCE PROMPT 4: Readers frequently don't know as much about a subject or topic as the writer does; so what kinds of things will your readers need to know about? RESPONSE 4 (Carol): *levels of architecture.* RESPONSE 4 (Ralph): *I'm working from the premise that these people don't believe in artificial intelligence, so I may have a problem.* Each response contains only one thought to consider, although one response is recorded as a fragment and the other as a complete sentence.

In contrast, the following three responses reflect a planner using multiple propositions to record entries. TASK PROMPT 1: Think about your assignment and give it your serious attention; then, explain in your own words what you think you are supposed to be doing in this paper? RESPONSE 1 (Carol): *applying everything we've gone over all the discussions concerning audience, what makes writing good, etc.* TASK PROMPT 2: What do you find interesting about this assignment? RESPONSE 2 (Carol): *Gives us a chance to write about and explore something that interests us. Writing as if we are already a member of the community.* TASK PROMPT 3: What are some specific things that your teacher will be looking for in this paper? RESPONSE 3 (Carol): *specifics of audience, what we've learned, to see that some thought process was used, information conveyed in a understandable way. Being a member of the community.*

SP: SINGLE PROPOSITION = indicates notation of one statement or comment offered for consideration or acceptance such as a point to be discussed or maintained in the paper.

MP: MULTIPLE PROPOSITIONS = indicates notation of several statements or comments offered for consideration or acceptance such as points to be discussed or maintained in the paper

GE: GENERAL & ELABORATED = indicates notation of proposition(s) concerned or dealing with universals of planning as opposed to particular aspects of the paper being planned, which are distinguished by the level of details or complexity used to record the notation.

GNE: GENERAL & NON-ELABORATED = indicates notation of proposition(s) concerned or dealing with universals of planning as opposed to particular aspects of the paper being planned, without being distinguished by details or complexity.

SE: SPECIFIC & ELABORATED = indicates notation of proposition(s) concerned or dealing with particular aspects of the paper being planned as opposed to universals of planning, which are distinguished by the level of details or complexity used to record the notation.

SNE: SPECIFIC & NON-ELABORATED = indicates a notation of proposition(s) concerned or dealing with particular aspects of the paper being planned as opposed to universals of planning, without being distinguished by details or complexity.

FIGURE 9. CODING CATEGORIES

Since the student responses in the preceding two paragraphs consider only universal plans that could well be applied to any paper, and since there are no elaborated or specific details about the topic or task being planned, these entries also reflect general non-elaborated (GNE) responses.

On the other hand, planners would also enter responses that contained specific information about their paper, but without going into much detail, and these were coded as specific non-elaborated, as the following example illustrates. TOPIC PROMPT 1: What are some of the ideas that you have been considering for the subject or topic of your paper? RESPONSE 1: *I have been considering two very different subjects. The first would include an argument against Searles reply to AI and the Turing test as a proof for intelligence.*

Finally, some planners recorded specific ideas or plans about their papers and made an extra effort to record more elaborate details of the ideas and plans. For instance, Erin, in the two examples that follow, enters responses that offers a writer/supporter some concrete details regarding optional topic ideas by recording two arguments (or proofs) that may need to be challenged in pursuing the ideas of artificial intelligence. TOPIC PROMPT 2: What are some alternative ideas for your topic? RESPONSE 2 (Erin): *An alternative would be something on reality perception, or I could write an essay that attacks both the Turing test as a proof of intelligence and professor Simon's claim of word-thing relationships that propose intelligence to exist in the simplest of digital computers (calculators).* In this last example, Erin's interests are expressed more clearly in the SE response, which happens to also record a point that Erin wants to raise about how artificial intelligence is defined. TOPIC PROMPT 3: Think about what you've said so far about your topic ideas; what interests you, and why? RESPONSE 3 (Erin): *the artificial intelligence issue interests me a lot because I don't believe that it is possible to have intelligence without consciousness, if it were, Simon would be right, and not just calculators but everything would have to be deemed intelligent in some manner. I think this is a point way overlooked by the professional philosophers that are currently dealing with this topic. The other topic interests me because I find the interpretation of reality an almost religious sort of experience.*

In applying these coding categories to the students' computer logs, the results reveal that 75% of the students' written entries were composed of multiple propositions. Not surprisingly, the greatest number of the students' written entries was General & Non-Elaborated (GNE), which accounted for 56% of all entries. The next highest category was Specific & Non-Elaborated (SNE) with 21% of the entries; 10% of the entries fell into the Specific & Elaborated (SE) category, and 8% fell into the General & Elaborated category. The remaining 5.5% were classified as either frivolous or flippant entries and not included.

In looking at the general and non-elaborated responses, which accounted for most responses, it seems like some of the prompts tended to have a mild "schema activating" effect in the sense that the recorded response often reflected some common planning patterns across students. For example, here's a prompt and a response from a student's log: AUDIENCE PROMPT 3. What are some things that readers would expect you to say about your topic? RESPONSE 3. *Define it and give basic information on it. Discuss the relevance of it to the readers. [EXPLAIN] how superconductivity will affect their life.*

Although this was categorized as a response statement with multiple propositions and as a general, non-elaborated statement (MP/GNE), it does reflect a simple schema with four distinct elements to it that may have been of limited value in establishing some overall structure for this student. First, the student plans to define what she means by superconductivity. Next, the student has decided that it is important to give the reader some basic information about superconductivity. The writer also notes that she needs to discuss the relevance of superconductivity for the readers' benefit. And finally, she decides that she wants to explain how superconductivity will be affecting the readers' lives. Albeit a very general and high level plan, it is carried out in the writer's paper.

The computer logs also suggest that the prompts that attempted to get students to generate paragraphs of more polished prose, which the supporter was to critique, were frequently ducked. For example, in response to TOPIC PROMPT 6: "Let's see an example, in a few paragraphs, of how you see your topic idea(s) fitting into your paper—keeping in mind your reasons for writing this paper. Have your supporter comment on the paragraphs after you have finished," even when students did produce some usable text, few of the logs or transcripts recorded any comment from the supporter.

On the other hand, in trying to encourage students to make written records of their planning sessions, perhaps the goal should not always be to hope that students produce perfect sentences, although a few of the prompts do specifically request that the writers attempt to produce a paragraph of two of prose that might be used to explain an idea they've been discussing or that might show how they would introduce a topic or key point. In fact, one study indicates that for some more capable students they produce better final drafts when they spend time generating brief propositions that note their ideas and plans as opposed to generating formal complete sentences (Glynn, Britton, Muth, & Dogan, 1982).

FUTURE PROCEDURES AND TECHNIQUES

Given the fact that only 10% of the responses were specific and elaborated responses, and given the above examples from students, which seem to present

a reader with a clearer picture of the writer's goals or plans, it may be interesting to see what might be done to further encourage more specific and elaborated written responses from planners. Perhaps one simple approach may be to simply tell students to just do it—i.e., be more specific when making entries. Another, possibly more subtle approach might be to revise selected prompts so that they request more specific responses.

A third and rather interesting approach might involve revising the procedural model that the students were asked to follow when using *Planners' Options*[®]. The transcripts and classroom observations indicated that the time during the planning sessions devoted to keying in responses was idle time for some of the supporters. Although some of the supporters remained "active" while the writer was recording a response (i.e., the supporter was attending to the text as it appeared on the screen and in many cases helping the writer by suggesting words, synonyms, phrases and sometimes sentences), approximately half of the supporters became "passive" while the writer recorded the response (i.e., the supporter would gaze around the classroom, rummage through bookbags, or talk with other students. Therefore, whenever there is a demonstrated high percentage of passive supporters, it may be useful to have the writer complete that portion of the task before meeting with the supporter. Thus, instead of asking students to read the prompts, discuss re-

logs as an outsider without the same context the two planners would have had also suggested that writing instructors might be able to use the computer logs as a powerful diagnostic tool. In other words, an instructor could evaluate students' logs and get a picture of the strengths and weaknesses of the plans and goals the students had developed. To help make the planning process more visible to students, the instructor could share several computer logs with the class and lead a discussion that talks about the reasons why particular ideas or plans appear to hold more promise than others. Or, the instructor could make comments on the logs and return them to the students.

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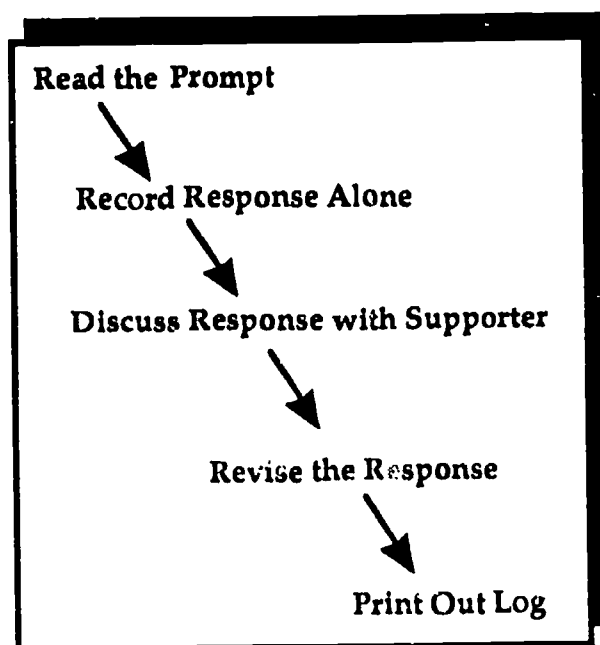


FIGURE 10. REVISED PROCEDURAL MODEL

sponses, record responses and then print out the log, a new component would be added. The revised procedural model would be as follows (see figure 10).

Finally, in addition to developing a coding scheme that allows a researcher to measure the level of planning that takes place during a session, reviewing these

TRANSFORMING TOPIC KNOWLEDGE: SIX PORTRAITS OF COLLABORATIVE PLANNING¹

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The most striking feature of these planning sessions is the variety of ways in which these students handle the interplay between managing topic information and addressing rhetorical concerns. What emerges from these three portraits is not a single model for successful rhetorical planning but a collection of workable patterns.

Alicia, a tenth-grade high school student, is telling her friend Maria about her plans for the extended definition papers that their teacher has recently assigned. This writing assignment asked Alicia and Maria to pick a phenomenon or abstract concept, to define it, and then to extend that definition based on their personal experience. Their teacher had them spend some time in class planning their papers together; their conversation gives us a glimpse of the kinds of plans that Alicia has for her paper. In the following excerpts, Alicia focuses on facts, on laying out the content that she has gathered from several sources. In this first segment, she begins with a dictionary definition of a *nova*, the topic of her paper, and then explains her basic plan for writing the paper.

Maria: What are you going to write about?

Alicia: A *nova*, that's when a star brightens intensely and then it gradually dims. It's more like an explosion of a star, like, of the sun. Okay, and other words...like a *supernova* is like a bigger explosion. Okay, and the sun and a star, you know, are like related. All right, and I'm gonna write the effects of it, so that's what it's really going to be about. That's the definition of a *nova*...and I just wrote some things down that are some effects that would happen, like hot summers, like really like a hundred and twenty degrees....

As the session continues, Alicia moves from describing novas in general to describing in great detail what would happen to the earth if the sun were to become a supernova. As this excerpt illustrates, her plans are largely content-based; she has collected a string of facts, but has not yet considered how to use those facts.

Alicia: Since the sun is going down, it's going to be cold all the time. Cold summers, like cold in August, and the same thing—the land will like get hard and dry and, of course, if it's frozen—everything—no plants will grow and no animals can eat the plants, and we can't eat the animals and all that. And it will freeze our rivers and stuff.

Maria: So anyway we will die.

Alicia: It will kill our fish. All in all the effect of it is, we'll like be gone, and plus since when the earth explodes, I mean, um, the sun explodes when it goes back down, it will lose some of its pull on the planet so we'll just be Venus, Jupiter, and Mars.

Maria: float off into space

Alicia: We'll just be floating around in space and we'll just be floating' around in space...and we'll just break up. (bell rings ending class)

At this point, Alicia's plan for writing her extended definition of a *nova* is basically a list of the facts that she plans to include. She has gathered information (e.g., dictionary definitions); however, her assignment to write an extended definition asks her to do more than report facts. This assignment asked her to develop her basic definition by relating it to personal experience.

The case studies in this article examine what happens when students face new writing tasks and try to engage in rhetorical planning, planning that relates content

knowledge to the rhetorical concerns of purpose, audience, and specific discourse conventions. These case studies are portraits of two high school sophomores and two college juniors as they attempt to transform knowledge to meet the rhetorical constraints of a variety of writing tasks. The students use collaborative planning (Flower, Burnett, Hajduk, Wallace, Norris, Peck, and Spivey) as they work with a partner to transform their topic knowledge. The transcripts of these planning sessions allow us to observe their conversations and eavesdrop on both their patterns of interaction and the problems that they encounter.

The participants in this study all faced writing tasks that were largely new to them. The high school students, of whom Alicia is one, often wrote essays and reports, but the extended definition paper called for them to combine their own experiences with information that they had gathered from sources. In contrast, the third-year college students whose experiences I will describe had a great deal more writing experience than the high school students, but their course also introduced them to new genres for writing (e.g., technical reports and news articles). In short, each of these writers found themselves in situations like the one that Alicia faced in the excerpts above. That is, they often had to transform topic knowledge, recast collections of information according to the constraints of new writing tasks that specified new purposes, audiences, and discourse conventions. Their planning sessions expand our understanding of how students begin to transform information according to rhetorical concerns.

The task that Alicia faces is similar to the writing tasks discussed in several process-tracing studies which suggest that transforming a collection of facts according to rhetorical concerns is often a stumbling block for student writers. Indeed, several studies suggest that the ability to deal with content knowledge in terms of rhetorical concerns is a critical difference between experienced and inexperienced writers.

Inexperienced writers are often fairly good at creating what Flower and Hayes call *plans to say* (content generation and arrangement) but do not attempt or have difficulty with *plans to do* (rhetorical planning). For these writers, planning often means making a list of chunks of information to be included in a text, much as Alicia did in the earlier excerpt. Certainly, gathering and organizing information is an important part of the writing process. However, for many writing tasks, writers like Alicia need to learn to go beyond collecting and arranging information; they need to learn that their writing can do more than present information. Often as they face new and more complex writing tasks, inexperienced writers need to move beyond arranging information and develop an awareness that writing can do more than report information.

A study conducted by Burtis, Bereiter, Scardamalia, and Tetroe suggests that the ability to distinguish between plans to say and plans to do may be at least in part a developmental issue. They outline the development of planning ability in 10- to 14-year old students in a study that used models of experienced writers' planning to help these young writers. The youngest of these writers had great difficulty conceiving of planning as anything but the generation of text; often their written planning notes were mirrored almost word for word in their final texts. As age increased, students were more able to distinguish between planning what they wanted to say in their texts and making rhetorical plans, plans that consider audience, purpose, and discourse conventions. The researchers note, "...students across the 10- to 14-year age range showed a tendency to distort all kinds of planning into content generation, although this tendency diminished significantly across the age range" (p. 170).

Scardamalia and Bereiter characterize the difference between the knowledge-based planning of inexperienced writers and the rhetorical planning of experienced writers as knowledge *telling* versus knowledge *transformation*. In contrast to experienced writers who transform their content to meet rhetorical constraints, the elementary school students in this study often relied on a "what next" strategy, which prompted them to simply add the next piece of information.

In short, the work of these process-tracing researchers suggests that the ability to transform knowledge into plans that are sensitive to rhetorical concerns may be at least in part a developmental issue. These studies suggest that by junior high student writers may be able to engage in rhetorical planning when prompted to do so. However, research comparing expert adult writers with college freshmen writers has demonstrated that more experienced writers pay a great deal more attention to rhetorical concerns. The distinction between texts that present collections of information and texts that transform knowledge according to rhetorical constraints is not new. Indeed, it is basic to Flower's discussion of writer-based and reader-based prose. More recently, Flower, Schriver, Carey, Hayes, and Haas have proposed that three major types of planning can contribute to the writing of expert writers. Based on detailed analysis of planning by expert and novice adult writers, they argue that planning may be *knowledge-driven* (cf. Scardamalia and Bereiter's knowledge-telling), *schema-driven* (driven by conventions for discourse), or *constructive* (driven by rhetorical concerns) and that under certain conditions each of these strategies may be successful. Thus, both expert and novice writers may successfully follow a knowledge-driven plan or schema, such as narrative, to generate a text—given that the schema or knowledge structure fits the task. However, they also suggest that experts differ

from novice writers in that the more experienced writers have both more schemata and more elaborate schemata for various writing tasks, and the expert writers could construct plans by specifying critical rhetorical elements when a ready-made plan would not suffice. Thus, they argue that the ability to perform this constructive, rhetorical planning is a key difference between the planning of expert and novice writers.

Given this research on knowledge transformation and the strategies that support or prevent it, my purpose in these case studies is to describe how student writers begin to move beyond familiar knowledge-driven planning and appropriate rhetorical planning strategies. As the earlier excerpt from Alicia's planning session illustrates, many student writers are adept at knowledge-driven planning but need help in developing plans that consider rhetorical concerns (e.g., purpose, audience, discourse conventions). The six portraits that follow are drawn from collaborative planning sessions in which students are prompted by a partner to develop their plans for writing and to consider rhetorical concerns (e.g., purpose, audience, discourse conventions). The portraits highlight various patterns of interplay between knowledge telling and knowledge transformation and illustrate the impact of both the task-at-hand and writers' experience on attempts to transform knowledge.

The portraits are drawn from case studies of two tenth-grade students from a small public high school in Pittsburgh and two case studies of students enrolled in a sophomore/junior-level technical writing course at Carnegie Mellon University. Taken together, they sketch a general picture of the successes and difficulties that these students encountered as they attempted to transform topic knowledge for a variety of writing assignments. The tenth grade students have more difficulty grasping the purpose of the planning sessions than do the more experienced college students, but both sets of planning sessions flesh out our understanding of the interplay between knowledge-telling and knowledge transformation.

The case study students each worked with a partner in the collaborative planning sessions. As writers, each participant had the rare chance to talk about his/her plans for writing before committing them to text. As supporters, each person tried to help the writer relate content plans to rhetorical issues by listening to the writer's plan, asking the writer to explain or elaborate, raising questions, or suggesting alternatives. The high school students had two planning sessions on the same assignment. The college students had three planning sessions, each on a separate assignment. In addition to their planning sessions, each of the students was interviewed twice, once before their initial planning session and then again about two weeks after their final planning session.

HIGH SCHOOL CASE STUDIES: ALICIA AND CRAIG

The setting for the first three portraits that I will sketch is a small Pittsburgh high school that specializes in programs for the creative and performing arts. In these three portraits, the case study students, for whom I will use the pseudonyms Alicia and Craig, plan their extended definition papers described earlier. As the earlier excerpts from Alicia's first planning session illustrate, reporting information is a familiar task for these students; however, the extended definition asks them to develop their definition and to relate it to their personal experience.

Craig and Alicia had two planning sessions for their extended definition papers. For both sessions, Craig worked with a classmate Ed, and Alicia worked with a close friend and classmate, Maria. The first portrait is drawn from both of their initial planning sessions. It highlights the mismatch between the teacher's intended purpose for the planning sessions and the students' interpretation of her purpose. The second and third portraits focus individually on Craig and Alicia's second planning sessions. These portraits contrast a planning session that fails to address rhetorical concerns with a successful attempt at knowledge transformation.

PORTRAIT ONE: MISMATCHED PURPOSES

The first set of sessions illustrates a mismatch between the teacher's intended purpose for the planning sessions and the students' interpretation of her purpose. Craig and Alicia's teacher intended the collaborative planning sessions as an opportunity for these students to elaborate their plans for writing by developing their often skimpy sense of audience and purpose and by considering alternative structures for their papers. However, the teacher was concerned that as supporters the students would have difficulty using the rhetorical prompts that collaborative planning suggested, that is, that they would not be able to make the abstract rhetorical concerns of audience, purpose, and text conventions concrete in their planning sessions. To help them, she prepared a dittoed list of sample questions to illustrate the types of questions that the students might use as rhetorical prompts when they served as a supporter. She intended these questions only as examples, but in the first set of planning sessions, both pairs of students used them as a checklist.

In terms of the teacher's goal, that the students elaborate their plans and consider alternatives, the first planning session was not very productive for either pair of writers. Alicia and Maria did little to elaborate their plans for writing; instead, they read the notes that they had written and used the sample list of questions that their teacher had given them as a checklist. In the following excerpt from their first planning session, Alicia reads questions from the dittoed sheet, and

Maria responds perfunctorily.

- Alicia: What is your audience?
Maria: Peers, I just told you that.
Alicia: What kind of language is appropriate for this audience?
Maria: Layman's terms.
Alicia: Is there an appropriate introduction?

- Alicia: What would the audience find interesting?
Maria: The facts.
Alicia: I got an X on almost everything [on the question sheet].
Maria: How long did she say this is supposed to be?

Craig and Ed do much the same thing in their first session. They take turns asking each other the teacher's list of questions without really engaging in any exploration of their topics or their plans for writing.

- Ed: What points would you like to cover?
Craig: Um, that some have talent and that they're born with it.
Ed: Just talent, all right. What's the reader going to remember from this paper?
Craig: That some have talent. I have to work on this a lot...all the other points refer back to the main point [another of the dittoed questions]
Ed: Do they?
Craig: Yeah.
Ed: Okay, what is your audience? Your peers or someone like yourself?
Craig: That's what we're supposed to say, right?

This excerpt illustrates that Craig and Ed nominally play the game that they think their teacher is asking them to play, but they are either unable or unwilling to use the session to explore and elaborate their ideas for writing. Both pairs of students move through the dittoed questions without stopping to develop their ideas or consider alternatives. For both pairs of writers, rhetorical concepts such as audience remain undeveloped. Maria responds with the single word, "peers", when questioned about her audience, and Craig's response makes it clear that "peers or someone like yourself" is the answer which he presumes that the teacher wants.

In these initial sessions the pairs of writers do little knowledge transformation or rhetorical planning. They review their basic plans for content (knowledge telling) and use the rhetorical prompts in a perfunctory way. In short, they do a task for the teacher; unfortunately, their interpretation of the task is not what the teacher intended nor is it a particularly useful task. They did not develop or enrich their plans by checking off the teacher's examples questions and briefly recounting the content that they planned to include.

Indeed, the writers' first sessions are almost paradigmatic examples of what Flower et al, (*Planning in Writing*) call knowledge-driven planning.

PORTRAIT TWO: THE TEXT INTRUDES INTO PLANNING

Craig and Ed's second planning session is subverted from a planning session to a text-editing session. Although both pairs of writers had drafts of their texts during their second planning sessions, Alicia and Maria, as the next portrait will illustrate, used their texts as a basis for discussion and further planning; in contrast, Craig and Ed's texts become impediments to further planning. Craig and Ed's second session is remarkable because of the absence of planning; both students read the other's text and made a limited number of suggestions. Given a text to work on, Craig was able to point out a paragraph that really didn't fit with the rest of the paper and helped Ed clean up a number of problems in grammar and punctuation, focusing largely on sentence-level issues. Ed, on the other hand, didn't help Craig at all. In a later interview, Craig said that Ed couldn't find anything wrong with his paper. He said that Ed was "kind of wishy-washy"; he couldn't make any specific suggestions about Craig's paper.

Clearly, however, Craig needed to address larger issues in his paper; specifically, his development was shallow. The best part of the session, Craig reports, was when the teacher, who had noticed the trouble they were having, came back to read his paper with her "war paint on." She told him that he needed to narrow his paper down to one point instead of three and really develop that point. Thus, in this planning session, neither writer considered major changes for his text, and as supporters neither writer used the collaborative planning prompts to help the other weigh rhetorical issues or consider alternatives.

PORTRAIT THREE: USING DISCOURSE CONVENTIONS TO SELECT TOPIC INFORMATION

Alicia and Maria's second planning session is interesting because of their use of discourse conventions as a means for selecting topic knowledge. In contrast to their first session, (see excerpt on page 71) where discourse conventions served as a static category provided by their teacher, Alicia and Maria show remarkable flexibility in their application of discourse conventions to each others' plans for text. Maria uses discourse terms that the teacher had introduced in class to help Alicia see how to use personal information to flesh out her extended definition, and Alicia addresses a genre-level problem in Maria's paper, distinguishing between an argumentative paper and an extended definition.

In the first part of this session, Maria interpreted the teacher's instruction about developing a general definition using personal experience to help Alicia see that she must do more than report the lists of information that she has collected about novas. Summarizing

what she saw happening in Alicia's paper, Maria said, "You're speaking in general. I'm talking about you...how would *you* feel...You personally, this is not talking about the world; this is talking about *you*." Alicia responded that she is not sure that she should spend much time in the paper talking about herself. Then, Maria, recalling the teacher's discussion about moving from generalizations to specific examples, advised Alicia, "Yeah, you can go from general to specific. Remember on the board you can go from a general writing to a specific." Eventually this discussion led Alicia to a new goal for revision, to make the general part smaller and then "get bigger on the specifics." Without directly referring to the concept of discourse conventions, Maria adroitly applied the teacher's instruction about use specific, personal details to flesh out the general definition.

Discourse conventions at the genre level were also the problem that Alicia pointed out in Maria's paper on the theory of evolution. As Maria discussed what she was planning to say, Alicia noticed that Maria was planning to turn her paper into an argument, while Maria maintained that she was still writing an extended definition. For example, Alicia said, "Oh, well, is this going to be like an argument? You're going to say..." Maria interrupted, "It's still going to be the extended definition of evolution. And going along with the definition of evolution, going along with stating the other species are involved with the evolution theory."

As the session continues, it becomes clear to Alicia that Maria was missing the point of the assignment: Maria was writing an argumentative paper rather than an extended definition. Alicia stressed that Maria was trying to *argue* a point and that she would have to cite a great deal of evidence to make her point. Finally, Alicia suggested, "You know I think it would be, if you just write the standard definition of evolution...It seems to me that would be like a whole different subject when you *argue* it." When Maria finally saw Alicia's point, the two proceeded to compare their papers and find a way for Maria to restructure what she has already written.

Although Alicia and Maria did not explicitly identify many of the issues that they discussed as specific discourse conventions, they clearly used a variety of discourse conventions to select and develop topic knowledge. Their experience illustrates that discourse conventions must be seen as encompassing a wide range of discourse moves (in their case both genre-level and task-specific text structures) and must be understood according to their function within the context of a given writing task.

DISCUSSION

While it is impossible to assign cause-and-effect relationships, the differences between these two planning sessions are paralleled by striking differences in

the way that Alicia and Craig typically use planning and drafts as they write and by the great differences in level of investment that each apparently brought to the planning sessions. Both Craig and Alicia had participated in a number of classroom activities to prepare them for their first planning session. Their teacher had the class read examples of extended definitions, write journal entries, and do some brainstorming or a rough preliminary draft. However, by the time of her first planning session, Alicia had already written and revised a draft of her paper. In contrast, Craig wrote a sketchy preliminary draft during class while the teacher was giving the instructions for the collaborative planning sessions and during the first part of the planning session while Ed was talking about his plans.

This difference in terms of investment of time and effort also seems to extend to Craig and Alicia's general approach to school writing assignments. In some sense, Craig's focus on sentence-level issues and his reluctance to engage in constructive planning is not surprising given his typical writing style. Craig is a one-draft writer: unless he's forced to do a preliminary draft for class, Craig's first draft is usually his last. He told me in his preliminary interview that his normal pattern for writing a school paper is to think a good deal. He focuses his early efforts on coming up with an original idea; then, he thinks of ways to develop those ideas on the bus ride home from school or talking with his parents. He rarely talks to classmates about his ideas for writing.

Alicia is quite different from Craig both in the sustained effort that she puts into drafting papers and in the great help she gets from her classmates. As soon as she has a topic for a paper, Alicia begins writing. She writes out a draft of everything that comes to her mind. Then she writes another and another and often yet another. While Craig is probably the better of the two writers (his teacher says that he's one of the best writers in her tenth-grade classes), Alicia and her partner prove much more skillful at helping each other elaborate their plans for writing and in focusing on rhetorical concerns.

Craig and Alicia make an interesting pair for comparison because of the differences in their writing styles and experiences. Craig brings writing ability but limited social interaction about writing as compared to Alicia's extensive interaction and willingness to revise in light of her interaction. As the first set of planning sessions illustrate, both pairs of students needed to move beyond their checklist approach to see planning as something that they could use for their own purposes. However, it also seems that collaborative planning was a more natural addition to Alicia's writing process than it was for Craig because talking about her writing and making new plans were a normal part of her writing process.

COLLEGE CASE STUDIES: NANCY AND FRED

Unlike the high school students, the college writers, Nancy, Fred, and their partners, made good use of all of their collaborative planning sessions, adapting their basic approach and use of rhetorical prompts according to the tasks which they faced. Compared to Craig and Alicia, Nancy and Fred have both a great deal of writing experience and experience in collaboration; as professional/technical writing majors, both of these students were familiar with peer editing and working in writing groups from other writing courses and workshops. Thus, in contrast to the high school students, who struggled at first with collaborative planning, these college writers adapted very quickly.

Nancy and Fred regularly worked with partners in class, and their teacher asked them do collaborative planning for three assignments: a news article, a technical memo, and a proposal for revision of a computer documentation project. In each case, these writers faced a new rhetorical situation; they had to hone diverse topic knowledge to create a coherent document that showed a clear purpose, was appropriate to a specified audience (as well as the teacher), and demonstrated control of a set of discourse conventions. Their planning sessions show both a consistent concern for rhetorical issues across the three writing assignments and flexibility in managing the interplay between developing content knowledge and rhetorical planning.

The most striking feature of these planning sessions is the variety of ways in which these students handle the interplay between managing topic information and addressing rhetorical concerns. What emerges from these three portraits is not a single model for successful rhetorical planning but a collection of workable patterns. Portrait Four shows two patterns for transforming topic knowledge: one for reducing and focusing abundant topic knowledge and the other for evaluating the viability of topics. Portrait Five illustrates the power of audience to build a sense of rhetorical exigence, and Portrait Six illustrates that for some writing tasks only minimal knowledge transformation is needed.

PORTRAIT FOUR: THE REVOLVING DOOR OF TOPIC KNOWLEDGE

The first assignment that these writers planned with their partners was a news article. For this assignment, the planning sessions for the two pairs of writers were very different. Fred and his partner, Dana, spent most of their planning session searching unsuccessfully for a topic for Fred's article while Nancy and Julie worked very hard to focus an overabundance of topic knowledge. However, as the discussion below will illustrate, neither pair of writers allowed their discussion of topic knowledge to become circular. That is, while both pairs spent significant portions of their planning session generating and rejecting topic knowl-

edge, both pairs exited that revolving door: Nancy and Julie exited within, moving to deeper-level planning while Fred and Dana exited out, taking with them tests for finding relevant topics.

Fred and Dana's use of topic information consisted largely of brief descriptions of possible topics; they made few attempts to transform the information, largely because the question of topic knowledge was not yet settled for Fred. Aside from a brief interruption where Dana described her topic, the entire session consisted of the partners posing possible topics for Fred's news article and rejecting each on the grounds that it was not timely or that the audience (the teacher and students in the class) would not find it interesting. However, as the following excerpt illustrates, Fred and Dana did not engage in extended discussions of unproductive topics, instead they used issues such as audience and timeliness to evaluate the viability of a given topic. In the excerpt below, Dana suggests that Fred might write about one of the issues raised in a recent issue of the campus newspaper. Fred vetoes the idea citing timeliness as the issue.

Dana: You could do...something about AIDS. They have that new, what was it? Like they did a survey and asked these people about you know their testing for AIDS. If they were tested, were they positive or negative, stuff like that. They said it really worked well, in a couple of other places I think, like New Jersey or something.

Fred: We have a whole week though, and if you pick something that already happened, it would be out of date by the time we submit it.

Even though the collaborators spent the majority of the session proposing and debunking various topics, Fred left the session with a sense of the kind of topic that he was looking for. Near the end of the session, he said, "I don't think this will be hard once I come up with something." Thus, while topic information dominated this planning session, the collaborators used specific tests of rhetorical relevance to moderate their discussion.

In contrast to Fred and Dana's session, the planning session for Nancy and her partner, Julie, was both abundant with content knowledge and punctuated with instances of rhetorical planning. Late in the session, Nancy briefly described her article and got a little help from Julie, but talk about Julie's article on off-campus housing dominated the session. Throughout most of the session, it was clear that Julie is swimming, nearly drowning, in a sea of content knowledge. Unlike Fred, Julie had found a topic with a great deal of information and faced the task of finding a way to recast information into a news article format. Julie and Nancy spent well over half of their session discussing and elaborating this information. However, periodic

returns to rhetorical issues, mostly at Nancy's prompting, reminded Julie to translate her "plans to say" into "plans to do."

Early in the session, Julie identified focus as one of her main problems. She had a great deal of information about a neighborhood action group that was concerned about violations of housing regulations by students who live in off-campus housing, but she is confused about the group's motivation. In the following excerpt, Julie and Nancy try to focus this content information.

Julie: I think it's also a whole bunch of little, I hate to say this, but I think it's really just a whole bunch of little prissy residents who just want something to bark about.

Nancy: Yeah, they need a cause, you know.

Julie: Yeah, you know, well they're like, they're like, they're like little bored housewives

Nancy: June Cleaver needs a cause. [both laugh]

Julie: And probably they're pissed off because it's so hard to find parking around their houses with all the students

Nancy: Yeah, parking is probably a part of it, too

Julie: because if all those students have cars, it's gonna be really hard to find places to park

Nancy: Yeah, see if you can get out of that lady what, what the driving force behind the

Julie: Yeah, why is this

Nancy: ...now all of a sudden

Julie: Yeah, OK.

This exchange illustrates one problem that Julie faces; she's was trying to write a supposedly objective news article, but she was aware of her own biased attitude and suspected that her major source ("that lady") has not been candid with her. Also, in this exchange, Julie introduced yet another topic, parking problems, into an already information-packed plan for writing.

The collaborators began to make progress in managing Julie's bumper crop of content knowledge when the discussion focused on discourse conventions. Much like Alicia and Maria, these students also spent time in their session relating the teacher's instruction about text conventions to Julie's article. They did this in two ways. First, they settled on the genre for the piece and decided how to use potentially volatile information (such as the likely results from an interview with the director of the neighborhood action group). Nancy said, "I would just keep this to the facts, a news article, and if you get more than that, then do the long extended version for the *Union*... [a student newspaper specializing in editorial pieces], but this thing needs to stick to the facts." Here Nancy distinguishes between the editorial pieces typically run by a student newspaper, which had been discussed in class that day, and a more typical news article. Julie responded, asking if Nancy meant that she should not use *comments* (a technical term

for quotations from sources in news articles introduced by the teacher in a previous class). Nancy clarified, "It's ok to use comments, but relate them; they have to be related to someone involved, like the landlord or the coalition, or a student." Here these two students began to make headway; they relate Julie's content plans to requirements of the news article assignment.

When Julie said again that she couldn't focus the problem that she is trying to write about, Nancy finally crystallized the most troublesome issue:

It's not, it's not the *problem* that you want to focus on; it's the *event*. That's what I think you're doing in a news article. The fact that there's a crack down on more than three unrelated students living together.

Much as Alicia did for Maria, here, Nancy uses both genre-level and task-specific discourse conventions to get Julie to begin rethinking her content in terms of the text conventions of the writing assignment; in this case, Julie needed to focus the events around a timely event, a crack down, to shape her information to fit the conventions of a news article.

Also, although both pairs of college writers focus on the issue of timeliness, Nancy and Julie are able to develop much more specific plans because the question of topic is settled, while Fred and Dana were not ready for such planning. Indeed, both pairs of college writers discuss rhetorical constraints which they apply to content knowledge. However, Fred and Dana's planning session is largely knowledge driven because the question of content knowledge is not yet settled; the issues of audience and timeliness serve only as selection criteria for potential topics. In contrast, Nancy uses the timeliness issue to help Julie recast the information that she has gathered according to a focus that is suitable for a news article. Thus, although much of Nancy and Julie's planning is dominated by discussion of content knowledge, they are able to transform that knowledge using rhetorical constraints.

PORTRAIT FIVE: AUDIENCE AND EXIGENCE

This portrait illustrates how Fred and Dana's developing understanding of audience shapes their content plans in their second planning session, building what Bitzer calls a sense of rhetorical exigence. The assignment asked the college writers to play the role of an information designer in a case study simulation. This collaborative writing task required them to work as a team to redesign a technical document written by a superior, the president of the fictitious company, and to write an accompanying memo explaining the rationale for their changes to an superior. Unfortunately, Nancy and Julie's tape recorder malfunctioned, so their planning session was lost. However, Fred and Dana's planning session exhibits a recursive interplay between audience and topic information; their developing understanding of audience allows them to build a sense of

rhetorical exigence, that is, what information is appropriate for this situation and how that information may be most effectively used.

Early in the session, Fred and Dana focused their efforts on plans for revising the technical document for a consumer audience; they considered what information consumers would need and try to find "a simpler approach" that would answer basic consumer questions (e.g., Why is this a good product? How can it be used in the home?). Their basic plan was to remove much of the information from the original technical document that the consumer audience would not need. However, as their planning continued, Fred and Dana began to realize that the plans that they had made for revising the technical document to meet the needs of the consumer audience were in conflict with the position that they needed to take for their in-house audience. Fred suggested that in deference to the company president, who wrote the original document, they should change his words as little as possible and concentrate on eliminating unnecessary prose. Later, he added that they could keep more of the president's prose (and probably not risk losing their fictitious jobs) and still not lose the consumer audience if they could format the text so that the consumers would recognize places "where you can stop reading, and the people who want to know more can go on."

This conflicting sense of audience surfaced again near the end of the session when the partners discussed the arguments that they would use in their in-house memos to defend their changes in the technical document. In the excerpt below, Fred recycles their earlier sense of deference to the president in his response to the arguments that Dana proposes that they use in the in-house memo.

Dana: ...In fact, there should be a lot more of that in here...I mean that's the product—except for that he doesn't really go into saying this is a great buy; you should get it for your house. I mean, you know...he's sort of belittling his own system. I mean if I were doing something like this, I'd have a lot more about just how people can use it. It [the original technical document] is more like how people that made it can use it; I mean it'd be better for a person who's installing it, you know, that's what this read like and maybe be that's

Fred: When you write the memo, you don't have to, you can't really tear this [the original technical document] apart because you're going to be writing it to the guy who wrote it. He's going to see it, so you have to say that it's good; it just needs a little work.

Unlike their first session where they focused on finding a topic for Fred, here topic or content knowledge provided the backdrop for rhetorical planning. The rhetorical concerns of two audiences, the con-

sumer audience for the technical document and the corporate chain of command for the accompanying in-house memo, eventually become so salient that they compel the writers to consider not simply what to write but what to write to whom. However, this dual sense of audience was not immediate; it developed gradually throughout the planning session. Fred and Dana have a good sense of their consumer audience from the outset; they understand what information their audience needs and how they can effectively present that information. Gradually, however, they build a more sophisticated understanding of their in-house audience and how its needs may conflict with the needs of the consumer audience. This conflict leads them to a more sophisticated sense of rhetorical exigence; eventually they realize that they must both propose changes to the technical document that will meet the needs of their consumer audience and present a rationale for those changes in the in-house memo without offending the original author. Thus, this more complex understanding of their audiences provides a more effective basis for assessing the viability of their plans.

PORTRAIT SIX: MINIMAL KNOWLEDGE TRANSFORMATION

The snapshot of knowledge transformation captured in this final portrait suggests that knowledge-driven planning may be effective when the demands of a writing task are not excessive. In this set of planning sessions, the task is again very different, and the writers adjust their collaborative planning accordingly. This time the pairs of writers met to talk about their plans for a memo proposing and justifying revisions to a computer documentation project that the four students had written as a group project. Each writer had user-tested a portion of the document, and thus, both planning sessions focused largely on sharing information.

The rhetorical aspects of this assignment were quite familiar to the students. The audience for the revision proposal was the teacher, and the memo format was well-specified in the handout describing the writing assignment. Not surprisingly then, these final two sessions are largely knowledge driven. One of the most useful things the writers could do in this situation was to share and compare what they had learned in their user-testing session. Thus, the collaborative planning sessions focused largely on sharing content knowledge, and there was little need to transform topic information. However, even though these sessions focus largely on sharing information, Nancy and Julie take an extra step, ending their session by consolidating their lists of issues into categories.

Although they did not engage in extensive knowledge transformation, the sessions allowed each of the writers to talk out the information gathered in user-testing. For example, in the excerpt below, Dana listens and makes brief responses as Fred talks through

some of the observations that Mary, a friend of Fred's, made as she tested part of the software documentation.

Fred: She (Mary) said that, ah, because it started in the middle of the page she assumed that it would only be half a page long, that's why she read it.

Dana: Really.

Fred: Yeah, like, if it would have started at the top of the page and continued down the whole page, she thought it would be too long, but since it started midway that's why she liked it.

Dana: That's cool.

Fred: She said that, she made the same point that Don [the instructor] made about the, you know, the picture was on the left side, and the text was on the right side. She said that was confusing to her, too. And I didn't ask her about it. She brought it up first.

Dana: That's a good one.

Fred: She said that, ah, she said that the display can, the display paint thing wasn't explained that well. I don't know why...she said she couldn't tell what the difference was between cut and clear.

Dana: Cut and clear? I'm amazed!

Fred: I guess we had to say something about when you *cut* you're going to paste it later, but when you *clear* it's gone forever I guess, right?

Dana: I guess.

Fred: I don't know. She said it was easy to follow, and she said that it was designed well.

As this excerpt illustrates, Dana served as a sounding board in this segment of their planning session, taking conversational turns and occasionally making substantive comments. The same pattern also dominated most of Nancy and Julie's session; in contrast to their responses in their earlier planning session, these "laid-back" responses did not add content; they simply allowed the writer to explain and develop the list of problems that they had uncovered in their user-testing session. Again given the nature of this assignment, these knowledge-driven interactions are sensible.

Although the majority of both planning sessions consisted of this information sharing, Nancy and Julie ended their planning session by briefly considering how they would use the topic information that they had developed. In the excerpt below, the writers discuss how they will organize the information that they had discussed.

Nancy: So that's it for this paper. I guess what I'm going to do is address those first three main issues; like, I would say typos are a main issue.

Julie: Yeah, that's a problem. I don't really have main issues.

Nancy: Well, mine are pretty much categorized. I'm just going to categorize them in to details and to, um, further instruction.

Julie: I guess mine is going to have to be details and maybe something about the language

Nancy: Yeah

Julie: I, I'll

Nancy: But there's really nothing you can propose to solve about the language really. You really need to have some new look at it, because we're not seeing the language any more.

Julie: Yeah, well that could be a proposal, have someone else look at it.

Nancy: Yeah, yeah that's all you can do; can't solve, you can't say this need to be changed to that.

Here, Nancy and Julie consolidate their lists of information under topic headings (e.g., Nancy's details and further instruction). They also reshape the language usage problems that Julie's testing turned up as a proposal for further work rather than as specific changes that she can make in the software documentation.

Although little knowledge transformation occurs in either of these planning sessions, both were clearly efficient. For both pairs of writers, planning for this task did not require the extensive evaluation and restructuring of content knowledge according to the constraints or multiple audiences or specific text structures. Thus, their planning sessions were appropriately simpler and focused on sharing information. However, Nancy and Julie's move to consolidate their content plans at the end of their session is a notable difference, which may have ultimately made their session more useful.

SUMMARY AND IMPLICATIONS

The two most salient issues illustrated by these case studies are the adaptation of collaborative planning techniques by the college writers and the need for students to understand the purpose of planning and to engage in defining rhetorical issues in planning as illustrated by the experiences of the high school students. The college writers showed both the ability to transform content knowledge to meet rhetorical concerns and flexibility in adapting to the demands of different writing tasks. Of the high school students, Alicia and Maria overcame their initial difficulties and addressed some complex rhetorical issues, while Craig and Ed had more difficulty and dealt with substantive issues only in terms of the texts that they had written and with prompting from their teacher.

Although the college students adapted more quickly to collaborative planning than the high school students, Nancy, Julie, Fred, and Dana did not follow a predesigned pattern in their planning sessions. In fact, they proved adept at both adapting their collaborations according to great differences in the state of their con-

tent knowledge and meeting the different rhetorical and practical constraints of assignments. Nancy and Julie's news article session illustrates that teasing out clear rhetorical goals from a maze of content knowledge can be hard work. Fred and Dana's experience planning on the same assignment illustrates that too little content knowledge can be as big a problem as having too much.

Fred and Dana's second session, planning the in-house memo and the revision of the technical document, suggests that rhetorical planning may be much easier when writers have a good sense of control over content knowledge and illustrates that rhetorical issues, such as audience, may take considerable time and effort to develop. The final planning session for both pairs of writers illustrates that knowledge-driven planning may fruitfully dominate planning sessions when the writers recognize that such strategies are a good match with the task at hand. In these instances, effective collaboration may depend on a partner's willingness to serve as sounding boards for developing ideas.

These portraits also illustrate that instruction interventions like collaborative planning must be seen by both teachers and students as flexible heuristics and must be adapted both to the constraints of a writing task and to the needs of a given writer. The experiences of the high school students argue that students must take charge if instruction interventions such as collaborative planning are to lead to rhetorical planning and knowledge transformation. For Craig, Ed, Alicia, and Maria, *taking charge* meant that first they had to see the sessions as something that could help them and not as something that the teacher wanted them to do. But it also meant that the writers needed to see that success in planning depends on their willingness and ability to apply the rhetorical prompts to the specific needs and situation of a writer. In contrast, the college students, who were writing majors, had little difficulty taking charge of their planning sessions. The portraits of their planning illustrate that heuristic nature of constructive planning, specifically the necessity of adapting to requirement of a rhetorical situation and to the state of a planner's topic knowledge.

Finally, the process-tracing research cited earlier suggests that moving from "plans to say" to "plans to do" or from simple knowledge-telling strategies to knowledge-transforming ones may be an important developmental step for young writers as well as a continuing struggle for writers in new or difficult rhetorical situations. These case studies suggest that through collaborative planning student writers may be able to help each other manage the interplay arranging topic knowledge and addressing rhetorical concerns. However, they also illustrate that students need to understand that while the planning sessions are meant to help them focus on rhetorical issues, differences in

task or context may require them to deal more directly with topic knowledge.

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TRANSFERRING TALK TO TEXT

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Observation of what transpires in a collaborative planning session gives teachers as well as students a valuable assessment tool, helping both to answer the question: "Where do I go from here?" Self-analysis of individual collaborative planning sessions and the resultant texts enables the students to assess their progress as a writers. These self-assessments, in turn, provide the teacher with valuable information on the progress of both a class of students and of individual students within the class.

In *A Framework for Reading, Writing and Talking Across the Curriculum (PCR II)*, Lytle and Botel present four perspectives or lenses, as they refer to these perspectives, for looking at the curriculum. These lenses, a reflection of current theory and research, present learning as meaning-centered, language-based, social, and human and provide a framework for language, literacy, and learning across the curriculum (11). The diagram below illustrates this approach to both the processes of learning and teaching.

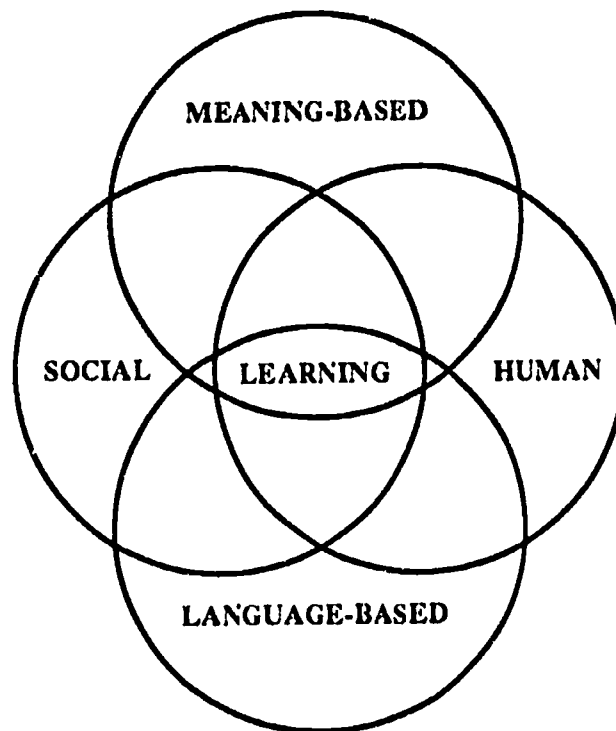


FIGURE 1. FOUR LENSES

FOUR LENSES FOR LOOKING AT THE CURRICULUM (LYTLE & BOTEL 11)

PCR II stresses the importance of "talking" to learn from and with others. Collaborative learning provides one means of enabling this talk; it is a process which incorporates the meaning-centered, social, language-based, and human learning illustrated above. Lytle and Botel point out that in order for students to gain from their participation in collaborative learning groups, however, they need *talking strategies* "to make implicit thinking processes explicit (123)."

As a member of the 1990 *Making Thinking Visible Project* sponsored by the Center for the

Study of Writing, Carnegie Mellon University, I have come to appreciate the importance of the strategies of both the planning talk in writer/supporter pairs and the use of the Blackboard Planner as a vehicle for establishing a plan for writing. Collaborative planning via the Blackboard Planner provides students with the *talking strategies* needed for successful collaborative learning. By acting as a writer/planner, the student articulates a plan to a supporter, requiring the writer to reveal his thinking process to himself as well as to the supporter. The supporter, in turn, asks questions, utilizing the Blackboard Planner, to focus the discussion of the plan. Thus, the supporter is provided with the opportunity to begin to ask, not only the writer, but also himself, meaningful questions about text production. Collaborative planning, in the ideal, therefore, promotes the learning/teaching model advocated by Lytle & Botel in *PCR II*. Being a classroom teacher, however, has made me realize that the ideal does not always translate to reality (i.e., a CP session does not always lead to improved text.). As a teacher-researcher and an advocate of the

writing process, I am intrigued by the transfer or lack of transfer between planning and text. My classroom research, therefore, centered around the following questions, relating planning to text:

- How did writers actually incorporate the questions or comments of the supporter into the text?
- What questions/comments did writers tend to ignore?
- What elements of the planning session enabled the writers to utilize effective writing strategies in the text?
- What writing strategies did students develop (what learning took place) as a result of collaborative planning, as evidenced by the text?

My research was conducted in two classes of grade 11 gifted students (Center for Advanced Studies), Peabody High School, Pittsburgh Public Schools. There were a total of 18 students in these classes. The following were employed as research tools:

- audiotapes of planning sessions;
- transcriptions of planning sessions;
- students' texts (papers produced in response to an assignment);
- students' discovery papers (papers which students wrote, after reviewing both the audiotapes of their CP sessions and their written essays, in order to assess the value of collaborative planning to their writing progress.

Utilizing Lytle and Botel's teaching/learning metaphor of the lens, I would like to present three snapshots of student collaboration and text production to see (1) what learning actually took place as a result of collaborative planning, and (2) what elements of the planning session enabled students to succeed. The snapshots will be interspersed with my observations on the planning session and its relationship to the student text, which is included in its entirety. A commentary follows each of the three examples of planning/text which I have included. Finally, I will present information gleaned from the students' own discovery papers regarding the connection between their process (collaborative planning in writer/supporter pairs) and their product (the written text) and present a final commentary on their observations.

ASSIGNMENT: PLAN AND WRITE A CHARACTER SKETCH IN WHICH YOU CONVEY A DOMINANT IMPRESSION OF THE CHARACTER.

The first two snapshots are excerpts from a planning session in which a student attempts to establish a setting for a character sketch in relation to a key point

or dominant impression of her chosen character. In much of the collaborative planning session not quoted here, the writer attempts to identify a dominant impression. Her planning gives evidence of confusion about her chosen character. In the first planning excerpt which I have quoted here, the writer, working with two supporters (we had an uneven number in class that day), leads her supporters into a discussion of the setting of her character sketch. Notice, however, that she does not defend her initial decision to use the Colombian setting when challenged by Supporter 1. She does, however, express surprise at the question. Note also that at the end of this excerpt, a new text convention is introduced by Supporter 1; he suggests a "looking back," although he does not specify what form this "looking back" could take. This suggestion will once again surface in Snapshot 2 with the suggestion of the use of "flashback" by Supporter 2. Also in the second excerpt, Supporter 1 challenges the writer to think further about the text conventions she will use to create the character for her audience. Both excerpts reveal a writer who is not really open to challenging or extending her thinking in relation to her chosen setting or other text conventions at this point. (NOTE: Throughout this article S will be used for Supporter and W will be used for Writer.)

SNAPSHOT 1: PLANNING A CHARACTER SKETCH (ESTABLISHING SETTING IN RELATION TO PURPOSE)

- S 1: Are you going to have a conversation between you and her, or between your parents and her or a couple of conversations, or?
- W: I hadn't really thought of that. Um, I don't know where I want to set this—at my house in reference to when I was in Colombia or to set it in Colombia. Maybe I should just have it there.
- S 1: Maybe you should just set it at your house and nothing at all about—
- W: Nothing at all about there?
- S 2: But you wouldn't know—
- S 1: I guess it is an exchange though.
- S 2: She was so adaptable—
- W: —adaptable—
- S 2: If you hadn't gone to Colombia—
- W: Right. Maybe I should just set it in South America.
- S 1: Yeah, well, set it down there and talk about how much you had to change, and look back and say how much she must have had to.

In evaluating the successfulness of her collaborations in her discovery paper, the writer points out that there is the possibility that "I ignore the questions I am not prepared to answer." Note, for example, that the writer ignores the comment in Snapshot 1 about including conversations and moves to a discussion of

setting. She says that she doesn't know where to set the piece, but when the suggestion is made that the setting should be her house in America, the writer objects. She receives the encouragement she is looking for from Supporter 2 (Supporter 2 seems to be encouraging the writer's own intentions) and quickly determines to set the piece in Colombia.

SNAPSHOT 2: PLANNING A CHARACTER SKETCH (INCORPORATING DIALOGUE AND FLASHBACK)

- S 1: Okay. Are you going to write a story about her, or use dialogue, or quotes?
- W: Yeah, I...um... see if I put it—I want to use dialogue because that was—I liked the way she phrased things. I liked her English. I mean her foreign accent in English, but do I write it in the way she would actually have pronounced things, or do I just write it?
- S 2: I think so. 'Cause did you read in the book where a young girl was writing about her father in Germany, and she just felt it how he said it. So I think that would be a good idea and that would help to get your dominant impression across.
- S 1: So, your dominant impression, how's that going to come out in your conversations, or are you going to make them up?
- W: Well, I'm certainly not going to remember them word for word.
- S 1: Well, I know, but are you going to, do you remember specific conversations that have to do with--
- W: Well, I think so. I remember conversations with her, with her family, with friends about the drug situation, and I always used to ask her when we were at my house looking around for something to do, "Well, what would you be doing at your house right now? And we'd always have conversations about that.
- S 2: Well, maybe if you could do a sort of flashback to your house from Colombia.
- W: Yeah, I don't know. It just impressed me that she fit in my family so well without losing her identity. She was definitely South American the whole time. She just adapted.

In Snapshot 2, a suggestion is offered for the use of flashback, which would have enabled the writer to expand her piece and reveal Malacho's adaptability. The writer, however, ignores this strategy, with "Um-hmm" and "Yeah, I don't know. . . She just adapted." The strategy—flashback—which might have allowed her to show this adaptability is ignored in favor of a restatement of her key point. The dialogue (conversations), which she discusses at length, are not utilized in the paper either. They are literally included as I know from past conversations that. . . (See character sketch below.)

THE CHARACTER SKETCH

"*Las medias, por favor.*" Rodrigo holds his feet out for Malacho to remove his socks. She puts down her hair brush and does this immediately. Things of this nature are a frequent occurrence in the Llano family and in all of Colombia, as well, I imagine. The father comes home from work and the wife and daughters are expected to do everything for him. Despite that, all requests are made with "pleases" and "thank you's" and everything is done good-naturedly. I dislike this practice. I am, of course, surprised to see Malacho take her father's socks off for him without protest or hesitation. In my mind she is a feminist: a young woman in complete control of her life, with a sincere interest in succeeding. I know from past conversations that she is a firm believer in the "women can do anything men can do" theory, and yet she jumps at her father's every command. However, I watch this process many times in various circumstances, and notice that Malacho does what is demanded of her without ever compromising herself or losing her identity. She goes along with the South American chauvinist conventions because they are a strong part of her, a major shaping force in her life. They are a driving portion of her culture. She has set tight boundaries for herself within which an amazing amount of freedom is possible. She maintains the inner strength, ambition, and constant desire for self-improvement I associate with a truly liberated woman. Whether or not she goes along with her society's demands or lack of opportunity for women is superficial; she will always strive for achieving her personal best.

COMMENTARY ON CHARACTER SKETCH

The writer of this character sketch is an individual with strong opinions, one of these being a firm belief in feminism. The writer's entire planning session gives evidence of confusion about the dominant impression (key point) she will give of her chosen subject. She marvels at Malacho's adaptability to a culture other than her own; moreover, she expresses confusion over Malacho's ability to accept her own society's cultural expectations of her as a woman. Adaptability and liberation were both considered as possible key points. Her supporter, in a part of the session not quoted here, suggested that perhaps the two were related. She accepted this suggestion. In her own words, this is how she incorporated her supporter's advice: "My final draft of the essay included them both, making the point that despite the restrictions Colombian society had placed on her, Malacho maintained her own identity while adapting to the ways of her non-feminist oriented country." In her discovery paper, the writer credits collaborative planning with helping her sort out her confusion about her chosen subject.

The key point of the essay is clear, but Malacho's character seems to have gotten lost in the writer's struggle to state a key point directly rather than establish a dominant impression of the character. The writer ignores the supporters' suggestions that would have

enabled her to show us a character rather than utilize her subject to make a point. In *The Cognition of Discovery: Defining a Rhetorical Problem*, Linda Flower and John R. Hayes state:

An audience and exigency can jolt a writer into action, but the force which drives composing is the writer's own set of goals, purposes or intentions. A major part of defining the rhetorical problem then is representing one's own goals. As we might predict from the way writers progressively fill in their image of audience, writers also build a progressive representation of their goals as they write (27).

At this stage of the composing process, as revealed by the text and the planning session, the writer's goal seems to be something like *I am going to make some sense out of this character who seems to have feminist views similar to mine but whose actions within the boundaries her own culture, in my opinion, belie those views.*

Why, then, did the writer incorporate so few of the writing strategies suggested by her supporters? Her planning transcript seems to indicate that she was not yet ready to show the reader a character because she was still confused about the character she chose to depict. Her "intentions" were to come to some understanding of Malacho's character and actions. If a writer is not clear on her key point, a discussion of strategies may not be directly transferable to a first draft of the assignment. A collaborative planning session on strategies (text conventions) may have been more helpful to the writer after this draft had been written. Another session may have enabled the writer to redefine her rhetorical problem and set a new goal which, hypothetically, may be stated something like this: How do I show the complexity of Malacho's thoroughly Colombian but independent character? Asking students to restate the assignment in the form of a question before they begin their collaborative planning may assist both the teacher and the student in this learning/teaching situation, enabling the teacher to understand how students are defining the assignment for themselves and enabling the student to focus more clearly on the problem which the assignment presents.

ASSIGNMENT: PLAN AND WRITE AN ON-CLASS ESSAY ANSWERING THE FOLLOWING QUESTION: WHICH NOVEL MAKES A STRONGER SOCIAL STATEMENT, *BLACK BOY* BY RICHARD WRIGHT OR *DINNER AT THE HOMESICK RESTAURANT* BY ANNE TYLER?

As evidenced by the following transcription, neither of the collaborators seemed prepared with a plan at the beginning of this collaborative planning session. They chose to use the "let's toss around a few ideas" approach rather than getting feedback on a specific plan. And yet, many of points of discussion concerning key point and the structure of the essay are valid ones, which Student B incorporated into his essay. In fact, it seems that by suggesting that they plan

together, Student A abdicated the chance to develop a plan. Student B became the writer/planner, sometimes asking questions but more often answering the questions of Student A, who begins to act as supporter to Student B. In his discovery paper, Student B says this about the process of collaborative planning: "The process is not known as a solitary dictation [I think this refers to the writer simply telling the plan to a supporter], and I think the role of the supporter is not only to suggest things that you think your writer-partner might like, but to suggest things that you yourself would like." Note Student B's argument in favor of what he terms the "block method" of comparing and contrasting toward the end of the transcription. Collaborative planning not only enables him to "suggest things that he might like" but also to argue in support of his choices. He, in effect, becomes his own best supporter, enabling him to develop greater autonomy as a writer.

**SNAPSHOT 3: PLANNING AN IN-CLASS
ESSAY TEST
(UTILIZING STRUCTURAL STRATEGIES
TO CONVEY A KEY POINT)**

- A: An essay test on—
 B: *Black Boy* and *Dinner at the Homesick Restaurant*—
 A: We're comparing and contrasting—
 B: — to see which was more socially responsible or something.
 A: To see which was making a stronger social statement.
 B: Statement, yeah, statement is better. . . .
 A: I'd be interested to know if anyone is going to write about *Dinner at the Homesick Restaurant*.
 B: I might, just to be different.
 A: Yeah, I was thinking about that, but I didn't see a way that I could. You know, everything I came up with as a good reason for *Dinner*, I had a counter for it, you know? All right, moving on. All right, for *Black Boy*. Maybe we should collaboratively plan collaboratively, you know, work on both of ours at the same time?
 B: Okay, *Black Boy*. The author Richard Wright, he's fighting society from the time he's a very little boy.
 A: Um-hmm. All right, so his main struggle is against society and its Southern institutions and discrimination policies and everything.
 B: All right, think about this, if you were going to write an essay, what would your main point be?
 A: In comparing the two?
 B: Your main impression. What would be— would you take it like saying that in *Black Boy*

the narrator was more depressed about society than any of the different narrators in *Dinner at the Homesick Restaurant* and then would you compare from there, or what would your text conventions be and stuff like that?

A: I don't know. See the thing that stands out in my mind is about the racism. I would take that. See the difference, I mean I don't see a way to compare them because in *Dinner* you're dealing with a family that has its problems like every family does. . . .

B: Yeah, I know. . . .

A: My question to myself, to you, I guess, is how do we compare? See I'm used to doing comparisons where we take one point and they're close, but you outweigh it for one specific reason in each, you know. You pick out a point and then you do a series of these.

B: You're undermining the block method.

A: All right, well anyway, I'm trying to find out how we can change, I mean how we can compare these points in *Dinner at the Homesick Restaurant* that aren't strong enough. I mean I guess we have to find what the points are?

B: I think you do it in reverse order. I think you find the points in *DHR* that are strong in terms of social, and then you just balance those against those of *Black Boy*, and then maybe after you've made your comparison, then you state other reasons why you think *BB* is superior to *DHR*. You can't start off with *BB* because there really are no matching influences with *DHR*. You need to start with *DHR* and then go the other way.

Throughout much of the year Student B was a fairly standard five-paragraph essay test writer. He had learned the formula and used it with little innovation or risk-taking. Many times I had suggested that he review his introductions and put conclusions. This essay is different, however. Here he begins to engage the topic by having a character from one novel hypothetically meet a character from the other novel. (Note the introduction of the text which follows.) In commenting on this session, Student B noted that in their discussion on this paper, he and his supporter decided that this didn't have to be "just another boring paper." He credits Student A with suggesting that he find some way to compare the books beside the usual. It is difficult to be precise about what specific comment in the transcription he is referring to. Early in the session, however, when Student A asks Student B if he thinks anyone will choose *Dinner at the Homesick Restaurant* as making the more significant social statement, he responds, "I might, just to be different." (See transcription above.) He doesn't choose *DHR*; however, he does do something "different," for the first time taking a risk in focusing his topic.

STUDENT B'S IN-CLASS ESSAY TEST

WHICH NOVEL MAKES A MORE SIGNIFICANT SOCIAL STATEMENT — *BLACK BOY* OR *DINNER AT THE HOMESICK RESTAURANT*?

If Cody Tull and Richard Wright had met on the street in an anonymous Southern town, Richard would have been expected to step aside, smiling falsely, while Cody continued on with a surly grin. I am not accusing Cody of prejudice; I am simply stating that that is how society was in the period the books were set in. *Black Boy*, told as an autobiography by Richard Wright, does a better job of exposing this prejudice; in fact, a primary goal of the book seems to be social criticism. *Dinner at the Homesick Restaurant* is a novel about a family cut off from society; victims, yes; instruments of harsh social commentary, no. Two comparable characters in terms of age, gender and rebellious nature are Cody and Richard; through their lives I state my case.

In *Dinner at the Homesick Restaurant*, the character of Cody Tull is a victim of his family structure and his own slightly warped mentality. Cody is always concerned that his mother hates him (he gives her good reason) and that Pearl loves his brother Ezra more. Cody becomes bitter and rebellious, and Pearl cannot handle him except through her presentation of herself as a harsh, authoritarian figure. Never in the book is prejudice shown against anyone except Pearl (I think her job could have been better) and Josiah, who suffers from cruel children and Pearl.

But, in *Black Boy* Richard Wright has to claw himself out of his desperately poor family while being beaten down constantly by both whites and blacks. Richard goes through childhood with no more than one year of schooling at each new place his family moves. The system is unconcerned, however; nothing is expected of a poor black boy anyway. In fact, Richard's beatings at the hands of the various family members were considered necessary to teach him his place in society. The more he challenged the white system, the more he would be hurt, and his parents knew that. As he goes into adulthood he finds prejudice everywhere—on the street, on the job, in the library etc.

A hypothetical meeting between Cody and Richard would be interesting. Would they fight the first day of school? Maybe, but only because both grew up with quite a lot of hate, not because of outright prejudice. Cody's hate came from his imagined mistreatment by his family (notably Beck, Pearl, and Ezra), and *Dinner at the Homesick Restaurant* chronicled these family relationships. Richard Wright's hate came from horrible prejudice, and out of his hate sprang *Black Boy*, a socially condemning novel. *Black Boy* wins by default; no novel I have yet read (except maybe *Oliver Twist*) could stay with it in terms of a powerful social statement. Only an autobiography gets that close to the hatred.

COMMENTARY ON ESSAY TEST

As indicated earlier, this essay offers evidence that Student B is achieving greater autonomy as a writer. He is willing to take risks rather than follow the standard five-paragraph essay—introduction—development with three major points—conclusion—format. The collaborative planning session offers evidence this

student is also able to support his choices of writing strategies in regard to this assignment.

Before engaging in the planning session, the students in the class had been presented with two means of comparing and contrasting. In the planning session excerpt presented here, Student B argues convincingly for what he terms the "block" (subject-by-subject) method as opposed to the point-by-point method, which Student A says she is used to. He points out that when one novel is the stronger choice overall, the writer should discuss the weaker of the two first and then move on to build his case in favor of the other novel. Note the part of the transcription which begins, "I think you do it in reverse order." He effectively argues that the point-by-point method will not work in comparing/contrasting novels in which one makes a much stronger case in regard to the problem which the essay question presents. His essay does, in fact, follow the structure for which he argues, as evidenced by the text.

This collaborative planning session and text also offer evidence that students become autonomous as writers when they become their own supporters, i.e., begin to provide meaningful answers to questions which they pose for themselves in regard to the assignment.

ASSIGNMENT: PLAN AND WRITE A NARRATIVE WHICH MAKES A STATEMENT ABOUT FAMILY

The writer of the following family narrative has lots of ideas, none of which have been thought through carefully or fully, as evidenced by his opening comments in the collaborative planning session: "I kind of came up with the idea of. . . I'm not sure exactly. . . I don't know how I can arrange it exactly," etc. His supporter, however, is quite adept at listening and asking good questions which enable the writer to develop his plan. Occasionally, the supporter offers suggestions via his questioning technique, such as when he asks the writer if he would like to use characters of different ages. However, it is the writer's choice to eventually make the characters ages 91 and 12. (See narrative sketch below.) Many student collaborative sessions begin with a discussion of key point. Here the writer begins by talking about strategies: a contrast between characters of different ages, the possible setting, using dialogue. It is not until the writer, encouraged by his supporter's question, is able to articulate a key point and find meaning for his piece, however, that the strategies discussed begin to make sense. A final decision about setting enables the writer to consolidate his plan.

**SNAPSHOT 4: PLANNING A "FAMILY" NARRATIVE
(MOVING FROM A DISCUSSION OF STRATEGIES TO A DISCUSSION OF KEY POINT)**

W: I kind of came up with the idea of people reflecting on their childhood or their family

life. And I came up with two ideas. I thought I'd work with two different age groups for my plan. I thought I'd try forties, you know guys coming together for a reunion or something, or real life, like on an army base or a nursing home or a hospital, you know? I'm not sure exactly. I don't know how I can arrange it exactly, how I want to say it, but have them reflecting on something which happened. And I want to do it so it's not real long, you know. I don't want it to be real long.

S: So, I guess you want to use a lot of dialogue?

W: Yeah, I'm going to make it basically all dialogue. You know, quick, snappy writing.

S: Are you going to go back into any flashbacks or into any memories or?

W: Yeah, I mean yeah, I think they'd have to, but I don't see any super long flashbacks or anything like that.

S: Do you have any idea of what they have in common?

W: I couldn't decide whether it's their family life that they developed over the years, or their family life as children. I kind of like the idea, and I think it should probably be easier to write if they knew each other in advance. But I guess I would like for each to discuss their different aspects of family life, you know?

S: Or would you like to do like the point of view of a person in his thirties compared to like a kid of age seven?

W: That's a cool idea. I like it. Yeah. Like a little kid could be saying something like, "I can't wait until I can get away from home." And then the adult will say something like, "Well, once you get away from home, you miss your parents, and I wish I were still home." And then he'd say, "You don't want to be at home because your parents make you eat your vegetables," or whatever. Maybe something like that. . . .

S: I wonder if you wouldn't want to have it a big brother and a little brother. The big brother is all grown up and has kind of a fun life, better than the younger one.

W: I thought about that relationship, but I thought I'd rather do it with different parents so they'd have more to compare.

S: So you want to use comparison?

W: Kind of, but not point-by-point, just we'll be comparing them because they each bring up a different quality.

S: Yeah, that no two parents are really alike.

W: Yeah, but that's not the point I'm really trying to make.

S: What is your point?

W: I think I'm trying to bring out the good in

family life. I'm going to show that it ends up working out for you usually, and that's important. I don't know, probably a positive view. The adult will be a kind of mentor to the kid, I guess. He's learned over the years that it's not only easier, but certainly nice to have people caring for you when you wake up in the morning and now he's having to wake up, you know.

S: Do you think that this has to take place in any particular setting to make it work better?

W: I'm not sure, but I think it'd be interesting if I put it in a hospital.

S: What are your other ideas like?

This collaborative planning snapshot and resulting text underscore the importance of utilizing "talking strategies" such as those provided by the Blackboard Planner. They also reveal the importance of "listening" to the talk and "thinking" about the talk as well. Note the supporter's questions and comments which enable the writer to develop his plan. "I guess you want to use dialogue" (strategy); "Do you have any idea of what they [the characters] have in common?" (topic information); "Would you like to do the point of view of a person in his thirties compared to a kid of age seven?" (strategy); "So you want to use comparison?" (strategy); "What is your point?" (key point); "Do you think that this has to take place in any particular setting to make it work better?" (strategy) By asking the writer to think about many aspects of his rhetorical problem, the supporter has enabled the writer to continuously review and consolidate his plan as he attempts to answer each successive question. Note that the writer does not evade the supporter's questions, but attempts to deal with each question or comment. To the supporter's suggestion that he use two brothers in his narrative sketch, the writer responds, "I thought about that relationship, but I thought I'd rather do it with different parents so they'd have more to compare. His responses give evidence that he is listening to and thinking about his supporter's comments. His willingness to do this suggests an acceptance of, or openness to, the process of collaborative planning.

THE "FAMILY" NARRATIVE SKETCH

A young boy walked into the room timidly. "Hi," he said.

An old man looked at the boy. "Well, hi there, sonny."
"My name is Stevie."

"Hi, Stevie, I guess you can call me. . . well. . . Grandpa." The man smiled at this. The boy found this strange. "I really appreciate you visiting me here. It does get kind of lonely."

"Oh, that's all right," stated the boy.

"How old are you?"

"Twelve, how old are you?"

"Ninety-one, but I'll bet I don't look it." And the old man laughed. The boy studied his laugh and tried to picture the old man as a kid out of the wheelchair, out of the nursing home, just running around with friends. "Have you any brothers or sisters?"

Two brothers, one sister," he hesitated, "all older."

"Oh, so you're the baby of the family?"

The boy cringed and said, "I don't think so, but they always call me that, so I must be. I wish they wouldn't call me that. Mom calls me her little baby in front of my friends."

The man laughed, not rudely, but a knowing laugh. "I don't think it's that funny. And my sister—she's sixteen—always says, 'Mom, get Stevie out of my room. I'm on the phone.' She's always on the phone. And then my mom says, 'Come here, my little poochie poo, leave Lisa alone and come give Mommy a hug.' Then I say, 'Mom, I'm too old to give you hugs, John never gives you hugs.' Then Mom says, 'But Bunchkin, you're never too old to give mommy a hug.' It sounds funny, but it's not. I'm really sure it would be a good idea to leave home."

Then the man took a deep breath, sighed, and said, "I thought you were coming here to cheer me up. I'm the one in the home."

"Oh, yeah, sorry, Mist—Grandpa."

"Oh, that's all right, I don't mind." I was the youngest also."

"Yeah, but out of how many, two?"

"Oh, not many. I had two brothers also, but I had six sisters."

"Ugh," moaned Steve as he slapped his forehead with the palm of his hand. I gotta sit down."

"Roll up a chair," laughed the man. And so the boy did. He rolled up right next to Grandpa.

"Are you for real, six sisters?" asked Stevie in disbelief.

"I wouldn't even joke," laughed the man.

"Yeah, that would be a real bad joke," said the boy. And they laughed together. The boy tried again to picture this old man as a baby being bullied by six sisters and two brothers, but he couldn't do it. "Did they call you baby?"

"And that wasn't all. I heard 'pumpkin nose,' 'schnookums,' and many other great ones." It may be funny to talk about with you, but when I'm at home, I'm not laughing."

"Of course not," said the man. "But it's a part of family life, and you get over it, like I did." And the man inched his way across the pink and blue room. "Coke, Steve?"

"Oh, sure. . . Grandpa. . . that'd be great." By the way, Grandpa, why did you want me to call you that and not your regular name. After all, I'm not your grandson. I'm just visiting from my school."

"Well, Steve, I guess I was tired of being called baby and pumpkin nose, and I thought I would take advantage of a chance to be respected for my age."

"Oh, I see." And as they drank their cokes, their eyes met, and they laughed.

COMMENTARY ON FAMILY NARRATIVE

The writer of this narrative says this about his collaborative planning in his discovery paper:

As I would learn as the year went on, paying attention to the questions posed by my partner was the single most important thing that I could do as a planner. Unfortunately, I didn't always do this, and I think my essays reflect it. In my compare-contrast essay, I had to compare two novels and tell which raised the more significant social issues and why. Before we began our session, I already knew the side that I wished to take. . . . However, I didn't know more than that. My partner questioned me on family and its importance; however, instead of answering him I would go back to talking about the importance of racism. Yet, when he asked me why I thought racism was more important, all I said was that it 'is on a completely different level.' That's what I say in my paper too. It's a bland, meaningless statement, that without further explanation, means absolutely nothing. Had I answered my partner's questions, my essay would have been much more informative. Instead, when the questions became difficult, I would shy away and not answer them.

The writer continues in relationship to his family narrative:

An example of what can happen if you do answer your partner's questions is evident in my narrative. I came into this session with only vague ideas of what I wanted to write. . . . We started our discussion by trying to decide what age group I should deal with. My partner asked me if I liked the idea of having a large age difference between my characters, and I reacted to the idea very positively. As it would turn out, in my paper, the elder character would be 91, and the younger would be 12. I got the idea of having the adult give the child some sort of advice about family life. However, I was still missing some key point in my paper until my partner asked me if the setting would be important. That turned out to be the missing link, and, after that, ideas began to flow. This was the best CP session of the year. Probably because by answering (with interest) all of the questions I was asked, I was able to come up with a strong plan. . . . It was interesting for me to go from having no ideas, to a strong, structured plan in about 20 minutes.

The writer's comments are evidence that he is well aware of what transpired in his planning session and of the connections between the planning and the text. As we have seen, his appraisal of his ability to stay with the supporter's questions is accurate. The writer's discovery paper reflections on the connection between planning and text provide him with an assessment of his development as a writer. He attributes his ability to come up with a "strong, structured plan in about 20 minutes" to his willingness to answer, as he says, "with interest" his supporter's questions. His statement reflects his acceptance of collaborative planning; his writing, the benefits of an openness to the process of CP.

SUMMARY: CONNECTING PROCESS TO PRODUCT

From my classroom inquiry, I have observed that students do not always utilize the comments of their supporters in producing text; yet many times they do. The snapshots presented here are evidence that, as learners, students in any given class, exist on a developmental continuum—intellectually, emotionally, experientially, psychologically. Generally, I find that students easily incorporate ideas that are perceived as consistent with and as enhancing their own intentions. They readily incorporate ideas or strategies with which they are familiar and which do not involve much risk-taking. Other students, however, challenge themselves to understand a strategy in relation to overall purpose or to relate overall purpose in a strategically unique way. These latter writers, exemplified by the writers of the Compare/Contrast Essay Test and the Family Narrative in this study, have begun to utilize collaborative planning for their advantage. They have begun to see the importance of reviewing and consolidating a plan via the decisions encouraged through the utilization of the Blackboard Planner.

In addition to learning from the collaborative planning transcriptions, the students' texts, and the students' discovery papers central to this study, the discovery papers of other students in my class provided me with additional insights regarding the relationship between collaborative planning and text. These quotations from my students' discovery papers, for example, suggest some of the reasons that students do not incorporate the comments/questions of their supporters into their text:

- "I reject ideas when they challenge my preparation, and I think I am anchored with a good idea."
- "When the questions became too difficult, I would shy away and not answer them."
- "Sometimes I answered too many questions and said too much instead of really listening to what the supporter was trying to emphasize to me."
- "I must listen to my supporter's comments."
- "I did not ignore my supporter's questions/comments, but when actually writing my essay, I did not incorporate them."
- "I tended to ignore questions that involved experimenting and changing my plan in a big way. I think that this is done out of fear."
- "I need to be more careful about passing over the things that don't strike my fancy at the moment."
- "The questions I tended to ignore were those that involved the revamping of my entire paper."

All of these comments seem to suggest that students will not benefit from collaboration when they are not open to the process. This lack of openness seems to result from one of three dominant attitudes: (1) an inflexibility in regard to their own ideas or established plan, (2) an unwillingness to improve process skills, or (3) an unwillingness to connect process to product. These three attitudes are further illustrated by the following students' comments:

I ignored my supporter's comments because I usually have thought it (the plan) over enough so that I don't like switching for any reason. . . . A portrait of myself as a writer would be a reckless writer, who dives into an ocean of ideas with no life jacket of planning. I wade through ideas with only a vague sense of what direction I'm proceeding in. . . . Collaborative planning was not entirely helpful to me only because of my hard-headedness. It was helpful to me when I allowed myself to be open to it.

If someone asked me whether or not they should use CP as a writing technique, I would definitely recommend an attempt at using it. Whether or not it works, it is up to them."

[INFLEXIBILITY/UNWILLINGNESS TO QUESTION ONE'S OWN IDEAS OR PLAN]

Throughout the three collaborative planning sessions, many plans and questions were thrown around. As I would learn as the year went on, paying attention to the questions posed by my partner was the single most important thing that I could do as a planner.

Unfortunately, I didn't always do this, and I think my essays reflect it.

[GOING THROUGH THE MOTIONS/NOT UTILIZING THE PROCESS TO ADVANTAGE]

I always seem to deviate from my original plan. I didn't ignore any questions the supporter asked. I answered all the questions and took all the comments into consideration. I had an answer for every question and/or comment that was made. .

I always thought about what I would say in response to a supporter's question, but I never once said, "Oh, yes, that's an excellent point." I never thought about it or perceived it in that way. . . . It is much easier for me to write from the heart and let my ideas flow. That's why I love poetry."

[UTILIZING PROCESS FOR THE SAKE OF PROCESS/NO CONNECTION BETWEEN PROCESS AND PRODUCT]

In assessing the benefit of collaborative planning to their development as writers, these students show that they lacked acceptance of the process. The first two students are fully aware that they did not utilize the process to advantage. The third, however, believes she took advantage of the process. But if we look further, we see that even she recognizes that she never said, "That's an excellent point." Such a comment on the writer's part, I believe, would indicate recognition that the supporter has made a significant statement which will enable the writer to develop her plan more fully.

This writer, by her own tacit admission, however, is resistant. She is not willing to revise her plan. (This unwillingness to revise was evident in successive written drafts of an assignment as well.) In fact, it's questionable whether she puts any plan into action. As she says, "It's much easier for me to write from the heart and let my ideas flow." Her comments lead me to believe that she enjoys writing from inspiration; she does not accept the value of making connections verbally, of thinking a plan through and getting reactions to it. Many times during the year she expressed verbal resistance to any new type of thinking she was asked to do. In regard to being asked to think about how a particular author made meaning in a piece, for example, she indicated that she had difficulty answering because she "doesn't think that way." She often commented that she is more of a "science/math" person than an "English" person. This defensiveness did not allow her to utilize collaborative planning to her advantage.

DEVELOPING PLANNING AND WRITING STRATEGIES

The students' planning transcriptions, texts, and comments give evidence of growth in planning and talking strategies which include

- developing listening skills;
- asking pertinent questions of oneself and of one's partner;
- answering rather than ignoring questions which are asked;
- connecting elements of the Blackboard Planner (key point, information, text conventions, etc.)

Their texts and discovery papers suggest that these students are now more conscious of using the following writing strategies in text production:

- utilizing planning decisions in the actual text;
- limiting information;
- organizing information in relationship to purpose;
- considering alternative structures;
- using specific detail and example.

A NOTE TO TEACHERS AND CURRICULUM WRITERS

The planning transcriptions and students' texts provide evidence that collaborative planning is one teaching method which fosters the learning model advocated in *PCRPII*. Collaborative planning enables students to improve cognition and enhance metacognitive awareness. Looking through the lens of *meaning-making*, the snapshots reveal students' efforts to ask and answer questions, making their thinking more visible to themselves. The snapshots also reveal a process which is *language-based*. Students learn through the utilization of talking strategies and by

making connections between oral and written language. They learn the significance of communicating for a purpose. Learning is advanced through the *human* and *social* aspects of collaboration. This process allows students who are open to it the opportunity to utilize their prior knowledge and beliefs (human aspect) and interact with a community of learners (social aspect) to further develop their knowledge and skills.

In teaching and in writing curricula, therefore, we should consider not only the "what" but also the "how" of teaching. As educators our goal is to develop independent thinkers and learners. We cannot accomplish this goal unless we pay attention to process as well as to educational materials and specific content knowledge we as a society deem it necessary for our children to have.

Observation of what transpires in a collaborative planning session gives teachers as well as students a valuable assessment tool, helping both to answer the question: "Where do I go from here?" Self-analysis of individual collaborative planning sessions and the resultant texts enables the students to assess their progress as a writers. These self-assessments, in turn, provide the teacher with valuable information on the progress of both a class of students and of individual students within the class.

My work as a teacher-researcher in the Making Thinking Visible Project at The Center for the Study of Writing, Carnegie Mellon University, has convinced me that collaborative planning is one methodology which, paradoxically, enables students to engage each other for the purpose of becoming independent thinkers and writers.

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STUDENT TEACHERS AND COLLABORATIVE PLANNING: TRANSFER AND ADAPTATION FROM REPRESENTATION TO PRACTICE

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"We conduct research in a field to make sense of it, to get smarter about it, perhaps to learn how to perform more adeptly within it. Those who investigate teaching are involved in concerted attempts to understand the phenomena of teaching, to learn how to improve its performance, to discover better ways of preparing individuals who wish to teach."
(Shulman, 1986, p. 3)

PURPOSE AND DESIGN OF THE STUDY

The purpose of this study is to explain how teachers early on in their professional work develop their own philosophies for teaching and learning and how they assimilate the new concepts and techniques they learn with what they have already learned in order to teach their own students. This work may be useful for other classroom inquiry projects or teacher preparation programs interested in how teachers form philosophies, make decisions, and adopt different methodologies for teaching composition. There are three main reasons for this inquiry: the first is to see how preservice teachers think about themselves as writers and how they represent and react to a new idea for teaching composition; the second is to discover how student teachers' attitudes toward and knowledge about writing and teaching writing, particularly in the areas of planning and collaboration, are manifested when they teach their own students; and the third is to compare experienced teachers' views about planning collaboratively with prospective teachers' views and to suggest some implications for the practice of writing.

Three studies in particular investigated some of the ways teachers represent themselves, their students, and their classroom situations in order to better understand the rationales teachers have for what they teach and how they teach. Swanson-Owens (1986) was interested in how two experienced teachers' philosophies about teaching and learning were played out in practice. Concerns such as "the individual's views on the source of new knowledge, the development of knowledge, and the goals of instruction" (Swanson-Owens, p. 69) are critical to the decisions teachers make about what they will teach and how they will teach it. Hillocks (1986) characterized four different types of instructional practice and provided explanations for the assumptions that underlie why teachers use these modes in the teaching of writing. Most recently, Hoy and Woolfolk (1990) studied the socialization of student teachers—their senses of personal teaching efficacy and general teaching efficacy.

These studies shed some light on ways teachers imagine the role that they play and the roles that their students play in the teaching and learning experience; their images of the classroom itself, the goals for instruction, and ways knowledge is gained directly influence the choices they make about what gets taught and how it is taught. I am interested in how preservice teachers, particularly those who aspire to teach secondary English, develop their teaching repertoires; I would like to know more about how and why teacher trainees make decisions about certain strategies and techniques they will accept and use or reject and not use in the teaching of writing. Like Swanson-Owens, I want to discover more about what it is teachers attend to ("locus of attention") and what influences their instructional practice ("conditions of instruction"). Unlike Swanson-Owens, however, I want to explore how prospective teachers early in their professional pursuits understand the nature of teaching and learning and how they begin to select certain methods for teaching composition. As a teacher-researcher in the Making Thinking Visible Project as well as a preservice teacher instructor, I am interested in how teachers early in their practice, at the time just before doing their practicum work and then during the actual practicum itself, select, translate, and apply what

they have already learned about writing to a new technique for teaching writing that they haven't learned before. In order to take a close look at these prospective teachers' representations of and attitudes toward collaborative planning¹ as well as their predictions and decisions about using collaborative planning, I decided to take a close look at several factors: prospective teachers' attitudes toward planning and collaboration, their images and representations of planning and collaborative activity, their reactions to using and teaching collaborative planning, their predictions of ways they would use collaborative planning in the classroom, and student teachers' adoption or rejection of it as part of their methodology and philosophy for teaching writing.

Twenty-three preservice teachers from the teaching of writing course during the fall semester 1989-90 at the University of Pittsburgh participated in this study. In the course they learned about collaborative planning, tried it for at least one of their own writing assignments, and predicted how collaborative planning would work in their own classes when they became teachers. In the spring semester, I selected two student teachers, based on their responses to writing attitude surveys and their journal writing, for short case study observations during their student teaching practicums—one of the participants who decided to use collaborative planning with students and one of the participants who did not.

I collected and analyzed five kinds of data:

1) a journal of reaction and reflection about collaborative planning. I asked these twenty-three students (prospective English teachers) to examine collaborative planning as a writing technique. They were to write their reactions in a journal that was required for the teaching of writing course and in which they commented on several philosophies and methods for teaching composition (e.g., Bartholomae and Petrosky, Atwell, Kirby and Liner, Applebee, Flower and Hayes). They also read two newsletters written by members of the Making Thinking Visible Project at the Center for the Study of Writing at Carnegie Mellon University, and they read selections from the Project Book on collaborative planning also written by members of this project. They viewed a twenty-minute videotape on doing collaborative planning, and they participated in a large group planning session and discussion. They also tried collaborative planning with a partner outside of class. They wrote their comments and reflections about all of these materials and activities in their journals. I collected, read, and commented on the journals at week four and at the end of the semester.

2) a thirty-question writing attitude survey. This survey, developed by David Wallace and Nancy Spivey at CMU, asked students about their own planning process as writers and about their views on collabora-

tion in writing (See Appendix A). On the first day of the teaching of writing class and on the last day of the course, I asked the students present to take this survey that asked 30 questions about their writing and planning experiences and how they felt about both planning and collaboration. When I administered the surveys at the end of the course, I asked the students also to indicate in the upper right-hand corner of the survey the number of times they did collaborative planning for their own assignments during the fifteen weeks of the course. I gave each of the surveys a numbered score, the highest possible score being 120.

3) written predictions about collaborative planning in their own classrooms. Very close to the end of the course in December, I asked these prospective teachers to predict how collaborative planning would work in a teaching situation that they imagined could happen to them (See Appendix B for examples). I also read the final take-home examinations (questions about planning collaboratively) of each student to gain more insights into how they understood and felt about using collaborative planning. In addition to the above information from all students who took the teaching of writing course, I also collected the following data from the two student teachers I observed during the spring semester:

4) observational notes taken during student teachers' teaching a composition class at practicum sites, and

5) personal interviews (audio taped and transcribed) with two student teachers at the end of the methods course and after teaching a writing class at their practicum sites.

This paper is a look at how one group of preservice teachers in general, and two individuals from that group in particular, represent collaborative planning and make decisions about whether or not this technique would be part of their teaching repertoires. The discussion toward the conclusion of the paper includes how some experienced teachers in last year's Making Thinking Visible pilot program understood collaborative planning and made decisions about whether they would use it in their own classrooms; their views were not unlike views expressed by some preservice teachers.

INITIAL RESPONSES TO COLLABORATIVE PLANNING

How did preservice teachers react to the collaborative planning technique for teaching writing? What reactions and reflections did they make about it over the course of an academic semester? What did they find useful and positive about it and what did they find problematic?

In the writing methods class and prior to any student teaching, the group discussed and wrote in their journals what they anticipated would be the ben-

efits and weaknesses of collaborative planning if they used it as a teaching of writing tool. Some of the benefits mentioned were that collaborative planning enhances speaking and listening skills, promotes social interaction, builds confidence and authority for writers, and contributes to sharing ideas, finding the self, considering elements of a piece of writing that they never considered before, anticipating problems that might arise in the text, getting organized, and considering suggestions they would not have thought of by themselves.

Among the concerns brought up by the students were what their writing assignments would be, so that when students do plan collaboratively they don't "steal" ideas from one another. They also voiced questions such as what if the students fool around and don't plan when they allow class time for planning, what if a writer refuses to plan with a supporter, what if students just ask questions in a lock-step fashion and aren't good supporters for writers, and what if writers become too dependent on their supporters for help? In answer to some of their concerns about collaborative planning, I talked with them about open-ended kinds of assignments that would be non-threatening to students who might be hesitant to share their ideas at first. We also discussed how they as teachers could demonstrate the supporter's role so that the blackboards would not just be a series of questions that a supporter would ask in a lock-step fashion. We also talked about how planning collaboratively might be a way for writers to become more independent rather than more dependent on other people for support for their writing in the sense that after doing collaborative planning with a supporter, the writer learns to make considerations and decisions about purpose, audience, text conventions, and topic on his own, when the supporter is not around.

The journals they kept during the course could be divided into two "camps." On the one hand, I read people like Kathy and Timmie who see more benefits to planning collaboratively than disadvantages, benefits like,

"asks them [students] to assume two roles writer/listener and encourager and prodder, which I believe any student benefits from seeing/being on more than one side." —Timmie,

or

"1. aids the writer in looking at his own writing through the eyes of an observer, 2. polishes social skills of the students, for they learn to interact and communicate with their fellow classmates. . . 3. takes fear of authority (teacher) away—comfortable with friends, 4. very egocentric—students like to talk about themselves, 5. good mental exercise, 6. creative outlet for students" —Kathy.

Students like Kathy and Timmie predicted that collaborative planning would be a successful writing

technique in how they imagined teaching a writing class. And students in this "camp" did plan collaboratively on the writing assignments for this class and other classes outside this class frequently, and wrote that they enjoyed it and that it helped them to get through their courses. About the technique in general, other members of the class wrote the following comments in their journals:

"Collaborative planning is concerned with getting beyond the facts into a region . . . which contains problems, & confusion. A whole new world opens up for the writer when she allows herself to face this area of confusion and puzzlement."

"I like this idea a lot. Probably because I have done it without knowing I was doing it & because it occurs before anything is written."

"Students would gain a clearer and more accurate understanding of what they are trying to express in their writing if they use collaborative writing exercises. The most important aspect in collaborative planning is that the writer is not being judged by the supporter but, rather, encouraged."

"I think it is a great idea for inexperienced writers who never plan and are never certain where they are going with a particular piece of writing. For these people collaborative planning is an excellent tool. Not only does their writing improve enormously, but they are also becoming skilled listeners and able communicators."

"This collaborative planning has a lot of side-benefit potential. I see the support system as character-affirming for uncertain adolescents. I think the process of explaining one's project to someone else, answering one's questions and defending one's choices and views would be a process of 'meaning-making'—investing a bit of oneself in the task at hand."

Six students in the teaching of writing course who saw advantages to using collaborative planning and who predicted that it would work in their classes used collaborative planning themselves anywhere from 4 to 25 times during the semester. These six prospective teachers planned collaboratively on the writing required not only in the teaching of writing course, but also in the teaching of literature course, the creative dramatics course, the teaching laboratory lesson plan assignments, and in other education courses they took during this semester where they were required to submit papers and other written work. Two of these six students, Margie and Geri, became collaborative planning partners and frequently planned (for at least 15 different written assignments during the semester) the writing they were required to do for several courses.

There was also representation from another "camp." On their writing attitude surveys, these six student teachers said they either never did any collabo-

rative planning after they were asked to one time during the course, or did it only one time beyond the course assignment. Journals like Lisa's, and Terri's reflected hesitancy to plan collaboratively for a variety of reasons:

"I like Atwell's approach better because I resent the fact that I will be told when to collaborate, and with whom. . . . I found that peer tutoring, either with same age pairs, or across ages, is a profitable type of collaboration. Yet, as with all types of collaboration, there are problems. The primary problem is that the tutor may be overpowering, or the tutee, resentful." —Lisa

"The only problem I have with C.P. is the specific points of focus that are part of the blackboard planner. For example, I don't think that audience applies to a poem. Shouldn't the points of focus change for each writing assignment? A student may even have a problem that isn't covered in the blackboard planner also. . . . I do know that not all students may benefit from collaborative planning, and those that do need constant supervision to keep them on task." —Terri

About the planning blackboards, John wrote,

"I am having a problem filling in the boxes. I get an urge to start writing first. So I will. In a rambling fashion. Then maybe I can fill in the boxes for a more cohesive final draft, should one be necessary."

And Stephanie remarked,

"My only complaint about the "Blackboard Planner" is that it's so linear. I like circular or flow chart types of things that don't have little boxes. I know that review and consolidate runs beneath all of the boxes, but it still looks too sterile. I like to be less organized. I suppose for me an ideal diagram would be somewhere between the blackboard planner & my actual depiction."

Other concerns from this group were that writers would become too dependent on supporters in order to plan their writing when they felt as teachers their goal was to get writers to become more independent; and the fear that one writer would "steal" another's ideas if they talked about it first kept resurfacing. Those who gave collaborative planning more skeptical reviews found it problematic because they felt collaboration could make writers too dependent on supporters for help, could allow for "stealing" original ideas, could cause much confusion and off-task behavior, and could impose a structure (the planning blackboards) that writers might find restrictive and unnatural. Randy wrote,

"Collaborative planning could probably be useful in the classroom, but it seems to me that the overall goal of the program should be to get students to ask *themselves* the right questions when they write. Writing, for me, has always been a very private enterprise—and I usually ask myself

questions like the ones that are stressed in collaborative planning. By working with another person, students may gain insight and practice regarding which questions to ask. However, that other person will not always be there, and writing, after all, is a private affair."

Students had different reactions to this writing technique, anywhere from very accepting of the idea to skeptical and cautious. Those who readily accepted this notion accepted collaborative planning because it is something they have already been doing as writers or because they saw it as something useful as a problem-solving strategy or a communication technique that promotes social interaction, authorial ownership, listening, and student-centeredness. Students who talked about writing assignments with others, who enjoyed interaction with others, and/or who have had other experiences with writing as problem-solving saw value in doing collaborative planning; students who thought that writing is private, who were taught to do their own work (if not, they would be cheating), and/or who understood or tried to move through the blackboards mechanically (that is, without having a sense of how audience, purpose, text conventions, and topic information interact and consolidate in a writer's plan) questioned whether collaborative planning would be a good idea.

PRESERVICE TEACHERS AS PLANNERS

How did preservice teachers think about themselves as planners? How did they react to collaboration in writing? What effect did their perceptions have in how they used collaborative planning for their own writing?

After administering the writing attitude surveys on the first day of the course and reading all the journals early in the semester in October, I discovered that the class had many different ideas about what planning is—from a process that occurs throughout the various stages of the writing process, such as brainstorming, drafting, and revising, to thinking about planning as outlining or note taking or divine inspiration or just bouncing ideas around with a fellow classmate or close friend. These students, through class discussion, discovered that they had different representations of planning, and they realized that their future students may represent planning and writing in their own individual ways also. At the midway point in the course during our class discussion, the majority of preservice teachers agreed that collaborative planning seemed to be one way to help students with writing; the majority said or wrote in their journals that would like to try it with their students in the future.

I asked the students during the fall semester to do collaborative planning with someone outside the class on a piece of writing they were working on. Several of them replied in their journals that they collaborated

with someone about the first journal assignment, which was to explain their own planning process. The majority of student teachers commented in their journals that they preferred collaborating with other members of their class rather than with someone outside of class (e.g., friend, parent, sibling). Their reasoning was that other class members knew the assignment and also had to do the assignment, so they were better collaborators because they had a better understanding of the assignment and had more of an investment for doing the collaboration—they might get some ideas for the assignment that they hadn't considered before talking it over with a peer. Getting some alternate or new ideas from peers was helpful; they did not consider this "stealing" someone else's ideas.

For at least six students, collaborative planning became a regular part of the writing process for all the other papers they wrote during that semester including the major course assignment, which was to design a sequence of writing assignments that they would teach to a high school class, and the take-home final exam which included both theoretical and practical questions about teaching writing. These students formed study groups and talked a great deal before and throughout the completion of the writing assignments. These students wrote that they talked to each other on the phone, before and after classes, and during breaks between classes about their assignments. Another six students wrote that they did not use any collaborative planning for any of the writing assignments and wrote their papers alone or only used it once. The others in the class wrote that they did plan collaboratively on more than one of the assignments or on part of the assignments and part of the time worked alone.

I obtained sixteen post-writing course attitude surveys from the twenty-three enrolled in the class (one student moved and had to finish the course early, and the others did not come to class that day). High scores on the surveys (scores in the high 90's and 100's) reflect that students felt positively about planning and did plan out their writing; high scorers also told others about their writing and felt that collaborating with someone about their assignments was very helpful and useful. Low scorers on this survey did not think that either planning or collaboration was as important as the high scorers. Students who had high scores on the attitudes toward planning and collaboration also indicated that they planned collaboratively many times during the course. The three highest scorers on the post-surveys were the three who indicated that they used collaborative planning the most times throughout the semester, from ten to twenty-five times. (One student estimated that she used collaborative planning somewhere between fifteen and twenty-five times.) Six students indicated that they never did any collaborative planning after they were asked to one time

Post WAS	Number of CP Sessions
108	25
107	11
103	15-25
101	2
97	10
97	3
97	0
93	3
91	0
90	4
90	2
90	0
90	0
86	5
84	1
77.5	1

TABLE 1. PRESERVICE TEACHERS' POST-WRITING ATTITUDE SURVEY (WAS) SCORES AND TIMES THEY DID COLLABORATIVE PLANNING

during the course, or did it one time beyond the course assignment; their writing attitude survey scores ranged from 10 to 30 points below the scores for the high scorers (See Table 1).

TWO PRESERVICE TEACHERS' PREDICTIONS ABOUT COLLABORATIVE PLANNING

What predictions did preservice teachers make about how collaborative planning would work for their own classes? Did their predictions have any bearing on whether or not they would use collaborative planning when teaching writing?

The previous sections of this study provided a glimpse at prospective teachers' general attitudes toward, reactions to, and reflections about collaborative planning before any actual teaching of writing occurred. Adoption of a new technique like collaborative planning, adding to one's teaching repertoire, and further developing a teaching philosophy all come from how teachers feel about writing as writers and how they perceive the following: notions about education and collaboration, their past history and success with schooling, and success with writing—the "baggage" teachers bring with them into their classrooms. In general, preservice teachers in this study who planned with a partner even before they were introduced to collaborative planning were more enthusiastic about teaching it and recognizing benefits of doing it than

those who were "private writers" before collaborative planning was introduced to them.

The next section looks at two specific students' attitudes toward collaborative planning, their predictions about how they imagined they would use collaborative planning in a classroom situation, and then, if they actually did use collaborative planning when teaching a writing class during student teaching. They wrote their predictions in their journals during the fall writing methods course, and they did their classroom student teaching during the spring semester. Private interviews were conducted with these two individuals at the end of the fall semester—at that time we discussed how they reacted to collaborative planning as writers, and also in the spring, after the student teachers taught a writing class—at that time we discussed what happened during the class, their reactions to teaching the class, and their reasons for using or not using collaborative planning during class time.

Why do Randy and Kathy feel differently about collaborative planning? Randy and Kathy are both excellent students, they both did very well in high school, and have received A grades in their teaching courses at Pitt. They have different personalities—Randy is quiet, soft-spoken, reserved, introverted; Kathy is gregarious, outspoken, demonstrative, extroverted. When they talked to me about themselves as writers in private interviews, they had different points of view. Randy likes to work alone, and he has had success in school from thinking and doing by himself. He feels that if he shows or tells someone his ideas before he hands in the final draft then it's like cheating or stealing. He wouldn't want someone to steal his ideas, and he wouldn't want to change his mind about what he wants to write about because he talked to someone who tried to talk him out of what he was going to write. He says he usually puts a lot of time into his writing, and rather than going to outside sources or other individuals for help, he prefers to think about what he wants to write, his view or what he thinks the truth is, then considers the opposing view and acknowledges it in his argument. These strategies have worked well for him. Randy is a confident, independent writer.

Kathy told me in an interview that writing has become easier and more enjoyable for her now, but when she first came to Pitt, writing was hard for her. She procrastinated doing her writing assignments, had trouble organizing exactly what she wanted to say, she rambled, and she couldn't find her "voice" in

what she wrote. Talking to her teachers and to other class members helped her to make sense of the points she wanted to make and to structure her writing better. Talking out her plans gave Kathy confidence that she had something to say that others would want to read about. She recalled times when at 11:30 at night, she'd be on the phone with one of her classmates discussing the next paper that was due. Bouncing her ideas off the other person was helpful as well as getting the other person's point of view. Discussing the assignments made Kathy more excited about writing and got her to think about her goals. Planning and collaborating helped Kathy feel more comfortable about writing and made her feel that she was really communicating to her readers. When I looked at Randy's and Kathy's responses to the Writing Attitude Survey they had taken on the last day of the teaching writing class, I noticed that Randy agreed that writing is a very private process, but Kathy disagreed with that statement. It appears that the way they would use collaborative planning in teaching writing and what they would predict for how students would use it are directly related to how they feel about writing as writers themselves.

Perhaps Randy and Kathy see collaborative planning differently because they are different writers. Both writers see benefits in planning, but they plan differently. Kathy likes to talk before she writes and before she hands in a final draft. Randy plans alone; he thinks about the assignment and determines how he's going to write it by himself. Kathy recognizes the benefits of collaboration, but Randy sees collaboration as a threat to original thinking. Kathy has learned that sharing what she thinks with someone helps her to communicate better; Randy has learned that you should always do your own work, and writing alone for him has paid off. I think that adopting a new technique like collaborative planning has much to do with how we adopt writing techniques ourselves as writers and with how successful those techniques have been for us as writers. As Table 2 demonstrates, Randy and Kathy disagreed on questions on the Writing Attitude Survey that were about how they viewed the writing

Subject of the Question	Kathy	Randy
I like to bounce ideas off people.	SA	D
I like to talk to someone before I write.	A	D
Writers should do their planning before writing.	A	D
Writing should be a very private process.	D	A
I like to finish writing before telling someone.	D	A

TABLE 2. DIFFERING RESPONSES TO WRITING ATTITUDE SURVEY
(SA-STRONGLY AGREE, A-AGREE,
D-DISAGREE, SD-STRONGLY DISAGREE)

process and how much they talked about their writing to others.

Randy and Kathy disagreed on their views about collaborative planning and also differed in their responses to the writing attitude survey. In their journals, they predicted that their classes would respond differently to collaborative planning (See Appendix B). These predictions were written in the fall semester teaching of writing course, before any student teaching occurred. Randy imagined that his tenth-graders would break into groups of two. He would tell them to take turns explaining the incident, the lesson, and its importance. The other person would be free to ask questions about anything the writer says that seems interesting or confusing. Then he goes on to describe three disaster sessions and one that's fair to good. His role, he feels, would be one where he really can't help much because he doesn't think that coming into the middle of a conversation gives him any way to contribute to the discussion. He would opt to work with one boy whose partner has decided to work by himself and would let the rest of the class "plan" for about ten more minutes.

Kathy also imagines that she would be teaching a tenth-grade class and would ask them to write a paper on a successful relationship in their lives. Her assignment is similar to Randy's (personal experience). Like Randy, she would let the class decide who will collaborate with whom, but when she monitors their planning and finds off-task behavior (the dance Friday night and the fight Tonya had with her boyfriend), she decides to pair students herself so they aren't with their friends and imagines that this works better. The planning and collaboration that Kathy supposes are successful; writers get new ideas and other viewpoints from supporters who can step back from the writer's relationship and see things the writer can't because "the writer might be 'too close to the forest to see the trees.'" Kathy predicts that her class' papers demonstrate "an in-depth analysis of their relationships" that she doesn't think would have happened had they written their papers without collaborative planning. Kathy discussed her plans for writing with other class members frequently throughout the course and saw more benefits than detriments to teaching this technique to other students.

Kathy's and Randy's responses bring up the issues not only of attitude toward classroom collaboration and the benefits of planning, but also of transfer of understanding a new concept and applying it to your own situation. Much in these responses points to how these prospective teachers understand the role of planning collaboratively and, not less in importance, how these teachers interpret their roles as writing teachers. Kathy has hope that collaborative planning will aid her future students in focusing on elaboration and key

points. Randy feels that the majority of his future students will use it as a "blow off" session. When I asked Kathy and Randy how many times they used collaborative planning during their own writing methods course or for other writing assignments this semester, Randy said he didn't do any planning collaboratively except for the one time when he was asked to and Kathy said at least 5 times. There is a definite link between the way they felt about and used collaborative planning as writers and the way they predicted collaborative planning would go in their own classes. Kathy wrote very positively about collaborative planning in her journal, used it with class members during the course, and predicted that it would be useful in teaching composition; Randy wrote that writing was a private process, did no collaborative planning except for the one time that he was asked to during the course, and predicted that it would probably be a waste of class time for his students.

Other members of the class also wrote predictions about collaborative planning in their journals during the fall semester. The majority of student teachers predicted that their classes would be more like Kathy's prediction than Randy's prediction, although a main concern for the majority of student teachers was whether collaborative planning sessions would invite off-task behavior. These predictions, I think, are linked to what student teachers bring from their backgrounds—both their own experiences as student writers and their previous student-to-teacher relationships, both successful and unsuccessful. In the majority of this particular class' eyes, off-task behavior on the part of their students means that they are not doing a good job as teacher, i. e., students on task are a sign of a good teacher. Randy, who has always done his writing privately and who considers writing to be a very private process, feels that if he gives students time to collaborate that they won't use the time to do the task, that they'll take advantage of the situation and use it for a bull session. Randy's descriptions characterize collaborative planning sessions as ones where the teacher has no control over what the students are doing; to allow the students to take control is for them to be off-task and unproductive.

Kathy's description is one of a teacher who guides and monitors students through their planning sessions; both the teacher and the students have control over the task. Kathy will intervene if she feels any off-task behavior is leading up to an unproductive use of class time. Kathy, who used collaborative planning with other members of the class when she was writing a sequence of assignments, believes there are more benefits than drawbacks in the planning session, among those are organizational and critical thinking skills, things she discovered as a student writer working on assignments for her own classes. Those who see writing

as a private process and see little advantage in sharing plans with someone, as Randy does, probably won't decide to teach collaborative planning. Those like Kathy who see advantages in the social, supportive aspects of planning out a piece of writing with others probably will ask students to try planning collaboratively when teaching writing.

HOW ATTITUDES AND PREDICTIONS WERE LINKED TO ACTUAL TEACHING OF WRITING]

Were the two student teachers' attitudes toward collaborative planning and their predictions about it linked to decisions they made about teaching writing to students?

In order to follow up how Randy and Kathy, with their different attitudes toward collaborative planning, their different experiences as student writers, and their different predictions on how they would teach writing, I went to observe their classes at their respective practicum sites during the spring semester while they were student teaching. On the day I went to observe Kathy and Randy teaching writing classes, Kathy used collaborative planning and Randy did not.

Kathy used collaborative planning with her tenth-grade "scholastic business" students when they were writing descriptive paragraphs about imaginary cars. (These students, she explained, were those not tracked into the advanced placement, college preparatory, or general mainstream groups at her school site.) Her lesson plan stated that her objective was to have students learn how to write descriptive paragraphs. Before class she told me that she thought collaborative planning would help her students focus on their purpose and supporting details for these descriptions. In her journal in the previous fall semester, Kathy predicted that her students would profit from doing collaborative planning because of the social interaction and because it took authority away from the teacher and gave it to the students.

In the follow-up interview I conducted with Kathy after her class, she told me that she discovered, as she had predicted, students enjoyed the social interaction and the break from the usual teacher-directedness of the classroom. Kathy confided that early in the class period she worried that the class was off task and too loud; she feared that her students were "goofing off" and not accomplishing anything in the planning session. During the class I observed that some of the paired groups that Kathy originally assigned wanted to join other pairs, so they became foursomes. Kathy did not object. As she went from group to group, she noticed that students were asking each other serious questions and making comments about their rough plans and first drafts, comments that asked for elaboration like "So what do you think of the Avenger [car name]?" and "What's your main idea?" At the end of the planning sessions, Kathy called the large group together and had

her students comment about the experience. Comments ranged from "Yes, it [collaborative planning] helps you; [it] made me see that my paragraph and car were stupid" to "I could have been a better supporter if she would have had something [a plan to discuss]" to "I could criticize him and he wouldn't get mad" to "[I got] a lot of good ideas from my supporter."

Randy's twelfth-grade "average" students had just read some of William Blake's *Songs of Innocence and Experience*; their task was to write about anything they wanted and in any form (poem, short story, dialogue) as long as they provided two different perspectives on the same thing. The students wrote their assignments outside of class and did not do collaborative planning at any time in class. Randy collected the class' assignments and photocopied eight of the forty papers from the two class sets. On the day I observed him, Randy distributed copies of the eight papers to each student, asked students to read those papers, and he went row by row to each student asking him or her to say which he or she liked best and which he or she liked least and why. Many students replied they liked them all; at least one in each class said they didn't like any. In general, students liked the pieces they said they understood or that were realistic, and they disliked the ones they claimed they couldn't understand or that dealt with what they called trivial matters. Both classes thought that one of the papers (two poems) plagiarized Blake and was not written by the student at all. Randy explained to the classes that the poems were not plagiarized, but that they were what he thought was a very good parody of Blake and that's why he included them in the eight example papers.

After class, when I asked Randy how he thought the two classes went, he said that he was pleased that he did get everyone to talk—most of the time only a handful of students dominate the class discussion and everyone else just sits there. He said he would probably not include the two poems that students thought were plagiarized if he could do the class again, because he did not want to promote discussion that someone cheated. (This was a surprise that he did not anticipate from the class, and yet, he told me that when he read the poems before photocopying them, he went to check Blake to make sure they were not plagiarized poems.) I asked Randy what he thought might happen if he would have asked his classes to re-plan their pieces or if he asked them, "If you could re-plan this, what would you tell this writer?" He said that that would have been interesting and probably a good idea to see what they would do, but that his schedule to get all of their assignments completed was jammed, and he just wouldn't have time to fit it in.

In his fall semester journal, Randy predicted that collaborative planning would have a mixed if not negative impact on his writing class; in the spring semester,

he decided not to teach or use it for the writing assignment he gave to his class. When I asked him in a follow-up interview after class if he would ever consider teaching collaborative planning to his students, his reply was that he would use collaboration on different projects (although he didn't mention anything specific), but he wasn't sure about using collaboration with writing yet. He said that he might try it and see if it would work, then, if it did, he might keep doing it. He said that he saw both the problems and the advantages with collaborative planning in the teaching of writing class; "I see both sides." He said he probably would try it, but that he couldn't during his practicum because his schedule and the points for his students' grades were already determined by his cooperating teacher. He added that planning collaboratively wouldn't work for his class if points weren't given for doing it; his students were very grade-conscious.

About collaborative planning he said, "I haven't done anything like that because I think it would be so new to kids, first of all. I have such a limited amount of time. I don't think it would be very successful, even if it was for points. I don't know if they would talk that much. The guys get together, they gossip, they get rowdy, and I don't know, I haven't tried it. I don't think it would be very successful with these classes. You need a year maybe to develop it, or half a year, or something." Randy's decision not to use collaborative planning seems to be based on his earlier prediction that it would generate too much "rowdy" behavior and other factors such as not enough time to develop a new technique during a teaching practicum and how to assess it. Yet, the one aspect of his class that he was most pleased with that day was that he got all of his students to talk in class. Their talk, however, was most often in the form of single comments or critiques directed to Randy as the teacher, not to each other as writers and supporters for the pieces of writing.

Kathy's overall impression of using collaborative planning was positive. She predicted that this technique would work in her class if she tried it, and she predicted that students would get ideas that they might not have thought of had they just tried to write the paragraphs on their own. She saw some evidence that students did get helpful feedback and alternative ideas from their supporters. She also predicted that students would get off the task and that they would complain about the assignment—which they did. But Kathy reflected after class that the off-task behavior and complaining were usual with her students and that planning the paragraphs collaboratively actually had the students more involved in the task longer than for some other class activities; when they got serious about their planning sessions and began to listen to one another's ideas, the complaints ceased.

ADOPTING AND ADAPTING A NEW WRITING TECHNIQUE

What insights concerning adaptability of a new writing technique does a study of preservice teachers provide? And what can be learned about the acquisition and transfer of knowledge by observing some of those who learned and/or taught collaborative planning?

If we look at Randy and Kathy in this study in light of Swanson-Owens' work, it appears that one plausible reason why Randy resists implementing collaborative planning into his teaching repertoire and Kathy adopts collaborative planning into hers is because of their strong commitment to "old knowledge." Randy resisted collaborative planning because it did not fit with his already-formed notions about planning and collaboration in writing. Likewise, Kathy's "old knowledge" about planning collaboratively was compatible with this innovation; therefore, she accepted it readily.

Randy's perceptions of the "conditions of instruction" during his student teaching also seem to be a strong influence on his resistance to using collaborative planning. He is concerned about how much time collaborative planning will take to teach and he doesn't want to change the way the curriculum has been set by his cooperating teacher. He states that his class won't do anything unless they receive points for it, and he can't give points for this activity because the points have already been determined by the cooperating teacher. One possible reason that Randy did not incorporate collaborative planning into his lesson, was that he perceived the conditions to be inappropriate. Kathy's "conditions of instruction" were determined by a discussion she had had with her cooperating teacher prior to her use of collaborative planning; both agreed that collaborative planning would be a good technique to try with these students for a descriptive writing assignment. Kathy may have incorporated collaborative planning into her lesson because the circumstances seemed right and appropriate for her to do so.

Likewise, it seems from my observation that Randy's and Kathy's "locus of attention" are different. Both student teachers share the position that learning should be an interactive process and both want interaction in their composition classes. But Kathy's class is one where students interact with one another as she moves among them; Randy's class is one where students interact with him and talk to one another through him. Kathy has her students doing most of the work collaboratively and she is there as a facilitator. Randy has his students do their own work privately and outside of class and he is there to direct their critiques of one another's work. The students in Kathy's class discuss their plans for their imaginary cars and reflect

on how others in the class helped them to plan the paragraphs they will write. Students in Randy's class evaluate existing written products, get a grade for the assignment from Randy, and move on to the next writing assignment, a research paper. Kathy's class seems more process-oriented in contrast to Randy's which seems more product-centered. From my brief conversations with the cooperating teachers at the classroom sites and from the interviews I conducted with Randy and Kathy following the lesson observations, I noticed that these student teachers' performances were also reinforced and influenced by what their cooperating teachers thought about both how they should teach the class and what they should teach the class.

It is not surprising that the attitudes that these student teachers had about collaborative planning as student writers in the teaching of writing methods course did not change when they actually taught a writing class during student teaching. Moreover, they asked their students to plan and to write in ways that they said worked best for them as writers. It is also worth mentioning that factors such as the already determined curriculum that these student teachers were to teach and the influences of their cooperating teachers also played important roles in Kathy's and Randy's decisions about whether they should use collaborative planning in teaching writing.

IMAGES OF COLLABORATIVE PLANNING AND TRANSLATING THEM TO TEACHING WRITING: TOWARD A THEORY OF TEACHERS' PROFESSIONAL DECISION-MAKING

Collecting and reading these prospective teachers' responses to collaborative planning and taking a closer look at what two secondary student teachers, Randy and Kathy, think about planning and collaboration has stimulated my own thinking about the images of planning and collaboration that writing teachers have, how they respond to those images, and how they translate them into their teaching. Last year I tracked six experienced teachers' responses to this writing technique throughout the Making Thinking Visible Project pilot year. These experienced teachers, at the end of the pilot year of introducing collaborative planning and having them try it with their students, wrote a "discovery paper" (a response to using collaborative planning and their reactions and reflections to their own classroom inquiry) and responded to an audio-taped interview we conducted and transcribed; they responded to collaborative planning in much the same way as the prospective teachers at Pitt did.

Two experienced teachers decided that collaborative planning would not fit with the way they taught writing; these teachers thought, much like Randy, that having students collaborate would generate off-task

behavior and would invite students to "steal" one another's original ideas. One of these teachers was piloting a project for the Pittsburgh Public Schools besides being interested in the Making Thinking Visible Project. This extra responsibility allowed her very little time to teach collaborative planning or to examine its effects on her classes. Besides the fact that she felt time constraints against doing collaborative planning with her students, she also could not agree with a fundamental premise of collaborative planning which allows writers to plan their ideas aloud and get response from a supporter about the piece of writing even before any writing takes place. It was important to her as a writing teacher and as a writer herself that writers create their pieces alone and not show their writing to anyone until after they had their own inspirations and were able to write something down without any interference or contamination from other writers. She explained that planning collaboratively would not be beneficial for the kinds of writing assignments that she does with her students, what she called "creative writing." She felt that collaborative planning might interfere with the individual creativity and originality of each of her students.

In a letter about this issue she wrote, "A writer's 'creativity,' or to be more specific, the summation of all the techniques an individual writer employs (wittingly or no) to create his unique 'voice' is not something which can be hashed out *en groupe*. The voice of the collaborator is sure to interfere." The idea of collaborative planning clashed with her belief that for writing to be original and creative, it must be done in isolation, without peer commentary or question. Planning collaboratively conflicted with her notions of how writers should plan—alone and without outside interference. One of her goals as a writing teacher was to get her students to find their own voices in their writing; she felt that collaborative planning, which she understood as writers helping one another to think, would inhibit students from achieving this goal. Collaborative planning could neither fit into the curriculum demands that were placed upon her nor could it fit into her own personal beliefs that writing was something that had to be done alone, quietly, and without any outside interference. The other teacher explained that he felt uncomfortable with collaborative planning because he rarely had his students work in pairs; he preferred large group discussions and a more teacher-directed classroom.

The other four teachers in the project did use collaborative planning with their students to varying degrees; two of them were secondary school teachers and two were elementary school teachers of gifted students. The two high school teachers said in their interviews that they discovered that collaborative planning was an important addition to the ways they

taught writing. One English teacher explained that it helped her students to write personal narratives and to understand and use text conventions such as foreshadowing, point of view, and symbolism in their own personal essays. The other high school teacher taught social studies; he said that planning collaboratively helped his students to focus on their key points and purposes for writing a research paper on World War II. He also discovered that collaborative planning brought about certain attitudinal changes in how students listened to one another during class discussions and how they were more willing to share different views and consider alternate ideas on an issue. He also noticed that his students were able to see the areas of purpose, audience, and text conventions in other historical documents as well as in their own writing. The two elementary teachers, during their interviews, agreed that collaborative planning was beneficial to their students because it provided a new vocabulary for thinking about writing and stimulated their students' thinking about more than just the topic information for their assignments.

These prospective teachers' and experienced teachers' opinions about collaborative planning and the decisions they have made about whether they would adapt this technique to their own writing classrooms suggests an idea about professional decision making, at least by writing teachers (See Figure 1).

Randy and Kathy, as well as the experienced teachers in our project group pilot, by the interaction between their images of the writing process (included in this image is their own notion of planning) with their prior educational experiences (included in this image would be their notion of collaboration), and adding their new image of this model of collaborative planning, receive and respond to this technique, and ultimately, make decisions about it, differently.

For example, Randy knows how to plan his own writing; he can be a good planner and supporter for himself, so he doesn't see how talking out his plans for writing with someone else will help him much. One of the goals he has for his students is for them to become independent thinkers, so the idea of having them share their thinking is at odds with what he feels is an important goal for his classroom. Randy has always been rewarded in school for doing his own work. He

thinks that having students collaborate might invite weaker students to take ideas from stronger ones—and that wouldn't be fair to the strong ones, in his view. Randy thinks that collaborative planning may end up being a crutch for weak writers to depend on stronger ones for ideas, which would make them unsuccessful in classes where students must write by themselves. Randy sees collaborative planning as really just a time for students to do some social chit-chatting; his journal prediction suggests that he doesn't want to be bothered by having to walk around the room, eavesdropping on his students' conversations, to make sure that they are on-task. Randy's view is similar to the experienced teachers who feel that collaborative planning infringes on the independence, originality, and time-on-task of writers when they work alone. Simply put, Randy and the two experienced teachers from our pilot study chose to abandon the idea of collaborative planning because they translate it as something that conflicts with their own histories and the way they think writers should learn to write, while Kathy and the other teachers who use collaborative planning teach it because they translate it as something that agrees with or enhances their histories and their notions about how writers learn to write.

But Kathy's representation of collaborative planning has its shortcomings as well. Because she finds comfort and security in discussing her writing assignments with others, she thinks that giving students opportunities to talk to each other will benefit all of them. During our interview, Kathy explained that planning collaboratively was good because it took the authority away from her as the teacher and allowed her students to teach each other; she feels strongly about breaking the traditional mold of the teacher doing most of the talking. Kathy and other experienced teachers in our pilot project see value in students socializing and brainstorming their ideas. Just getting some students to "freewrite" orally is an accomplishment. But are freewriting and brainstorming really the same as this model of planning collaboratively?

Collaborative planning is really more rigorous and difficult than freewriting or brainstorming. It is not social for socializing sake; it is both social and intellectual for a purpose—for a writer to test a plan with a supporter and to develop a more thorough plan for a

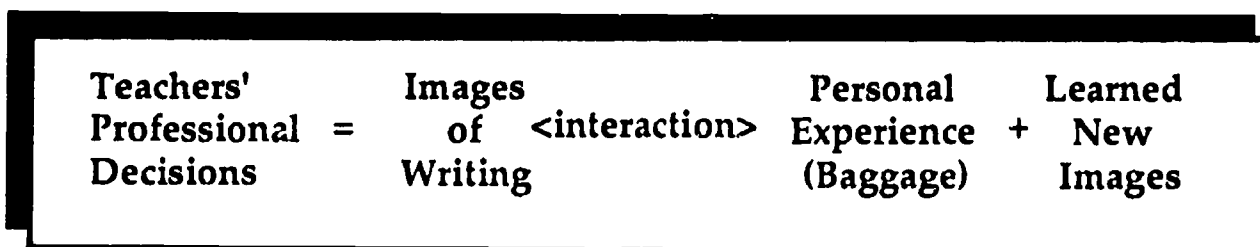


FIGURE 1. A THEORETICAL DIAGRAM OF WRITING TEACHERS' DECISION-MAKING PROCESSES

piece of writing. Collaborative planning demands that the writer come with a thoughtful, prepared plan, and it requires that the supporter respond and react with helpful and appropriate insights, questions, and comments. It asks writers to consider very specific rhetorical concerns when they are discussing their plans. Writers and their supporters talk out the writer's purposes, conventions she or he wants to use, who the audience is and how the audience will react to this piece of writing, what the key points are and what the reasoning is behind those points. Collaborative planning is based on the notion that writers need to move beyond generating topic information to other important considerations that influence and create a well-developed composition.

Each teacher has an understanding and representation of this writing technique, but each of these representations is limited in the sense that it may not include all of the dimensions that collaborative planning might offer as a way of teaching writing. One image that has emerged consistently and that has been a reason for teachers to accept, question, doubt, or reject this idea is that planning collaboratively is talking or *just talking*. For teachers who believe that getting students to talk to one another is beneficial for getting them to write, collaborative planning is accepted; for teachers who see interactive student talk as unimportant and even detrimental to the writing process, collaborative planning is abandoned. Teachers who translate this model of collaborative planning to their students as *just talking*, however, face the consequences of off-task behavior and unfruitful planning sessions. Collaborative planning isn't just talking about anything; it is focused talk about specific planning areas—talk that should help the writer to make choices about what she or he might say, what effects and impact the piece might have, and how the piece might look.

Another image of collaborative planning that may be a reason for deciding to use or not to use it is that it encourages one student to think for another or to do the work for another. Those who believe that planning collaboratively encourages student writers to "cheat" in order to get the writing done reject it; those who see it as a strategy for getting students to overcome "writer's block" and to gain awareness and control of their own ideas with the help of a supporter accept it. Those who decide to do collaborative planning may also see it as a sort of scaffolding, a way for writers who begin with a supporter and the structure of the planning blackboards to internalize those strategies and become better planners when they choose to write or when they are required to write alone.

Kathy and those experienced teachers who advocate collaborative planning see it as a way to place the authority and ownership for writing into their students'

hands; Randy and those who choose not to use collaborative planning see it as something that takes ownership away from individual writer. Teachers who embrace collaborative planning whole-heartedly and force it on their writing classes may be doing as much a disservice to their students as those who see no benefits to it at all and never use it. The problem with these different images of collaborative planning and teachers either adopting it or abandoning it is that if a teacher does one or the other then students who would find collaborative planning very helpful may never get the opportunity to try it, and students who have to use it because the teacher is so sold on it may be restricted from writing in the way they feel is most comfortable and productive for them.

Being a researcher on this project has given me a glimpse at how teachers, both experienced and prospective, translate this technique and make decisions about whether collaborative planning should be taught to students in their classes. In this study, those who were predisposed to the technique of collaborative planning were so because it fit with their "old knowledge" and their representations of planning and collaboration in the teaching of writing. Equally important to whether or not teachers actually use collaborative planning when they teach writing are their "locus of attention" and their "conditions of instruction." Effective teachers recognize that their classes contain student writers with a variety of learning styles and that different approaches work well for different students. Student writers may want to plan collaboratively for some writing assignments and may not find it useful for others. What is important to keep in mind, I think, is that the teacher's translations are translated again by their students; students who are doing collaborative planning may understand it and use it differently than their teachers had intended. And students who don't get to experience planning collaboratively at all miss any potential benefits that good rhetorical planning may contain.

NOTES AND ACKNOWLEDGMENTS

¹ Collaborative planning is a writing technique developed by Linda Flower that helps writers to use planning at various points in the writing process, developing their own plans for creating text (Flower, Burnett, Hajduk, Wallace, Norris, Peck, and Spivey, 1990). When I refer to collaborative planning throughout this paper, I mean the model of collaborative planning advocated by Flower and the members of the Making Thinking Visible Project.

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APPENDIX A: WRITING ATTITUDE SURVEY

Name: _____

WRITING ATTITUDE SURVEY

Different people bring very different attitudes to their writing in school. This survey will help you define your attitudes toward writing. Respond to the following statements about writing by circling the appropriate letter(s) to indicate how strongly you agree or disagree that the statement applies to you. There are no right or wrong answers; answer honestly in terms of your own writing experiences in school.

SA=STRONGLY AGREE, A=AGREE, D=DISAGREE, SD=STRONGLY DISAGREE

- SA A D SD When I have a writing assignment, I like to talk to someone about it before I write.
- SA A D SD I know writing techniques that I can adapt for different kinds of assignments.
- SA A D SD My major concern when I begin a paper is coming up with enough things to say.
- SA A D SD When I get stuck writing, I come up with other strategies to try.
- SA A D SD I am likely to come up with a clearer sense of what I want to accomplish in a piece of writing if I think about my ideas before I start to write.
- SA A D SD Writing should be a very private process.
- SA A D SD When I write something, I tend to jump right in and start writing the final draft.
- SA A D SD I think it helps if I decide what my major points will be before I start to write a paper.
- SA A D SD The thing which determines how well I do in writing is luck.
- SA A D SD I consider what I want to accomplish before I start writing a paper.
- SA A D SD I like to wait until I've finished a paper before I tell people about my writing.
- SA A D SD Planning is something writers do only before they write, not after they start writing.
- SA A D SD I know when I have a good idea for something that I'm writing.
- SA A D SD When I have a writing assignment, I end up doing little planning because I don't have time for it.
- SA A D SD I think the ability to write well is an art: either you can do it, or you can't.
- SA A D SD When I start writing an assignment, I have no idea if I will succeed in saying what I mean.
- SA A D SD I test out my plan for a paper by thinking about my goals.
- SA A D SD People can give me useful advice about what I'm going to write.
- SA A D SD I waste a lot of time when I write because I don't know what I want to say.

(TURN OVER TO COMPLETE SIDE TWO)

APPENDIX B: PROSPECTIVE TEACHERS' PREDICTIONS ABOUT COLLABORATIVE PLANNING

RANDY

PREDICTION OF A CLASS USING COLLABORATIVE PLANNING ON A SPECIFIC WRITING ASSIGNMENT

Writing Assignment: Tell me about a time in your life when you learned an important lesson. This should be something you think is really true. Please, be sure to tell me why this event in your life was so important.

Class: 10th grade, World Literature

I would have the class break up into groups of two. I would tell them to take turns explaining what happened, the lesson this taught, and why it was important. The other person would ask questions about whatever interested him/her or confused him/her.

Let me give a few scenarios for different groups. In one group, two boys are together—one is considered "cool" by his classmates while the other is considered a "nerd." The second boy has a great story to tell, but it is rather personal. He is afraid that, if he tells the other boy his story, the other boy will make fun of him and tell everyone else in the class. The other boy may not actually do this, but this doesn't matter. The second boy thinks he will, so, he changes his story to a safer subject. However, this subject bores him. In the end, he doesn't write much at all.

In another group, two girls who are very good friends are together. They are talking about their plans for this weekend instead of about their plans for writing. As the teacher moves toward them, one girl suddenly says, "I think that would be the best way to write it." They continue with this creative dramatics scene as long as the teacher is close enough to hear what they are saying. After the teacher leaves, they go back to talking about Friday night.

In another group, a boy and a girl are together. The boy tells his story, but the girl doesn't like it. She tells him to change the story. After a brief discussion, he agrees to change it and ends up writing what she wants him to write.

In another group, two girls who aren't really friends are together. One girl tells her story, and the other girl acts as an audience—pointing out parts of her story that were interesting and that could be expanded while saying that she was confused about other parts of the story. Also, the second girl points out that the first girl never really said why the lesson was so important. After a brief discussion, the storyteller comes up with a good reason.

As the teacher, I'm moving from group to group, not saying much. I'm just trying to make sure everyone is on task. Actually, I couldn't say much if I wanted to because I walk in at mid-discussion. It's like walking up to two friends who are talking about something that I know nothing about. I just stand there trying to figure out what they are talking about so that I don't say anything stupid. I spend a few minutes in each group, trying to make sure they are making progress.

I notice that one group has stopped talking, and no one is writing. I go over to them. One boy says that the other boy is only confusing him; he is thinking about what he will write on his own. I work with the boy that was shunned while the other boy works alone (because he wants to work alone). Now, I'm sitting with this boy talking about his story. I realize that I can no longer check on the rest of the groups. After about five minutes, I look around the room; everyone seems to be working, but I have no way of knowing what they are really talking about. I decide that the best thing to do is work one on one with this boy for about ten more minutes and then end the collaborative planning session.

KATHY

HYPOTHETICAL SITUATION

3rd assignment:

My class is a 10th grade Literature and Composition class. It consists of 25 students and is homogeneously grouped. I am asking them to write a paper on a successful relationship in their lives. I decide to give them time in class to collaborate before they submit their papers to me. So they divide any way they wish: into pairs, threes, and fours. Most students, however, are paired off. As I monitor these sessions, I overhear a little chatter going on; conversations on the dance Friday night and the fight Tonya had with her boyfriend before class. I'm worried that they're not working and staying on task, so I decide to change the groups, switching students around so the "friends" aren't together. This seems to work better. Many of the students are involved in similar relationships, so they seem to understand what the other is talking about. The writer seems to be gathering new ideas and thinking of new aspects of his relationship that he hadn't thought of. I don't think his creativity is being restricted at all, because this assignment doesn't call for much creativity. (I mention that because I oftentimes tend to think CP can limit or restrict one's creativity.) The listener, in this assignment can, from an objective observer's point of view, bring to the writer's attention aspects or viewpoints in the relationship that he hadn't thought of before. He can also give the writer a new viewpoint of himself by analyzing the writer's role in this relationship, for the writer might be "too close to the forest to see the trees."

In my students' papers, I see an in-depth analysis of their relationships. I don't think they would have gone into them as deeply as they did without CP. So, in this case, CP worked.

COLLABORATIVE PLANNING AND THE CLASSROOM CONTEXT: TRACKING, BANKING, AND TRANSFORMATIONS

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COMMUNITY COLLEGE OF ALLEGHENY COUNTY

For most of my students whose experience had been shaped primarily by a banking pedagogy in a low track in secondary school, both my problem-solving pedagogy and the use of collaborative planning within that framework demanded a restructuring of their concepts of themselves as learners, reading, writing and thinking if they were to succeed.

*"Authority (and the floor) belongs to the writer as a planner and thinker"
(Flower et al. 11)*

"Can't you just tell us what these stories say? What are we supposed to say in these papers?" (Laura, a community college student)

"When I was in high school, I was a low track student. I was never taught to compose an essay (like this one), never taught to think for myself, or do scientific work. I was taught how to do my taxes, fill out job applications, and sit quietly without asking questions. I would go from class to class like a zombie for eight hours. Each class was different; one class I was learning, one I was sleeping. When I was in eleventh grade, I slept every day in class and the teacher would always read his newspaper. At the end of the year, much to my surprise, I passed with a B+. (Carolyn, a community college student)

"A careful analysis of the teacher student relationship at any level, inside or outside the school, reveals its fundamentally narrative character. The relationship involves a narrating subject (the teacher) and patient, listening objects (the students). . . . His task is to "fill the students with the content of his narration. . . . Education thus becomes an act of depositing. . . . This is the banking concept of education. . . ." (Freire 57-58).

The four quotations above—the first principle of collaborative planning placing authority in the writer, the frustrations voiced at the end of the first month by a student in my community college developmental writing class who wanted the teacher to be the authority, an analysis of the effects of tracking in a paper written in the same class by a student reflecting on her past educational experiences, and Paulo Freire's definition of the banking concept of education—represent four critical pieces that shaped the direction of my odyssey in learning about collaborative planning embedded in the framework formed by my students' past educational experiences and attitudes about learning and by the reading, writing, and learning demands posed by the problem-solving pedagogy of my developmental composition course. I learned after two semesters of working with collaborative planning that how students conceptualize and act on the principle of "authority belong[ing] to the writer as planner and thinker" is linked to strategies, rules and attitudes shaped and reinforced by past (and present) classroom experiences. For most of my students whose experience had been shaped primarily by a banking pedagogy in a low track in secondary school, both my problem-solving pedagogy and the use of collaborative planning within that framework demanded a restructuring of their concepts of themselves as learners reading, writing, and thinking if they were to succeed. Specifically the restructuring depended on their ability to know when to either use, adapt or abandon old strategies and to learn new strategies to meet new demands.

The intricacy of this process I saw only in retrospect as I analyzed all of the data I collected for this study. But it is the intricacy of the transformation that I want to focus on in the three parts of this paper by presenting the following:

1. a contextual framework, a description of my two semesters of using collaborative planning in a community college developmental course and the consequent evolution of a research strategy and a theory about change indicators;
2. cases of five students who represent a development continuum illustrating barriers to and strategies for students' negotiating transformations in their learning;
3. a discussion of the patterns illustrated by the five students in relationship to the class as a whole and the implications for the use of collaborative planning in classrooms.

THE CLASSROOM CONTEXT: TWO SEMESTERS OF COLLABORATIVE PLANNING

Eng-100, Basic Principles of Composition, is a second level developmental writing course for community college students at the Community College of Allegheny County who have either placed in, based on a score on the Test for Standard Written English (TSWE) or who have taken Eng-089, Basic Writing Techniques, a developmental writing course for those testing below the Eng-100 cut-off. (In-class placement essays are used to move students up or down levels in the first three weeks of a semester.) The primary objective of the course is to help students who have basic control over writing conventions learn to write short, analytical essays in response to reading based topics. *Rereading America: Cultural Contexts for Critical Thinking and Writing*, a thematic reader exploring contemporary issues through a variety of discourse types, is one of the two texts (the other is a handbook) required for the course. This is the course in which I used collaborative planning for the fall and spring semesters.

A problem-solving pedagogy framed the fall and the spring courses. The students and I in the fall reviewed the topics in the book and picked the themes that they wanted to read and write about. Students worked in small groups to discuss readings and shared analyses and questions with the class as a whole. The groups also responded to drafts at various points in the writing process. Given the process orientation of the class and the dependence on small work groups, the students, except for four, had no apparent difficulty accepting collaborative planning, although they varied in their proficiency in the planner and supporter roles.

Although fifteen students began the course in September, eleven were enrolled at the end of the fifteen weeks with four¹ withdrawing because of job

and family demands conflicting with coursework. Ten of the eleven tested into Eng-100 and their reading scores (and performance) indicated that they were reading at or above high school grade equivalency levels. The eleven typified the heterogeneity of urban community college classes: five were between 26-36 while six were between 18-22. Of those in the traditional cohort, all but one who was only eighteen had been working full time one or two years before beginning college. This work experience is what they had in common with the non-traditional students and accounted, in part, for the ease with which they accepted group work since most had to work in teams in their jobs. Work was also the issue that they wanted to read and write about in *Rereading America*.

Observing students using collaborative planning in the fall class, I saw a distinction that was to be the center of my spring inquiry, the difference between rigid and adaptable planners. Debbie illustrated the former. Depending on well learned formulas acquired in high school like the five paragraph essay, she would transform all assignments to fit her formulas rather than use the rhetorical guides of the collaborative planning model to plan her work. She applied her formulas like the rules of an algorithm, always generating a response, albeit a weak one that left her peers puzzled over the meaning of her generalizations. Diane, in contrast, worked with the rhetorical guides of the blackboard planner, shaping each assignment to the varying needs of the audience she constructed, the demands of the task, and her purpose. She used the collaborative planning sessions to test ideas, modifying, adapting, negotiating meanings with her supporter.

The contrast between and the consequences of the rigid and adaptable planning styles was illustrated in an analysis the class did of the papers Debbie and Diane wrote in response to an assignment asking them to examine the work environments and attitudes of two workers from Studs Terkel's *Working* and to draw conclusions about the relationship of the two variables. Debbie's general, unfocused essay asserted only that the workers were different through a methodical listing using a point by point formula of the differences. In contrast, Diane tied the differences between the workers to a concept, alienation, that she had written about in a prior assignment. The class, in examining the two papers for revision, asked each writer to explain how she defined the writing task, the purpose and the audience.

Their respective responses to the questions revealed the difference in the planning of each. Debbie's purpose was simply to compare and contrast; she ignored the prompt in the assignment that asked her to draw conclusions about relationships between attitudes and environments. She defined "Audience" as

the class who had read the assignment. Her constrained definition lead to sparse details. Diane's purpose was to articulate a theory about how attitudes are shaped by environments in work places and, even though she knew that the class had read the material, she stressed that she needed to use details to make her argument credible. She transformed knowledge to fit her goal whereas Debbie's paper was driven by a schema that she learned in high school which she generalized to all assignments: "Just state a subject, then compare and contrast to whatever the other may be, then summarize it." The resulting paper was a five paragraph essay, a formula she perceived as working because, as she said, it always got her a paper. With the schema controlling her planning rather than the rhetorical components Diane used, Debbie altered all assignments to fit the formula, a rigidity that was dysfunctional.

I began the spring term hoping to learn more about what caused the two kinds of behaviors I had observed in Diane and Debbie, but my inquiry expanded and became more complex because the initial resistance I encountered to both the problem-solving pedagogy and the introduction of collaborative planning forced me to examine aspects of the students' academic histories, their assumptions about learning, and their reading and writing strategies to determine whether these components conflicted with the assumptions inherent in the classroom pedagogy. My gradual understanding of the conflict shaped and reshaped the research strategies I used during the term.

Of the nineteen students who enrolled in my spring section, ten had taken the lower-level developmental writing course the prior semester. Their placement scores indicated lower reading proficiency than those in the fall class. Of the remaining nine, three were repeating 101 while six entered on the basis of placement scores. Five were between ages thirty and fifty while the remaining fourteen represented the traditional 18-22 year cohort.

Laura's complaint, quoted at the beginning of this paper, voiced the sentiments of the majority in the class. They did not want the responsibility of discussing the readings; I was to lecture and tell them "the meaning." I was also to tell them exactly what I wanted them to write in the papers. The idea that authority should rest with the writer was, indeed, a very foreign notion. A minority comprised of the older students, however, voiced support for the pedagogy of the class and for collaborative planning because, as several wrote on a questionnaire, "you learn to see things from different points of view," and "you learn to be open to opposing points of view."

Two of the readings in a unit on education revealed both to the students and to me the underlying structure to the resistance in the class to the shift in

authority and responsibility that both the problem-solving pedagogy and collaborative planning posed. The first, "Keeping Track," (Oakes 459-469) presented the students with the interview responses from teachers of high and low track classes to the question, "What are the five most critical things you want the students in your class to learn this year?" and the responses of students in the classes to the question of, "What is the most important thing you have learned or done so far in this class?"

The students saw quickly that expectations for high track students centered on thinking critically and independently whereas expectations for low-track students centered on following directions. Low track students, in their responses, spoke of learning respect, of being quiet, of learning to listen. The class erupted over the essay with students expressing surprise that *tracking* was an *intentional* action on the part of educators. *Although every student in the class had been tracked into a low track in high school, none knew of the term tracking, but all spoke of the consequences of being tracked.* Carolyn's description, quoted in the beginning of this paper, typified the experiences many recounted in their papers. Many noted that their experience had not prepared them for the literacy demands in their present assignments. In the midst of the many angry comments being made about how they were treated in high school and how they were not challenged as the high track students were, one student pointed out to the class that I was asking them to be critical thinkers, that their book had the term in the title. Their new conceptual awareness of the implications of their past education and the challenge posed by the pedagogy of their present class marked a turning point for a number of the students who began to do the hard work demanded by a problem-solving pedagogy.

A second essay, "Women Students in the Classroom" (Maher 493-504) used Paulo Freire's banking concept of education as a framework to discuss the passivity of women college students. But my students saw the connection to their own passive learning style, a behavior that was reinforced in many of their other courses. Vicki's reflection on the pedagogy of her college and high school classes typified the experience of the majority: "Most classes I had previous exposure to consisted of the 'banking' theory. I find it easier to listen to a teacher lecture and memorize one 'right' answer."

Prompted by what was evolving in the class, I reread parts of *The Pedagogy of the Oppressed*, but with new questions, posed by Linda Flower in a collaborative planning session I had with her over this paper. "Is it enough," she asked, "to make students conscious of the banking model? Will just the critique liberate? How do you get from banking to problem solving? What are the strategic shifts? What must students learn to do?"

To answer the questions she and I evolved, I had to look beyond the surface behaviors I had noted in the first semester in the rigid and flexible planners, to the underlying histories, attitudes, strategies that the students brought into my class that shaped the learning behaviors that conflicted with the assumptions underlying my classroom pedagogy and collaborative planning. If I could understand this deep structure then I might better define and trace the kinds of transformations students needed to make if they were to improve their role as a learner during the semester. I might also understand the impediments to change.

What helped in my understanding of the deep structure was the chart on the next page (Figure 1) I drew for myself which graphically depicted the tie between the roles and activities Freire (59,71) assigns to teachers and students in the banking model and the expectations of low-track teachers and students in the Oakes data (469-468), expectations my students spoke of in describing their own experiences in low-track classes. As the word lists on the chart illustrate, the assumptions of banking and low-track tracking are the same; authority lies in the teacher while students are to passively receive, but not transform, knowledge. The student is not defined as a thinker; rather, as Freire (58) says, "...the students patiently receive, memorize and repeat."² In contrast, as Figure 1 shows, the outcomes of Freire's problem-posing education match teacher and student expectations in high-track classes and the objectives and principles inherent in collaborative planning. Clearly, my pedagogy initially was demanding a role and behaviors from the students that conflicted with their past educational experience.

Neither banking nor low-track education place strong cognitive demands on students. Since students are only to process knowledge rather than transform it, it follows that in such an environment they would, as my students confirmed in a discussion, learn to listen rather than question, to respond to recall and recognition tests rather than to essay exams or paper assignments, to read for information rather than analysis, and to accept the teacher as the authority for determining meaning. The latter would explain the agitation in the spring class over my refusal to declare what essays meant. For the students to handle both the problem-solving pedagogy and collaborative planning, they needed to transform themselves from passive to active learners. Translated into strategies, this meant learning to frame questions, to use reading strategies that fostered interaction with the text, to develop writing strategies that moved beyond formulaic approaches like Debbie's and to accept their own authority as the makers of meaning. However, accomplishing this, even within a classroom like mine where they were being introduced to strategies that would foster the transformation, meant overcoming impediments not the least

of which were their many years of passive learning.

To gain a beginning understanding of the variables affecting whether and how students move from passive to active learning, I decided, based on what I knew of the backgrounds of the students, to gather data on factors that could be indicators of the movement students made in the transformation. These factors included the following: prior attitudes and knowledge about writing, changes in reading strategies and attitudes during the semester, attitudes about and changes in classroom discussion behaviors, pedagogy used in prior classes and in current college classes, attitudes about and changes in collaborative planning behaviors, perceptions of differences between home and school environments in terms of the freedom to (or receptiveness towards) discuss or debate ideas, the image the students held of themselves as thinkers, and time demands from jobs, credit loads and families.

Because of time constraints from the demands of teaching two additional writing courses and chairing the English department, I chose to use questionnaires rather than interviews to assess these factors.³ Listed below are brief descriptions of the questionnaires that yielded the context for the discussion in the next two sections of this paper:

1. *Prior Composition Knowledge* (given in February)

Asked students about their writing process, their prior writing experience, attitudes towards writing, and their understanding of terms often used by writing teachers. Questions were structured to find out what formulas or rules students had for writing.

2. *Reflections on Reading, Writing, and Thinking* (given in early April)

An open ended questionnaire distributed after the discussion on tracking and banking education, I asked students to reflect through a variety of prompts on the classroom pedagogy, on their reading behaviors, on the writing assignments, on collaborative planning, on thinking and on any differences between the kind of critical thinking and reflection they were asked to do in class and what was valued at home. (An essay by Richard Rodriguez gave them a framework for the latter question.)

3. *Reflections on Attitudes and Learning Behaviors* (given in the last week of class in May)

More structured than the April questionnaire, the students were asked to reflect on their behaviors as readers, writers, collaborative planners, thinkers and class participants both in the beginning and the end of the class and to identify and discuss any changes in behaviors that they had made.

Most Critical Things for Students to Learn		Paulo Freire's Banking Model Roles and Activities		Most Critical Things for Students to Learn		Collaborative Planning
High Track Teachers' Responses	Low Track Teachers' Responses	Teacher	Students	Low Track Students' Responses	High Track Students' Responses	Objectives: 1. "Create a visible change in the quality of student thinking." 2. "Enable students to be self-aware problem-solvers." 3. "Adapt to meet needs of developing writers in a variety of settings." Principles: 1. "Authority belongs to the writer." 2. Build richer network of goals, plans, and ideas. 3. Creation by supporter of a collaborative social context....
Interpret	Respect for Teacher's position	Subject	Objects	Learn respect	Form Opinion	
Identify	Punctuality	Knows all	Know nothing	Shut up	Be Creative	
Evaluate	Self-discipline	Thinks	Are thought about	Listen	Analyze	
Investigate	Cooperativeness	Talks	Listen	Behave	Speak out	
Analyze	Responsibility	Disciplines	Are disciplined	Follow orders	Express self	
Question	Work with others on job	Chooses	Comply	Self-control	Think	
Create	Understand basic words	Acts	Are passive	Do work	Be imaginative	
Think Critically	Follow one set of directions	Chooses content	Adapt	Follow directions	Transform	
Self-reliance	Good work habits					
		Consequences of Banking Education				Consequences of Problem Posing
		<ul style="list-style-type: none"> •Mythicizes reality •Resists dialogue •Treats students as objects of assistance •Inhibits creativity •Isolates individuals 		← Freire's Contrast →		<ul style="list-style-type: none"> •Demythologizes •Regards dialogue as indispensable •Makes students creative thinkers •Bases itself on creativity and stimulates reflection •Engages students in inquiry and transformation •Fosters collaboration

FIGURE 1. COMPARISON OF FREIRE'S MODEL TO TRACKING GOALS AND COLLABORATIVE PLANNING

The data allowed me to form a picture of the class as a whole as well as portraits of individual students. In addition to the questions, I had students tape two collaborative planning sessions and, after they used the tapes for their papers, I transcribed them to see if there was any relationship between the behaviors in the collaborative planning sessions and the background information I had from the questionnaires. As the next section will show, there were strong connections between the factors I had structured into the questionnaires and the thinking exhibited in the collaborative planning sessions. All of this, plus notes from my classroom observations form the basis for my discussion of the five individual students in the next session and their relationship to the general patterns discussed in section three.

INDIVIDUAL COLLABORATIVE PLANNING PORTRAITS: A CONTINUUM

The following five portraits present a continuum of behaviors from Dale and Kim who are operating in a rigid

model with behaviors influenced heavily from a past history of banking classrooms, to Stacey who is struggling to shift from her past history of banking behaviors to adapting and changing to a problem-solving pedagogy, and finally to Joanne and Vicki who represent a flexible model, who have been relatively successful in accepting authority as writers and learners. Since collaborative planning for each of these students is embedded in the framework of their concepts about learning and themselves as learners, the three drawings on Figure 2 (next page), configured like nesting blocks, represent the relationship of collaborative planning to the learning environment constructed and operated by the students from their histories, beliefs, and the transformations they were making in their learning postures.

The relative size of the blocks represents the degree of influence of certain concepts tied either to banking education or to problem-solving pedagogies which remove the teacher as the sole authority. In the following discussions, the data from the questionnaires paint a

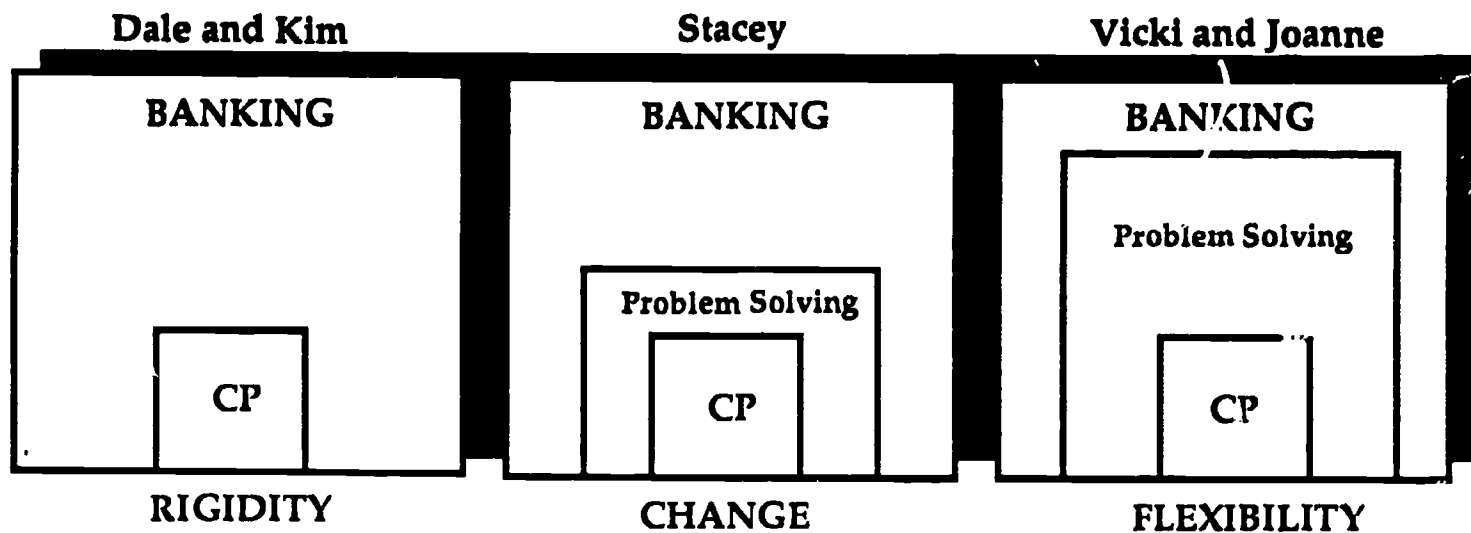


FIGURE 2. LEARNING ENVIRONMENTS

portrait of the classroom behaviors and attitudes of each student and the excerpts from the collaborative planning protocols⁴ will illustrate the effects of the behaviors.

DALE: RIGIDITY AND RULES IN A BANKING ENVIRONMENT

For Dale, collaborative planning was embedded in a framework of banking behaviors erected from his high school courses and his prior college developmental English class. A 1989 graduate, he attributed most of his knowledge about writing and reading to his prior developmental English and reading classes. Although he could define terms like *thesis statement* and *topic sentence*, his papers showed that he did not in practice know how to generate these structures. He had learned and was successful with (earning B's) the five-paragraph essay in high school and in college. As the collaborative planning excerpt will show, this is the formula he imposed on writing assignments. Outlining was what he had been taught to do to plan, but he never, in practice, came to a collaborative planning session with an outline. He indicated that the kinds of papers he had written prior to 100 included narratives, comparison-contrast "where you discuss one thing and then another," and cause-effect. Revising, he defined as "to correct mistakes." Rules he recalled from prior courses included not using "you or third party" or "dividing one paragraph into many" (although in response to another question about paragraphing, he indicated that he did not know where to divide for paragraphs).

In the first reflection questionnaire, he observed that "the work demands in this class has changed alot [sic] from 089. We have alot more papers and it is alot [sic] harder to write these papers because they consist of other people's feelings and not my own. My expectations were set high in this class because I did good in 089 but now I just want to pass." He elaborated further on his frustrations over his writing in response to another question:

My attitude has changed [towards writing], I feel for the worst. In 089 I liked to write and I put alot of time in to my writting Now I just put the best writting I can down the first time and I don't change it cause it never really mad sense to me. I wouldn't know if I was making the right changes.

In his May response, Dale indicated that he had not changed his single-draft strategy: I would just try to read it a few times and just write what I thought was best. It took me around 3-3 1/2 hours." When asked to reflect on critical thinking, he wrote, "I did not think of myself as a critical thinker in 089 because I had lived all of my writtings and now I have to think about the writtings."

Collaborative planning he viewed as "good cause I can hear my views and explain them which helps me understand them and then I can hear others views on the readings." On the May questionnaire, he indicated that he spent most of his time in his collaborative planning session discussing purpose, audience, text information and text conventions. Yet, the sessions I observed with him and the taped dialogue revealed that he in practice dealt only with text information in the form of knowledge telling. He wrote that he disliked taping sessions because he did not like to hear his own voice and because he "did not feel right about using it."

His need to discuss the readings came from the difficulties he was having dealing with the assigned essays:

I try to pay alot more attention to the readings know and my reading class has helped me in some cases. I don't take reading notes the first time through but I reread the material and then take notes. I did not like the readings in this class, I found them very hard to relate to one another and I never realized when to use my words or the looks words. The readings in this class has made me learn to sit and read even the most boring ones.

In assessing in May the changes, if any, he had made in his reading strategies, he indicated that in the first months, he would read an essay about three times, would highlight and take some notes, but by the end of the term he added two additional strategies: writing in the margins "to better understand the paragraph" and writing a summary "to see if I understand the whole writing."

Dale's participation in class discussions was minimal, a behavior that he acknowledged in his response to a question about talking in class: "I am not a talker. I like to listen and when something really controversial comes up then I like to talk." Although he claimed that he listed questions on difficult readings and perceived himself as asking questions, he did so only a few times. His general silence might perhaps be explained by his need "to feel more comfortable with my peers." Although he described his home environment as one where he could talk freely about ideas, such discussions did not take place. Home "was a quiet place to study." The overall impression he gave by his comments and his behavior was of someone who had not had much practice in using talk to explore ideas.

Three factors in this profile are reflected in the following excerpt from Dale's collaborative planning session on an essay for a PTA newsletter.⁵ First, his five-paragraph formula offers him a sure answer in the midst of all of the confusion he reveals about writing and reading. Second, he uses the collaborative planning session as he indicated in his questionnaire, to hear his views and explanations so that he can better understand himself, the evolution of writer-centered prose. This purpose shapes the collaborative planning session into what Barnes (50) calls "presentational talk" in classroom dialogues between teacher and student where there is seldom risk taking or exploration and where there is a presumed "right answer." Dale's supporter supports this style by taking the teacher's inquiry role by asking for more topic information, but he never challenges Dale's thinking even in a critical point where he offers, as a solution to parents, a misreading of one of the writer's suggestions about time. The third factor, Dale's not discussing the task assignment, was consistent with his tendency to reduce all of the assignments to a five paragraph essay whether or not they would fit that formula.

Jim: How do you plan on starting your paper off?

Dale: I plan on bringing an opening paragraph...on saying how Asians are different from American students and how they excel faster than American students. And then I plan on going into an outline type paper from the rest of the first page to the second where Asians do good and Americans do bad for such and such reasons. The rest of my second page two paragraphs and on to a third page, maybe

three paragraphs in all and the end. And this is why and compare.

Jim: You mentioned they excel better and faster. How do they excel better and faster?

Dale: Well their parents teach them from very little they need the schooling. They're not going to do anything without education. While the United States parents don't give that into their heads. They don't put that in American kid's heads.

The supporter continues to quiz Dale in the same vein with Dale reciting, but never questioning. Neither Dale nor the supporter discuss Dale's purpose or the audience beyond what parents should be told so Dale never shapes the text information by connecting it to any of the rhetorical components of the blackboard planner. Dale reveals a kind of Calvinistic attitude about the ability for students to change attitudes and behaviors towards learning when he discusses the feasibility of his solution to better education, giving kids more free time in school. When his supporter asks him whether kids would waste it, he agrees that kids in seventh grade on would abuse the freedom, but that younger kids would not, but "you've got to install it now so that generation isn't lost." His rigidity about older students changing reflected perhaps his own tendency to cling to behaviors that were well practiced even though they were no longer working for him.

Time was, perhaps, one reason why Dale did not alter his one draft five-paragraph strategy. He was working twenty-five hours a week and taking sixteen credits. Experimentation and multiple drafts would have taken time that he did not perceive himself as having.

KIM: GETTING BY IN THE BANKING MODEL

Kim, even more than Dale, operated in a banking milieu as the following discussion will show, but was far less reflective than Dale. For her, the road to success, as an excerpt from a collaborative planning session will illustrate, lay in applying what she perceived to be a rule to please the teacher and to get a good grade. The goal was the grade, not a conceptual understanding of what she was doing.

A 1989 high school graduate, Kim had taken Eng-089. Although she never filled out the first questionnaire, she indicated in a conference that she "had no writing" in high school, that she "wasn't asked to do much of anything" in her four years. This lack of preparation was a theme she returned to again and again both in the two reflection questionnaires and in her collaborative planning session. Reflecting on the demands of her present class, she wrote "When I was in high school the work demands and responsibilities were a lot different than college. When you're in college everything is up to you. If you don't care or try to pass, you will fail. High school was not like that." In an

exchange in a collaborative planning session where Stacey, her partner, was the planner, she said:

Kim: If you think about it here, all through school, I never really worked hard on anything.

Stacey: Neither did I.

Kim: I never had to and if you don't have to, then you're not going to do it.

Her minimalist attitude characterized her approach to writing and preparation for collaborative planning. Only in reading strategies did she make any change, but only in the last month of the course. To write papers, she wrote, "I read the assignment and tried to see what it was saying. I took note on it then I look at what assignment was and wrote my paper. I spent about 2 or 3 hours on a paper." Like Dale, she wrote only one draft and generally avoided any kind of planning as her participation in collaborative planning sessions was always limited to acting as a supporter since she never came prepared to be a planner. Only in reading did she change strategies. She described herself in the first months of the course as reading an essay once, highlighting and taking notes. In the last month of the semester, she indicated that she was now reading an essay twice and, in addition to her other strategies, writing a summary to "understand more." She was silent during class discussions because, as she wrote, "I basically listen to everyone else." She felt free at home to discuss ideas, but she seldom did. She, like Dale, had little practice in using talk to do more than recite knowledge, a functional strategy in banking education, yet one that would not help her transform or restructure knowledge, a key activity to her assuming authority over her writing.

In her role as supporter to Stacey, she repeatedly offered one strategy, no matter what Stacey was attempting to do as planner. As the following excerpt illustrates, Kim's comments reveal that she lacks a conceptual understanding of the function of examples in exposition and seizes on the idea of adding examples as a remedy to her failing papers. Consistent with her behavior was the emphasis on an extrinsic goal—in this case, a grade pay-off. It is Stacey later in the planning session who tries to tie her comments to audience and purpose.

Stacey: Cause I'm writing on behalf of the PTA and...

Kim: Go ahead

Stacey: um, about the American children

Kim: compared to what? Give examples.

Stacey: Students in local communities, ideas on enriching schooling, parents need to motivate children to work hard,—improve performance. Compare Asian-American students against American students, difference in study time.

Kim: How do you know that?

Stacey: I read it.

Kim: You have to give me an example.

Stacey: Asian-American children are not interested in social life and American kids are.

Kim: Do you actually give a reason why you know that?

Stacey: Asian-American parents accept A's and B's as opposed to American parents who accept C's and D's.

Kim: You have to find something to support that, too. Summarize. Just say what it has in it. Differences in school. Make sure, like I told you that you have something to back it up. That's why we're getting F's on our papers. Cause if we just say something we have to have something to support it. That's why our papers are always F's. We need something to support it...It's probably in the reading. Give examples and back up your examples. And that way we'll get a good grade on our paper.

Later in the session, Stacey recognizes that Kim has no understanding of the function of examples in a paper and is using the advice of adding examples as a generic prescription. In exasperation, she tells Kim that her examples are coming from the readings and says that she does not understand what Kim is calling an example. Only then does Kim reveal that she has not read the essay Stacey is working with.

Kim, like Dale, also holds a fatalistic attitude about the ability for learners to change behavior after a certain age, arguing "they have to start [a change in attitude] at a young age. Cause there's no way if you start in high school they're going to be that way."

Kim, like Dale, works from a passive model of learning, but she invests far less time and work than he does into the class. (She, too, had a job working thirteen hours a week while taking twelve credits.) For Dale and Kim, collaborative planning operates in an environment that the two have erected from the banking model where each either operates with a strategy that paid off before (Dale) or with one that hopefully will pay off (Kim). Neither focuses on purpose in collaborative planning sessions as a rhetorical device. Rather, each conceives of purpose as part of an extrinsic reward system—do it right and get a good grade.

STACEY: RISKING CHANGE FROM BANKING TO PROBLEM-SOLVING

Stacey, Kim's friend and collaborative planning partner, was also a 1989 graduate, but she entered the class based on her placement scores and had no prior college writing courses. When she got back comments on her first essay that asked her to expand her ideas, she demanded of me after class, "Tell me what you want me to say in this," a demand like Laura's quoted at the beginning of this essay. The idea that *she* was to de-

termine the content was one she resisted until mid-term. The reason seemed to lie in her past experience in high school writing classes. She wrote the following:

This class is very different from my other English writing classes. My past classes helped me alot [sic] because the teachers I've had helped people individually. And told us exactly what we were doing wrong and how to correct it.... I need to know exactly what is expected and what will help me.

When I discussed this comment with her, I found that right and wrong referred to errors, that her teachers would correct all of her errors and she would copy the corrections to get a good grade. She wrote, "I was always told my writing was very good. When I entered this class I was totally lost and confused on your feelings about my writings." New to her was the focus on the content of her work and the idea of communicating to an audience. Around mid-term Stacey began to make specific changes in reading and writing behaviors and in her approach to collaborative planning. (Perhaps she was motivated by a warning at mid-term that she was in danger of failing.) Her strategies for reading had been to read once or twice, highlight and take notes, but after the mid-term, she increased the number of strategies she was using to include underlining, writing in the margins, writing summaries, and answering questions at the end of the essay even if they were not assigned. She also added the strategy of taking a second set of notes structured around her analysis of the writing task (a strategy discussed and modeled in class), something she had never done before. As she said, "I use more strategies and found new ones that helped me alot [sic] more." These new strategies moved her from simply processing knowledge like Kim and Dale to restructuring knowledge.

She made similar shifts in her writing process. She described what she did prior to mid-term in the following way:

At the beginning, I would get the assignment, wait till last minute, read it, and write my rough draft, the way I did in high school. I hardly used any notes.

Of her revised procedure, she said:

I have changed my writing alot. When I get the assignment I start right away by reading it. I read the essay, take notes, reading it again and take more notes. I take alot more time on my papers."

Her collaborative planning session with Kim revealed that she also was using an outline to focus her planning session, another strategy that she had never used before. Asked to advise students to help them become more effective planners, she cautioned them to do what she had not done in the beginning, to have notes with questions and ideas, "so you can ask questions and get a good point of view."

What Stacey was shifting away from was the presentational talk, the telling of knowledge, that had

characterized her initial collaborative planning sessions and was moving towards the kind of exploratory talk that would allow her to shape ideas. Part of this learning came from her listening to herself on tape (she initially found it difficult to use the tape recorder). Reflecting on the use of the tape, she wrote, "I learned what kind of questions were important to me to ask and it helped me to organize my paper."

Questioning behavior did not come easy to Stacey. Like Dale and Kim, she regarded herself in class discussions as a listener, and expressed discomfort at what she labeled as the "controversial" topics discussed in the class. By this she meant essays on racism and sexism. She feared asking questions or voicing an opinion because of not wanting to sound stupid. The collaborative planning sessions she came to value because they provided her with a response that she could not obtain elsewhere. As she said:

I don't have anyone to give ideas to at home. By the time I get home from work, nobodys awake. And I know my friends won't tell me the truth. They will just tell me it's good.

The excerpt from the collaborative planning session in the prior discussion on Kim, Stacey's supporter, shows Stacey at the beginning of the session trying to describe the information she wants in the paper, but the session is derailed by Kim's confusion over examples and her attempt to convince Stacey that the key to good papers lies in the panacea of examples. I entered this session to provide another supporter to Stacey when I observed Kim's counterproductive behavior. This taped session occurred about the time that Stacey was initiating changes in her behaviors, and the following excerpt illustrates, on one hand, her tentative move towards an exploratory questioning using pieces of the blackboard planner and, on the other, her pull towards the old behaviors when she turns to me not in the role of supporter, but as teacher in the banking model to dictate to her.

Stacey: OK. I'm doing an outline cause I used to do them in school and I did really good on the....Do we have to write stuff from all the essays?

Jean: What are the points that you want to make in the paper to the parents?

Stacey: Oh, yea, my purpose. I want to show them why American education should change, so I give examples and my own experience.

Jean: This little outline—have you had time...

Stacey: What *all* should be in there?

Jean: Again, what are the points that *you* want to make to the parents?

In the next class, Stacey returned to show me a detailed informal outline that listed all of the key points that she wanted to make along with relevant points from one of the essays. When she showed it to me, she said,

"This is what I want to say," a marked shift away from her prior pleas for me to tell her what to say.

Stacey differed from Kim and Dale in two critical ways. First, she modified and changed her approaches to reading and writing, adding strategies to her reading like answering questions and summarizing that allowed her to restructure the meaning. To her writing, she added task analysis, tried to focus on purpose, and spent time developing a detailed plan that she wrote down. By her estimate, she doubled the time she was spending on her papers, from about three and a half hours to seven or eight. She, too, like the others was working 25-30 hours a week and taking thirteen credits, so the additional allocation of time meant sacrifices in other areas of her life. This willingness to commit additional time was the second difference between her and Kim and Dale. A comment she made on the May questionnaire in response to a question about what she had learned that would be of use to her in her other classes marked progress she had made: "I have learned to think on my own, to express my own opinions." Her journey to this point was not easy and demanded that she give up old attitudes, learn new strategies, invest limited time, and take the risk of asking questions.

VICKY AND JOANNE: FLEXIBILITY IN PROBLEM SOLVING PEDAGOGY

I write about these students as a symbiotic pair since, from the first week of the course, they influenced each other as learners extending their collaboration beyond the group work in the class to calls to one another at home to discuss readings and drafts. They had much in common: Vicki had graduated in 1975, a year before Joanne had earned her G.E.D. in 1976. Both had long histories of factory work although both were unemployed and were being sent to school for retraining through a federally funded program. Even though they were not working, Vicki had young children to care for while Joanne was responsible for elderly parents in poor health. Both sat in the front of the room and both took an active part in class discussions, often initiating a line of inquiry. Neither had the self-consciousness of the younger students or the fear that others would view them as stupid. As Vicki said, "I wasn't concerned what others thought." In response to a question about what prompted participation in class discussions, both focused on the need to know. As Joanne said, "I needed to understand." For both in class discussions, this meant voicing ideas and asking questions about their own interpretations, a testing of the clarity of their own thinking.

For both, the classroom was the only place where this verbal exploration could go on since neither came from homes where this kind of discourse took place, as the following excerpts from their questionnaires indicate:

I really have no one at home to bounce opinions with, but I have classmates and parents which support

and help keep me on the right base. I act as a mentor occasionally to my parents. I feel free in class to discuss issues of the readings. I enjoy when there is a response, to tell me if I'm on good thought processes or not.
Joanne

College has opened my eyes to different views, good and bad, that I might not have thought about before coming back to school. The only drawback when writing any papers is that I don't have anyone at home to read and discuss my ideas with.
Vicki

Although the collaborative planning sessions provided the interchange each sought, both approached collaborative planning with caution in the initial sessions; Joanne, because of unproductive sessions working with a peer on revision in her prior 089 class and Vicki, because of the initial difficulty of "having someone question [her] paper and of taking advice." Yet, each overcame her skepticism and came to view the sessions positively; Joanne, because [she] "began working with someone prepared with more material written down..." and Vicki, because [she] "realized they were being helpful, not criticizing [her] work and because [she] learned that there could be different versions of the same reading."

Both began the class with knowledge about composition acquired either from high school (Vicki) or college (Joanne in Eng-089). Vicki had been taught the five-paragraph essay and the point-by-point formula for writing comparison-contrast papers that Debbie had operated with in the first semester. As writing *rules*, she listed "never use I" and "always write four paragraphs." But what separated her from students like Dale and Debbie who refused to go beyond their well-practised schema was her willingness to use the rhetorical components of the planning blackboard to shape her papers. As she said, she learned early in the term to analyze the task before she planned her paper. The plan she brought to collaborative planning sessions was a detailed informal outline with bits of the essay written out. She dropped her prescription about numbers of paragraphs and made paragraphing part of revision: "I start writing, see how it sounds, then divide into appropriate paragraphs".... "I read what's written, move sentences or paragraphs around where needed, go back and change or add whatever is necessary." Writing meant multiple drafts, in contrast to Dale's one draft approach.

All of Joanne's prior writing experience came from her Eng-089 course which had stressed descriptive, narrative, and process writing. Because of the focus in that course on control over error, she entered 100 believing that revision was proofreading. It was the combination of reading the chapters in her handbook on the writing process and her work with Vicki that lead her to reconstruct her view of revision. As she said in response to a question on what she had changed in her writing process since the beginning of the course, she spoke of revision in different terms. She said, "I have to

expound on points that I make to make my writing clearer to the reader (understandable)." Her concern with audience evolved from Vicki's sensitive responses to her work as the excerpt from a collaborative planning session will show. She also attributed to collaborative planning her awareness of "weaker points dealing with chronological orders for writing, wordiness, and confusion over words."

Both Joanne and Vicki expanded their reading strategies in response to the complexity of the readings and the demands of the writing assignments with both adding the kinds of strategies that allowed them, like Stacey, to restructure the text. Both began with the strategies that characterized nearly all of the students in the class—read once and highlight or underline. But both from the beginning already showed themselves to be more active readers with Vicki writing summaries and Joanne writing marginal notes and questions. What each added were notetaking and answering questions in the textbook even though they were not assigned. As Joanne said, "At the end of the semester, I began to read the questions at the end of the readings first, to try to evaluate what I was to focus on." She was using the questions like advanced organizers to give herself purposes in her reading. What this examination of Joanne and Vicki's evolving strategies revealed to me was the complexity underlying the adaptability I first saw in Diane in the fall semester. I observed only her adaptability in her planning strategies. Through Joanne and Vicki, I saw the shifts each had to make in strategies and attitudes that were the underpinning for their behavior in the collaborative planning sessions. What was particularly striking to me about their willingness to make these shifts was both acknowledged that mine was the only class they were taking that was not, as they put it, "a banking course." Both then were willing to adapt strategies even though the old strategies were being reinforced and rewarded outside of my class. Perhaps one reason for their willingness was the intrinsic reward each experienced: both wrote of their growing confidence in themselves as thinkers and writers.

The following excerpt from a collaborative planning session with Joanne as the planner and Vicki as the supporter illustrates how the two went beyond the concern with topic information that characterized the sessions of Dale and Kim and emphasized the interrelationship between audience, purpose and text conventions. (Joanne's plan consisted of a partial outline and drafts of parts of the paper.) The interaction between the two has a plasticity that is missing in the excerpts quoted from the other students.

Vicki: What I wanted to ask you about what you were writing. Sometimes I know that you like new words. Talking to...teachers would understand it, but ordinary people like parents at home, like housewives wouldn't. A lot of the words are good, but I don't think...like that one. I don't know how to say it....

Joanne: Compendium. I know.

Vicki: They aren't going to understand it. But I like some of the ideas that you have in there. I didn't see a lot of like quotes from anyone in particular.

Joanne: Yea.

Vicki: I wondered if you were going to add something like that. What actually do you want to say in the paper?

Joanne: I'm more or less going with the ideas of suggesting things that can be done, slight descriptions of the research that's been done on it. But I guess where I'm really...OK. I understand what you're saying about the...

Vicki: support. Yea, you do say in here, cited by Butterfield. Do you want to put any quotes or statistics in here?

Joanne: Not really. But statistics might be a good idea, could be very, very good.

Vicki: Are you going to rewrite this?

Joanne: What I'm going to do, I'm going to outline it if you think it shows good pattern. So some of the words won't be there that are in there now. I'm sure they won't be.

Vicki: [Refers to a strategy that Joanne had used on an initial paper that produced a weak essay, an incident that had become a source of humor between the two] Oh, that means you're not going to copy this again. [laughter]

Joanne: No, I'm going to outline it and just go from a new outline. So I'm trying to decipher if you think the content is...

Vicki: OK. You talk about interactive pedagogy. See I don't know if you really explain...[reads] "this constructs a coherent vocabulary for interaction"...that sounds a little bit too wordy...OK You're not really saying...It's more or less telling students ask questions and get involved...or come and do what I learned to do. Why don't you just say that this example is interactive pedagogy?

Joanne: Right. OK

Vicki: It's a suggestion.

Joanne: No, I hear you.

Vicki: If I were reading this, I'd think it was really wordy.

Joanne: It's 700 words, babe. Alright it's got to be a little wordy.

Vicki: No, it's just that a lot of them I didn't understand.

Joanne: They threw you?

Vicki: So, I would just skim it and miss something I was supposed to understand.

Joanne: Well, that's why I wonder if my suggestions seem if they stand out enough. Do you think

when you get to the part where it suggests things that the parent can do at home that you would remember any of that?

Vicki: Maybe put your suggestions at the end.

The excerpt illustrates the level of trust between Joanne and Vicki. Vicki, from reading Joanne's prior work, knows that she is fascinated with new words and that she has become addicted to a thesaurus. In her experiments with newly acquired words, she often uses words that are inappropriate either for reasons of register or semantics. Vicki who has discussed this with her in prior sessions illustrates in this session the impact the diction would have on the behavior of a reader. This vivid instantiation of the concept of audience worked for Joanne who was gradually learning how to balance her drive to expand her vocabulary against the needs of an audience reading her paper. Conscious that her preoccupation with words distract her reader from the points she wanted to make, she tests at the end of the excerpt whether she has given enough emphasis to the suggestions she wants to make to parents. Vicki suggests a way to make the suggestions more emphatic, a suggestion Joanne uses in her final paper.

This excerpt typifies the dynamic between the two when they switched planner-supporter roles. Joanne would raise issues of purpose and audience, and the two would explore a line of inquiry, offer options, consider new arrangements, clarify meanings. In contrast to the presentational talk of Dale, Kim, and Stacey, Joanne and Vicki's talk illustrated Barnes' concept of exploratory talk. Each took care in their role of the supporter to recognize the authority of the other as writer; comments like Vicki's "it's just a suggestion," typified this sensitivity. The emphasis each put on purpose and audience in the collaborative planning sessions resulted in essays that went beyond the schema and knowledge driven papers of Dale and Kim. Each attributed her improved attitude about writing to the influence of the other, and each gradually increased the time they spent preparing for the planning sessions. Joanne's comment as she reflected on her attitudes towards writing at the end of the course typified Vicki's sentiments:

The collaborative sessions with Vicky have been going good. She adds her point of view to my paper. I still feel as if I'm too critical about my own writing, always feeling not good enough although I would like to write correctly, logically, analytically. I have been putting more hours in for this critical thinking prose that I try to write than when I was in 089. I feel freer to write it seemed to be a burden and actually I've come to a point of feeling some self-esteem heightening when I write.

PATTERNS AND IMPLICATIONS

In designing the questionnaires, I incorporated eight factors that I hoped would be indicators of the degree of change in the learning behaviors of students. The patterns that emerged in the case studies revealed

not so much the dominance of one factor over another but the interrelationship of factors associated with the student's willingness to alter and adapt learning behaviors. In addition to the factors that I began with, the collaborative planning sessions revealed factors that I had not anticipated, namely the student's attitude towards the possibility of altering behavior and the importance of the style of talk used.

All of the students shared the common background of having been in low track classes in high school where the goals, expectations, and behaviors were the same as those underpinning banking education. But this fact did not predict that all would continue to operate out of this model. Those that made the transformation from passive to active learning like Vicki and Joanne or Stacey who was attempting the change did so not because they acquired concepts to characterize their prior education but because they were willing to alter both attitudes and behaviors and to invest the time that the new behaviors demanded.

Reading, writing, talking, and collaborative planning behaviors all changed. In reading this meant altering reading strategies from the passive behaviors of underlining and highlighting to interactive strategies that included transforming the text, strategies like summarizing, notetaking, and answering questions in their reader which gave focus to their reading. (All of the students in the class added reading strategies by the end of the course, but the more successful students used the strategies that demanded more text analysis, summarizing, notetaking, question answering.) In writing, students moved from the one-draft strategy of Dale to multiple drafts, to investing more time in the planning process (Stacey's beginning use of outlines, Joanne and Vicki's use of outlines and partial drafts). It also meant abandoning well practiced and rewarded schema like the five-paragraph essay and learning to use the rhetorical components of the planning blackboard to determine the shape of the paper. Concepts had to be redefined with a consequent alteration in behavior; for example, Joanne learned that revision did not mean error correction, but rather the clarification of her ideas, a point driven home to her by Vicki's responses in the collaborative planning sessions. (These altered behaviors added hours on to the time students spent on out of class work, a price that was too much to pay for students like Dale, a point that will be discussed later.)

The change in classroom talk with its consequent effect on collaborative planning was, perhaps, one of the more critical and more difficult shifts students had to make. Except for Vicki and Joanne, all of the class described preferring to listen rather than talk, citing reasons that included self-consciousness in talking in front of strangers, fear of sounding stupid, anxiety over possibly being wrong, uncertainty over how to phrase

ideas, tension over discussing issues where there could be disagreement. The preference for listening and the reasons given for the reluctance to engage in discussion underscore the effects of the banking pedagogy and the experience of low track classes. Another reason students gave for not discussing was that they were not good thinkers. This self-deprecating image, Freire (49) argues, is in banking education a consequence of being told "they are good for nothing, know nothing and are incapable of learning anything." His analysis is supported by the descriptions (like Carolyn's that began this paper) of minimal classroom demands students experienced in their low track classes.

Both the educational histories and responses to the query on talk in their homes underscored that most of the students had little or no practice in or models for the kind of exploratory talk needed for both the classroom discussions and the collaborative planning sessions. Seven of the eleven described home environments where there was either no one to share ideas with or where to do so was to risk hostile behavior. Wanda, a black woman from a low income neighborhood who spent her summers cleaning houses to earn her fall tuition, said,

At home I can't discuss ideas that I many have because just the fact that I am in college is not accepted to everyone around me. Some see me as trying to be something they can't be....They feel I am trying to be better than them. I may speak of situations at school such as descriptions of attitudes and characters, but not issues or what I read because education is still frowned on for women. When I speak on issues that I may read I am told I am flaunting my education and it doesn't look or sound attractive. So I keep my ideas to myself.

For students like Wanda to take the risk to break silence, it took not only courage but as those who moved from silence to talking in class wrote in response to why they decided to ask questions and voice ideas, they had to feel that they could trust their peers and that they would not be humiliated for a wrong answer. Their comments acknowledged that they learned to accept criticism of their thinking if it came in the form of questions to help clarify or to point to other evidence, but what they were frightened of was what they had experienced in prior classes, an attack on their intelligence.

Most difficult to discuss for at least half of the class were issues they labeled "controversial." In particular, four white students singled out readings and papers on racism as did two Afro-American students. The white students revealed in written responses strongly held racial biases which distorted their reading; a white male student felt that if he would share his views that he would turn the class into "the Morton Downey show." The two Afro-American students felt

that essays on race should not be discussed in class because for both "it only made it worse." When I asked one of them, a thirty-four year old male to explain his comment to me, he said that he was raised to think of himself as an American first and not a black man and to dwell on issues of race, he believed, "only fed racism." Readings on feminism provoked negative feelings in four white males (two also expressed racist views) who felt that they were "losing out" because of affirmative action which in their perception favored women. Class discussions revealed that most students had little or no historical background on issues of race, class or gender, had no experience in examining the origins of their beliefs, and had difficulty listening to or accepting evidence that challenged their beliefs. At least half the class shared the Morton Downey model — that you could not talk about such issues without people screaming at one another, a view reinforced by the television shows they watched.

The model of talk most familiar to the students, one they, like Dale, replicated, was the presentational talk of past classrooms where the teacher, as the authority, would call on students for answers, a focusing on text information. The fear of giving wrong answers was rooted in this model since this talk is often used by the teacher for evaluation (Barnes 50). It is a model that does not encourage the risk taking of trying to relate ideas or to challenge ideas, behaviors needed in good collaborative planning sessions. It was this model of talk I noted that characterized many of the collaborative planning sessions I observed. Even though I had modeled the inquiry a supporter needed to affect, had given students lists of questions from the concepts of the planning blackboard, would intervene when I observed students employing the presentational model, I found that it was difficult for students to give up a model that was so strongly practiced and one that they were experiencing in classes they were taking concurrent to mine. What seemed to motivate students like Vicki, Joanne, Stacey, and Wanda to shift were intrinsic motivations—a need to know, an enjoyment of exploring ideas, a feeling of growing confidence in their own thinking.

Those that employed the presentational model in collaborative planning sessions focused primarily on text information and secondarily on task analysis in their sessions. Generally missing was discussion of audience, purpose, or text conventions. Those students like Vicki and Joanne who linked those concepts, who saw that text information had to be shaped by the implications of audience, purpose and task, also recognized what the concept of "authority" meant—that they as writers were in control of meaning in their papers and needed to clarify for themselves at varying points in the process what they were trying to do. They needed to be conscious of their goals and intentions

(words that they never used). In contrast, for students like Kim and Dale, authority always remained with the teacher and they tried to produce papers "that the teacher would like." Dale thought the way to do this was to employ a formula he had been rewarded for using in high school while Kim seized on the panacea of examples.

Only through the window of the collaborative planning sessions did I see the importance of a variable I had overlooked in my inquiry, the students' belief about the possibility of change. I discovered through discussion that five of the eleven students shared Dale and Kim's Calvinistic view of changing attitudes and behaviors about learning. These five believed that kids had to be taught early because by high school it was "too late." Freire speaks of this kind of fatalism in political terms, that the oppressed cannot envision change or that they can be the instrument of change. I saw the psychological implications of the belief acted out in the behaviors of Dale and Kim who, even in an environment where change was being encouraged and supported, where strategies to affect the change were being demonstrated, continued to employ learning behaviors (a kind of functional fixity) that prevented learning in the new environment. Although I was operationally functioning on the belief that mine was a problem-solving pedagogy, these students, in constructing a conflicting environment from their past training, drew their behaviors from that environment and transformed collaborative planning sessions to fit their representation of the classroom.

Aside from the security of the known and the fear and risk inherent in change, time, I think, was a critical variable affecting whether students would employ new strategies. Those students who gave evidence of transforming learning styles began to employ strategies that demanded more time in reading and writing. Generally, they estimated that they doubled the time they were spending on assignments which meant that they had to make adjustments in other parts of their lives. For example, Stacey cut back on the number of hours she was working; Laura dropped a course; Vicki arranged for additional baby-sitting so that she could increase library time, the only quiet place she had to work. These were strategic moves that students made after weighing the costs and benefits of the alterations in time allocations. These students seemed to operate out of a sense that investing time in this class to learn what they recognized that they did not know how to do would pay off in the long run because as Joanne put it, "it will get easier." But students like Dale were tied to short term goals defined as "do enough to pass this course," a strategy which culminated in both he and Kim failing the department exit exam.

As I indicated in the beginning of this essay, the concepts of rigidity and adaptability which motivated

this inquiry I came to see as surface behaviors that were rooted in the interrelationship of all of the factors I have described operating in the students. The collaborative planning sessions became a powerful diagnostic tool that permitted me to see beneath the surface behaviors and to gain some understanding of the dynamics of students' thinking processes and consequent learning behaviors. I saw that collaborative planning was not a panacea since students who defined their learning through their past banking/low track education simply transformed collaborative planning to fit that model. Yet, even with these students, collaborative planning, in subtle ways, had an effect. Of the eleven students who finished the course, eight indicated that they had negative feelings towards collaborative planning, yet by the end of the term, ten stated that they felt that collaborative planning was really helpful and spoke of the importance of someone listening to and commenting on their ideas, of the value of learning from someone else, of learning to see from other people's point of view, but all qualified their comments by saying that the value of sessions was related to how prepared the planner and supporter were. I saw that for students whose educational lives had been dominated by the banking/low-track model that collaborative planning was a powerful tool in shifting them away from an object to an actor role in the learning process, a key shift if they were to choose to begin to transform their perceptions of learning and their image of themselves as learners.

NOTES

¹Two of the four were also among those four who had difficulty accepting collaborative planning.

²Six students, including two Afro-Americans, recalled classes like the one described by Carolyn in the beginning of this paper where knowledge was not even "banked," where they were asked to do virtually nothing more than attend class.

³Although questionnaires gave me sufficient data to determine patterns, I lost the more elaborate detail that interviews might have given.

⁴The language excerpted from planning protocols and from papers and questionnaires has not been edited.

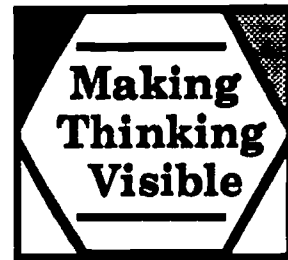
⁵The collaborative planning transcripts were in response to the following assignment:

Assume that you have been asked by the president of the PTA of your local high school to write an essay directed to parents of high school students that will suggest ways that the education offered by the high school can be improved and will suggest steps that parents can take at home to help their children become better students. The PTA president who knows that you have been reading about the American education system urges you to let the parents know that your suggestions are coming

from researchers as well as your own analysis of your secondary education. This essay will be printed in the PTA newsletter that will be mailed to parents of all of the students in the high school as well as the teachers, administrators, and school board members.

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SECTION THREE: ADAPTING ASSIGNMENTS

How do teachers really use collaborative planning in classrooms? Leslie Evans, Andrea Martine, and Karen Gist offer multiple answers to this question as they describe in this section the ways they integrated collaborative planning into high school English curriculums and into Martine's community college class.

Evans writes a monthly log of the school year that charts an odyssey with collaborative planning beginning in October with her apprehension over mastering the technique and ending in June with her judgment that the odyssey has been "a wonderful adventure." She also shows how she used transcripts from collaborative planning sessions to improve through reflection the skills of students as planners and supporters.

As a full-time teacher in a large urban high school and as a part-time instructor in an urban community college, Martine describes her experiences with collaborative planning in both educational settings. She shows how she integrated collaborative planning into a standard assignment on reading and writing about a short story in a regular ninth grade English class and, in the same class, uses the technique to improve note taking skills in an assignment on a novel. In a community college developmental writing course, Martine uses collaborative planning to help adult writers respond to an in-class, expository writing assignment asking them to define concepts based on readings.

Reflecting on her year's experience with collaborative planning in ninth grade regular and senior scholars classes, Gist stresses to those using the technique for the first time the importance of a step-by-step modeling of the procedure, of the teacher's reflecting on both the successes and difficulties students have with collaborative planning, and of allowing enough time in the design of assignments using the technique. She illustrates how collaborative planning can be used for group writing assignments, and she analyzes both the successes and the difficulties of using collaborative planning to focus on aspects of writing a research paper. She also includes responses to questions on collaborative planning and excerpts from student journals to illustrate the varied experiences of students with collaborative planning.

A BEGINNER'S MAP: FROM COLLABORATION TO COLLABORATIVE PLANNING

LESLIE BYRD EVANS
STEEL VALLEY HIGH SCHOOL

Since the students themselves had indicated on their survey responses that each person in the collaboration should be responsible for particular parts of the assignment, I defined and assigned the roles of supporter and planner to "divide the labor." From that point in the year collaborative planning became a prewriting and revising tool and required students to switch roles as planner and supporter.

OCTOBER 1989

I had read about collaborative planning and was anxious to get some ideas on how to make it work, so anxious that I took a colleague with me to the first seminar. Participants included teachers, professors, researchers, and community leaders, but it became painfully obvious to us outsiders that they had been working together for months, some for a year, comfortable in their vocabulary of "planners, supporters, and blackboard planners." My friend and I sat, panic-stricken, as a dozen people communicated freely in a language unlike any spoken in the teachers' lunch room at my school. By the end of the three-hour session my friend made her decision about joining the project:

This is all theory. I want something that I can take into my classroom and use. You can't use 'conceptual planning' to keep kids from hitting each other over the head with their grammar books.

I credited her lack of enthusiasm to teacher trepidation of something new, but when I tried to talk to other teachers back at the all-brick, windowless world, there were more no-votes:

In group work there's always someone who sits there and lets all the other students do the work. Someone always gets a free ride. —English teacher

They don't really talk about the assignment; they talk about how many kegs they consumed over the week-end. -Social Studies teacher

Even when I mentioned to my classes that we would be trying some new ways to plan writing, I got tepid responses.

- You're just making us do this for a class you're taking.
- University work is too hard.
- I'll be put with someone whom I despise.
- I'll be put with someone who despises me.

The Cynics were in full battle array. No one wanted to try the generally accepted collaboration much less the finer points of collaborative planning; what had once sounded like a great idea now sounded like a lot of work for too little reward. But Linda Norris, the project director, had been so nice over the phone. How could I call her back and say I wasn't interested? I could never get up enough nerve to make the phone call.

NOVEMBER 1989

I went back to the next meeting, without my friend, and tried to get past the hideous Jargonwokky

At the first two meetings I heard terms used that sounded vaguely familiar, but there was no dictionary to look them up. I had many questions to ask before I could begin to experiment with collaboration in the classroom.

What does a *blackboard planner* look like and why is it a metaphor?

What are *text conventions, supporters, non-linear patterns in HyperCard*?

Would I ever be able to tell *schema-driven planning* from *knowledge-driven planning*?

Would I ever achieve *cognition*?

If I know what *rhetoric* means and I know what *intention* means, why don't I understand *rhetorical intention*?

How do I make a double-entry reflection log if I've never done a single one?

My discovery paper is that I probably don't belong here.

All this and I have to make thinking visible?

I finally decided that the only way to snicker-snack past the Cynics and Jargonwokky was to stop talking and to start doing. I had to start slowly or my seniors would whine and I would be trying to justify activities that I didn't fully understand. The KISS (Keep It Simple Stupid) approach was more for me than for my students. So I created some "rehearsal" assignments to warm us up for real collaborative planning. I would save the concepts of *planner* and *supporter* and *blackboard planner* until they had more practice at collaboration. A chart I put on the board assigned student pairs. Students sat with their partners, read the assigned lines of *Beowulf*, translated the lines together, agreed on a translation and wrote it down. The next day they presented their translations before the class; one person read the original and one person read the translation. We paused for discussion, questions and clarifications and then went on to the next part of the story. It worked so well with *Beowulf* that we repeated the process with *Canterbury Tales* also.

DECEMBER 1989

After several KISS assignments I asked them some questions about collaboration, a term with which they were now familiar. The responses I received varied from the social to the practical and to the educational.

STUDENT QUESTIONNAIRE ABOUT COLLABORATION

During the past two months you have had occasional opportunities to answer questions, discuss, plan and write in small groups or with one other student.

Please answer the following questions about that work completely and clearly. Thank you.

1. *What do you like about collaborating with another student to complete assignments? (Try to list 2 or three reasons at least.)*

- Your answer is more interesting because it is two peoples' ideas.
- If someone isn't as intelligent, you can help them.
- I like it because if you don't have a good idea, then you and your partner can discuss it and get a good answer.
- You can correct the other person's mistakes.
- It's better to be corrected by another student, than to turn it in and get a poor grade.

- You get experience working with different kinds of people.
- You get to know about the other person.
- You might get more points?
- It doesn't take as much time as doing it alone
- The time goes faster.
- It's easier to brainstorm.
- You can argue out your reasons.
- Stories are more creative.
- It makes you more confident.
- It's fun to hear what people think.
- Someone else critiques your writing.
- It's easier and fun to write. If you have fun, it makes it better to learn.

2. *What do you dislike about collaboration? What are the problems? Would you rather work alone? Why? (2 or 3 comments at least please)*

- When the other person just sits there, but they still get credit.
- When the other person hasn't read the assignment or hasn't prepared what she's going to write.
- When I'm doing the work for two people.
- When I have to tell the other person that they're wrong.
- Sometimes you disagree on how something should be written.

3. *Do you feel that you have to do all the work while another student gets a "free ride"?*

- I hate when that happens.
- If you let them do that, you're stupid.
- There isn't anything I dislike about it.

4. *What do you think could be done to make collaboration better?*

- Take the free riders and pair them together.
- Let the people with good grades work together.
- Pair up a student who is doing real well in class with another student who could use some help.
- Less emphasis on a "deadline" . . . more time should be given.
- Pair up with who you want.
- Do it more often . . . so we can have more practice.
- Each person in the group should be responsible for a part in the assignment.
- Develop a division of labor in the assignment.

5. *Which kind of assignments work best with collaboration?*

- writing, essay questions, creative writing, writing stories, answering questions
- Any kind because maybe you are weak in a certain area and don't realize it.

- On ideas or something all of us have experienced.
- descriptive paragraphs
- class discussions and oral presentations

JANUARY 1990

Their suggestions provided the structure for the bridge between collaboration and collaborative planning. I put free riders together and smarties together, a combination that I had previously avoided. As a result more students participated; even the yakkers began to listen. Since the students themselves had indicated on their survey responses that each person in the collaboration should be responsible for particular parts of the assignment, I defined and assigned the roles of supporter and planner to "divide the labor." From that point in the year collaborative planning became a prewriting and revising tool and required students to switch roles as planner and supporter.

FEBRUARY 1990

By second semester I was so pleased with the response of the "average" students to a touch of collaborative planning that I decided that I'd try using the approach to solve a problem that I was having in my Advanced Placement Classes. Many of my in-class writing assignments are questions from past English Advanced Placements Tests that I use throughout the school year to help students practice for the real thing in May. One problem in the resulting essays is that many students are not answering the question. In their anxiety and hurry to tackle the question, they write many paragraphs of specific references and examples to a question that isn't on the test paper. Collaborative planning before writing the timed essay in class might give them practice at figuring out what the question is really asking. Each student interpreted what he or she thought the A. P. test question was asking and then compared it to his or her partner's interpretation. Two heads argued better than one; this paired exercise helped them develop their own critical inner voice. Students who were too accepting of any idea that came along began to reread and rethink the test question on their own. The second time I used this assignment I also had them transcribe a section of their conversation using the following instructions:

Assignment with your partner: Transcribe (copy) a small section of your collaboration from yesterday's class period that you think is interesting.

Individual Assignment: Reflect on the conversation in writing.

Step One: Each collaborative pair should get a tape recorder and their tape. Play back the tape and listen to your conversation from yesterday. Jot down some individual observations or reactions to your conversation in your individual notebooks as you listen to the tape.

Step Two: Take a short section (one minute or one page) of the tape and transcribe it (copy it). Select an

interesting feature of the tape — possibly a section where collaboration seems very successful or a section where the thinking got muddled but you tried to straighten things out. You may have your own reasons for selecting the section which I'd like you to share with me at the end of the transcript. You can use your names or use *planner* and *supporter* as I did on the transcription that we read in class last week. If any of the transcripts are used for class, I will not use your names if you identify the speakers by *planner* and *supporter*. If you don't mind, use your own names.

Step Three: Using your individual notes and the transcript, write on a separate piece of paper any thoughts or reflections you have about the process that took place yesterday.

Step Four: Re-box and replace the tape recorders and tapes at the front of the room. Turn in your transcripts and reflections.

The taped conversations were tedious listening, but the reflections read like true confessions:

"I'll never use 'ya know' again."

"I never knew I completely dominated the conversation."

"I let Jack do all the talking. Am I always that quiet around guys?"

"Playing back our conversation makes me realize that I wasn't listening to anything Lori was saying. And I don't think she was hearing me either."

"I sound like I'm from la-la land. If I had been about 200% clearer there might have been an outside chance that Melissa might have understood a sentence or two of what I said."

"Do I really sound like a chicken or is it memorex?"

MARCH 1990

The third time I used collaborative planning with my A.P. Students, I video-taped as many of the collaborative pairs as I could in two class periods. I typed up one conversation in which students did not interpret the question correctly. I wanted to share this conversation with students to see if they could identify where productive communication fell apart. I shared the transcript with students, first not including my interpretations and asking them for theirs and then giving them a copy of the transcript with my interpretations. The general reaction was that they agreed with my interpretations and thought they were amusing because I had cut through the facade and BS. Below is a short excerpt from one transcript.

TRANSCRIPT FROM A.P. COLLABORATIVE PLANNING SESSION (APPROXIMATE INTERPRETATION OFFERED BY OBSERVER-TEACHER EVANS)

Silence while both students read the question.

Nadia: *(reading out loud)* . . . the theme, the setting . . . *(Let's pick out words we recognize and can deal with.)*

Kelly: . . . the images, the characterization . . . *(Okay, that seems like a reasonable place to start.)*

Here's more.)

Kelly: Yeah. *(Sure. I can't think of anything better to do.)*

Kelly: Okay. *(I'm not sure that's what we should do first, but I'll go with the flow.)*

Nadia: Let's start with the setting . . . to set the mood. *(Setting is easy to write about.)*

Kelly: Yeah . . . then characters . . . and then image. First of all . . . whenever the characterization of her, about her being at the movies. That happened really before her mom died. Are we going in order of the story or are we . . . *(Setting is okay, but there are so many more examples of characterization.)*

Nadia: I don't think the order makes sense . . . You want to describe the setting or should we put the characterization first? *(Okay, so whose idea goes first? Yours or mine?)*

Some of the communication problems that students identified were: jumping on the first idea that comes up because the planner and supporter feel pressured to talk rather than think; worrying that "my" idea isn't as good as the "other" person's idea; being seduced by what seems to be the "easy" topic rather than the topic that would answer the question; one person doing all the talking; lack of good listening skills. After another collaborative planning session on an essay question, we analyzed a transcript of a planning dialogue that used good supporting techniques.

In the exchange below, Jenny is the supporter and Laurie is the planner.

Jenny: Is that too many characters to focus on in one essay?

Jenny: You can't do that.

Laurie: Why?

Jenny: Macduff is not on Macbeth's side.

Laurie: Techniques? . . . that would be like . . . symbols? similes? right?

Jenny: tone . . . attitude. . . irony . . .

Laurie: It says, "A light! A light!" It's dark out which is kind of strange. That's your scene . . .

Jenny: What are you trying to show?

Laurie: How he used like darkness when something evil was supposed to happen. You know, like murder and then the ghost came. It was right after he just scorned Banquo. And that was irony there. So he says, "Pity him . . . what a shame." . . . Did you do attitude? What would be like the attitude of the murderers? Whenever Macbeth was going to hire the murderers he like had to get them angry you know . . . and they didn't believe that Banquo was the enemy?

Jenny: How are you gonna connect these two? . . . How are you going to connect them?

Laurie: This is going to tie in like whenever he mur-

dered them, when it was dark out . . . so that the murderers themselves didn't know what they did.

Jenny: So are you going to say that Shakespeare was trying to guide his audience . . . ?

Jenny goes on to help Laurie realize that a character's speech was sarcastic and to help Laurie realize that she was summarizing too much.

Reading this transcript aloud in class led to these student observations about the positive results of the two girls' collaboration:

- The responses I received varied from the social to the practical and to the educational.
- There is clarification of original text.
- The supporter extends ideas of the planner.
- The supporter helps limit and focus content of paper.
- Careful listening helps prevent mistakes and helps planner clarify so that misunderstanding won't take place.

MAY 1990

We refined these techniques during the second semester leading up to the Advanced Placement Test in May. During May the students also experimented with a HyperCard® computer program that guides them through the process of considering the audience, the text conventions, and purpose of their writing. Because the program we used is a prototype and was not designed to use on a network system which my high school has, there were many technical difficulties that needed to be solved before the program used time efficiently. A few of my students mastered the computer game *Tetris* while waiting for their program to "boot up." The revised computer program that resulted did help students to understand the terms *audience* and *text conventions*; but once students worked individually on the computer, the "collaborative" part of the process dissipated.

JUNE 1990

The collaboration odyssey during the 1989-90 school year was a wonderful adventure. My students had fun while they planned their writing, the video camera and tape recorders helped me "monitor" their progress, students evaluated their own dialogues and planning sessions, my school and the research project supported my attendance at the national NCTE and local WPCTE conferences, and I won \$800 worth of grants for the upcoming year to continue collaborative assignments. It was a journey out of cynicism and confusion into some very practical applications and experiments in collaborative learning. Best of all, my classroom has become a better place to learn.

ACTUAL CLASSROOM EXPERIENCES USING COLLABORATIVE PLANNING

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At one point in the previous example, the supporter states, "You're not really explaining this to me." The writer responds by saying, "Ask more questions then." That is the role of a good supporter to ask questions which will challenge the writer to defend or change his point of view.

THE FIRST EXPERIENCE

I am a teacher of twenty-four years who teaches in a large city high school in Pittsburgh, PA. Alderdice High School is noted in the state of Pennsylvania for its wonderful Gifted Program. Actually, we have four levels in our educational program. The class which has participated in the collaborative planning project is my ninth grade regular English class. The first semester of 1989, I introduced the concept of collaborative planning to my class. The way that I did this was through a lecture. My students took notes on the lecture. Next, I taught them the thesis-support essay format. Then we read "The Split Cherry Tree" by Jesse Stuart. The class was to take notes while they read the short story. Then we had a group brainstorming session on the differences and similarities between the main character, David's parents and the students' own parents. Once again, the students took notes. Now we were ready for the essay assignment: "Compare and Contrast David's Parents' views with Those of Your Own Parents."

I was now ready to model the collaborative planning session for the class. I reviewed the Blackboard Planner by placing it on the board and discussing each element of it with the class. The students were taking notes during this explanation. One of the students and I then presented the collaborative planning session to the class. I was the supporter, and he was the writer. This class period, forty-five minutes, was spent presenting this model. The next class period, the students were paired by me for their own collaborative planning session. The pairing process was completed as closely as possible to talker/non-talker. Since this was the beginning of the year, and I was not familiar with their writing skills, I used this pairing method. It worked well. We spent fifteen minutes on the writer/supporter combo, and fifteen minutes on the supporter/writer combo. In other words, each student had fifteen minutes to plan his essay with a supporter.

When I think of all of the things that I was asking the class to do, I am amazed. First, I asked the students to read the short story and to take reading notes, and to relate the content to prior knowledge. Then I asked them to learn the thesis-support essay format. This process involved learning the elements of an introductory paragraph, learning transition words, learning the use of the three elements of support, and learning the purpose of a good conclusion. Third, I asked them to learn the collaborative planning process and its terminology. Next, I asked them to take notes on the process as well as the specific relationship of the views of the characters in the short story compared with their own parents' personal views on issues raised in "The Split Cherry Tree." Finally, I asked them to incorporate all of this information into a planning session and then into a final product — the essay. I discovered that these ninth graders were able, and more than able, to follow these requests.

After the planning session, the students spent one class period writing the introductory paragraph and having it approved by me. This means I checked the paragraph to see if they had a topic sentence, a thesis sentence and a plan of

development sentence. The students wrote the rough draft at home. The next class session, we prepared the final essay. I collected all of the notes, the rough draft and the final essays. Out of a class of thirty students, twenty-two successfully completed this assignment. I began to wonder if the collaborative planning session was the reason for this high success rate. This prompted me to give the students a feedback form to use to measure their attitudes about the process. They used each other for reference points, i.e., when one student did not know the spot in the story where specific information occurred, the other student did. They enjoyed having someone listen to their ideas. In collaborative planning whenever something acceptable is stated by the supporter, I asked the writer to write it down in his notes. This act gives immediate positive feedback to the writer. The students enjoyed the fact that someone else liked what they were proposing. While the collaborative planning session was occurring, I took notes on the social aspects of the process. I discovered that I was not even missed. They were so involved in what they were doing that they didn't even realize how fast the process was happening. I did not use tape recorders for this session since it was my first, but the talk between the members of each group was active, on task and challenging. It isn't often that a ninth grade class is so on task. This positive result motivated me to try collaborative planning again with this class.

Ernest L. Boyer in *High School: A Report on Secondary Education in America* suggests:

The first curriculum priority is language. Our use of the complex symbols separates human beings from all other forms of life. Language provides the connecting tissue that binds society together, allowing us to express feelings and ideas, and powerfully influence the attitudes of others. (Boyer 85)

Because language and thinking are so closely related, teachers of English hold that one of their main duties is to teach students how to think. Thinking skills, involved in the study of all disciplines, are inherent in the reading, writing, speaking, listening and observing involved in the study of English. The ability to analyze, classify, compare, formulate hypotheses, make inferences, and draw conclusions is essential to the reasoning processes of all adults. The capacity to solve problems, both rationally and intuitively, is a way to help students to cope successfully with the experiences of learning within the school setting and outside.

Collaborative planning helps students to develop these thinking skills. This development of the students' reasoning skills is an added outcome of the collaborative planning process. Intensive study of literature and writing as early as grade seven helps the students to nurture their reasoning processes. Session planning

takes the students one step further. This challenge is seen in the note-taking process. Everyone has his own way of analyzing a reading to make it relevant. Some readers:

- adjust their reading speed
- look for key words
- use context clues to figure out meaning
- break down words, sentences, paragraphs
- eliminate words
- identify key parts
- put themselves in place of the author
- relate content to prior knowledge, experience, examples
- conduct self questioning of the author
- put ideas together to summarize
- compare and contrast
- think about ideas that formed and how they formed
- reread
- pay attention to the title
- overview
- acknowledge confusing parts of the text
- visualize or imagine
- take notes

When we have a reading assignment, it is most important to be able to take good notes from that assignment. Note-taking is one of the most important of all of the study skills. Note-taking is a skill that is used for life. If students learn to select important things to remember and write them down in their own words, they can reduce study time. Note-taking in the collaborative planning process helps the students come to the session prepared to work. I have seen many different uses of notes in the collaborative planning process. First, my college students use the reading notes mentioned above. They use them to support their theses plans with specific support from the texts that they have read. They also use notes to help them to address the elements of the Blackboard Planner in the collaborative planning process. These latter notes seem to keep the students focused on the task at hand. The high school students also use these notes to help to focus the discussion during the collaborative planning process. Students who come with notes, at any academic level, attend to the session in a more clearly focused way. The third way that notes are used is to jot down any positive feedback from the supporter that may be used in the production of the final paper. These notes help the writer to monitor and adjust his writing strategies. The suggestions from the supporter help the writer to reinforce ideas as well as to change, or adjust, or expand ideas as necessary. The notes from the supporter help

the writer to understand his own writing strategies. For example, what is it that I do when I write a compare / contrast essay? Do I always tackle the essay the same way? Has the supporter helped me to change the same old approach I always use? What suggestions given by the supporter helped me to improve my approach? Will I remember and use these suggestions the next time that I write a compare / contrast essay? After the planning session has occurred, my college students asked for an additional week, (we meet on a weekly basis), to listen to their tapes again, to review their notes taken during the session, and to reorganize their essays. This additional week gives the students time to analyze and to reassess their own writing processes. I had not done this the first semester. We wrote immediately after the planning session. Then, when the students had time to think about their collaborative planning session, they were not able to implement their changes.

THE SECOND EXPERIENCE

This experience also occurred in my first semester ninth grade English class. This time the assignment was based on the reading of the novel, *Great Expectations*. The students had worked on collaborative planning two other times. They also knew the requirements for the assignment. These requirements are the Monitoring Achievement in Pittsburgh (MAP) requirements which include:

- the topic logically using specific details
- to write a relevant conclusion
- to use varied and vivid word choices
- to use varied sentence structures
- to use transitional devices
- to employ standard usage
- to employ mechanics which comply with *The Guide to Standard Written Practice*

The students were to describe Pip's development throughout the novel, or to compare Pip to other characters, or to illustrate Pip's desire to improve himself throughout the novel. The choice was theirs. They were to come to the session with notes that they believed would support their thesis. The next class was spent discussing the question sheet which Tom Hayduk, one of the project members, prepared for the collaborative planning group members to use with their classes. This question sheet refers to each aspect of the Blackboard Planner with specific questions which the supporter may use to guide his questioning strategies for helping the writer during the collaborative planning session. After this discussion, the students were more focused on the questions which they used to ask the writer during the collaborative planning session. This session, the teams paired themselves. The students spent twenty minutes each as both writer and

supporter. This was probably our best collaborative planning session. Next, while using their notes, the students wrote their rough drafts which I had to approve. Finally, they wrote their final essay. We shared our efforts by reading them during the next class session. Positive feedback only was offered by the other members of the class after each final draft was read by its author. I remained neutral here by saying that I had to take careful notes on their comments for CMU. I then used these comments as part of the evaluative comments which I placed on each final copy. Our last class on the novel was spent discussing the pros and cons of the collaborative planning process. Overall, the students felt more confident about the writing process because of their ability to take and use careful notes before, after and during the writing process.

I am still a firm believer in the SQ3R method for reading and understanding texts. This method, although not recommended specifically for the study of literature, is also an appropriate study skill to employ when reading anything new. SQ3R represents Survey, Question, Read, Recite, Review. In the first step, students are to take a visual overview of the work. Then, they are to question as they read. During this question period, the students are to prepare questions which will help them to become mentally involved with the text. While they read, the answers to the questions they have written should be revealed. They are to note the specific details and ideas from the text which enhance/explain their questions. To reinforce this procedure, the students are to recite the main ideas from the text without looking back at the pages. If they cannot do this step, they are to reread to find the supporting details which they cannot remember. They may also take notes to summarize the main ideas as they recite. (This step directly correlates with the collaborative planning process. While they are planning, I insist on their continuing the note-taking process which they began while they were reading.) Finally, the students review. This is where the notes are summarized and reviewed for preparation of the rough draft. I give a grade for the notes, so most of the students attend to this step. My contention is that the students, who take notes throughout the collaborative planning and reading procedures have better products at the end of each collaborative planning process. They seem to be more focused on the reading, writing and thinking acts. These students have obviously followed each step in the over-all process. They are also more organized and better prepared as both a writer and a supporter. Because they have met and been graded for each increment step along the way, they probably believe that this feedback has enabled them to feel more confident about being able to complete these tasks successfully. The words of William Hazlitt support this note-taking theory, "The more a man writes, the more he can

write." (Murray 238) " In order to affect writing significantly, reading must be a passionate, life-long pursuit, a kind of love affair with language that begins in child-hood. It takes years for even the "born" writer, whose natural element is literature, to assimilate through reading the sense of language that makes his work distinctive and to master the subtle skills that give it form and meaning." (Murray 216) Reading and note-taking are both skills that must be continually developed to enhance and improve the writing process.

THE THIRD EXPERIENCE

Semester changes caused seventeen of my first semester ninth graders to leave my class. These moves required major changes in my lesson plans. I asked the students from the first semester to act as leaders in the next collaborative planning session. Of course, I had to review the note-taking process for reading, the essay format, and the collaborative planning process. This session was also going to be filmed by Linda Norris for CMU. All of this occurred only three weeks after the second semester began. The literature assignment was to read and take notes on *The Light in the Forest* by Conrad Richter. The students were also given study guides for each chapter. These study guides helped the class discussion process. The writing assignment was to compare/contrast the two cultures presented in the novel. The students were grouped in groups of three - a supporter, a planner and an observer. The role of the observer was to take notes on the actions of the other two group members while the session was occurring. Each member of the group was to have his reading notes, his class notes and his study sheets. The following excerpt comes from the tapes which were recorded on that day. The purpose of this piece is to notice what happens to the collaborative planning session when the students do and do not have good notes. The writer has good notes in the example below. These notes enabled him to fully participate in the collaborative planning session. The supporter, on the other hand, was not as well prepared and had no notes to help him.

- W: OK
- S: So what is the purpose of writing your story?
- W: So I can get a good grade. I'll write it to depict how the white man mistreated the Indians. Right, how the white man mistreated the Indians, and I'm gonna use my strategy by using step by step, fact after fact how the white man treated Indians.
- S: White man treated Indians, OK...
- W: What you laughing at? And then, I don't have this written down, my purpose...
- S: Your purpose...
- W: Yeah, to compare the different viewpoints of the two environments that they were raised in.

- S: So one's the savage, and one's tame.
- W: But actually, I disagree. I'll say the Indians were more tame than the white men were.
- S: Because they have more prejudices...
- W: Yeah ... in some forms they did
- S: There was no prejudices in any of the Indians. They just scalped people.
- W: And I'm going to try to write this in the third person, all right, and use a lot of symbolism, and how do you say it (reading)... all right, dialogue. I'm not going to use much dialogue though...
- S: You're not really explaining this to me. You've gotta um...
- W: Ask more questions then.
- S: Oh, well, what are your main strategies in writing this story?
- W: Like I said before, use step by step and describe most of the characters in the story, like their backgrounds and why they acted the way they did in the story, and to try to get Mrs. Martine to understand, you know, the basis of why they acted the way they did why the Indians thought the white men were better, and why the white men thought they were better than the Indians.
- S: So what are the similarities between white men and Indians?
- W: They both looked down upon the female race as not being quite equal, and the youngsters, until they became up to their manhood.
- S: So explain their customs and heritages — How's that?
- W: I would, but I still need more work.
- S: Need more information?
- W: Yeah, more information on that...
- S: Well, from somewhat you know, they both scalped people.
- W: Yeah, they're both...
- S: It said in the story that the white man scalped one of their brothers.
- W: Yeah, that's true. All right and then, as I said before, the third person audience which will be written. Do you have any more questions?
- S: Well, not really, not yet. Just keep on doing keeping up the good work.
- W: Keep up the good work.
- S: Keep up doing the good work.

At one point in the previous example, the supporter states, "You're not really explaining this to me." The writer responds by saying, "Ask more questions then." That is the role of a good supporter to ask questions which will challenge the writer to defend or change his point of view. When these questions are

missing or not challenging, the frustration of the writer is evident. He did the assignment and came to the class prepared, and he expected his classmate to do the same. When these expectations are not met by both parties, the strength of one student's efforts can still make the collaborative planning session worthwhile. Imagine how much more productive this session would have been if both parties would have been similarly prepared.

After the last collaborative planning session, I began to wonder about the use that the students make of their notes, i.e., the notes that they make while the collaborative planning session is actually occurring. The reading notes become an integral part of each session. The students expand, change and incorporate those notes into their dialogue about the assigned essay. They constantly refer to their notes during the session. Are these reading notes and the notes taken during the session an important aspect of the writing process? Because the writer only acknowledges and copies the helpful suggestions of the supporter, are these notes just used to increase the self-esteem of the supporter? Do the writers really blend these notes into their final essays? Is the use of these notes just to insure that the writer is really listening to the supporter? Compared to this ninth grade class, my college students write pages of notes while they are planning. In their notes I have found examples of revisions, deletions, additions and suppositions. They not only write the supporter's ideas, but they also write how they will use these suggestions to improve their final papers. In the college classes, the supporter also writes while he is in the role of supporter. Is an idea better when it is heard and then written? Why are these notes so important to the collaborative planning process? It seems from my observations this year that the students who have the most elaborate set of collaborative planning notes, produce the better final essays. Each student has the same amount of time in class for the collaborative planning process. Why do some use the time more effectively than others? Is mental note-taking just as effective as the actual written notes? Actual written notes are those which were taken during the session. What does the paper in front of the students do to motivate their thinking process? It is my belief that these notes are key in spurring the thinking process which, in turn, ultimately directs the writing process.

THE FOURTH EXPERIENCE

The next experience occurred in one of my college classes entitled, "Basic Principles of Composition." This class is a remedial writing class in which students prepare for 101, English Composition. This class uses a wonderful textbook entitled *Rereading America* which was edited by Colombo, *et al.* It is published by The St. Martin's Press. This text provides the students with a wealth of reading material as well as a wealth of writing

assignments which correlate with the readings. What it does not provide, and it is not meant to provide, are the successful writing strategies which college students need to become confident writers. I thought that this would be a good place to use collaborative planning as an instructional tool. The students read the Immigration Chapter. In this chapter, there is a good bit of time placed on reading about the differences between *The Melting Pot Theory* and *Cultural Plurism*. The students were asked in this assignment to explain and illustrate the two aforementioned concepts. This is where we used the collaborative planning process. These students were much more inquisitive and helpful than the younger students. As student supporters they were almost unforgiving in their attention to helping one another become better writers. Questions like: "What do you hope for your audience to take away from this paper?" "How exactly do you plan to do that?" "Is that all that you need to do to achieve your purpose?" "What else might you do as a writer to achieve your purpose?" There were many more thought provoking questions that these students generated. In between the questions was a genuine sharing of ideas. These students shared their appreciation and analysis of the textual materials, their notes and their own tentative essay plans all within the collaborative planning process. Each student was interested in helping the other student produce a better final product. After a thirty minute session, each student had a fifteen minute planning period, the students used their reading notes, their collaborative planning notes and their textbooks to create an in-class paper. The only criticism was that the students didn't have enough time to really change their ideas that drastically because of the lack of time. The next time that we used the process, I allowed time to pass (one class session) before we actually wrote the essay. This permitted the students time for contemplation on the collaborative planning process. This also permitted the students time to revise their rough drafts. This time spent working on the assignment in such depth produced a more focused effort.

What a difference physical and mental maturity makes in one's approach to the writing process. The college students do not have to be reminded to take and use notes. They seem to do this automatically. They realize the importance of incorporating reading notes into text. When the collaborative planning session is occurring, they realize the importance of recording the supporter's useful comments for their own future use. There is evidence from the tape recordings of their sessions that they do use these comments to change their own texts to make a better written product. These students also are willing to reflect on the entire process after it happens. This final step was never reached with the ninth graders. They were willing to complete an evaluation and to discuss the collaborative planning

process, but to get the ninth graders to become more introspective would take another year. I attribute this flaw only to a lack of maturity. I know that with practice they could do an introspective session, but the year, having been split into semesters, was just too short. The college groups, however, were more than willing to discover what these sessions enabled them to do as writers. They were also attentive to these clues the next time that they wrote an essay. The instructor can say, suggest, and write all of the comments in the world on or about an essay, and the same errors will continue to occur. When a peer makes the comments verbally on a tape that each student can review over and over again, and also jot down in his collaborative planning notes to review at a later time, the change does sometimes occur, and it is remembered by the student. These college classes were willing to actively participate, take reading and collaborative planning notes, and to reflect and use these notes to improve their own writing strategies.

EPILOGUE

The year as a teacher-researcher was a challenging one. A need to be organized, clearly focused and very specific in giving directions was essential on my part. How could I expect the students to follow the collaborative planning process without careful planning on my part, modeling, guided and independent practice, review and evaluation. This procedure must become second nature to the student. After all, most decisions in life are made after some type of consultation with another human being. Why should or would the act of writing be eliminated from this sharing process? When we do share our planning ideas with others through the collaborative planning process, the final papers show a marked improvement. I plan to continue in the project and to continue with my research next year. The positive results of my students work and my work were that encouraging.

Language provides the connecting tissue that binds society together, allowing us to express feelings and ideas, and powerfully influence the attitudes of others. (Boyer 85)

I saw this quotation become a reality through my participation in this project.

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A REFLECTIVE LOOK AT TEACHING PLANNING IN HIGH SCHOOL

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As I reflect on this first experience for the students as well as myself, I feel good about the class' performance. They did an outstanding job in using the blackboard metaphor. . . . I listened to them analyze characters and project what might happen next. They talked about relationships of characters and the effect of one character on another. . . . Their stories reflected the energies they used to write them. They were proud of their stories and anxious to share them with their peers.

As I look in retrospect at my 1989-90 school year, I have discovered three factors to be especially essential for a first time teacher teaching the collaborative planning process: modeling the procedure step by step for the students, reflecting on accomplishments and/or problems by the students and the teacher, and having time.

With my introduction to collaborative planning last fall, I listened as veteran teachers shared their experiences with this process and became excited. However, at one point it hit me that these teachers were talking about successes with college students and advanced high school seniors. I winced as I thought about my own teaching schedule heavily laden with mainstream ninth graders, those students whose ability levels would range from above average to borderline remedial students. Would they be able to grasp this blackboard planner metaphor? Would they be able to talk to one another? Ninth graders? Even though I did have two classes of advanced seniors, I accepted the challenge to trod where others had not with my ninth graders.

I felt my work was cut out for me. To build my confidence in the students' ability to talk to one another, I spent several weeks teaching cooperative learning techniques. I focused on getting the students to work together in small groups, to respond to each other in pairs, and to participate in large group critical discussions with little to no teacher involvement. I found this to be extremely helpful in preparing ninth graders to talk to each other, trust each other, and rely on each other as resources. Consequently, when the students were assigned to their groups for the collaborative planning assignments, they were ready.

THE ASSIGNMENT

The class had just completed studying an autobiographical narrative, "Giving, Getting," by Nancy Packard. The next step was for the students to cooperatively write a sequel to this narrative. The class was divided into groups of four and provided the following criteria for their sequels: the characters had to be consistent with the original story; the story had to be believable; the story had to be realistic; and the conclusion had to be reasonable. Only one sequel would be produced by each group.

THE PROCESS

After I introduced the planner's blackboard and the roles of the planner and the supporter, Linda Norris assisted me in the next class as we modeled a collaborative planning session using the same assignment but a different story. After she and I discussed what we had done and identified what had occurred in our planning session with the students, it was their turn. Within each group every student took a turn as the planner while the remaining three students acted as supporters. Each group was supplied with a tape recorder to tape its sessions. These sessions took two class periods.

On the third day the groups reconvened and played back their tapes. Their individual stories lent many good ideas for discussion and planning for their group

sequel. Some groups took one planner's ideas and developed them together; others took bits and pieces from each planner that would work well together to make one good sequel. Each group selected a recorder who took notes and did the final writing. The planning and writing took two days.

PERSONAL REFLECTIONS

As I reflect on this first experience for the students as well as myself, I feel good about the class's performance. They did an outstanding job in using the blackboard metaphor; in particular, they worked on the purpose/keypoint and text conventions. I listened to them analyze characters and project what might happen next. They talked about relationships of characters and the effect of one character on another. One group was constantly reminding each other that their story had to be in first person because the original story was. Another group put a lot of work into developing its story through the use of dialogue. While still another group developed its story by having one of the characters write a letter to another. Their stories reflected the energies they used to write them. They were proud of their stories and anxious to share them with their peers. In fact, they enjoyed the process; this was evidenced in another assignment in which they had to write a letter to their former eighth grade English teacher explaining what they had been doing during the first quarter of their ninth grade English class. A number of them wrote about being a planner and a supporter as they wrote a sequel to a story and "this lady from Carnegie Mellon who came with tape recorders."

STUDENT REFLECTIONS

Before using the collaborative planning process with a new writing assignment, I felt it necessary for the students to get a chance to review their first experience with it when they wrote their group sequels. Therefore, I selected two sections of a transcription from one groups' planning session for reflection. The first section we looked at was from the planning session where one student was the planner and two other students were the supporters. The other section was taken from the second day's reflection session. I selected the sections of the transcription I thought reflected best what the students were to have achieved and photocopied copies for each student. I also made a transparency of each section for group discussion. The following is a segment of the planning session. Purposely, the speakers were unidentified.

Several students volunteered to read the parts of the speakers aloud. I then had each student label on his copy P for planner and S for supporter; we discussed the outcome. To help the students focus on the parts of the blackboard planner used, the students were instructed to: put parenthesis around those words or lines which showed the planner's purpose or keypoints;

put brackets around evidence of the planner's use of text conventions; and underline the planner's references to his audience.

SEGMENT OF COLLABORATIVE PLANNING SESSION

- 2nd: Uh, I think that Nancy and Walter are having problems with the Christmas presents, 'cause Nancy, I don't know, and Walter, Walter's too hard to buy presents for because he's spoiled and he's selfish, so—
- 1st: So, like what are you telling me you going to put in there?
- 2nd: I tried to change like, that Walter later in life would accept any presents that he got instead of just being grumpy like he —
- 3rd: was.
- 2nd: —had. Yeah.
- 1st: All right. Um.
- 3rd: Well, in your story, is they all going to become friends? I mean—
- 2nd: Yeah, I think so. Because, because um, Walter is uh (schrungy?), and George, I put George back in the story because I think he did have a purpose. And I think that George would be the one to get Nancy and Walter to be friends again.

I found that using their own work was more effective than using a generic piece for several reasons. First, the students could better identify with the content of the transcript. Secondly, they were quite pleased and surprised to discover that they were actually doing the things we had talked about. Thirdly, they became more aware of the difference in what they were really saying when they spoke and what they thought they were saying. They were shocked and yet pleased to see their words in print. Also, using their transcript proved to be an unplanned springboard for the next assignment because I repeatedly heard comments like, "I'm going to be more careful about what I'm saying the next time we tape." Several students asked me to have their tape transcribed for reflection the next time.

COLLABORATIVE PLANNING PART II

I was feeling more relaxed with using collaborative planning with my students and their writing. I could use terms like audience and text conventions and feel confident that they knew what I was talking about. Some of my students were stronger than others and were able to work in pairs with the weaker students. I believe if I could have worked with the same students for the entire school year, all of the students would have benefited more.

Unfortunately, the progress I was making with my ninth grade students with the collaborative planning process was interrupted with the changing of semesters which ultimately destroyed the continuity

and structure of my classes. Schedule changes and the rearranging of my classes caused me to end up losing a number of my original students and getting new ones. Everything I had done up to this point was now lost; I would have to start anew. And so I shifted my intent and focus for the second half of the year from my 9th grade classes to my senior scholars classes which had remained intact from the first semester.

I could do this more comfortably now because the questions and uncertainty which consumed my thoughts at the beginning of the year had been satisfied. With a lot of control and guidance, ninth graders can incorporate the collaborative planning process into their writing. The students' first experiences with this process were very much controlled by me. I selected the groups/pairs who would work together; I modeled the roles of the planner and supporter; I worked with the kinds of questions students could ask as a supporter; I emphasized the steps of the blackboard planner; and most importantly, I taught them how to work together. Coming from a background where for eight years they had been taught to work independently, I found it essential to teach them how to work with other students. Of course, some students grasped the collaborative planning process quicker than others, but I believe, with practice, all students can. As a teacher I was feeling good about myself because I was getting less moaning from the students when I mentioned we were going to write; instead, I was hearing, "Can we choose our own partners?" I'd like to say the students wanted to do this because of what they had learned about themselves as writers; however, part of the truth lies in the fact that they liked using the tape recorders.

Feeling stronger and more confident with teaching the collaborative planning process, I considered this procedure as a help to my seniors with their research papers. I decided to use it at three stages of the writing of their papers and to focus only on the assignment definition and the purpose/keypoint portions of the blackboard planner. The three stages they were to plan collaboratively were the selecting and limiting of their topic, writing the thesis statement, and writing the outline for the body of their papers.

THE ASSIGNMENT

Throughout the year we had been looking at heroes in various literary pieces. As a transition from the readings to their research work, we read and discussed an interview with Bill Moyer on heroes. Evolving from this, the students' research assignment was to construct a definition of a hero based on their personal thoughts and concepts and find an individual, literary or real, who fits their definition. They were to research this person and present him or her through their definition of a hero.

COLLABORATIVE PROCESS

The students were permitted to select their own partners and were provided tapes and tape recorders; some students jotted notes during the planning sessions as well. They were encouraged to have some forethought on their definitions and bring notes to the first session. The students were very enthusiastic from inception. I took a class period and explained the blackboard planner and the roles of the planner/supporter as I did with the ninth graders. Some of the same concerns surfaced for the senior scholars as did the ninth graders initially. They felt uncomfortable questioning someone else's ideas. I get the feeling that they felt they were expected to take over the teacher's role. How do you know what to ask as a supporter? How do you start? The following excerpts from their reflection journals exhibit common student reactions to experiencing the role of the supporter for the first time.

David: When being a supporter I found difficulty in using dittos (*sample generic questions*) given us. Ben was a good supporter. He had fewer problems with the questions (*generic samples*) than I did. His questioning allowed me to solidify my ideas.

Julia: Being the supporter helped me think about points that were still unclear about my own definition of a hero. I think I could have used more feedback from my supporter. I'm not sure that I could bring my point across to him.

Brian: I liked being a supporter for someone else except I felt I wasn't all that helpful due to the fact that he (*partner*) had no idea which direction he wanted to go.

Karen: Collaborative planning helped me realize my definition of a hero was too super human. Noreen helped me figure out a realistic idea of a hero.

Katy: Being a supporter is difficult. It is hard to start off with questions to ask the planner, but when you get those first couple out, it becomes very interesting.

I was feeling quite successful with this approach to getting students involved with their research papers when things suddenly and unexpectedly became uprooted. Seemingly, in unison they were jolted into reality—they were doing "a research paper!" They weren't supposed to be discussing their ideas and thoughts; they were supposed to be writing five, ten, how many pages? Do we have to have note cards? How many footnotes? Does this have to be typed? When is this due? Will I survive to graduate? Text conventions, like a huge, hungry monster, devoured the enlightenment, the calmness and enjoyment of making decisions and planning with which the class had begun. It was as if they had emerged from a dense fog and realized, "How could I have possibly conceived the idea that

writing a research paper was not going to be stressful!" This was unrealistic! Where was the stress? And so, I was coerced into providing limitations and restrictions that I didn't want to. I constructed a calendar of due dates and deadlines; I provided them with a specific number of pages to be written, note cards, etc. Ben, one of the students in this class, summarized my feelings within his own; "... I was in so much of a rush to get things (note cards, outline, rough draft) turned in within a reasonable time of the due date, I kind of lost the purpose of my paper."

I attempted to have the students collaboratively plan the body of their paper through the development of an outline, but many of them were consumed by text conventions so much so that they became frustrated and irritable. I, on the other hand, was becoming frustrated also because time was becoming a factor for me too. I only had a limited number of weeks to devote to this assignment. I battled with using the traditional approaches to teaching the research paper, allowing the students to research and write on their own, and with the new approach I was attempting of having the students talking and planning before writing.

Although a final paper did evolve and many of them did meet my objectives and expectations very well, I intend to assess my approach and procedures and make some modifications before I attempt this again. I need to find a way to deal with the students' fear of the dreaded research paper. I do believe there is merit here, and collaborative planning can work for this type of assignment, too.

The students' candid comments in their final reflection papers reinforced for me both the need for and the value of collaborative planning in writing. The students were to respond to the following:

- Reflect on the benefits of planning with a supporter in a collaborative effort to write your paper. Focus on:

- at what point (s) did you feel CP was or could've been most helpful to you?

- what effect did the CP process have on the final outcome of your paper?

Lisa: I really didn't know how to interpret my hero into my definition at first. But after the planning, I was able to get the feel of what I was doing. At that point was when the planning became the most helpful to me.

Ron: This collaborative planning didn't help me change my idea of what I wanted, but made it clearer so I really understood what I was doing.

Ben: I found it easy to plan my paper by talking about it. It helped me figure it out like a person goes to a psychologist to talk about problems he is having.

Brian: In the beginning I felt really good about the support groups. I feel that it could have been very beneficial to the outcome of my paper. It is important to get feedback from an observer. Maybe he/she can point out some critical points that might need to be reconsidered. Unfortunately, my experience with my partner did not turn out to be beneficial. I received hardly any feedback at all. The majority of responses I received was, "Yes, that's good." I wished my partner could have been a little more involved and had more suggestions. I totally encourage you to continue this exercise with your students for the next years to come.

Linda: I thought that having us talk on a tape was a good idea. Even though I had an idea of what I wanted to say about a hero, I still was a little fuzzy. Sharm did a good job of being a supporter. She kept asking me questions and making me think, really think of how I was going to organize my paper. She brought up some good points so I didn't end up with a 50-page paper.

Julia: The collaborative planning helped me find my definition of a hero, but during the second planning session I found myself talking more about what I was planning to write about. Also, during the second session I got much more feedback from my partner and it was easier for me to ask him some questions and make suggestions.

For a first attempt, I was pleased with my effectiveness in teaching the collaborative planning process and also with the outcome of that effort which has been evidenced in the students' writing, both ninth grade and twelfth. Although the purpose of this research was not to compare teaching at these two grade levels, I discovered that there were similarities and differences. Modeling was more important for the ninth graders than the seniors; this could be attributed to maturation, experience, and development over four years. However, reflection was important for both grade levels. Through reflecting both were able to see their writing process. They were able to talk about what they did to reach their goals and assess the effectiveness of it. One big similarity was the need for time. The difference lies in the use of that time. For the ninth grade time was essential for modeling and for reflection during and after each step of the process initially. Later on, that amount of time decreased. For the twelfth grade time was not needed as much for instruction as it was for the actual planning sessions. I found myself underestimating the amount of time needed.

As with any new process, real effectiveness can only be measured if the process is practiced; therefore, I intend to build more opportunities to use and practice collaborative planning into my future lessons.



NOTES ON EDITORS AND CONTRIBUTORS

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has taught English since 1967 at the Community College of Allegheny County on the city campus where, for the last six years, she has chaired the department. She teaches basic and general writing as well as American and women's literature. Her 1987 dissertation at the University of Pittsburgh was a participant observer study of basic writers who showed error apprehension. She and her husband, Charlie, happily ended this year ten years of indentured parenthood as the second of their two children graduated from college. As a vegetarian and anti-chocolate person, she has been a minority in the this MTV project dominated by meat-eaters and chocoholics.

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