THE IMPACT OF PRESCRIPTIVE PLANNING MODELS ON PRESERVICE ENGLISH TEACHERS' THOUGHT AND ON THE CLASSROOM ENVIRONMENTS THEY CREATE: AN ETHNOGRAPHIC STUDY

by

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In recent years, naturalistic studies of planning have shown the "hidden side of teaching," pictures of the ways teachers think before and after they enter the classroom. Few, however, have shown how prescriptive planning models impact on teacher thought and the classroom environments they create; and none has looked at the impact of prescriptive planning models on preservice teacher thought.

The purpose of my study was to create ethnographic descriptions of two preservice teachers' thoughts and of the classroom environments they created. The major difference between the two participants was the prescriptive planning model used. One used a rational means-end planning model — the model most commonly taught to prospective teachers when they are first introduced to unit planning. This model encourages the teacher to develop a written unit plan with a rationale, objectives,
activities, and evaluation standards prior to the teaching of a lesson or set of lessons. The other preservice teacher used a recently developed recursive planning model that encourages brainstorming, design, and reflection based on a list of educational design variables that research has indicated have an impact on educational environments.

My ethnographic findings reveal that the use of both planning models impacted on preservice teacher thought and on the classroom environments they created in terms of:

1. the quantity, quality and content of the planners' preactive and postactive thought,
2. the quantity of unplanned decisions that the planners made while teaching,
3. the overall organizing principle of their classroom environments, and
4. the way preservice teachers defined and practiced planning.
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A few years ago I began supervising preservice English teachers. After my first quarter I began searching for some means to assist them with their planning. Even though these preservice teachers had good preparation in previous classes for making rational means-end unit plans -- plans complete with unit objectives, sequenced activities and evaluation standards -- they still turned in written unit plans and implemented lessons that were less than creative and coherent. These preservice teachers had been introduced to current theory and practice in the teaching of all the language arts -- reading, writing, speaking, and listening -- but they still produced plans that often relied on one or two worn-out methods for one or two of the language arts. As a beginning supervisor, I needed help in answering the question: How can I assist preservice teachers with making and implementing more creative and coherent plans?

I began my search for an answer to that question by reading the research on teacher planning. Robert
Yinger's ethnographic study, "A Study of Teacher Planning," (1982) provided a lead. As I looked through his ethnographic description of a good teacher's planning activities, I noticed that his teacher planned in very much the same way that good writers write. In other words, the planner first of all engaged in an elaborate brainstorming stage full of inspirations and informal models of research. After this activity, she organized her materials and sequenced her activities into her own coherent unit plan structure. Then, she tried out her plan on her actual student audience. After trying it out, she revised until those plans became acceptable strategies that seemed to work.

My inspiration came. Why not help preservice teachers use creative thinking to make their unit plans? To carry this inspiration out, I relied on what I knew about the connection between writing and creativity. I knew from previous studies (Naff, 1986a) that creativity is naturally a part of the writing process; and I knew, too, that the English preservice teachers already understood the writing process. Having faith in these insights, I developed -- and then tested and revised -- a creative planning model that resembles the writing process model (Naff, 1986b).
THE CREATIVE PLANNING MODEL

Like the writing process model, the creative planning model is a three-stage recursive thinking process. In the PREPLANNING stage, the first stage, the preservice teachers use a variety of heuristics or do informal research 1) to find or develop methods, 2) to make the best of environmental constraints, 3) to think of creative ways to project their own personalities into their teaching as well as 4) to think of ways to know the students' and address their needs.

After an elaborate PREPLANNING stage, they then create a written unit plan or educational design in the second stage, the PLANNING stage.

In the POSTPLANNING stage, the third stage, the preservice teachers try out their plan in the actual classrooms. Then, immediately after implementation, they go to their planning journals to evaluate and/or revise their unit plans; or they may elect to reflect on other educational variables that impact on their plans. This postplanning journal writing often leads preservice teachers back to the preplanning stage. They brainstorm anew, in light of their new findings. The creative planning process, then, becomes recursive. After rethinking, after additional brainstorming, they revise
their written unit plans or mental plans before continuing their implementations. Figure 1 outlines the model that I introduced to the preservice teachers.

THE RATIONAL MEANS-END PLANNING MODEL

In the preceding years, my preservice teachers had used a rational means-end planning model that is an outgrowth of Ralph Tyler's (1949) theory of curriculum and instructional design. This model is a linear planning model that encourages preservice teachers to make a unit plan outline which includes 1) a rationale, 2) a set of behavioral objectives stated in student terms but based on the rationale, 3) a set of activities that will help students meet the objectives and 4) a list of evaluation standards that will assess whether the behavioral objectives are met. As Schubert (1980) argues, this modified Tylerian approach to curriculum and instructional planning became one of the most pervasive planning strategies encouraged in American teacher preparation programs. Figure 2 is the rational-means end planning model used by the preservice teachers as they made unit plans.
Creative Planning for Creative Teachers

PREPLANNING

Brainstorming
Researching
Collecting
Generating
Collaborating

PLANNING

Organizing
Sequencing
Visualizing
Integrating
Designing

POSTPLANNING

Experimenting and testing by teaching
Evaluating
Reorganizing
Internalizing
Storing away
Creating sound methods

DESIGN VARIABLES

1. Physical characteristics of classroom/s and ideas for their use.
2. Other available school space and ideas for its use.
3. Number of students.
4. Number of periods.
5. Pupil characteristics.
6. Theories of learning and philosophy of education.
7. Learning activities.
9. School objectives and/or standards of learning.
10. Current social events that may impact on classroom content or activities.
12. Classroom management strategies. (example: quick way to break students into small groups.)
13. Executive management strategies. (example: way to collect many teaching activities.)
14. Personal teaching refinements. (example: want to use more metaphors to illustrate ideas.)
15. Professional goals. (example: want to publish article on experimental method).

EVALUATION OF EDUCATION DESIGN

Does form follow function?

Is the total educational design intended to be beneficial and stimulating for students?

FIGURE 1. Creative Planning Model
Unit Title

Rationale (Why are you teaching this? What is the theory? Grade Level?)

Unit Objectives (in student terms)

Introductory Activity

Activities (What things will you do to accomplish your objectives? These activities are not necessarily in order)

Culminating Activities

Materials (What do you need to accomplish your objectives and carry out your activities?)

Evaluation (How do you plan to assess student accomplishment of objectives?)

FIGURE 2. Rational Means-End Model
In several basic ways, the creative planning model differs from the rational means-end planning model. First of all, the creative planning model encourages a recursive thinking strategy for making unit plans which is not encouraged in the rational means-end planning model. Second, the creative planning model directs preservice teachers to consider a wide variety of design variables such as classroom constraints, individual pupil characteristics, management strategies, planning strategies, and professional and personal developmental goals that are not necessarily encouraged in the rational means-end planning model. Third, the creative model encourages preservice teachers to evaluate their entire educational designs on a daily basis. The rational means-end model only explicitly encourages evaluation of students based behavioral objectives. (Both of these models will be more fully and systematically compared to a descriptive model of planning in the concluding literature review section).

NEED FOR FURTHER RESEARCH

For my dissertation study I wanted to determine what impact, if any, these two prescriptive planning models have on preservice English teachers' thought and the classroom environments they create. To test this, I
conducted an ethnographic study of preservice teacher planning which described and then compared what happened when two preservice teachers each used one of the planning models: the creative planning model described above and the rational means-end planning model. I wanted to examine the ways in which the two planning models seemed to impact on the preservice teachers' preactive, interactive, or postactive thinking about teaching and on their beliefs about planning and teaching. I also wanted to see how their use of the model impacts on their classroom activities and the impressions they create with students and cooperating teachers. No other research studies have descriptively compared the impact differing prescriptive planning models have on preservice teacher thinking and action.

The literature review that follows contains a summary of some planning models and findings about what happened when they were used. Also included are findings on planning's relationship to teacher's beliefs, interactive thinking and the impressions the preservice teachers make on cooperating teachers and students, as well as a brief section on teachers' beliefs.
CHAPTER 2

A LITERATURE REVIEW ON TEACHER PLANNING

INTRODUCTION

In the last twenty years some researchers have begun to look at teachers as professionals, as people who think in deliberately meaningful and complex ways about their work. These researchers study teachers' thinking to better understand the complexity of their professional lives. To study the professional lives of teachers, they develop descriptions of teachers' thinking by engaging in naturalistic research. They interview teachers as they plan, and they interview teachers as they review their own classroom activity on videotapes. Others also engage in participant observations. They sit in classrooms and observe the actions and decisions of teachers. The data from these studies are sometimes used to develop and refine models of teacher thinking which can help educators on all levels better understand how teachers think.

In the following pages I will provide a brief historical background on the research field of teachers'
thinking. I will also use a model of teacher thought and action (Clark and Peterson, 1986) which will help explain the outline of this review. My review will represent the literature within the research field of teachers' thought processes that deals with planning and its impact on teacher thinking and action. In the first section of my review, I will give detailed descriptions of various planning models and research findings on them. These planning models encourage preactive and/or postactive thinking. In the second section, findings will be presented on interactive teacher thinking, thinking that occurs while teachers are working with students in the classroom. The third section will present findings on 1) teachers' beliefs and 2) how those beliefs impact on planning and action.

THE HISTORICAL ROOTS OF RESEARCH ON TEACHER THINKING

Phillip Jackson described the mental activity of teacher behavior in *Life in Classrooms* (1968). His research concentrated on the complexity of the teacher's task and the hidden side of teaching. In almost every literature review of teacher's thought processes, Jackson's seminal idea presented below is quoted or alluded to and then developed:
A glimpse of the "hidden" side of teaching may increase our understanding of some of the more visible and well-known features of the (teaching) process (Clark & Peterson, 1986; Clark & Yinger, 1980).

At the 1974 National Conference on Studies in Teaching, the National Institute of Education organized ten panels to develop research directions on teaching. Panel 6, shared by Lee Shulman, was to create a research agenda for realizing Jackson's dream of studying teachers' thinking. The panel included anthropologists and experts on the psychology of information processing. These panelists decided they wanted to understand that which is uniquely human about teaching. They realized that teaching was not a mechanical activity, but, rather, that teachers were responsible for

1) aggregating and making sense out of an incredible diversity of information sources about individual students and the class collectively;

2) bringing to bear a growing body of empirical and theoretical work constituting the research literature of education;

3) combining all that information with the teacher's own expectations, attitudes, beliefs, purposes; and

4) having to respond, make judgments, render decisions, reflect, and regroup to begin again (Peterson & Clark, 1986).
To realize Jackson's research vision, the Institute for Research on Teaching was inaugurated at Michigan State University in 1976. Much of the research literature in my review is funded by or spawned from the research at this institute (Clark & Peterson, 1986).

MODEL OF TEACHER THOUGHT AND ACTION USED IN RESEARCH ON TEACHERS' THOUGHT PROCESSES

Below is an "advanced organizer" for my review of the literature on teachers' planning. This model, which was developed by previous reviewers of the research on teachers' thought processes, nicely pictures the manner in which researchers in this field tend to look at the teaching process (Clark and Peterson, 1986).

![FIGURE 3. A model of teacher thought and action.](image-url)
In the model, two domains of teaching life are depicted by circles; teachers' beliefs and thought processes; and teachers' actions and their observable effects. These domains differ in terms of observable behavior (the first circle depicts invisible behavior, the second circle depicts visible behavior) and in representing diverse fields of research on teaching (the first circle represents much of the Panel Six research emphasis, and the second circle represents much of the process-product research emphasis.)

The model suggests that teachers' beliefs and thought processes influence teachers' actions and their observable effects as the connecting arrows indicate. The model also suggests that teachers' actions and the effects those have also influence teachers' beliefs and thought processes (see connecting arrows). In other words, after teaching a class, a teacher may think about the next day's activities differently or transform some of his/her basic beliefs based on that day's interactions with the students.

The first domain represented by the left circle uses Phillip Jackson's designations for categories of teachers' thought processes: preactive, interactive, and postactive thinking (Jackson, 1968). Preactive and postactive thinking can be considered planning. This
thinking occurs before and after classroom teaching when the teacher is without his/her students. Interactive thinking is the thinking actually done while teaching in the classroom. These phases of teacher thinking are grouped with teachers' beliefs to comprise the domain and make up the categories that help shape the research foci in teacher thinking. Note, too, that within this first domain, the thinking processes and beliefs influence each other as the arrows within the circle indicate. Teacher planning may affect teachers' interactive thoughts and teachers' interactive thoughts and decisions may have some bearing on teachers' beliefs.

Similarly, the second domain represented by the right circle suggests that teachers' behavior influence students' classroom behavior. The students' classroom behavior, in turn, could influence student achievement. Student achievement, then, as the inner arrows indicate might influence subsequent teacher action.

Finally, in addition to these recursive and reciprocal influences, constraints and opportunities also influence teacher thinking, beliefs and action. These influences might be the school design, the principal, the community or the school's curriculum.

The following sections, which are based on this model, are reviews of literature dealing with teacher
planning and how it influences teachers' beliefs and teachers' interactive thinking. When possible, I also share findings that show how teacher planning influence actual teacher behavior and/or student response.

MODELS OF TEACHER PLANNING AND RESEARCH FINDINGS RELATED TO EACH

The model of teacher thought and action explained above defines planning as preactive and postactive thinking. Planning is the teacher thinking that goes on outside of the classroom without the students present. Planning might take place before teaching or after. Planning is not just thinking ahead, it also includes reflecting on implemented plans. Beyond this general definition of planning, little agreement exists as to the nature of teacher planning.

My review of the literature on teacher planning is divided into two sections to demonstrate how varied the conceptions of teacher planning are. The first section is devoted to a detailed summary of Ralph Tyler's prescriptive model of curriculum and instructional planning, which has been widely used in teacher preparation programs throughout America. I will also show how other educators have modified his prescriptive model. Research
findings related to actual teacher use of this modified prescriptive model will also be provided. In the second section I will present a detailed summary of Robert Yinger's descriptive model of teacher planning and the research findings related to that model.

RALPH TYLER'S PRESCRIPTIVE MODEL OF PLANNING

In *Basic Principles of Curriculum and Instruction* (1949), Ralph Tyler lays the groundwork for a systematic way of planning curriculum and instruction in American schools. What follows is a review of how Tyler's methodology of curriculum and instructional planning was first presented and then altered as teacher educators and administrators translated his ideas into models for teaching practice. Also included are research findings related to the actual use of the Tyler model.

Summary of Tyler's Model

Tyler begins his *Basic Principles of Curriculum and Instruction* (1949) by posing four questions that developers of curriculum and instructional strategies should consider:

a. What educational purpose should the school seek to attain?

b. What educational experiences can be provided that are likely to attain these purposes?
c. How can these educational experiences be effectively organized?

d. How can we determine whether these purposes are being attained? (Tyler, 1949, p. v-vi).

These questions provide the outline for my discussion of his work.

a. What Educational Purposes Should the School Seek to Attain?

Tyler's basic assumption throughout Basic Principles is that "all aspects of the educational program are really means to accomplish basic educational purposes" (Tyler, 1949, p.3). He acknowledges in the opening pages that these goals will always be a matter of choice, but he believes more systematic ways of selecting the goals are available and should be used (Tyler, 1949, p. 3ff).

Basic educational goals are met through the educational process. He defines education as follows:

Education is the process of changing behavior patterns of people. This is using behavior in a broad sense to include thinking and feeling as well as overt action. When education is viewed this way, it is clear that educational objectives represent the kinds of changes in behavior that an educational institution seeks to bring about in its students (Tyler, 1949, pp. 5-6).

Elaborating, Tyler argues that curriculum designers or teachers should be about the task of systematically and rationally setting educational goals. To set goals, they can 1) study the learners themselves as a source of
educational objectives, 2) look at studies of contemporary life outside the school, 3) get suggestions about objectives from subject specialists, 4) use educational philosophy, or 5) use psychology of learning theory.

Once these purposes are found, they should be stated in a form that could be helpful in selecting learning experiences and in guiding teaching. The form Tyler recommends is to state objectives in terms of changes that will take place in students. He does not believe that objectives stated in forms of teacher behavior, content coverage, or generalized patterns of behavior are fitting. Instead, objectives which identify both the end of behavior to be developed and the content or area of life in which this behavior is to operate are best. For example, Tyler considers these objectives to be stated to his liking:

1) The students will write clear, well-organized reports of social studies projects.

2) The students will develop an appreciation of the modern novel (Tyler, 1949, p.46).

The above objectives specify content and behavior change for students. They are also GENERAL objectives which Tyler prefers to specific objectives (Tyler, 1949, p. 57). However, general objectives need to be clearly defined. For example, a general objective related to "appreciation of literature" might be enhanced with a
teacher's general definition of "appreciation." The teacher might, for instance, define "appreciation" as the desire to read more literature, the effort to learn more literature, the effort to learn more about the material or author, or to express oneself creatively as a result of being stimulated by a work (Tyler, 1949, p. 61). All of these definitive refinements on "appreciation" provide specifics of the behavior or the type of appreciation the students will demonstrate.

b. How Can Learning Experiences Be Selected Which Are Likely To Be Useful in Attaining These Objectives?

Tyler defines a learning experience as "the interaction between the learner and the external conditions in the environment to which he can react. Learning takes place through the active behavior of the student; it is what he does that he learns, not what the teacher does... The essential means of education are the experiences provided, not the things to which the student is exposed" (Tyler, 1950, pp. 63-64). Tyler very much espouses the belief that the student should be an active learner.

These active learning experiences should be selected with five general principles in mind. First, for a given objective to be attained, students must have experiences that give them practice in the kind of behavior suggested by the objective. Second, the learning experience must
be satisfying for the students. Third, the active learning experiences should be within the range or ability of the students. Fourth, many different experiences can meet a single objective. Since one activity can help students accomplish many objectives, this gives teachers creative freedom in planning units of curriculum and instruction. Fifth, a single learning experience can bring about several outcomes. Therefore, the best activities are often those that meet many unit objectives efficiently and creatively.

c. How Can Learning Experiences Be Organized For Effective Instruction?

Tyler sees linear organization as a necessary ingredient of an effective curriculum because, if educational experiences are to produce a cumulative effect, they must build on each other. In order to build an effectively organized group of learning experiences; continuity, sequence and integration are needed. Continuity has to do with vertical organization. Recurring and continuing opportunity for skills to be practiced is necessary. Sequence is more than continuity. Conceivably, a major "practice" curriculum element could recur again and again but there would be no sequence for further development. Sequence emphasizes the importance of having each experience build on
another. **Integration**, then, is related to insuring that students have a unified view and have unified their personal behavior in relation to the larger curriculum. They can apply, in other words, their new-found expertise in other disciplines.

The elements of the curriculum can and should be organized into meaningful units by using a process of planning.

In addition to the points made above, Tyler encourages flexibility in planning; but this feature of Tyler's work, in particular, has not been evident in modified versions of his planning model. He encourages the use of "**preliminary flexible plans**" or so-called "source units." He asserts that plans should be flexible enough to permit modification:

(Source plans) are flexible enough so that they permit modification in light of the needs, interests and abilities of any group; and they are inclusive enough to cover a wide range of possible experiences from which those that are most appropriate for a given group may be selected (Tyler, 1949, p.101).

Within these flexible source units Tyler recommends the following: 1) a statement of major objectives, 2) a description of a variety of experiences, 3) an outline of cumulative experiences that will help students integrate the unit experiences and content, 4) a list of resource
materials, and 5) an indication of expected student development. This source unit is developed during what he terms a "preplanning" period.

Tyler, also argues that planning must be carried on while the units are actually being used. Student participation in planning, for example, requires some teacher openness and possible revision of earlier source plans.

d. How Can The Effectiveness Of Learning Experiences Be Evaluated?

Tyler believes learning experiences should be evaluated. He defines evaluation as "a process for finding out how far the learning experiences as developed and organized are actually producing the desired results," and he states that "the process of evaluation will involve identifying the strengths and weaknesses of the plans" (Tyler, 1949, p. 105). Student evaluations might take many forms. Tyler suggests that teachers use observations, questionnaires, samples of student products, and samplings of student reactions.

In evaluating a bit of curriculum and instruction, the objectives must first be clearly defined. The next step is to identify the situations which give the student the chance to express the behavior implied by the educational objectives. After this, evaluative instruments should be selected. After deciding on the
instruments, a means of getting the students records of behavior is needed. Once the instruments are used, summary appraisals should be made in the form of scores, descriptions or both. The results will be used to present student achievement. Hypotheses about the results should be developed. If the hypotheses check with the data, they likely explain the basis for why the curriculum worked effectively.

To sum up, Tyler defines the curriculum planning process as follows:

Curriculum planning is a continual process and that as materials and procedures are developed, they are tried out, their results appraised, their inadequacies identified, suggested improvements indicated; there is replanning, redevelopment, and then appraisal; and in this kind of continuing cycle, it is possible for the curriculum and instructional program to be continuously improved over the years (Tyler, 1949, p. 123).

**Modifications of Tyler's Model**

This section provides a brief overview of how Tyler's theory was put into practice by various practitioners in universities and in the field. Research findings are also shared that show how this modified planning approach influenced the actual planning activities of teachers and the classroom environments they created.
a. Hilda Taba's *CURRICULUM DEVELOPMENT: THEORY AND PRACTICE*

In the widely disseminated *Curriculum Development: Theory and Practice* (1962) Taba presents her synthesis of Tyler and Benjamin Bloom's taxonomy of objectives (1954) along with examples of her work with actual teachers who used her modified Tylerian model of curriculum and instructional planning. Bloom, of course, is responsible for "cleaning up" the process of making behavioral objectives. Straying from Tyler, Taba argues more forcefully for the use of specific objectives and uses Benjamin Bloom's prescriptions for creating them. Otherwise, her approach to curriculum and planning is similar to Tyler's as the outline of her approach suggests:

Unit planning is the process of

1. Diagnosing Needs
2. Formulating Specific Objectives
3. Selecting Content
4. Organizing Content
5. Selecting Learning Experiences
6. Organizing Learning Experiences
7. Evaluating
8. Checking for Balance and Sequence (Taba, 1962)

Like Tyler, Taba emphasizes the complexity of curriculum planning and argues that the teacher's unit plan is the
integral part of the overall curriculum for several reasons. First, the task of creating a unit plan requires as much theoretical knowledge as comprehensive K-12 curriculum design. Second, a teaching-learning plan is the point where problems of curriculum making are worked out realistically. Third, making unit plans is a creative endeavor which requires experimentation and revision as the teachers implement them in the actual classroom. Fourth, unresolved theoretical curriculum dilemmas can be worked out in a concrete setting. Fifth and finally, criteria for good curriculum acquire meaning only when they are applied to tangible content.

Unlike Tyler, however, Taba provides some actual examples and insights from her studies of teachers who actually used her model to make unit plans. For example, Taba alludes often to her work with teachers in the Contra Costa County Schools. She shows how elementary school teacher planners considered many planning variables as they created curriculum and instructional units on comparative culture and comparative geography (Taba, 1962). She gave examples to show how the teachers selected the basic ideas which formed the general concepts for content development, how the teachers came up with content samples, and how they developed diagnostic devices suitable to their needs as well
as other planning considerations. Taba did not share whether the students benefited from the unit nor how the units influenced teacher behavior.

b. Other Modifications of Tyler's Prescriptive Model

Evidently, many educators decided that Tyler and Taba's planning approach required too much orderly and careful thinking or that teaching the Tylerian planning process by having teachers actually engage in the entire process would be too tedious. To simplify the problems of teacher planning, many resorted to programmed instruction or elaborated on one variable of the planning process almost to the exclusion of all others. A handy guide by H.H. McAshan entitled Writing Behavioral Objectives: A New Approach (1970) captures the overall direction of this trend. Here is an illustrative sample taken from a real-world curriculum guide guided by his view of planning along with a sample of McAshan's programmed-instruction methodology used to introduce his new approach to making specific objectives:
Behavioral Objectives Guidelines

I. Delegated or Prescribed Need

A. Scope of program (primary)
   1. Movement exploration: (X—level 1) Students have participated in programs of exploration of fundamental movements, some of which are: walking, running, jumping, hopping, leaping, skipping, sliding, galloping, bending, turning, twisting, swinging, pushing, pulling, throwing, catching, striking, and many combinations of these.

II. Goal Statement (Communication Checks)

A. Behavioral domain: Psychomotor
B. Learner: Grade one students
C. Program variable: Fundamental locomotor and axial movements

III. Minimum Level Objective

D. Combine A, B, and C (above) into goal statement: To improve the fundamental locomotor and axial movements of grade-one students.
E. Identify type of evaluation or measurement instrument: Teacher-made test of locomotor and axial movements.

IV. Desired Level Objective

F. Combine D and E (above) into a statement: To improve the fundamental locomotor and axial movements of grade-one students as determined by a teacher-made test of locomotor and axial movements.
G. Identify and insert the success criteria or standards of how well the learner must achieve into F (above): To improve the fundamental locomotor and axial movements of grade-one student so that 80% of the students can perform correctly 75% of all the locomotor and axial movements described in a teacher-made test.

Sample Methodology for Teaching this Method

1. Quality education refers to the effectiveness of any educational program in meeting its own _____________________________.

2. The primary reason for the current emphasis upon writing behavioral objectives are to:
   (a)
   (b)
   (c)

3. Objectives intended to produce changes in learner behaviors are referred to as _____________________________.

4. Performance objectives that are nonlearner-oriented are called _____________________________.

5. According to the general literature, behavioral objectives can be effective when utilized:
   (a)
   (b)
   (c)
   (d)
   (McAshan, 1970, 3, p. 94)

FIGURE 4. Model for Making Specific Objectives
Research Findings on Actual Use of Variations of Tyler's Planning Model

By the time researchers began examining the actual use of Tylerian planning, Tyler's method of planning was reduced to descriptions such as a "rational means-end model" (Yinger, 1979) which recommends four essential steps for effective planning:

(a) specify objectives,
(b) select learning activities,
(c) organize learning activities, and
(d) specify evaluation procedures.

In fact this simplified model became almost a prescription for making complete unit plan. Modified forms of this model are still in use today in many teacher preparation programs and in schools.

Below are findings from surveys, laboratory studies, and naturalistic studies of classroom life that show to what extent the widely disseminated modified Tylerian model for planning is being used by teachers and the influence its use is having in the classroom.

a. Surveys

In 1970 Taylor studied planning in secondary British schools. By 1970, "rational means-end" planning had moved beyond America. Taylor was perturbed that American
theorists had made no "trips to the real world" to find support for their planning models (Taylor, 1970, 5). Taylor did just this. He surveyed 261 teachers to find out how they planned. He discovered that the primary planning concern for teachers was pupil needs, interests, and abilities. After considering students needs, they then focused on subject matter, goals, and teaching methods. The surveyed teachers thought little about evaluation or how their course fit into the larger curriculum. In Britain, Tyler's modified planning model was not actually used by teachers.

Zahorik (1975) asked 194 American teachers about their planning decisions. He, too, found that teachers were most concerned about pupil activities. Zahorik concluded that teachers do not begin planning by stating objectives as the modified Tylerian model suggests. In fact, he noted that objectives were rarely used.

b. Laboratory Setting Studies

Zahorik (1970) wanted to know what effect structured planning would have on actual teacher behavior. He gave teachers the same partial lesson plan to teach which included behavioral objectives and content to be covered (a unit on credit cards). The other six teachers were given some other task for the allotted hour and were told about the unit they were to teach right before walking
into the laboratory classroom. In the classroom Zahorik recorded teacher behavior that was sensitive to the students' needs and behavior that encouraged and developed pupils' ideas, thoughts and actions. He concluded from his comparative findings that teachers who used the linear planning model were more insensitive to pupils.

In a rather unnatural setting Peterson, Marx and Clark (1978) tried another research method to see if Zahorik's findings were right. They asked twelve teachers in a laboratory setting to think aloud as they planned instructional units for different groups of junior high school students whom the teachers had never met. Like Taylor, they found that objectives were not the starting point nor the focus of teacher planning. Teachers spent the most time planning content and instructional strategies. The least amount of time was spent on objectives.

c. Naturalistic Studies Related To Planning

Several naturalistic studies also add insight into the actual use of Tylerian planning. Eddy (1969), in showing how beginning teachers are socialized into an educational bureaucracy, provided a detailed summary of one elementary teacher's planning approach. Below is an excerpt:
Now the first thing I had to do in planning this plan book was to figure out a program for myself, my time allotments and what I was going to teach each day. That was the first step I thought best to take. So I looked in front of the plan book and there it gave time allotments for a week. In other words for social studies, you gave it 150 minutes. Now 150 minutes is roughly 30 minutes a day, five days a week. So I knew I had to have a social studies period every day. Now the music lesson was roughly 75 minutes a week, so I figured out that if I divided that in two I'd have a music lesson roughly about 35 to 37 minutes a week, twice a week, because music is a subject you don't have to promote much. The children are crazy about it and love to do it. The same is true with physical activities. We're supposed to have an hour a day according to the time allotment, so we have a gym period which is an hour twice a week, and then the other one we make up in the classroom. So I allowed for that, the same is true of arithmetic. I have that every day for half an hour. I have reading every day for 35 minutes. I have my language arts every day for 30 minutes. I have science three times a week for 30 minutes. I have health twice a week for 30 minutes... (Eddy, 1969, p. 38)

Eddy concluded that, because the administration encourages this type of planning, the school made "explicit the role of the teacher as a technician who enacts the policies formulated by those in managerial positions in the educational bureaucracy" (Eddy, 1969, p. 39). This study, too, confirms the basic notion that Tyler's method of planning is not being followed by teachers in the field, at least partly because they were asked to plan in the way described above, by filling in the time blocks.
In *Behind the Classroom Door* (1970) Goodlad and assistants surveyed 150 classroom throughout American to see if they did, indeed, meet up to ten reasonable expectations related to effective schools. Since these expectations would be realized partially through teacher planning, some of their findings are worth noting.

1. Concerning instructional objectives, the researchers made this startling conclusion: "If there were central concepts of children's need and interest guiding the selection of specific learning activities, they escaped our attention."

2. The researchers were struck with the dullness and lack of variety in the learning fare. Few teacher-made or child-made devices were seen. Instruction was overwhelmingly group-oriented rather than individualized.

3. Teachers did not rely on children as instigators and planners of classroom activity.

4. Grading procedures were traditional and standardized. Little criterion-referenced evaluation was observed.

5. Few classes ventured out to the larger community. No human resources were brought to the rooms.

Overall, the researchers felt that schools had become artifacts of a society that did not care (Goodlad, 1970). From this report of life behind the classroom door, we could perhaps argue that the teachers responsible for life within these classrooms were not acting out of Tyler or Taba's theory for curriculum development: no evidence of clear objectives, lack of variety in content and activities, little concern for student interests, and no
indication of alternative evaluation standards such as Tyler or Taba recommended.

Morine-Dershimer and Vallance (1976) looked at teacher's written unit plans. They collected two lesson plans from each of 20 elementary teachers. They judged these along Tylerian lines: statement of goals, source of goal statements, attention to pupil background and preparation, identification of evaluation procedures, and indication of possible alternative procedures. They found that the plans did not reflect main attention to behavioral goals, diagnosis of student needs, evaluation procedures, or alternative courses of action. As will be discussed in the next section, Yinger's studies on planning confirm these findings. Teachers did not begin with nor focus heavily on behavioral objectives (1977, 1978, 1979, 1981, 1982).

McCutcheon (1982) also looked at written unit plans and provided a few samples of elementary teacher's written planbook plans. Basically, the plans were simply reminders of what should be done for the day:

Reading
Group 1 read pp. 57-63. Discuss?
in TG p. 187 workbook pp. 12-13
Suffixes, Boardwork — suffixes, TG p. 188-199.

Social Studies
Mapreading, Dittos of Magellan's and DeGama's voyages.
Groups put on project maps or project globe
Discuss oceans and continents. (McCutcheon, 1982)
After analyzing the above planning process, McCutcheon suggested that perhaps the richest form of a teacher's planning was mental planning. Taking her notion from Dewey, she elevates this process by calling mental planning "deliberation." She argues that mental planning might well be the most professional of teacher activities, but in the same paragraph she notes that few teachers tried to relate theory and research findings to practice. The teachers do, however, think about the past and envision future plans.

McCutcheon lists several influences that cause teacher planning to be what it is. First, teachers complain that they received little training in planning in their education courses. They were taught to think of planning as that which is done on paper. They received no help with mental planning.

In the school system, the constraining influences on teacher planning were several. First, they complained about teacher isolation. Teachers were rarely able to plan with others, brainstorm, and get new ideas. Second, the teachers had to rely on materials close at hand and on textbooks that had errors. Other influences included administrative interruptions, time-allotment scheduling for subjects, and class size. Some of the teachers
studied were not allowed to use additional materials because memos were sent out by the principal requesting that teachers stick to the text.

Among many suggestions for improving teacher planning and the context of planning, McCutcheon agrees that teachers need to be exposed to notions about planning and the analysis of materials and their use. She suggests problem-solving sessions.

McLeod (1980) tried to find out when and if teachers tend to think about learning objectives. She conducted stimulated recalls with 17 kindergarten teachers and discovered that intended learning objectives were more often developed in the interactive phase of teaching not the preactive stage as should be the case with the modified Tylerian approach.

In "Learning to Teach Reading Comprehension in Cooperative Learning Groups" Lalik and Niles (1986) looked closely at the collaborative planning activity of preservice elementary teachers. They discovered that the preservice teachers were not "activities-driven" as much of the above research has suggested. Instead, the groups determined the goal of their instruction before selecting procedures. The goal was general as Tyler would have encouraged instead of specific as Taba would have wanted it. The teachers, then, came up with activities, thought
about content, came up with ways to implement the activities, and developed sequences for the activities as well as time allotments. Student evaluation procedures were also discussed. These preservice teachers had some Tylerian sense of how to go about planning for reading instruction.

In my review of the literature on planning, I found only one study that looked at teachers' planning and its effect on teacher behavior and student achievement. In Peterson, Marx, and Clark's (1978) study, twelve experienced teachers taught social studies lessons to three groups of junior high students. Prior to their teaching they thought aloud about their planning. The students completed attitude measures and achievement measures after the lesson.

As was the case in the other studies, most teacher planning statements focused on the content to be covered. The study also detected that the differences in teacher planning were related to teacher aptitudes. More verbal teachers were more productive and had more planning statements dealing with higher order subject matter than did the less verbal teachers. Teachers who scored high on conceptual level directed more attention to the instructional process and learner. The researchers concluded that differences in planning might be related to cognitive processing styles and abilities.
The researchers’ teacher behavior findings suggest that teachers who emphasized the subject matter tended to ask more questions in their classrooms about the subject matter and focused on subject matter more heavily. The cognitive level that the teacher planned to use and the actual cognitive level of the classroom discussions were consistent. Consistency was also evident in planned and actual instructional processes. Teachers who planned procedures to introduce activities, for example, spent more actual classroom time explaining procedures than did those who did not address this in planning.

This sole study simply tried to discern whether teachers improve their teaching after practice. The researchers found that, when using student achievement as an indicator, the teachers did not improve.

d. Summary. The above review suggests that Tyler’s method of planning is encouraged in teacher preparation programs, but it is not being fully implemented in real school settings. Some of the studies suggest that when a form of this model is used, teachers are less sensitive to student needs. None of these studies attempted to show how the use of Tyler’s modified prescriptive planning model influenced inservice or preservice teacher thought or the learning environments they created.
ROBERT YINGER'S DESCRIPTIVE MODEL OF PLANNING

In "A Study of Teacher Planning," Robert Yinger spent several months gathering ethnographic data on one elementary school teacher's planning process. This data was then used to develop a model which describes the components of her planning and their interrelationships. It has also been used as a basis for subsequent research.

Yinger calls his model "a process model" which he says represents "the individual, preactive deliberate information-processing involved in planning, from an initial idea to its execution in the classroom" (Yinger, 1982, p.244). He defines planning as "a process of preparing a framework for guiding teacher action, a process strongly oriented toward particular action rather than, say, knowledge or self-development. (It) involves teacher thinking, decision making, and judgement" (1979b, p.9).

Yinger's Model

Below is Yinger's general process model of teacher planning. It represents three distinct planning stages 1) problem-finding, 2) problem formulation/solution (design), and 3) implementation, evaluation, and routinization.
As an overview, problem-finding is the first step in his planning model. In this stage, a planning task is translated into a specific planning problem. The product of this problem-finding effort is a tentative problem-conception to be later developed in the second stage. The model in Appendix A shows how complex this initial stage of planning can be.

Most of a teacher's planning time and energy are invested in the second stage, the Problem Formulation/Solution (design) Stage. The thought process most evident in this stage is the design cycle. The initial planning task is repeatedly elaborated and tested mentally until an acceptable solution is found (Yinger, 1982). For fuller explanation of this stage, see the model in Appendix B.
In stage three the planned activity or strategy is actually carried out and evaluated in the classroom. This stage provides the teacher with information about the implemented plan which may lead to further modification or possibly even rejection of the plan. If the implemented plan is effective, it may eventually be routinized. Knowledge about the effectiveness or ineffectiveness of a strategy or activity is stored away in long-term memory. This knowledge, then, becomes part of the planner's repertoire of knowledge and experience which can be utilized throughout the planning process. See Appendix C for a fuller explanation of this stage of planning. In addition to creating this planning process model, Yinger also discovered other planning tools. He found that this teacher developed in her planning process instructional activities and teaching routines described below.

a. Instructional Activities

Instructional activities are the basic structural units of planning and action in the classroom. Almost all of the teacher activity within the classroom took place within the boundaries of an activity. All other activities were used to prepare for the next activity. Similarly, all forms of planning (daily, weekly, yearly) involved organizing and sequencing activities.
These activities served as "controlled behavior settings." In other words, the teacher created and controlled the classroom setting ahead of time by planning activities in the preactive stage of teaching:

Activities, as defined in this study, were equivalent to behavior settings, although they may be more accurately described as controlled behavior settings. Not only was the behavior of the teacher signalled and controlled by the setting as the ecological psychologists suggest, but the setting itself was largely created and controlled by the teacher ahead of time. Through planning, the teacher was able to structure activities to increase the probability of signalling and eliciting behavior that conformed to her purposes. Therefore, even if the teacher's behavior in the activity was largely a reaction to the pupils' actions in the setting, general boundaries and guidelines were already established for behavior through preactive planning (Yinger, 1977, pp. 14-15).

Seven features of Yinger's instructional activities were consistent with features of controlled behavior settings. For each instructional activity in the teacher's classroom, planning decisions were made about:

1) location, 2) structure and sequence, 3) duration, 4) participants, 5) acceptable student behavior, 6) instructional moves, and 7) content and materials (Yinger, 1977).

b. Routines

The teacher's planning technology also included the use of routines. Yinger defined "routines" as mechanisms...
repeatedly used 1) to establish and regulate instructional activities and simplify the planning process and 2) to increase the predictability and reduce the complexity of the teaching environment (Yinger, 1977, p. 16-17). Because the teacher made such active use of routines, Yinger described her planning as the process of selecting, organizing and sequencing routines.

The teacher developed several types of routines: 1) activity routines, 2) instructional routines, 3) managerial routines, and 4) executive planning routines.

Activity routines helped control and coordinate the features of instructional activities. The teacher routinized as many of the activity components as possible. By the middle of the school year only 14% of the instructional activities were not routinized. In other words, the teacher did not have to think anew each planning period about where a repeatedly used activity would be set, how long it would take or how it would be introduced.

Instructional routines are methods and procedures established by the teacher which help her make specific instructional moves. Examples of instructional routines might be questioning procedures, monitoring strategies, or methods for giving instructions. These were routines because they occurred over and over again in similar fashion.
Management routines control and coordinate classroom organization and behavior not specifically associated with an activity. They might regulate such things as transition between activities, collection of students' papers or procedures for ending a class session.

Executive planning routines are like cognitive strategies that activate and guide learning. In planning, these routines are a system of established thought patterns that activate and guide planning. They set patterns for planning activity. This snippet from his ethnographic study shows the executive planning routine his teacher used to make unit plans:

When the teacher planned a unit for science or social studies, she first gathered all the materials she could find on the topic, next she looked through the materials themselves or on ideas developed from the materials. Once she decided on a general sequence for the unit, she concentrated her planning on the selection and the sequencing of activities (Yinger, 1982).

These four types of routines increased teacher flexibility and effectiveness by freeing time and energy from many planning and implementation decisions. Fewer characteristics of instructional situations had to be evaluated, decided upon or manipulated. Second, they increased predictability and reduced the complexity of the classroom environment. Less time was spent on classroom procedure. More time was spent on content
since the students could better predict the direction of an activity and what was expected of them.

Research Findings on Use of Yinger Model

Clark and Yinger (1979) conducted three additional follow-up research studies. The first was a survey of teacher planning practices. In this study teachers described the kinds of planning they engaged in, the considerations and constraints that affected their planning, and their reasons for planning.

Yinger's earlier findings were supported. As Yinger found in his first study, the teachers did not begin planning with learning objectives. Instead, they planned around their students and around activities. These teachers often limited their search for ideas to resources immediately available. Teachers often let the search for new means to produce new results take a subordinate role to reproducing an element from memory since this method is faster than searching for a new one. Along the same lines, readily available materials are considered first simply because doing so is easier and faster. Like with the model planner, the most common form of written plan was an outline. Most planning, however, was done mentally (Clark & Yinger, 1979b), a fact that confirms the earlier findings of Yinger (1977).
In the second study teachers were asked to rate thirty-two different language arts activities in terms of attractiveness, appropriateness, probability of use, and effectiveness. One interesting result was that teachers engaged in a four-step process (another executive planning routine) when making judgments about activities. First, they tried to understand the activity. Second, they tried to imagine using it in the classroom. Then, they thought of ways to modify or adapt the activity to avoid problems foreseen in step 2; and finally, the teachers created a mental image of the revised version of the activity. This "mental version" seemed to be used to judge the merits of each activity (Clark & Yinger, 1979b).

In the third replication study, Clark and Yinger (1979b) again tried to trace the entire planning process. Five teachers kept journals documenting their planning and thinking about planning. Each teacher planned a two-week writing unit that had never been planned before.

Clark and Yinger found that each plan was unique because topics and activities for each plan varied. They did find support for the planning process, though. A cyclical planning process was used. The teachers did not begin with carefully stated objectives. Instead, they
began with a general topic idea and then elaborated on it. They also found evidence for the second and third stages of Yinger's process model. For example, one teacher spent a great deal of time elaborating her unit focus. The refining process of the third stage was also apparent.

A new finding in this replication study was that teachers had different styles of planning. Some were seen as incremental planners. They moved in a series of short steps, relying on day-to-day information from the classroom. Others were comprehensive planners. These planners were more concerned with developing a well-defined framework for future action at a more comprehensive level. They tended to look at the whole and were careful to specify their plans as completely as possible before they began to teach.

The incremental planners devoted time to the opening activity and then decided after implementation what to do next. These planners placed a high value on spontaneity and staying close to the needs of their students. Yinger and Clark concluded that these incremental planners were "in tune" with their students at the expense of not knowing where they were going. When they encountered difficulties in mid-implementation (mid-stream), they had no detailed plan to re-examine, adjust, trim down or
modify. For example, one incremental planner's opening activity failed so she decided to drop the entire unit (Yinger & Clark, 1979b).

The comprehensive planners, in contrast, spent much more time in the problem-finding and design stage. These planners made predictions about how students might or might not react to implementation of the plan. They developed fairly complete pictures of what might happen. When difficulties or distractions occurred in implementation, the planners could look back to the fully elaborate unit plan as an aid in deciding how to solve the problem. Whereas the incremental planners had to go back to square one when adaptation was necessary, the comprehensive planners had something to go back to. On the negative side, the comprehensive planners may have felt locked into a course of action that might have been inconsistent with the needs of the students. Or, the planners may have felt more frustrated when their plans did not go as they were envisioned (Clark & Yinger, 1979b).

In addition to this replication study, Clark and Elmore (1981) also found evidence of the use of the planning process model in their case study of Ms. Combs who engaged in yearly planning only and who actively used the same recursive planning process to transform the
prescribed curriculum to meet the interests of her students.

Morine-Dershimer conducted a study (1977) in which elementary teachers made written reading plans and discussed them daily with the researcher before implementing them. Although many possibly important planning variables were not listed in the written plan such as diagnosis of pupil needs, lesson objectives, and seating arrangement, the interviews revealed that they were considered earlier. Morine-Dershimer concluded that teachers formed a "mental image" when they planned. These "mental images" were then "nested" in a still larger construct called "activity flow" (1979). Joyce, in an earlier study (1978-79), defined "activity flow" as the progress of a class through each particular subject matter and through a balanced set of activities which range across subject matter and transpire within a school day or week. The planned activity flow influences the potential stimuli to which teachers can respond and establishes routines through which they will respond. In summary, activity flow establishes the parameters within which off-task and on-task behavior will be defined as well as appropriateness or correctness of response. It influences the availability of stimuli and helps create both the routines to be used and the parameters within
which the fine tuning, the daily planning revisions, will take place. Teachers rarely change the total direction of activity flow once it has been set (Joyce 1978-79, p. 75-77). This research also supports Yinger's contention that classroom activities serve as controlled behavior settings.

Other researchers have also noted this activity flow idea or nested routine idea. Clark and Elmore (1979), for example, observed elementary teacher planners in the first five weeks of the school year. They found that the teachers created routines that established the structural and social features of the classroom that then persisted throughout the year. Others have noted similar set systems (Morine, 1979; Shultz & Florio, 1979; Bromme 1982).
INTERACTIVE TEACHER DECISIONS AND HOW THEY ARE INFLUENCED BY PLANNING

In recent years many studies have been conducted on teachers' interactive thought and decision-making (Peterson & Clark, 1986). Interactive teacher thinking occurs while teachers are in the classrooms actively engaged with their students. The major research question in this research field is whether teacher interactive thought is primarily reactive or reflective. To get at this global question, the researchers deal with aspects of interactive thought such as the content of teachers' interactive thoughts and the antecedents of teachers' interactive thoughts (Brophy & Rohrkemper, 1981; Calderhead, J. 1981; Clark & Peterson, 1981; Clark & Peterson, 1986; Dolye, 1979; Marx & Peterson, 1981; Olson, 1981; Peterson & Clark, 1978; Shulman & Elstein, 1975; Wodlinger, 1980). The studies cited below deal with the relationship between teacher interactive thought and planning.

THE IMPACT OF PLANNING ON INTERACTIVE DECISION-MAKING

In "Planning and Classroom Reality: An In Depth Look," Morine-Dershimer (1978-1979) described discoveries from her three case studies of teacher interactive
decision-making. She found that the difference between the teacher's plan and classroom reality was a key determinant of the nature and amount of decision-making of the the teachers under study. Stimulated recall protocols conducted for eighteen other lessons also revealed that the degree of discrepancy between teacher plan and classroom reality was a critical variable in determining the way teachers made decisions in the classroom.

One case study was devoted to a teacher who was labeled "image-oriented" in her interactive thinking. In stimulated recall interviews, she usually explained classroom routines that were being implemented instead of discussing decisions being made at the time. Throughout her teaching one could see that she was sticking close to the objectives she had in mind for the students. She discussed alternative procedures in terms of standard procedures she had already established and had modified only slightly. She felt generally pleased with the way things went as if the sessions had conformed to her image of what should have happened. Thus, she seemed to have selected and refined an instructional system that met an important teaching objective and was satisfied with the way the system was operating. The teacher's plan and classroom reality were closely matched. Since the reality of the situation did not intrude because there
was little discrepancy between teacher expectations and the actual events in the lessons, the teacher was operating primarily out of pre-formed images of the pupils and of the instructional process. The decision points that did arise were handled readily by established routines. Few on-the-spot decisions were required. Thus, Morine-Dershimer concluded that this teacher was image oriented in her interactive thinking (1978-1979).

The second teacher was more "reality-oriented" in her interactive information-processing. This teacher tended to discuss decisions rather than to offer explanation of procedures she typically used. The teacher made most mention of pupil-related decisions but still alluded to plan-related decisions and supplemental decisions. Instructional concerns for this teacher were pupil learning, pupil attitudes, lesson content, and modification of procedures. Observations of pupil verbal behavior were the most frequently mentioned source of information whereas teacher awareness was expressed primarily in comments about instructional principles being used.

This teacher did see a discrepancy between her lesson plan and the classroom reality. Pupils were not always responding in expected ways, but these discrepant answers were not perceived as pupil error for the most
part. Thus, discrepancy was not critical to pupil learning. There was no perceived discrepancy in relation to the teacher's major goal, but there were times when students gave answers she did not expect. These answers made her make a decision on the spot as to how to address this acceptable but unexpected student response. This teacher was reality-oriented because she was very aware of actual pupil behavior, although observation was focused by the lesson plan. The problems that arose, though, were handled by "inflight" decisions instead of with routines.

The third case study teacher was labeled "problem-oriented" in her interactive information processing. The teacher tended to discuss pupil-related decision and to give descriptions of the events that were occurring. The principal source of information identified by this teacher was observation of pupil nonverbal behavior. Teacher awareness was high, with attention being given about equally to identification of alternatives, statements of instructional principles being used, and expressions of feelings experienced at various points in the lessons. Overall, the teacher's report of her interactive thought suggests that she was very aware of but not very satisfied with the compromises she had to make in her lesson. The goal was to have children
succeed at a task so they could proceed with confidence on their own. It was disconcerting to find that the children could not handle the task. She perceived a major discrepancy between the teacher plan and the classroom reality. Her information processing was, therefore, characterized as "problem-oriented."

Decision-making was somewhat curtailed. Few immediate solutions to the problems were identified on the spot. More indecision was evident. To deal with the situation, she postponed decision-making.

Morine-Dershimer concluded from these studies that perceived discrepancy between teacher plan and classroom reality may be a crucial factor in determining whether interactive decision points are handled by established routines, by in-flight decision, or by postponement of decisions to a later time when the opportunity for more reflective thinking will be available (1978-1979).

MODEL OF INTERACTIVE DECISION-MAKING RELATED TO PLANNING

Several researchers have developed models of teachers' interactive decision-making (Peterson & Clark, 1979), but the only one that accounts for preactive teacher thinking or planning is the model developed by Shavelson and Stern (1981). Basically their model assumes that teachers' interactive teaching may be characterized
as carrying out well-established routines. The model suggests that teachers form a mental image which is activated from memory as a plan for carrying out interactive teaching:

These images or plans are routinized so that once begun, they typically are played out, much as a computer subroutine is. Routines minimize conscious decision making during interactive teaching and so "activity flow" is maintained. Moreover, from an information-processing perspective, the routinization of behavior makes sense. Routines reduce the information load on the teacher by making the timing and sequencing of activities and students' behavior predictable within an activity flow. (p.482)

Figure 6 is an outline of their model.

Teachers have several decision options. When teachers are carrying out routines, they may notice a cue. If this classroom cue is within tolerance, teachers continue with their routines. If the perceived cue is not within tolerance, the teachers can take immediate action or if delayed action is necessary, they can remember to take delayed action or store the information for future consideration.

This model, of course, assumes that teachers do, indeed, create routines and act out of them.
FIGURE 6

Model of Interactive Teacher Thinking
TEACHERS' BELIEFS

In the model of teacher thought and action, Clark and Peterson (1986) note that teachers' beliefs are also a part of teacher thinking. Beliefs can influence and be influenced by teachers' thought processes. Additionally, they can also impact on teaching action and consequently on the nature of the classroom environment.

Recently, Eisenhart et al. (forthcoming) reviewed naturalistic studies of the last twenty years to see if teachers' beliefs about certain teaching activities were consistent across the profession. Their ethnographic analysis of this literature was coupled with data analyses from ethnographic interviews of fifty-six beginning teachers. They found that teachers do, indeed, have consistent beliefs about certain teaching activities. Teachers feel positive toward in-class instructional activities in which the teacher has responsibility, expertise or control. Teachers reflect a negative orientation toward peripheral or noneducation activities in which the teacher takes little responsibility, has or wants no expertise, and has (or wants) no control.
CHARACTERISTICS OF PLANNING MODELS

In this section, I briefly reviewed the intent and features of the rational means-end and creative planning models. This review of these planning models' features was used to explain the plausibility of the hypotheses posed in this study.

Rational Means-End Planning

a. Intent. The intent of the rational means-end planning model used in my study is to provide teachers with an outline of Ralph Tyler's theory for constructing sound curriculum and instructional units. The rational means-end planning model is a simplified version of Tyler's strategy for making unit plans. Unlike Tyler's model, this model does not mention the strategies he encouraged for developing a rationale, stating objectives, making decisions about activities, and formulating evaluations. Nor does it encourage the recursive nature of planning that he envisioned. This modified Tylerian model, which is representative of the most pervasive planning strategy encouraged in teacher preparation programs today (Schubert, 1986, 1980), encourages teachers to make a written document that demonstrates on paper how objectives will be met in the American classroom.
b. **Features:** The rational means-end planning model is a one page modified model of Tyler's basic principles of curriculum and instruction (See Chapter 1, Figure 2 for the rational means-end planning model).

1) **Unit Title:** The model's first organizational feature is the unit title. The inclusion of a title requirement encourages preservice teachers to develop the unit with an overarching organizational image in mind.

2) **Rationale.** The second feature is the rationale. The rationale is delimited by a series of questions posed in parentheses. The questions in parentheses are as follows: Why are you teaching this? What is the theory? Grade Level? These questions organize the rationale decision making around considerations of educational practices, theory and the grade level of the students.

3) **Objectives.** The third feature is the unit objectives. Again, this portion of the outline is focused by a statement in parenthesis. This enclosed statement (see planning model for a clearer picture) encourages teachers to set behavioral objectives for students, as opposed to setting teacher objectives or goals. It clearly suggest that teachers should think of the changes they would like to make in student behavior. When this model was introduced to the preservice teacher in my study, an additional handout was provided to the
help this preservice teacher use Bloom's taxonomy of objectives to make her behavioral objectives. By including this handout and emphasizing the behavioral objectives, this model and the introduction to it espouses a definite theory of education, that the best way to bring about student changes is to set objectives, then find activities that will help students make those changes.

4) Activities. The fourth feature of this outline is the activity section which is divided into three sections: introductory activity, activities, and culminating activities. The activities section is shaped by the statements enclosed in parentheses: 1) What things will you do to accomplish your objectives? and 2) these activities are not necessarily in order. The model encourages preservice teachers to list possible activities that could be used throughout the unit. These activities do not need to be written in any certain order.

5) Materials. The fifth feature of this outline is a materials section. It, too, is shaped by an enclosed comment: "What do you need to accomplish your objectives and carry out your activities?" This section is an organizational step for planners. Once they have their objectives and activities set, they can make a list of the materials they need.
6) **Evaluation.** The last feature of the planning model is the evaluation section which is explained further with the question: "How do you plan to assess student accomplishment of objectives?" This feature reinforces the overall intent of the planning model, that the purpose of schooling is to see to it that particular changes in student behavior are encouraged. The teacher is responsible for assessing change in the students' behaviors. Ways of assessing changes are to be listed in this section of the plan.

c. **Implicit Assumptions of the Model.** The rational means-end planning model suggests that the steps encouraged in the model are necessary and sufficient for effective planning. If teachers create a coherent unit along the guidelines provided, they have planned well and are ready for the classroom.

d. **Impositions of the Rational Means-End Planning Model on the Natural Planning Process.** Yinger's planning process model, which was introduced and explained in full in chapter two, is a descriptive model of teacher planning. This descriptive planning model was not intended to represent an ideal planner. Instead, it describes how one effective teacher and other teachers in replication studies plan when they are not asked to follow prescriptive planning models. An assumption of
this study is that these teachers have not previously been heavily influenced by a prescriptive planning model. Yinger's elementary teacher, for example, did not go through a teacher preparation program. A teacher who is required to use the rational means-end planning model would be asked to impose on this natural method of planning in several ways.

First, the rational means-end planner would be responsible for creating the rationale for her unit. Yinger's natural planner did not create a rationale since the aims and goals of her curriculum were already established by the school.

Second, the rational means-end planner would have to develop evaluation standards. This would be an imposition on the natural planner's method since she rarely addressed the issue of evaluation in her planning process. Again, the standards of evaluation were provided by the school.

Third, the use of the rational means-end planning model encourages teachers to proceed in a more organized and logical fashion than is true for the natural planner. Thus, the natural planner would be encouraged to develop a linear thinking process where none existed before.
Fourth, Yinger’s planner would be required to make a structured, written unit plan. This would be an imposition since she did most of her planning mentally.

Fifth, a teacher who was asked to plan using the rational means-end planning model might not routinely consider other planning variables that natural planners address. For example, the teacher might not think about nor develop management strategies, instructional strategies, or executive management strategies consistent with objectives since the model focuses more on the creation of and meeting of narrowly-focused student objectives than the maintaining of a learning environment through the use of teacher routines.

Sixth, the elaborate activities generation in the natural planner’s problem-finding stage might be stymied as the rational means-end planner immediately begins to look for activities that would clearly meet the stated objectives and whose outcomes could be evaluated.

Creative Planning Model

a. Intent. The intent of the creative planning model is to assist preservice teachers with their planning by providing them with a creative, recursive thinking strategy that helps them create, evaluate, and sustain sound educational environments by considering
many educational design variables in all phases of teaching and to make improvements of their classroom environments in light of those considerations. The creative planning model is designed to help teachers realize that planning is an ongoing thinking process that requires creative energy both before and after teaching. The model is an outgrowth of 1) research on the creative process, 2) writing-to-learn theory and research, and 3) ethnographic studies of natural teacher planning. The model is intended to be of service to the teacher, not a model that provides some accountability check on the teacher. Unlike the rational means-end planning model, the focus of evaluation for creative planning is not on the students' reaching behavioral objectives at some future point but on the evaluation of the daily classroom environment and its potential for making learning beneficial and stimulating for students. Of course, "beneficial and stimulating" will have to be defined by each of the planners in accord with the goals of their institutions. For example, the creative planner in my study is encouraged to define "beneficial and stimulating" as "actively engaging students in all the language arts." To have teachers actively engaging students in all the English language arts is the overreaching goal of her English education program. Science teachers will have a
different goal for assessing the daily activity of classroom life. The goal might be, for example, to have students constantly engaging in scientific inquiry. It is up to the teacher, the educational designer, however, to make those language activities and scientific inquiries beneficial and stimulating for the students. The creative planning model provides a strategy for utilizing creative thinking to make these stimulating environments possible.

b. Features. Like the rational means-end planning model, the creative planning model is presented in a one-page document (for creative planning model, see Figure 1 Chapter One)

1) Title. The model's title is "Creative Planning for Creative Teachers." This title is a feature which helps teachers remember the creative connection they are supposed to make when they are introduced to the model. The model is introduced by having teachers think about people whom they know or whom they have read about and who are considered to be creative. They are asked to share within small groups the creative processes these creative people engage in. When the groups come together and share their findings, they discover that many creative people in diverse fields engage in a similar creative process: they brainstorm and/or research for a
long while; next they start to design and work out the structures for their products or productions; then, they revise and revise until the creative works are consistent with their images and are ready for some intended audience. When the creative planning model outline is distributed, the teachers are encouraged to see that educational planning can be creative, too. They are encouraged to make the connection that teachers can be educational designers who create fluid classroom environments that are specially suited to a special audience: their group of students. They are also encouraged to see that educational design is as complex as other design professions. They are encouraged to take a look at all of the design variables that might be involved in planning stimulating environments.

2) Creative Thinking Strategy. The second feature of the creative planning model is an outline of a creative three-stage recursive thinking process. The three stage recursive thinking process includes a PREPLANNING stage. This stage includes brainstorming, researching, collecting, generating, and collaborating. These activities are to be used when considering the design variables listed in the model. The second stage is called the PLANNING stage. In this stage teachers will begin to organize their thoughts and develop a
meaningful unit of instruction based on the insights they reaped from their preplanning activities. This stage is characterized by the present participle verbs organizing, sequencing, visualizing, integrating, and designing. The focus at this stage is on bringing all the planning design variables together in a coherent way. Unlike the rational means-end planning model, the creative planning model is recursive because the thinking encouraged is ongoing and is in a constant state of revision.

The POSTPLANNING stage is characterized by these activities: experimenting and testing by teaching, evaluating, reorganizing, revising, internalizing, storing away and creating sound methods. These listed activities suggest that teachers should try out their plan in the classroom and then make revisions if necessary. If implemented strategies, activities or sequences of instruction work, they can be stored away in memory or in a file to be used over again in useful ways.

3) Educational Design Variables. The third feature in the creative planning model is a listing of educational design variables. Educational design variables are variables that tend to have an impact on the classroom environment and, because of their impact, should be considered in the planning process. These variables are to be addressed in the preplanning,
planning, and postplanning stages. In the preplanning stage the teachers about think the unit of instruction. In the postplanning stage teachers look back at these design variables to see if they contributed to the successes or weaknesses of the classroom environment.

Some of the design variables have to do with classroom constraints that impact on the type of learning activities that are possible: physical characteristics of the classroom, other available school space, number of students and number of periods. Although these can be considered constraints, they can also be considered as variables that spawn creativity. This idea was discussed in the presentation of the model which was conducted at the beginning of the student teaching quarter. The teacher is encouraged, for example, to think of ways she could transform the environment. For example, she is encouraged to think about ways that twenty students could successfully interact on a regular basis.

One educational design variable that is highlighted in the creative planning presentation is pupil characteristics. Teachers are encouraged to do naturalistic research in their own classrooms to get to know each student's ways of living and thinking.

The thinking process in the model encourages teachers to generate activities, talk with others about those,
and collect activities. These are also evaluated on a regular basis in the postplanning stage.

The model encourages teachers to look beyond their classrooms to the school objectives and to the current social events that may impact on classroom content or activities.

The thinking strategy is to be used with evaluation procedures as well. Ideas for successful evaluation standards are developed, tried out, analyzed, revised and stored away as either a successful or unsuccessful approach in certain settings.

In all stages of planning, the planner is encouraged to think about successful management strategies. An example of a management strategy is to think of a quick way to break students into small groups.

The model also lists executive management strategies. These are strategies that enable teachers to handle all of their planning activities. Examples are finding an effective way to collect activities such as an activity file and finding new ways to use the computer to make compilation of student records more manageable.

Personal teaching refinements are considered a design variable. Teachers, for example, who decide they want to use more metaphors to illustrate new concepts will have an impact on the nature of the classroom
environment. This variable also encourages the preservice teachers to rethink objectives for themselves in light of classroom monitoring.

Professional goals are considered a design variable because teachers sometimes need to use data collection methods in their classrooms and so must consider how these goals can be met without interfering with student learning. Reaching professional goals might mean that teachers would have to work out additional executive management strategies so that they could have more time, for example, to write for publication.

Finally, the last design variable in this section is related to instructional goals. After brainstorming on all of the above variables in no particular order, the teachers begin to formulate or reformulate general goals for units of instruction. The goals will be more focused in the planning stage and evaluated in the postplanning stage.

4. Evaluation of Educational Design. The last feature of the creative planning model is the evaluation standard for the educational design. Unlike the rational means-end planning model, the creative planning model has a separate evaluation for the educational design. An aesthetic design standard is listed: Does form follow function? This is a modern art evaluation which asks of
a work, is it perfectly suited to do its function? An educational design is successful when it is perfectly suited to its function, that is, when it is beneficial and stimulating for students.

c. Implicit Assumptions of the Model. A feature of the creative planning model that is not explicitly stated in the model but that is encouraged in the presentation of the model is that writing is an effective tool in the planning process. Writing is encouraged in all three phases of the process. In the preplanning stage writing can be used to list all the activities that come to mind, all the planning constraints and suggestions for utilizing them, and thoughts about philosophy of education. In the postplanning stage, writing is most crucial because it can capture all the wisdom that is reaped from daily analyses and it can be readily used again and again in making decisions about classroom design. Keeping a postplanning journal is a disciplined way to think deliberately about teaching on a regular basis. A daily fifteen minute journal reflection on what happened in the classroom is encouraged in this model especially for beginning teachers who do not have a very large nor internalized knowledge base about life in classrooms. The writing helps them develop this base. The creative planning model also suggests that planning is a creative,
recursive thinking process and that planning is a thinking activity geared toward creating an educational design that is beneficial and stimulating for students. The model also implies that writing about teaching is an effective way to improve teacher thinking and planning. Finally, the model is implicitly designed to empower teachers by helping them see that they are responsible for creating the educational design, that when something successful or unsuccessful happens in the classroom it is due largely to the strengths and weaknesses of the educational design. In other words, the students will not be blamed as being incapable of fitting into the educational design: instead, the designer will assume a major responsibility for the outcomes of the environment.

d. Impositions on the Natural Planning Process. The thinking strategy encouraged in the creative planning model is an expansion of the natural planning process. In fact, the thinking strategy encouraged in the creative planning model is based, in part, on the natural planning model. Writing process terms, though, are adapted (i.e. preplanning instead of prewriting) to introduce the natural thinking process instead of information-processing terms which Yinger used. The creative planning model enlarges the planning task of natural planners in three ways. First, the creative
planning model encourages teachers to go beyond their natural way of planning to consider design variables that they might otherwise overlook. For example, Yinger stated that most of the natural planning was toward "preparing a framework for guiding teacher action, a process strongly oriented toward particular action rather than, say, knowledge or self-development" (Yinger, 1979). The creative planning model, however, strongly encourages development of teaching knowledge, subject matter knowledge, and professional development.

Second, the creative planning model also encourages the use of writing as a way to help teachers think more creatively and clearly about their planning. Yinger noted that most teachers relied on their memories instead of searching for additional materials or activities. In other words, they often used activities that immediately came to mind. A planning notebook or design manual, however, can help teachers keep track of their designs and previous thinking about teaching. It can be used as a resource for activities as well as a collection of case studies related to the solving of classroom problems and concerns.

Third, the creative planning model also requires more of an initial time commitment when making unit plans than the natural planning process requires simply because
the teachers are encouraged to write out their thoughts instead of not writing them out. However, planning time and energy can be markedly reduced when a teacher acts out of highly effective routines as Yinger noted. Perhaps the writing out of teacher thinking will also help teachers create more effective routines which will eventually save them time once the routines are established.
CHAPTER 3

METHODOLOGY

The purpose of this chapter is to present the outline of the research design and methodology of my study. The chapter will follow a standard ethnographic design outline which includes the 1) problem statement, 2) purpose of the study, 3) questions the study addresses, 4) the working hypotheses for the study, 5) the outline of the research design, and 6) the data collection and data analysis methods used. It will also include a section on reliability and validity safeguards used in this study.

PROBLEM, PURPOSE AND RESEARCH QUESTIONS

PROBLEM STATEMENT

It is not known what impact prescriptive planning models have on preservice teacher thought and the classroom environments they create when those teachers are taught those models and required to use them.

PURPOSE

The purpose of this study was 1) to develop grounded descriptions of two preservice teachers' planning
thoughts and the classroom environments they create and 2) to provide a theory that helps explain the impact of the prescriptive planning models they were taught and required to use on their thought and the classroom environments they create. One preservice teacher used a creative planning model. The other preservice teacher used a rational means-end planning model. The descriptions of what happened when the models were used were developed based on the questions listed below.

QUESTIONS TO CONSIDER

The questions posed for this study were organized along the research foci presented in Clark and Peterson's (1986) "Teachers' Thought Processes." Questions posed were related to the preservice teachers' preactive, interactive and postactive thought; their beliefs; and the classroom environments they created.

Preactive Thinking

How did the preactive thinking of the preservice teacher who used the creative planning model differ from the preactive thinking of the preservice teacher who used the rational means-end planning model?

"Preactive thinking" is defined as teacher thought directed toward preparing for instruction. Teacher
thoughts are operationally defined in this study as phrases or clauses, made by teachers in writings or interviews on classroom life.

a. As the preservice teachers made their unit plans, how did their preactive thoughts differ in terms of number of statements related to the rationale, objectives, pupil characteristics, activities, evaluation standards, course content, and planning process statements used?

b. As the preservice teachers made their unit plans, how did their preactive thoughts differ in content and, if differences did exist, were they attributable to the planning models used?

Interactive Thinking

How did the interactive decision-making of the preservice teacher who used the creative planning model differ from the interactive decision-making of the preservice teacher who used the rational means-end planning model?

"Interactive thinking" is defined as the teacher thought while the teacher is within the the classroom during instructional periods (Clark & Peterson, 1986). Interactive decision-making is a facet of interactive thinking that is specifically related to moments in which a teacher elects to make changes in her planned classroom
activity. Interactive thought was observed and analyzed in terms of these questions:

a. the number of interactive decisions made by each preservice teacher;

b. the types of interactive decisions made by each preservice teacher;

c. the sources of information which provoked these decisions; and

d. the relationship between their interactive decision-making trends and the planning model used.

Postactive Thinking

How did the postactive thinking of the preservice teacher who used the creative planning model differ from the postactive thinking of the preservice teacher who used the rational means-end planning model?

"Postactive thinking" is defined as teacher thought directed toward evaluation and/or follow-up work on the preceding instructional period (Clark & Peterson, 1986).

a. After implementation of a lesson, how did the preservice teachers' postactive thoughts differ in number in terms of the following categories: 1) rationale, 2) objectives, 3) activities, 4) evaluation standards, 5) class composition, 6) individual students, 7) overall impression of classroom activity, 8) content and/or
materials, 9) teaching style, 10) planning process, 11) management strategies, 12) instructional procedures, 13) liking/not liking teaching, 14) professional teaching goals and 15) cooperating teacher concerns.

b. After implementation of a lesson, how did the preservice teachers' postactive thoughts differ in terms of content along the same lines cited above?

Classroom Environments

How did the classroom environment of the preservice teacher who used the creative planning model differ from the classroom environment of the preservice teacher who used the rational means-end planning model?

The "classroom environment" is defined as the total ecology of the classroom (Yinger, 1977). It includes the interaction of the physical environment, the teacher, the individual students, the plan of instruction with all its features, as well as the larger school community's impact on the classroom. For the purposes of this study, classroom environmental features will be observed and analyzed in terms of the following questions:

a) Objectively, how did the preservice teachers' classroom environments compare in terms of 1) variety of activities used, 2) number of language arts incorporated and the total time expenditures for each, 3) types and
amounts of group and individualized activities used, and
4) general degree of student involvement in language arts encouraged?

b) Subjectively, how did the preservice teachers' classroom environments compare in terms of the cooperating teachers' and students' perceptions of the classroom environments?

**Before and After Beliefs on Teaching and Planning**

How did the before and after teaching and planning beliefs of the preservice teacher who used the creative planning model differ from the before and after teaching and planning beliefs of the preservice teacher who used the rational means-end planning model?

"Beliefs" is defined as thoughts related to "attitudes consistently applied to activities or attributes" (Eisenhart et al., forthcoming).

**WORKING HYPOTHESES FOR MY STUDY**

Using the literature review findings and my analysis of the impositions likely to arise when prescriptive planning models are encouraged, I developed tentative assertions which shaped my ethonographic study's research questions, data collection, and analysis.
My study's purpose was to determine what impact differing prescriptive planning models have on preservice teacher thought and action. Specifically, two preservice teachers (from the same teacher preparation program, of similar ability, and who teach the same units in similar classroom) were taught to use different perscriptive planning models. One preservice teacher was taught and required to use the creative planning model, and the other was taught and required to use the rational-means-end planning model. Their preactive, interactive and postactive thinking was examined as well as the classroom environments they created. These three categories of inquiry are consistent with the categories Phillip Jackson (1968) developed and that are used today by researchers on teacher thinking (Clark & Peterson, 1986). These categories were used to shape my working hypotheses.

Preactive Thinking

Morine-Dershimer (1977, 1978, 1979) and Clark and Yinger (1979) categorized teachers' planning statements (or thoughts) in terms of rationale, objectives, pupil characteristics, activities, evaluation standards, course content and planning process statements. My working hypotheses for the influence of the prescriptive planning models on the preservice teachers' preactive thinking are along the categorical lines cited above:
a. **Rationale.** The creative planner will devote more thoughts (phrases or clauses in writings or interviews) to the unit's rationale than the rational means-end planner because the creative planning model encourages the preservice teacher following that model to engage in a variety of heuristics—brainstorming, collaborating, researching—to enable her to write about her philosophy of education, her theories of learning, and other pertinent educational design variables that could help shape the rationale. The rational means-end planner, in contrast, will limit her written rationale discussion to a statement of her rationale in terms of the theory she used, the educational practices she believes in, and the grade level she will be teaching. In other words, the rational means-end planner will describe her rationale as the rational means-end planning model encourages her to describe it.

b. **Objectives.** The objectives of the preservice teachers will differ. The rational means-end planner will develop behavioral objectives using Bloom's taxonomy of verbs to aid her in formulating specific objectives for student outcomes. The creative planner will state educational goals that serve as environmental directives for teaching and classroom life.

c. **Pupils.** The teachers' statements about pupils will differ. The rational means-end planner is not
encouraged to think about individual students nor to do research designed to aid her in the addressing of special student needs. The creative planning model, however, encourages preservice teachers to do naturalistic research within the classroom before they start teaching. Therefore, the creative planner will have more planning statements about individual students than the rational means-end planner.

d. Activities. The activities that both preservice teachers use will be the by-products of their teacher preparation program and their own ingenuity. Both will have many language arts activities; but, since the creative planner is encouraged to think about how each activity will affect or is affected by each design variable, she will give more rationales for each activity than the rational means-end planner. The rational means-end planner will state that the activities she selected were selected because they advanced her objectives.

e. Content. First, both preservice teachers will have detailed insight into the play they are teaching. Both preservice teachers have an expressed "love" of Shakespeare, extensive background preparation in Shakespearean studies, and a commitment to prepare ahead of time for interactive moments that may require their
expertise in knowledge of Shakespeare. This investment in and commitment to Shakespearean studies will confound both planning models directives on content.

Second, both will naturally study and do research on the play. This study and research is not consistent with the natural planning process Yinger described because he studied an elementary teacher who did not need to devote as much time to content preparation such as reading a dense play, doing research on the life and time of the Elizabethan period, reading critical analyses of the play, and reading other Shakespearean plays related to the play actually taught. Both of these preservice teachers, however, will have the planning task of designing an entire unit. Their only directive will be to teach the play *King Henry IV* to twelfth-grade students for one month. No methods, additional content requirements, nor resource restriction or directives will be provided. They both will have access to a university library, access to the extensive methods materials in a self-instructional teaching lab, as well as access to Shakespearean scholars. They will have to decide what will be taught within the play. Content guides are not provided. Their content selections are expected to have more to do with their personal understandings of the play than with the planning models they used.
f. **Planning Process Statements.** The preservice teachers' planning process statements will differ markedly. The rational means-end planner will make statements about her behavioral objectives and whether they are being met. She will make statements about whether her evaluation standards are accurately measuring her objectives. She will wonder, too, if her activities are really lending themselves to the objectives she has set. The creative planner, on the other hand, will make statements about preplanning and postplanning. She will make statements about how she revises her daily plans as she monitors daily classroom happenings. She will also speak or write about brainstorming, about being creative, about her "form" following her "function." Both planners will use the planning jargon they were given to describe and guide how they think about their planning.

**Interactive Thinking**

Another question of interest is to determine how the preservice teachers differ in their interactive decision making. I explored this question by studying the types of decisions they made, the instructional concerns they had at those decision points, the sources of information that triggered their decision points, and the type of general thoughts they had at their decisive moments (Morine-Dershimer, 1979).
The rational means-end planner will have more plan-related decisions because she will be constantly aware of the objectives the students are supposed to be meeting. She will make decisions to keep the students engaged in activities that will help them meet the objectives she has set for them. The creative planner, however, will be quicker to pick up on other pupil-related cues and make decisions based on those. Since she will be eager to make the educational environment stimulating for the students, she will be more apt to change direction or focus in light of these student cues. Since she is not bound by meeting objectives, she will regroup and perhaps change her goals to better meet what she believes are the needs of the students. At the same time, however, she will not let the students rule the classroom and direct its course. She will have an internalized plan and will only accommodate student directives that fall within the parameters of her student-centered plan. The creative planner will consider more alternative procedures in interactive decision-making as well. Third, she will be better prepared to handle problem situations with developed routines since she is encouraged to develop management routines ahead of time in her preplanning stage. The rational means-end planner, however, will have fewer
readily available routines since she will not plan them out in advance and will have to postpone decisions when problem situations arise so she can pursue her objectives for the day (Morine-Dershimer, 1979).

**Postactive Thinking**

There will be marked differences in the preservice teachers' postactive thinking as well. Since the creative planner is encouraged to analyze, evaluate and revise if necessary after daily implementations of plans, she will do so. This analysis will be done in a postplanning journal. The rational means-end planner, however, is not required by her planning model to do any type of postactive thinking; so she will not engage in extensive postactive thinking. She is, however, required to keep a teaching journal in which she reflects on her teaching. With these journals, the creative planner will have more focused analytical and evaluative written statements than the rational means-end planner. Even in postactive interviews, the creative planner will have more meaningful analytical and evaluative statements than the rational means-end planner since she will have routinized her postactive thinking process.

**Classroom Environments**

The preservice teachers' classroom environments will differ along several lines. For example, they will
differ in terms of the kinds of language arts activities that are actually implemented, the amount of time each preservice teacher devotes to instructional activity, how often students in their classrooms are actively engaged in instructional activity, and in the kinds of student products encouraged. Also, the preservice teachers' cooperating teachers will differ in what they say about their environments as will their interviewed students.

a. Differences in Activities Encouraged. Both preservice teachers will have some learning activities that all students will benefit from since the teachers' preparation program encourages such activities. Differences will exist, however, in the amount of time students are actively engaged in meaningful activities. Since the creative planner is supposed to monitor her daily classroom environment and critique it in light of active student involvement, she will have students more actively engaged more often. The rational mean-end planner will let her objectives guide her action and environment and not her perceptions of active student involvement.

b. Differences in Student Products. The student products will differ in each preservice teacher's environment. The rational means-end planner will have students produce products that assess her behavioral
objectives. The creative planner, however, will have students produce products that meet her educational goals but that are also specially suited to the needs and interests of her students. She will attempt to have students create products (or productions) that are stimulating for the students and that will actively engage them in the use of language arts.

c. Differences in Cooperating Teachers' Perceptions of Environments. The creative planner's cooperating teacher will perceive the unit to be beneficial and stimulating for the students. She will also comment on the effectiveness of the environment in terms of classroom management, teaching style, physical characteristics of the room as well as other educational design variables since she was introduced to the creative planning model and encouraged to assess the preservice teacher in terms of it. The rational means-end planner's cooperating teacher will perceive the unit to be effective in terms of the students meeting the objectives of the unit, since she was encouraged to assess the preservice teacher in those terms.

d. Differences in Students' Perceptions of Environment. The students in the creative planner's environment will generally find her environment
stimulating and beneficial for them. They will be able to share much about the content of and strategies used in their Shakespearean unit. They will express feelings of appreciation because they will feel that the unit was designed especially for them—with their interests and abilities in mind. The students of the rational means-end planner will note that the objectives for the unit were met. They will be very much aware of the objectives of the unit and will be able to describe which activities were used to help them meet them.

**Before and After Beliefs on Teaching and Planning**

To have some control over my study in addition to matching the participants on many variables, their beliefs systems were compared so that I could attribute actions and thoughts to those. To compare, I created beliefs matrices for the preservice teachers' beliefs on teaching and planning and studied their responses to those to see if differences in their initial beliefs existed.

I hypothesize, therefore the following: at the beginning of the study, both students will have the same basic beliefs about teaching activities. Their beliefs about planning will be very similar, too, since they
learned about planning in the same classes and will be committed to learning what they will be asked to learn.

The rational means-end planner will probably have little change in her basic beliefs. Deep beliefs are hard to change (Harding & Livesay, 1984). The creative planner, however, will be introduced to a whole new paradigm for planning that is very consistent with writing process theory which she appreciates. This will cause her to have a major paradigm shift as far as her thinking about planning goes. Her thoughts about teaching will not change drastically except that she will have a higher regard for creative planning.

If both teachers' thoughts about teaching activities differ after the student teaching experience, they will more likely be the results of having exposure to life as a classroom teacher as opposed to the planning model used.

These tentative hypotheses shaped the data collection and data analyses of my study presented in the next sections.
OUTLINE OF RESEARCH DESIGN

THE POPULATION

Two Preservice teachers

This study focused on two preservice teachers in an English education program at a Southwestern Virginia University. These two teachers were matched on a number of variables to increase the possibility that differences in their thinking and classroom environments could be attributed to differences in the planning models each preservice teacher used. More specifically, I matched the two preservice teachers on gender, age, socio-economic background, ethnicity, general appearance, preparation, general ability, enthusiasm for teaching and writing ability. Both preservice teachers were a) female, b) about twenty-one, c) from middle class backgrounds, d) white, e) judged by university supervisor to be generally attractive in appearance, f) the recipients of a similar teacher preparation program (the only differences will be in the types of English courses taken; otherwise their education coursework will be identical), g) judged by their preservice teacher advisor to have about the same intellectual ability as evidenced in coursework and grade point averages, h) judged by their preservice teacher advisor to have about the same
degree of enthusiasm for teaching as evidenced in their performances during the junior level student aide program, i) matched in writing ability as demonstrated in their writing class products. Additionally, I administered an instrument designed to elicit teacher beliefs (Eisenhart, et al. forthcoming) to discern the preservice teachers' attitudes toward certain teacher activities, planning activities, and philosophies of education before their teaching experiences. The results of this instrument indicate that the two teachers entered the study with the same general beliefs about teaching and planning. (See Appendix D for the instrument).

Both preservice teachers, of course, agreed to participate in the study knowing that they would be questioned, observed, and asked to collaborate with the researcher in writing up the final ethnographic report (see informed consent forms, Appendix E).

Two Cooperating Teachers

The two preservice teachers worked closely with their cooperating teachers during the preservice-teaching quarter. I used criterion-based selection in choosing the cooperating teachers as well.

First of all, I asked the English-education advisor to pick out two cooperating teachers who would encourage the two types of planning introduced to the two
preservice teachers: one teacher who would encourage the creative planning model and one who would encourage the rational means-end planning model.

The advisor picked one cooperating teacher who had experience working with preservice teachers and who was impressed with the results she saw when a preservice teacher used the creative planning model last year. This teacher watched as the university supervisor worked with the preservice teacher on this type of planning and was given a copy of the planning model and suggestions for helping the preservice teacher with it. This cooperating teacher was also re-introduced to the creative planning model and encouraged to assist the preservice teacher with it. The other cooperating teacher had also worked with preservice teachers. She, however, was well-versed in rational means-end planning as was evidenced in our interviews.

Second, the two preservice teachers were assigned to cooperating teachers from different schools so that collaboration between the preservice teachers would be less likely. Yet, both cooperating teachers worked within the same school system (for a discussion of these schools, see setting).

Third, both cooperating teachers had a twelfth grade, college-bound high school class that they thought
could profit from a one month Shakespeare unit on *King Henry IV--Part I*.

Fourth, the cooperating teachers agreed to let their preservice teachers teach a *Henry IV* Shakespeare unit to the class mentioned above for a one month period.

Fifth, the cooperating teachers agreed to compile simple daily data records (see Appendix F) on the preservice teachers' actual teaching environments and agreed to engage in ethnographic interviews.

Sixth, both agreed to share in ethnographic interviews their thoughts about planning and their philosophies of education to discern how their beliefs compare and contrast with their preservice teachers and with each other.

Seventh, both agreed to follow several basic rules to help make the teaching environments for both preservice teachers similar in terms of freedom to plan and amount of cooperating teacher feedback (see Appendix G for cooperating teacher guidelines).

**Students of the Preservice Teachers**

Each cooperating teacher picked one student as an informant who could best share the class' global response to the preservice teacher's one-month Shakespeare unit. In other words, this student was sufficiently involved with the larger class community to be able to share not
only his/her impressions of what happened but the perceptions of other students from varying backgrounds. I interviewed these students at the end of the quarter to get them to share their impressions. They did not know that they were participants in the study until the end of the unit. The preservice teachers did not know who the students to be interviewed were, but they both knew that some student would be interviewed concerning their teaching.

The Researcher's Role

I was a participant observer in the study. Basically, my only form of actual participation was to introduce the two different planning models to the two preservice teachers and the two cooperating teachers. I conducted these introductions several weeks before the preservice teachers began teaching. The two sessions were one hour and a half in length and were audiotaped. Otherwise, I was an observer in the field who sat in classes, took notes, videotaped, and interviewed. I had a minor evaluative role as well. I simply acknowledged to their preservice English education supervisor whether or not the preservice teachers were using their planning models. If the preservice teachers had problems and needed assistance, they had to talk with their
cooperating teachers or university supervisor. The university supervisor conducted weekly seminars for all the preservice teachers and visited their schools on a weekly basis.

THE SETTINGS

I collected data at two Southwestern Virginia high schools within the same school system. More specifically, I collected data in the two preservice teachers' twelfth-grade English classrooms and in the preservice teachers' planning rooms. Additionally, some interviews occurred in my university office.

THE PLANNING TASK

Each preservice teacher taught a one-month long, twelfth-grade, college-bound unit on Shakespeare's *King Henry IV, Part I*. I selected the content for several reasons. First, the preservice teachers had the same planning task so that the planning task would not be a confounding variable in the study. Second, both designed one-month units (N=20 days in the unit) so that both had the same amount of teaching experience. Third, this planning task required quite a bit of planning because of its curriculum potential. For example, the Shakespearean unit could have conceivably incorporated all of the
language arts. A Shakespeare unit, for example, could have included historical background, literary studies, strategies for reading comprehension, listening strategies for viewing the play, dramatic arts activities, reflective essays and speaking skills. A writing unit, in contrast, might not have as much curriculum potential for using all the language arts. Fourth, this planning task did not automatically encourage strict adherence to textbook teaching strategies because the preservice teachers were given sets of the plays, the main contents of which is the play itself. Fifth, this play had never been taught by the cooperating teachers so the preservice teachers did not over-rely on their cooperating teachers' strategies. Sixth, this literature selection had potential appeal for and content relative to the abilities of a twelfth-grade, college-bound-student audience. College-bound students were able to relate to the actions and characters in *King Henry IV* when given a bit of teacher help. This play's key figure is a young man who questions his father's leadership style, a young man who likes "hanging out" with the "real" people in England. He also likes to have fun but is able to act as a true leader when required. For these reasons this play, more than most of Shakespeare's plays, was believed by me to be well-suited for a young adult audience. Finally, many Shakespearean
resources were readily available: historical background texts, methods books, information from the Folger's Shakespearean teaching institute, videotapes of the play through the Virginia Foundation for the Humanities as well as all the other Shakespearean plays. The preservice teachers were easily able to find supporting resources if their planning process led them to decide that such materials would be beneficial. A unit for which few such resources exist would not have allowed the preservice teachers to display as fully the results of this aspect of their planning.

DATA COLLECTION AND DATA ANALYSIS METHODS

To collect and analyze data for each research question, I used a variation of James P. Spradley's (1979) Developmental Research Sequence Method (D.R.S. Method). I also used additional collection and analysis strategies that pertained specifically to each research question. In a following section, I discuss each of these other strategies under headings that are restatements of the five research questions.
A DEFINITION OF ETHNOGRAPHY

An ethnography describes a culture from the native point of view. Instead of studying people, ethnographers learn from people. They try to learn the systems of meaning that constitute a culture. Spradley defines "culture" as "the acquired knowledge that people use to interpret experience and generate social behavior" (1979, p. 5). Ethnographers, therefore, study the acquired knowledge that influences 1) interpretation of reality and 2) social behavior.

A primary way an ethnographer can study a culture is by studying its language because language is "a tool for constructing reality" (Spradley, 1979, p. 17). Different cultures have different languages that are used to categorize and construct reality differently. Ethnographers also study behavior in context to infer cultural meanings (Spradley, 1980). In my ethnography I learned about two different preservice teacher planning cultures. Here, I am using "culture" in a more limited scope than is commonly thought. I studied a "preservice teacher planning culture" as opposed to "a black culture" or even a "preservice teacher culture." One preservice teacher planning culture was expected by the researcher to emphasize rational means-end planning theory, jargon, and practices. The other culture was expected to
emphasize creative planning theory, jargon, and practices. As ethnographer, I learned about how participants thought and acted in these two planning cultures by analyzing their verbal descriptions and actions. What follows is the method I used to generate, analyze, and compare the descriptions of these two cultures.

THE DEVELOPMENTAL RESEARCH SEQUENCE METHOD

The Developmental Research Sequence Method (DRS) is a step by step process for creating an ethnography. Below are the twelve steps I used to create my ethnography. For detailed descriptions of each step, see Spradley's The Ethnographic Interview (1979) and, for a few samples of the process, see Appendices E,F,G,H,I,J and K.

1. Locating Informants
2. Interviewing and Observing Informants and Participants
3. Making an Ethnographic Record
4. Asking Descriptive Questions
5. Analyzing Ethnographic Data
6. Making a Domain Analyses
7. Asking Structural Questions
8. Making a Taxonomic Analysis
9. Asking Contrast Questions
10. Making a Componential Analysis
11. Discovering Cultural Themes
12. Writing the Ethnography

CONSTRUCTING VIGNETTES

To manage the data collected and analyzed using the DRS Method, I first created an ethnographic vignette (or description) for each preservice teacher, for each research question. These vignettes were then compared through the use of Smith and Pohland's (1976) constant comparative method.

The vignettes were developed using what Frederick Erickson (1986) calls low inference data. I first counted all the phrases and clauses in their journals and then grouped them in categories that emerged. I listed and then tallied all of their reported interactive decisions and also counted the comments made during the discussion of those interactive decisions. Finally, I either videotaped the classroom sessions or completed daily observation logs (see Appendix E) for each of the teachers' twenty-day unit. These observation logs provided low-inference, quantifiable data on types and number of language arts activities used as well as amount of active student engagement.
After vignettes were created for each teacher, I compared. My assertions emerged from these comparisons.

**ADDITIONAL DATA COLLECTION AND ANALYSIS METHODS FOR EACH RESEARCH QUESTION**

In addition to the vignettes, I used some of the data sources in other ways to address each research question. The ways the data sources from ethnographic interviews, participant observations, stimulated recall protocols, and document analyses of planning journals, unit and daily plans, and the preserve teachers' handouts were used are described under each research question listed below.

1. How did the preactive thinking of the preservice teacher who used the creative planning model differ from the preactive thinking of the preservice teacher who used the rational means-end planning model?

I developed descriptions of both preservice teachers' preactive thoughts by analyzing data collected through a) ethnographic interviews, b) unit and daily plans; c) their planning journals (both preservice teachers were required to write 15 minute reflections on their teaching experiences; d) the cooperating teacher ethnographic interviews; and e) participant observations. After I completed the Development Research Sequence (D.R.S.) domain and taxonomic analyses for each
preservice teacher's preactive thinking before the unit began, I compared them using Smith and Pohland's (1976) constant comparative material in order for assertions to emerge concerning the impact of these different planning models on the preservice teachers' preactive thinking.

2. How did the interactive decision-making of the preservice teacher who used the creative planning model differ from the interactive decision making of the preservice teacher who used the rational means-end planning model?

Each week I videotaped a one-hour session of each preservice teacher's classroom (N=4 hours for each teacher) over the twenty-day unit; and, I also conducted additional participant observations that were not taped. After the videotaping of each one hour session, the preservice teacher and I reviewed the tape in a private place within the school. At each viewing, the preservice teacher was asked to stop the tape when the tape reflected a moment in which she decided to make a decision not previously planned. After the tape was stopped, the preservice teacher explained why she made the decision, what influenced the decision and what she was thinking about at the time of the decision. Sometimes she also decided whether it was a good or bad decision. The preservice teachers' stimulated recalls were tape recorded and later analyzed.
I used Morine-Dershimer's (1979) process of data analysis to compare and contrast the types of interactive decisions the preservice teachers made since this is the data analysis method within the literature that tended to capture the impact of planning on interactive thought. Since this process is elaborate and requires much sample explanation, her procedures, along with examples from my study, are provided in Appendix K.

After using Morine-Dershimer's analysis procedures for each preservice teacher's decisions, I compared their decision-making. The other observational data were used to "flesh out" this low-inference data in the ethnographic vignettes.

3. How did the postactive thinking of the preservice teacher who used the creative planning model differ from the postactive thinking of the preservice teacher who used the rational means-end planning model?

To make descriptions of both of the preservice teachers' postactive thought processes, I analyzed their teaching journals. Since their journal entries were written after teaching, they served as good indicators of postactive thought. The data from each preservice teacher's planning journal statements were searched for categories that were used in previous studies of teacher thinking that emerged from the data themselves. The statements within each category were tallied and in some
cases analyzed in terms of content. The categories dealing with statements about individual students and the class' overall characteristics, for example, were analyzed in terms of content through the use of D.R.S. componential analyses. After the tallies and analyses for each preservice teachers' thoughts were completed, I then compared the findings to see what impact the prescriptive planning models seemed to have on the preservice teachers' postactive thinking.

4. How did the classroom environment of the preservice teacher who used the creative planning model differ from the classroom environment of the preservice teacher who used the rational means-end planning model?

The cooperating teachers and I kept charts on daily activities within the preservice teacher's classrooms. Specifically, the charts provided data on a) variety of activities used, b) number of language arts incorporated, c) amount of time devoted to instructional as opposed to noninstructional activity, d) types and amounts of group and individualized activities used, and e) the general level of student involvement in instructional activities (see Appendix F for an example).

Other descriptions of the preservice teachers' classroom environments came from student informants in their twelfth-grade Shakespeare classes. Each cooperating teacher chose an informant who was able to
provide a global picture of the class' response to the unit. I conducted ethnographic interviews that enabled the informants to share their class' visions of what happened during that one-month Shakespeare unit. The preservice teachers did not know who the informants were nor did the informants know ahead of time that they were to be asked to discuss the unit. After I analyzed both student interviews, I asked each informant to evaluate my findings to make sure I represented their impressions accurately.

Still other pictures of the classroom environments came from the two cooperating teachers. These professionals gave daily feedback to the preservice teachers and watched them closely from a professional standpoint. I conducted ethnographic interviews with these cooperating teachers throughout the one-month unit, then, developed descriptions of their impressions. Again, I asked the cooperating teachers to look over my descriptions to make sure they reflected their impressions.

5. How did the before and after teaching and planning beliefs of the preservice teacher who used the creative planning model differ from the before and after teaching and planning of the preservice teacher who used the rational means-end planning model?

To obtain descriptions of the preservice teachers' initial beliefs, I used the Heuristic Elicitation Method
(Eisenhart et al., forthcoming) to develop an instrument for discerning the preservice teachers' attitudes toward certain teacher activities and planning activities. (See Appendix D for the Beliefs Matrix on Planning Beliefs developed by this method.) This was used at the beginning of the data collection period. A follow-up, open-ended interview at the end of the one month period was conducted to see if their thoughts about teaching or planning activities had changed. Where changes were detected, these were examined and an assertion was developed (through the use of D.R.S. method) to explain the findings.

WAYS RELIABILITY AND VALIDITY WERE STRENGTHENED IN MY STUDY

TRIANGULATION

To strengthen reliability and validity throughout my study, I tried to use as many data sources and as many methods of analysis as possible to practice what Goetz and LeCompte (1984) call triangulation. Triangulation, in the field of ethnography, reduces subjective bias since at least three data sources are required to make an assertion and several different methods are used to analyze the data.

In this study the overall assertions were developed from many data sources:
1) ethnographic interviews with the preservice teachers;
2) ethnographic interviews with the cooperating teachers;
3) ethnographic interviews with the preservice teachers' students;
4) participant observations of every class session for each preservice teacher;
5) videotapes of selected classroom sessions;
6) stimulated recall protocols;
7) document analyses of unit plans;
8) document analyses of daily lesson plans;
9) document analyses of the preserve teachers' planning journals;
10) document analyses of the cooperating teachers' written subjective impressions;
11) document analyses of teacher-generated handouts;
12) document analyses of preservice teacher evaluations;
13) analyses of beliefs matrices on teaching;
14) analyses of beliefs matrices on planning; and
15) university and public school documents.

A chart indicating all the data sources used to support each assertion appears as Table 21 in Chapter Four.

RELIABILITY

Reliability has to do with the extent to which research studies can be replicated. In other words,
could researchers who use the same methods obtain the same results? Reliability has to do with whether other researchers would discover the same phenomena or construct the same constructs. Ethnographic designs can be both externally and internally reliable (Goetz & LeCompte, 1984, pp. 211-220).

External Reliability

External validity has to do with whether the same theoretical constructs and methodological procedures could be used elsewhere with similar results. To enhance external reliability I tried to 1) make the role of the researcher clear, 2) make judicious informant choices and carefully describe the selection process, 3) specify the conditions in which data collection occurred, 4) carefully document the theoretical constructs and premises of the study, and 5) carefully describe the methods of data collection and analysis (Goetz & LeCompte, 1984, pp. 213-217).

Internal Reliability

Internal reliability has to do with whether another researcher given the same constructs procedures, and data, would reach the same conclusions. To enhance internal reliability I tried to use 1) low-inference descriptors, 2) peer examination of data and constructs,
3) mechanically recorded data, and 4) triangulation of data sources.

**VALIDITY**

Validity has to do with the accuracy of research findings. To have validity, researchers need to make sure they are observing what they think they are observing. They also need to make sure their conclusions are accurate and can be applicable across similar groups. Like reliability, validity can be assessed both externally and internally (Goetz & LeCompte, 1984, pp. 221-222).

**External Validity**

External validity is concerned with the degree to which findings and conclusions can be compared across groups. To enhance external validity, I, first of all, picked samples that were representative of the larger population. Preservice teachers, like the ones described in my study, typically exist in other preservice teacher programs. In other words, there are other bright and eager preservice teachers from similar preparation programs. Second, to avoid setting effects, I picked high schools for each preservice teacher that would facilitate the type of planning desired. Other researchers could also match preservice planners with
appropriate communities. Third, history effects were controlled in my study since the study only lasted for about ten weeks altogether. Fourth, my constructs were valid in that the participants helped construct them and gave final approval to them. Fifth, using the DRS method and triangulation of data sources also strengthened validity. Use of the DRS method also strengthened the validity of my study since hasty generalizations were short-circuited (Goetz & LeCompte, 1984, pp. 228-232).

**Internal Validity**

Internal validity is concerned with this question: Do participants and observers share the same vision? The researcher can be more sure that the answer to this question is "yes" by reducing observer effects. I used low-inferenced data collection strategies, such as videotapes, verbatim interviews and coding categories such as domain lists. Again, my triangulation of data sources and use of the DRS analysis procedure reduced threats to internal validity since researcher interpretation is held in check (Goetz & LeCompte, 1984, p. 11, 222-228).
CHAPTER 4
FINDINGS

INTRODUCTION

This chapter is devoted to an analysis of the impact of prescriptive planning models on preservice English teachers' thought and on the classroom environments they create. The purpose of my investigation was to determine whether prescriptive planning models had an impact on preservice teachers' thought and the environments they created and what those impacts were. To accomplish this analysis of impact, I compared the thought and classroom environments of two preservice teachers who used differing planning models. The preservice teachers were matched on other variables (see Chapter Three) so that any differences between them could be more readily attributed to their use of their planning models. Despite this control through matching, some of the differences may be attributed to variables not completely controlled in the study. These confounding variables will be presented in this chapter when their influences seemed obvious.

This chapter is organized in an unorthodox way. Each subsection is a presentation of findings for each
research question. Each of these presentations begins with an ethnographic vignette which helps show the differences between the two preservice teachers. A little narrative about the rational means-end planner will always precede the narrative of the creative planner. A follow-up comparison of the two narratives within the vignettes is then provided. Each subsection is divided into two main sections: 1) the ethnographic vignette and 2) other findings related to the particular research focus. These other findings are low-inference analyses of all the data sources used to develop the opening vignette. The lengths and number of sections within the "other findings" vary greatly.

PREACTIVE THINKING

Ethnographic Vignette of the Planners and Their Schools

At about 6:00 a.m. both preservice teachers rise and make themselves ready for their first day of school. In January, it is bitter cold.

Mary Ellen has no need to leave her mountain-top town since she will be teaching in the town's university high school. With a few extra minutes to spare before warming up her car, she tries on her third wool jacket to make sure the look is right. She decides on her black jacket, a pleasant contrast with her fine blonde hair.
At 8:00 she pulls into a big parking lot loaded with sporty cars.

Mary Ellen walks into a newly-constructed, flat-roofed complex with few windows. Inside, the school is full of new lockers in bright colors, giant trophy cases and indoor-outdoor carpet. She eventually finds her way through the corridors to the English teachers' workplace. The school is highly departmentalized.

Inside the English teachers' workplace, Mary Ellen sees a huge center table that seats about twenty. Several teachers are sitting around enjoying their coffee-cake and coffee. The table is always full of goodies. Around the walls are little nooks decorated with each teacher's wit and resources. Communal filing cabinets are interspersed throughout the room. The department chair, Mary Ellen's cooperating teacher, has a key to the adjoining bookroom full of resources and the King Henry IV plays. As the cooperating teacher turns off the bookroom lights, she welcomes Mary Ellen to University High. The faculty are introduced as they rush in to collect their needed items for the day. Mary Ellen is given her own special nook near other fellow pre-service teachers.

Mary Ellen, the rational means-ends planner, is on the ball. She comes to University High with her unit
plans all worked out. However, despite her preparation, Mary Ellen thought that getting through the first day was very hard:

Well, the hardest part is over with, I hope, the first day. I feel a lot better than I did before actually being here. I’m a worrier, but I can’t help it! I’m really comfortable in this school. It’s similar to my high school which I think helped put me at ease. The building and facilities are outstanding. It seems like there is everything here! It’s big in size, but the way it’s structured, it seems cozy. One thing I’ve noticed already is that departments don’t socialize with one another. Same disciplines seem to stick around together; yet, I’ve also observed a lot of interdepartmental gossip, which I don’t like at all!

Students here range considerably in many ways. They do all seem much younger than I thought they would be. I’m glad. I did get a few wise cracks before Mrs. Laprade entered the room, and I glared at the guys. They shut right up after saying I was going to be a bitch. Nice, Huh? They’re college-bound, but to me, are more on a general level. They were inattentive and unresponsive and that’s my worst nightmare! I can handle explaining ideas over and over to someone who does not understand, but I don’t really know how to handle it when they are so apathetic.

Throughout her early preactive teaching days Mary Ellen spends quite a bit of time in the teachers’ workplace. While there, she talks with other preservice teachers about planning details related to curriculum and instruction and about the ins and outs of University High. When she does venture beyond the workroom, she does not really find it that helpful: "I haven’t really found observations that helpful, but talking with other teachers is."
Outside of the University High school, Mary Ellen spends many hours preparing for her unit on King Henry:

There was a lot of thought involved before I even began to write down my unit. I really wanted to get a good sense of the play before I started planning. I read the play. I believe it was twice, I read it through, jotted down notes on my own understanding. I tried to pick lines or instances that I thought were important. I did a lot of research on the play itself, on Shakespeare’s world, the theater, and that again, was really before I started planning. All the while I was reading I would think, "Oh, this activity would be great here." I consulted a lot of works on getting kids to act out things; we saw the Shakespeare video in our methods class, and I went back and watched that again, keeping this play in mind. There were a lot of materials available on Shakespeare. The prereading situations to get kids to react to the play—I have used a few of them, but they were kind of vague.

Mary Ellen, like most Southwestern Virginians, is perturbed about the many snows that cancel school during this preactive period before her unit begins, but she tries to be optimistic. Near the end of her preactive teaching days, she has this to say about her unit and preparation:

I’ve got my King Henry unit finished. I think it’s good, but I’m not sure it will work. I wish I knew the kids better. I have a lot of activities that rely on their amount of class participation, and the plans could really flop if the students aren’t enthusiastic. The class is good (intelligent) and would probably do anything. It’s 12c (college-bound), but I want them to enjoy themselves and be enthusiastic. This particularly pertains to performing and improvisation. I don’t want to have to break their arms to get them in front of the class!
Mary Ellen did a thorough job of rational means-end planning. She knows the content of the play and has many activities to help students meet her objectives. Even though she planned her unit before she came to the school, she still continues to revise it by adding some final touches. Mary Ellen seems ready to go.

Jennifer, the creative planner, leaves her mountain-top university town by descending a mountain road which leads to a small community high school in the valley below. Her half hour jaunt is made with another preservice English teacher. They like each other and are filled with "what if" stories as they hurriedly find a parking place amidst '67 Mustangs and used Chevrolets. They ascend the several stairs to the stately 1915 brick establishment. After touching base with her cooperating teacher, Jennifer steps in the women's lounge. In the private restroom she checks out her professional garb. Her traditionally untamed red locks are in place. Her silk blouse, with her school-marm brooch placed just as Norman Rockwell would have it, looks right. She picks off one piece of lint from her long and tailored wool skirt. Looking into the mirror she says "ha" as she laughs at the look she's elected to wear. The bell
rings. Setting off her svelte look, she places her large-framed glasses on her sharp-featured face and enters the women's lounge.

The lounge is the only place where female teachers throughout the disciplines get together and kick their shoes off for about fifteen minute intervals. The small room has an old, paned window covering the expanse of one wall. Within the room is a table for about six, a microwave and refrigerator, Coke and snack machines, a comfortable old couch with end tables and a bulletin board for news and notes. Jennifer introduces herself, noting with pride that she is working with Ms. Robey. The teachers take her in and welcome her to the school. Jennifer is up and feels warmed by their interest.

For the next two weeks Jennifer gets to know the teachers, their school and the students much better. As she observes Ms. Robey’s classes and other teachers’ classes, she notes the physical characteristics of their rooms and uses that data to generate her own ideas for one wall that Ms. Robey lets her call her own. She makes notes about pupil characteristics—even attends a basketball game to get to know her basketball players and the larger school community better. She carries her King Henry in her purse and pulls it out occasionally to reread snippets in preparation for her sixth period, 12th
grade college-bound unit. Throughout the first few days, Jennifer ransacks Ms. Robey's resources and comments in writing on the reams of high school texts that help or hinder her planning.

In the library she discovers films and additional resources. Some of them she checks out and places on her students' resource table. Others are used to help her build a repertoire of background information, material that she can internalize and call-up in an impromptu way when the class is ready for such stuff.

Daily, she works out her strategies in writing. She considers not only curricular and instructional strategies, but also classroom management strategies and planning strategies. By January 10 she is developing an instructional procedure that includes management strategies:

One idea I've been playing with is response/free writing journals from each student. I should make up materials needed for these notebooks—get some colored paper and some folders then make up name tags for them. The students and I can put in them 1) responses to classes—success and failure of teacher/students; 2) freewriting in class; 3) give pictures or other prompters for those having problems getting started or who need challenges—individual assignments. Have my first entry already entered from the previous class observations. I'll include mostly positive reinforcement; but some suggestions. Always receptive—never miss an entry! I have this idea targeted for the 6th period class to challenge them in several ways.
By the second week, Jennifer is zeroing in on her student community. She is trying to find out ways to motivate them and bring the sometimes difficult Shakespearean world to life:

With the right motivators 6th period can discuss on a deep level the literature they are reading. They have a problem with keeping up with reading. Somehow (if they're not reading Swift, they'll really shirk Henry IV) I've got to find a way to get them interested in reading and understanding Henry. Something to get them awake/alive—maybe a combination of media. They are capable of reading Shakespeare and other difficult works, but they are not prompted enough. She [my cooperating teacher] gives them time in class to begin reading which is always a way to stretch a lesson, also giving them time to do the work.

Though ready to go, Jennifer and her students and the larger rural communities in the area are hit, as well, with heavy snows. Of course, the snow days give Jennifer extra time to plan and read and refine her strategies. Yet, the tension in having to wait to implement gets to her. With her rich unit plans developed through the use of much insight into the school and its pupils, Jennifer sums up, the day before her teaching begins:

During the last two days, I have experienced a renewed dedication to planning. Before, the snow was depressing me. But with the realization that there is nothing I am able to do
about this weather or my teaching hours or any other pressing issues that this unexpected vacation brings, I was able to take an in-depth look at what I was preparing to do. I have decided the lesson plans should function as both my guide to how the class should progress, and also a way to keep all my notes I want to use in one place. As I rewrite my lesson plans, I have decided to include my notes inside each daily lesson. This will work out fine and be much more organized. Also, I have been giving an "outlook" for the rest of the unit at the end of the first week's plans. This is helpful to me. I have a direction—not a concrete one by any means—but something more planned out than a unit but not as detailed as a lesson. I have a direction and a time frame to work with.

Today I began some criticism on Henry IV and I felt like a scholar all over again. One of the greatest attractions teaching holds for me is the growth that is built into the profession. No other job would allow me to take in-depth looks at literary works, examine the criticism, convey what I have learned to others, and learn from their introduction to it. What a dynamic profession! I personally enjoy, expand on my knowledge, and benefit from my profession while others grow and benefit too.

Jennifer, it seems, is ready to begin as well.

**********

Both of the preservice teachers, as hypothesized, seem to have prepared their units in a manner specified by their models. The rational means-end planner focused on curriculum and instructional procedures and then developed a unit plan that she was pleased with and that conformed to her model. The creative planner also spent planning time with curriculum and instructional procedures, but she devoted most of her school time to observing the students in formal and informal situations.
She also spent a great deal of time learning about teaching through observing her teacher and other classes. What follows is a different look at their preactive thinking and a development of assertions that support the overall assertion presented here: that the prescriptive planning models used had impact on the preservice teachers' preactive thought.

**OTHER FINDINGS ON THE PLANNERS' PREACTIVE THINKING**

In the preactive stage of teaching, while the preservice teachers were making their unit plans, the planning models seemed to affect the overall quantity of and, in some cases, the content of the preservice teachers' thoughts. Differences were found in their rationale, objectives, pupils, activities, evaluation, content and planning process statements. Some of the difference was attributable to the planning models used. The findings presented below support the above assertions.

**Quantity of Preactive Thought**

Analyses of the preservice teaching journals can be used to support the assertion that the prescriptive planning models had an impact on the quantity of preactive thought the preservice teachers engaged in
while they developed their unit plans. I hypothesized that the preservice teacher using the creative planning model would devote more thought to her unit plan than the rational means-end planner, since she was encouraged to think about a host of educational design variables before she began her unit. She was to consider those design variables as she engaged in the thinking strategies encouraged in the preplanning stage. The rational means-end planner, on the other hand, would limit her preactive thought to the tasks required of her in her planning model. The data from their daily journal reflections support the above hypothesis: the creative planner devoted more written phrases and clauses to preactive thinking (N=1769) than the rational means-end planner (N=574). Table 1 graphically displays the categorical content of their journal entries and the quantity of thought devoted to each. These categories emerged in the analysis and were, therefore, not imposed on the data. To avoid a value judgment in ranking the significance of each category, the categories are presented alphabetically.
<table>
<thead>
<tr>
<th>Category</th>
<th>Creative Planner</th>
<th>Rational Means-End Planner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activities</td>
<td>86</td>
<td>17</td>
</tr>
<tr>
<td>Class Composition</td>
<td>174</td>
<td>58</td>
</tr>
<tr>
<td>Content, Materials</td>
<td>217</td>
<td>16</td>
</tr>
<tr>
<td>Cooperating Teacher</td>
<td>138</td>
<td>75</td>
</tr>
<tr>
<td>Descriptions of Daily Events</td>
<td>5</td>
<td>40</td>
</tr>
<tr>
<td>Discipline Problems &amp; Strategies</td>
<td>7</td>
<td>24</td>
</tr>
<tr>
<td>Feelings about Teaching</td>
<td>178</td>
<td>36</td>
</tr>
<tr>
<td>Individual Students</td>
<td>65</td>
<td>0</td>
</tr>
<tr>
<td>School Community</td>
<td>96</td>
<td>52</td>
</tr>
<tr>
<td>Observed Activities</td>
<td>54</td>
<td>0</td>
</tr>
<tr>
<td>Personal Insights</td>
<td>111</td>
<td>14</td>
</tr>
<tr>
<td>Philosophy of Education</td>
<td>14</td>
<td>0</td>
</tr>
<tr>
<td>Physical Characteristics of Room</td>
<td>17</td>
<td>0</td>
</tr>
<tr>
<td>Planning Process</td>
<td>224</td>
<td>43</td>
</tr>
<tr>
<td>Professional Teaching Objectives</td>
<td>10</td>
<td>29</td>
</tr>
<tr>
<td>Research Study</td>
<td>11</td>
<td>0</td>
</tr>
<tr>
<td>Student Objectives</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>Student Teaching Program</td>
<td>61</td>
<td>35</td>
</tr>
<tr>
<td>Teacher Collaboration</td>
<td>35</td>
<td>0</td>
</tr>
<tr>
<td>Teaching Before Unit</td>
<td>155</td>
<td>130</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1769</strong></td>
<td><strong>574</strong></td>
</tr>
</tbody>
</table>
Several of the categorical emphases may be attributable to the planning model used. Of course, the written reflections in no way capture all of the thought the preservice teachers engaged in and cannot be totally representative of their universe of thought, but the written reflections do suggest the preservice teachers' concerns as they made deliberate efforts to share in writing their thoughts about their teaching experience, thoughts that they knew would be shared with their university supervisor.

First of all, as hypothesized, the creative planner devoted more thought to individual student characteristics (N=65) than did the rational means-end planner (N=0). This was expected since the creative planner's model encouraged her to do naturalistic research in the classroom to get to know her students. The rational means-end model did not encourage this research, so the preservice teacher may have seen no need to elaborate on insights about individual students.

Second, the creative planning model encouraged the preservice teacher to use a variety of heuristics to develop creative ways to prepare for and teach her unit. The creative model encouraged the preservice teacher to develop insights about teaching, to learn through the planning and teaching experience. In the journals, the
creative planner shared more teacher insights (N=111) than the rational means-end planner (N=14). "Insights" was defined as "statements related to new discoveries about teaching gained through observation, study or reflection."

Third, the creative planning model introduced a creative thinking strategy, a model of creative thought, that the preservice teacher was encouraged to internalize and use. The rational means-end planner, in contrast, was not introduced to a new thinking process. Perhaps the differences in these models contributed to the creative planner's strong quantitative emphasis on discussion of the planning process (N=224). She may have been using her journal writing as a way to help her think about and internalize the thinking strategy. The rational means-end planner devoted fewer statements to her planning process (N=43). Perhaps, since she was not asked to learn a new method and had worked with her planning model for a longer period (in previous methods classes), she had already internalized the process and had no need to "write to learn." As other data sources suggest (planning interviews) she was well-versed in rational means-end planning before she came to the study.

In addition to this data source, evidence from the unit plans, daily plans, teacher-generated materials, and
cooperating teacher and preservice interviews suggest that the creative planner devoted more preactive thought to planning than did the rational means-ends planner.

Content of Preactive Thought While Making Unit Plans

The content of the preservice teachers' preactive thought was examined along lines typically used in research studies of teacher planning. The content of the two preservice teachers' comments in writing and in interviews were compared through the use of domain and/or componential analyses of their statements about their 1) rationales, 2) objectives, 3) pupils, 4) activities, 5) evaluation, 6) content, and 7) planning process. These domain and/or componential analyses were, then, compared through the use of Smith and Pohland's constant comparative method. The content of their preactive thought tended to be consistent with the planning models used. The data below support this overall assertion.

a. Rationale Statements. Rationale statements were defined as statements related to the theoretical assumptions the preservice teachers used to develop their units. The rationale statements from their written unit plans, their journals, and their comments in interviews were used in the analysis.
1) A Comparison of The Planners' Unit Plan Rationales. Both preservice teachers included a rationale in their written unit plan. Both are presented together with a domain analysis of early rationale's features:

The Rational Means-End Planner's Unit Rationale

Rationale. This is a four week unit on Shakespeare's King Henry IV. It is planned for twelfth grade college-bound classes who have already had experience with Shakespeare, as well as studied the history of the English language. Both of these factors provide the classes with a sound base in literature and language, so they are able to move on to a more difficult work, that is King Henry IV.

The unit will combine activities in literature, language and writing. One of the main ideas the unit will be centered around is that the work is a play and meant to be acted out, seen and heard. Though the classes have had experience with drama, they have not, to my knowledge, performed. They are familiar with elements of drama and the theatre, which will be helpful.

Table 2 is a domain analysis which lists the features of the rational means-end planner's unit rationale.
<table>
<thead>
<tr>
<th></th>
<th>Features of the Rationale (Rational Means—End)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Time Span of the Unit</td>
</tr>
<tr>
<td>2.</td>
<td>Class Composition</td>
</tr>
<tr>
<td>3.</td>
<td>Class' Previous Content and Skill Coverage</td>
</tr>
<tr>
<td>4.</td>
<td>Activities that Will Be Encouraged</td>
</tr>
<tr>
<td>5.</td>
<td>Specific Rational Statements</td>
</tr>
<tr>
<td></td>
<td>a. students are ready to move on to more difficult work</td>
</tr>
<tr>
<td></td>
<td>b. plays are meant to be acted out, seen and heard.</td>
</tr>
</tbody>
</table>
The Creative Planner's unit rationale:

Rationale.

Literary Material—Henry the IV, Part 1, like other Shakespearean plays taught in the classroom, is a great literary masterpiece that is as widely read, seen, and appreciated today, centuries later, as it was in Shakespeare's time. Through the study of literary works, we may increase our understanding of the commonality of human emotions as well as the range of differences in human experience. By reading and responding to a piece from a different time and culture, students should move beyond their own experience to become aware of values, beliefs, and experiences different from their own as well as to recognize the universality of human emotions and reactions.

Teaching Method—

(Focus on Questioning) — Talking, asking, and answering questions both orally and in writing often reveal our thoughts and feelings to us as well as to others. This experience in turn clarifies our view and focuses our thinking to include more than just our own transaction with the piece but takes into account literary conventions and techniques, the wisdom of the world (universality), and the experiences of others.

(Focus on Response Log) — The response log is an effective managerial, leaning, and teaching medium which gives the teacher feedback as well as offers an opportunity for the student to synthesize materials provided to them throughout the unit. The log should be used to record personal transactions with the situations and the characters presented in the piece, and refer back to notes given throughout the unit, to carry out prereading and prewriting exercises, to provide the teacher a medium for individualized feedback and positive reinforcement, and to organize class work.

(Focus on Group Work) — Participation in small groups facilitates student leaning. Small group procedures bring teaching and learning into perspective by providing opportunities for teachers to stimulate and guide the independent thinking of students without total domination by the teacher in the learning process. Cooperative thinking may clarify and enrich their thought processes because in groups there is a pooling of information and skills.

Table 3 is a domain analysis that represents the features of the creative planner's unit rationale.
Table 3.

Features of Unit Rationale (Creative)

1. Literary Material Section
2. Teaching Methods Section
3. Three Foci on Teaching Methods: questioning, response log, and group work
4. Specific Rationale Statements related to Literary Material
   a. is great literary masterpiece that is widely known and appreciated today
   b. will increase our understanding of commonality of human emotions
   c. will increase our understanding of range of differences in human experience
   d. will help students become aware of values and beliefs different from their own.
   e. will help students recognize the universality of human emotions and reactions.

Teaching Methods
(Focus on Questioning)
   a. will reveal our thoughts and feelings to us
   b. will reveal our thoughts and feelings to others
   c. will help clarify our views
   d. will help us take into account literary conventions and techniques
   e. will help us take into account the wisdom of the world
   f. will help us take into account the experiences of others

(Focus on Response Log)
   a. effective as managerial tool
   b. effective as learning tool
   c. effective as teaching medium
   d. gives teacher feedback
   e. offers student opportunity to synthesize material
   f. can be used to record personal transactions with the play's situation and characters
   g. can be used to log evaluative remarks on activities
   h. can be used to store notes that can be referred to throughout unit
   i. can be used to carry our prereading and prewriting exercises
   j. can provide teacher with a medium for individualized feedback and/or positive reinforcement
   k. can help teacher organize class work

(Focus on Group Work)
   a. facilitates student learning
   b. provides opportunities for teacher to stimulate and guide independent thinking of students without total domination by the teacher in the learning process
   c. can clarify and enrich thinking by pooling of information and skills
2) A Comparison of the Two Unit Rationales' Features

The features of the two rationales differ in several ways, and the differences may be attributable, in part, to the planning models used. The rational means-end planner developed a rationale consistent with her model. She included the grade level and a few characteristics about the class composition. Her reasons for teaching the unit included that the students were ready to move on to harder material and that plays are meant to be acted out, that is, seen and heard. As hypothesized, she provided a brief rationale as her model encouraged and did not take liberties with its directives.

The creative planner, as hypothesized, gave more reasons (N=21), for the features of her unit than the rational means-end planner did (N=2). Perhaps this difference is because the creative planner was encouraged to engage in a variety of heuristics that encourage this type of thinking.

Interestingly, as also hypothesized, the creative planner considered more design variables within her rationale than the rational means-end planner. The rational means-end planner considered the questions mentioned in her model: Why are you teaching this? What is the theory? Grade Level? The creative planner,
however, often based her rationales on variables related to current educational theory, management strategies, professional teaching refinements, content and pupil characteristics (see Creative Planner's Domain of Features). These design variables, of course, were encouraged in the creative model.

Another difference that was not anticipated earlier, but that may be attributable to the planning models used, is that the creative planner developed a rationale structure or outline that was consistent with her needs. She did not feel bound by the old unit plan structure she had been introduced to in previous methods classes. Instead, she let the structure become a natural organizational device for her thoughts on the rationale. In her introduction to the creative planning model, the preservice teacher was told that she was not bound by the old model's structure and could develop one that would best meet her own needs. She, though not required, acted on the suggestion.

3) A Look at Their Comments About the Rationale

The two preservice teachers described their rationales for their units in different ways in their interviews and journals. Below are domain analyses of their representative thoughts on their rationales.
Kinds of Rational Means-End Rationale Statements

wanted to combine all aspects of English: literature writing & language 
combining all aspects of English is essential when you’re planning 
wanted them to get the drama aspect of unit 
it’s meant to get them on their feet performing 
wanted to incorporate the writing, the reading, the literature and the language 
my semi-rational was that they would be prepared to read the play 
I had a sense of what I wanted them to do

Kinds of Creative Planner Rationale Statements

more for me 
wanted to make sure I had background information 
wanted to know teaching theory behind me 
wanted to be able to justify unit to students 
wanted to justify unit to myself 
can see how (whole) is related 
wanted to define in my mind what "x" was supposed to do 
was beneficial to me 
when it’s in writing, it’s there for reassessment 
when it’s in writing, it’s not just floating in my mind 
gives me insight into (my thinking about the unit) 
wanted to be able to justify it to another teacher

These two rationale domains implicitly suggest the preservice teachers' perceptions of the rationale. The rational means-end planner sees the rationale as a statement of the importance of the unit. In other words, she described what she thought was important in her unit but did not provide any justifications for why those aspects were important. Her list of rationale statements almost sounds as if she has adopted some basic rules about good units but has no defense or justification for
them. For example, she states in interviews that combining all aspects of English is important; yet, she provides no reasons for it. It seems that she has internalized key insights encouraged in the teacher preparation program, but does not sense the need to explain or justify them as the creative planner did. Perhaps, if the rational means-end planner had been encouraged to justify or think deeply about her rationale, she would have. Yet, throughout our extensive interviews and her journal, she rarely commented on the justifications for her unit. Perhaps she just did not see the need to do so since her model did not encourage that caliber or type of thought. The creative planner saw the unit plan rationale as a justification of her unit. She thought that she needed to justify the unit to herself, her students, and possibly other teachers and parents. She wanted to be able to explain the logic of her design. Second, the rationale served as a document of her prior thinking and helped her to think clearly about what she wanted to do.

b. Planners' Unit Objectives

Both preservice teachers created *King Henry IV* objectives. Their unit objectives are listed in Table 4. The creative planner has also noted with numbers the standards of learning she included.
Table 4.

**Planners' Unit Objectives**

<table>
<thead>
<tr>
<th>Rational Means-End Planner</th>
<th>Creative Planner</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Students will</strong></td>
<td><strong>Students will</strong></td>
</tr>
<tr>
<td>1. be familiar with the world in which Shakespeare lived and wrote</td>
<td>1. increase his/her understanding of the range and depth of human experience through study of the play 12.5</td>
</tr>
<tr>
<td>2. understand Shakespeare’s language</td>
<td>2. develop written commentary on the play through analyzing style, characterization, mood, and themes present 12.8</td>
</tr>
<tr>
<td>3. analyze characters in the work</td>
<td>3. formulate a basic knowledge of the Globe Theater, Elizabethan culture, and the history as it applies to Henry</td>
</tr>
<tr>
<td>4. demonstrate a more refined skill of dramatically reading aloud from the play</td>
<td></td>
</tr>
<tr>
<td>5. assess the characteristics of a given character through his/her interactions in the play.</td>
<td></td>
</tr>
<tr>
<td>6. summarize events in the play</td>
<td></td>
</tr>
<tr>
<td>7. recognize the changing nature of language by comparing Shakespeare's language to our language today. 12.9</td>
<td></td>
</tr>
</tbody>
</table>
My analysis of this data is inconsistent with my original hypotheses. First, I thought the rational means-end planner would create objectives that were more behavioral and specific in nature and that the creative planner would state her objectives more in terms of general goals or environmental directives for the course. The opposite happened. The creative planner's objectives are more detailed, concise, and specific in nature. For example, both preservice teachers developed student objectives related to the content of Shakespeare's world. The rational means-end planner presented her objective in a very general way: "Students will be familiar with the world in which Shakespeare lived and wrote." The creative planner, however, was more specific about the depth of knowledge, the types of knowledge bases desired, and the connection to the play of those bases: "Students will formulate a basic knowledge of the Globe Theatre, Elizabethan culture and the history as it applies to Henry." Though specific, the creative planner's goals still allow much freedom in student content acquisition.

Perhaps the larger quantity of preactive thought the creative planner put into her unit before she actually
started to write objectives enabled her to have a clear sense of what she hoped students would be able to accomplish. The creative planner did not actually write out her objectives until the week before she was to implement. She engaged in other preactive thought by addressing other design variables in creative ways and then used this information to develop her objectives (see discussion of planning process for support of this assertion). The rational means-end planner, however, developed her unit plan over the Christmas holiday before she entered the halls of her high school. Although she changed some of her unit activities, her objectives remained fairly consistent (see discussion of planning process for support of this assertion).

Also, the unit objectives themselves seem to suggest that the creative planner put more thought into developing her objectives, and thought more thoroughly about what she hoped students might accomplish than the rational means-end planner. The number of objectives (N=7) and the specificity of the objectives (see objectives table) supports this assertion. Consequently, the caliber of preactive thought before the unit was designed and the calibre of preactive thought demonstrated in the written objectives suggest that the creative planning model may, as was hypothesized, have
encouraged the creative planner to engage in more preactive thought and in doing so, enabled her to produce clearer and more concise objectives. My original hypothesis seems naive in retrospect. I should have anticipated that objectives require much preactive thought to be clear and concise. Since no heuristic strategies are encouraged in the rational means-end model, the rational means-end planner may have just stated her objectives outright just as a beginning writer often does when starting his/her thesis.

Second, I hypothesized that both preservice teachers would create objectives that were fairly consistent with their rationales since both were encouraged to consider their rationales as they stated their objectives or goals. The creative planner developed objectives that were consistent with her rationale (see Rationale and Objectives charts), but the rational means-end planner’s objectives are not consistent with the two main justifications that she presented in her rationale section and that she alluded to in interviews. The most blatant example of this inconsistency is that she strongly emphasized in her rationale and interviews that the plays are "meant to be acted out, seen and heard." Yet, none of her objectives mention acting out the play or listening to or viewing the play. Of course, it could
be argued that these objectives are subsumed under her very general ones. Still, the objectives do not seem to directly relate to the overall rationale.

Although I did not expect that the creative planner would synthesize the state standards of learning into her unit objectives, the fact that she did may be an influence of the creative planning model as well. The creative planning model has a design variable related to school objectives or standards of learning. This planner sought out those objectives and synthesized them into her plan. The rational means-end planner never spoke or wrote about the standards of learning, in the preactive stage, and they are not represented in her unit. The creative planner, however, noted the standards of learning that were incorporated into her unit by the SOL numbers at the ends of certain objectives (see above objectives list).

c. Pupils

In the preactive stage, before the preservice teachers began teaching, the rational means-end planner made no comments about individual students in her journal (N=0) and few in her general preactive interviews. The creative planner, however, made many comments about her individual students in her journal (N=66) and in the interviews. She kept notes about students in her class
and often shared insights she picked up about various students in her class. The creative planner’s model encouraged her student research, and the rational means-end model did not encourage student research. Perhaps the models used contributed to this major difference in their actual preactive thought and planning.

Both planners did, however, share impressions about their classes. I compared their two domains of thought to see if the differences were in any way attributable to the planning models used. These domains are presented in Tables 5 and 6.
Table 5.

Kinds of Statements About Class Composition (Rational Means-End)

1. I don’t know the kids hardly at all.
2. They think they can be cute with me.
3. They’re smart-mouthed.
4. They seem to be respectful for the most part.
5. Students enjoy it when they realize that the teacher is a person too.
6. I wish I knew the kids better.
7. The class is good (intelligent).
8. They’ll probably do anything (I ask of them).
9. I don’t want to have to break their arms to get them in front of the class.
10. They might be lacking motivation.
11. They’ve had more Shakespeare than I’d expected. from Interviews
12. I don’t think they’ve dealt with things the way I’ll have them doing it.
13. I know they have a strong background in Shakespeare so I know that will be a big help.
14. There’s a lot of looking on others’ papers which I will not tolerate from a college-bound class especially.
15. Just the whole expectations of the kids, I’m surprised, disappointed. I’d thought I would be able to do more with them than I’m going to be able to do. They think they know it all. And that they don’t need to have a teacher tell them because they are bright enough. That’s just the way they are. They’re wise guys and cutesie toward me and it’s been difficult.
16. I hope they will be able to do more fun activities like go to the library. I hope they are responsible enough to do that without being a big party kind of thing but I was really surprised. I thought they would be a lot more kind to me.
17. Even though they are college-bound, they are not the ability that I thought they would be. They are not as advanced as I thought they would be. It seems to be at this school that college-bound means these kids plan to go to college. At the school I went to, you were on that level. But here their intention is to go to college and there are all kinds of kids thrown in there.
Table 6.

Kinds of Statements About Class Composition (Creative)

1. They are tired by this time of day and will need more motivators.
2. This is the class I'm most excited about.
3. They seem good-natured, bright, are fun to be with.
4. They are a good group of kids.
5. Sixth period is very intriguing. They require quizzes everyday to make them read, yet they are the brightest group.
6. They need some type of excitement, perhaps something to jar their motivation bottoms.
7. (Sleepiness) is not an excuse for sixth period.
8. Most of the kids have jobs after school so they rarely get much work done on the nights they work.
9. Sixth period is a larger class, but they (with the right motivators) can discuss on a deeper level the literature they are reading.
10. They have a problem keeping up with reading.
11. If they're not reading Swift, they'll really skirk Henry IV.
12. They are capable of (understanding) but they are not prompted enough.
13. They seem to work quietly even though today is a pep rally.
14. They seem to act with/to individual teasing attitudes — very calm, relaxed classroom.
15. Their lack of formal behavior works well with my own personality and Ms. Robey's.
16. They seem to have lots of respect and a sense of humor.
17. They are obviously talented young people capable of group work and motivated by creative assignments.
18. I was quite impressed by this collection of characters (after reading their literary product). I know they are capable.
19. They seem to fall apart at the least break in transition or at a hint of weakness in plans or idea. They try to "milk you" for everything you have in other words.
20. This is the class I fear the most. Fear because I’m afraid I’ll lose control of them, or even that I might never teach them a useful thing and they would be right in the end — school was really a waste of time for them. I fear this class the most and I am most emotionally attached to them also.
21. They do react well to an informal approach, but conversely need the structure to get them to do anything.
22. I am beginning to feel an enormous sense of pride in my "kids". I have been reading all their poetry and some of it is outstanding. I can’t help but brag to the other student teachers and my roommates about how talented they are.
Table 6. (continued)

Kinds of Statements About Class Composition (Creative)

23. Each class has its own strengths and weaknesses which means, although I have basically the same material to cover, I need to have three preparations which will be variations of each other. It seems impossible—they may be close or cover the same material which cuts down on research time for the teacher, but I must say that is not uncommon to have very different classes on the same grade level. It is almost inevitable, I would say.

24. I am confused about how this time off will affect my students. On the one side of the coin, I realize that if they're as bored as I am, they might approach these units with renewed motivation. On the flip side, a lot of my students will have had time to enjoy themselves and not want to come back at all. They will have lost the "groove" that one gets into and perhaps it will take longer to get them back on track.

from interview:

25. They're just cool students.

26. I liked the SOLS because they helped me know what they could achieve.

27. They're going to be a good group to work with.
The only difference in these comments that may be partially attributable to the planning models used is that the creative planner's comments seem to be based more often on insights reaped from thoughtful observation of the student products and actions. Her model, of course, encourages this activity.

The rational means-end planner, on the other hand, never mentions reading student products as a means of getting to know her students. She does, however, gain a few insights through observation, but the comments in which she expresses these insights do not suggest the deliberate seeking-out of data that the comments above suggest. Instead, they sound more like recordings of abnormal events that led her to document them in writing.

Secondly, the creative planner makes several comments which suggest that she is trying to understand the class community so that she can fit into it and enhance it by making it beneficial and stimulating for the students—a directive in her model. For example, she realizes that even different classes on the same grade level and in the same grouping can differ markedly and that different preparations are needed (see 23). She also mentions repeatedly that, because she notices a lack of motivation, she will have to come up with ways to motivate the students (see 1, 6, 7, 9, 12, 17, 21). She even
talks about how the class' personality is consistent with hers and will, therefore, be easier to work with (see 15).

The rational means-end planner, in contrast, who had no directives for studying the classroom environment nor for thinking of creative ways to fit into it, displays none of this insight. None of her comments about the class are tied to insights as to how she hopes to become a part of the community or make the community beneficial and stimulating. She does, however, note that the students will probably do anything she will ask them to do (see 8). This, perhaps, could be a statement about fitting into the class community.

When the data on individual students and class comments are seen together in comparison, it seems that the creative planner, as encouraged, devoted more analytical comments to pupil characteristics than did the rational means-end planner. Perhaps the planners' use of differing models contributed to this major difference.

d. Activities

As hypothesized, both preservice teachers sought out and used a variety of activities in their unit plans. All of the activities seemed to be types of methods that are encouraged in their teacher preparation programs.
Also as hypothesized, the rational means-end planner spoke of finding activities that would meet her objectives (see Rational Means-End Planner's Thoughts About Their Unit Objectives). Likewise, the creative planner, as conjectured, selected her activities by considering numerous educational design variables. As the creative planner's rationale suggests (see Kinds of Creative Planner's Rationale Features), she considered more design variables when selecting certain activities. In other words, she did not pick the activities solely because they met her stated objectives. For example, she had many reasons for using the response logs (N=8). Those reasons addressed other design variable such as management, learning theory, evaluation and executive management strategies. Data from her interviews and journals also reflect that she considered many design variables, as her model stressed, when selecting activities.

e. Evaluation

Both preservice teachers evaluated every activity they encouraged students to engage in. Their methods, presented in their units, were varied but reflected the types of evaluation measures encouraged in their teacher preparation programs. Both, for example, included assessments such as tests, projects, and performances.
Their understandings of the purposes of evaluation, however, differed as was hypothesized. The creative planner did plan to use her evaluation tools as a means for monitoring the classroom environment as her model suggested. The rational means-end planner, who was not encouraged to think of evaluative instruments in this way, never spoke of her evaluation measures in those ways. Instead, as expected, she considered them as means for assessing the degree to which students met or failed to meet objectives. Excerpts from the planners' transcribed interviews support this assertion:

Rational Means-End Planner’s Comments on Evaluation

Then would be the evaluation, and that would be how you will assess other students accomplishing the goals, the objectives that you set. I think that they should be very clear. I think that that has been one of my main problems, or my weakness, is that with my unit, they were clear in the beginning but somehow they kind of got bogged down in the shuffle of activities. The scale they would be graded on, the one to five, check minus, check plus, how much they will weight in the final over-all unit grade. Then, how you will be grading it. What you will be looking for, what is required for, I don't want to say the best grade, but, you know, what you will be looking for in the evaluation process. And that would be it.

Creative Planner’s Comments on Evaluation

I think evaluation is very important. It is definitely a part of planning because it is providing feedback on your implementation. It (grading papers) is a part of preplanning in the sense that you (learn) about the types of activities that the students enjoy; about the types of activities that they will do better at, especially in English, because some students like poetry and some students do not. You know, it’s just kind of, you almost, it’s trial and error. You just don’t know who is going to enjoy which.
Content Statements

Both preservice teachers evidenced in interviews, their journals, and their actual classroom teaching a detailed understanding of *King Henry*. Both studied and conducted detailed research on the play. As hypothesized, this research emphasis seemed more the by-product of their academic preparation in the field of English, their love of the play and their desire to know the play well. Since the data do not lend support one way or the other as to the impact of the planning models used, they will not be presented. Yet, both models do implicitly encourage this activity. Knowing the play is integral to formulating the rationale, objectives, activities, and evaluations.

Planning Process Statements

As expected, the planning process statements of the preservice teachers differed markedly. The rational means-end planner described her planning in terms of the model she was given; a nonrecursive, step-by-step process. The creative planner defined her planning in terms of the model she was given: a three-stage, recursive process that encouraged her to consider many
design variables in the preplanning and planning stages. The interviews and journal entries are full of discussion of their planning processes, but only a few representative sections of their discussion will be provided here to support my above assertions:

**Rational Means-End Planning Process Comments**

I started brainstorming activities, but even before that I thought how I wanted to teach it, more about my rationale, which is the first section of the unit plan. I thought of what I really wanted them to get out of it, what I felt was important.

After I had written my rationale, I gathered activities, I wrote to my high school teachers, actually I did this before I read the play. I wrote to them and one in particular sent me a lot of material, but they dealt with Macbeth. So what I did was, looked at what I thought to be the best of those materials for King Henry and I tried to adapt it somewhat to this play. That took quite a bit of time; finding significant quotations from the play. I spent a lot of time in SICL just going through different drama activities; I made up an activities file which is just brainstorming, all the possible activities; and it was really hard to narrow it down.

Researcher: You skipped over behavioral objectives. Does this suggest that you looked at activities before you created your objectives, or...?

Well, I had my objectives in my mind; and my rationale, like I said, I kind of had a sense of what I wanted them to do, but I did not have clearly stated, or defined objectives. I had not written out objectives.

Researcher: So you had goals and then kind of proceeded with activities. When did you write your behavioral objectives?

I brainstormed my activities. I did not clearly apply them to the play. Then after I had a long list of activities, I knew what was available; what had been done; and what I thought would be successful, then I went back and made my objectives. I didn't make my objectives to fit the activities; I don't feel that I did that. I had it in my mind what I thought I would want them to achieve, and I think that is in my
rationale. And then my activities, then I brainstormed my activities. Then I went back to clearly define the objectives and then I chose activities that I thought would achieve those objectives.

I selected activities that would meet the objectives.

Researcher: Have you used any activities that are inconsistent with these three objectives?

No.

Researcher: Have the objectives in any way limited you in terms of the activities you could use?

Yes. I think they have limited it as to what was available to use or what options I had.

Then for the evaluation, the introductory projects and their performances were weighted twice; quizzes and homework would be weighted one time, and I gave them, how I would grade the projects, that I would count how hard they worked. How attentive they were to doing the project, that I wanted them to answer the specific questions that I had posed on the projects and that it would be on a scale of one to five. And again with the paraphrasing. That was all included in the evaluation and not just in a list that said, "these will be weighted two times" but I said how they would be assessed. And the test I said would be weighted three times. The project was going to be weighted three times as well.

Creative Planning Process Statements

O.K. Probably the most important thing, you know, I have all these ideas before I begin and the most important thing is just getting to know your students and getting to know what the different classes are like; just really getting in there and knowing all their names the first or second day; starting to work with them a little bit. The first two or three days, they were doing alot of group work in a couple of the periods and I would just float around; talk to them briefly; get to know the personalities. I was giving a lot of make-up quizzes, so I would go down to the library and give a quiz and just kind of talk to them a little bit. As a teacher, but then again as someone who is generally interested in their class. That makes all the difference in the world. All the kind of preconceived notions that I wanted to do, kind of all rode on what kind of class it was; and I know a lot of the preservice teachers found that they had everything all planned out beforehand and worked really hard over Christmas break,
and then you get to the class and then you realize that this
is not going to work and there is just no way that you can
manipulate it so it will work. If you are manipulating it,
you are trying to make this particular plan fit the class that
doesn’t have that kind of personality, so, what I wanted to do
over Christmas break, I really wanted to get a brief overview,
the knowledge as far as what I needed to have in teaching, and
then wait until I got to see my classes before I even got
started, started narrowing down the things that I wanted to
do. I feel that was probably better because I didn’t have the
unit planned in my mind... stuck. I do that all the time; I’ll
get something just stuck in my mind and I’ll say that it
is so good that I wish it would fit with these people, or
whatever, and then I can’t think of anything fresh that would
go with them so I try to keep in mind the students.

Researcher: O.K. All right. So in the first couple of days
you’ve spent most of your time getting to know the students,
could you say more about your strategies? You mentioned
several; that they were in groups and that you just went
around and tried to pick-up information...any other strategies?

I went to a basketball game.

Researcher: No.

Yes I did. It was so much fun. I...

Researcher: Do you consider that part of your planning?

Oh, yes, most definitely. I got in so many students good
graces by going. Most of the basketball team I have in my
classes, and you know, it’s just having them see me there. It
was just like an ice-breaker, almost.

Researcher: You mentioned that you were going to get a
student to help you with bulletin boards. I assume you’ve
been brainstorming about that. Your said that at home you
didn’t think about it that much. What did you come up with in
terms of materials and/or bulletin boards? and How?

Looking at other teachers’ classrooms. I’ve begun to, like
when I see an empty classroom, I just walk in and look
around. And, you know, I see different teachers working on
projects that they are displaying in different places. That’s
and idea. Miss Robey has some ideas from last year that her
students made. She was kind of telling me off the top of her
head about that. She has a lot of materials from previous
years that students have made and let her keep. I’m probably
going to use a few of those just to display around, like ones
of the Globe Theatre and another one of Shakespeare's life, but they're really nice.

Researcher: Other types of planning activities?

Observing in class, that is when I take down a lot of my notes; observe individuals. I take down a lot of my notes about what my cooperating teacher is doing, even. How she gets them into groups; how she keeps them quiet. It's amazing what she does to keep them quiet. I've got lots and lots of notes like that. I spend 30 minutes after school, staying here; I stay here till four and generally that is when I try and jot a few notes down as far as how the day had gone; if anything significant has happened, you know, just kind of overall view of the day. Exploring the library, that is another thing I have done. I did that after 3:30.

Researcher: You said that you were going to wait and do your unit plan after you had selected all this material...have you started to work on it?

I have started today (After seven full days of observation—preplanning).
In the first week of their King Henry IV unit, the university school students in Mary Ellen's class come trickling in after the tardy bell. Mary Ellen, without a plan to deal with such delinquency, decides to let their behavior slide—this time. After calling the roll, she cannot decide whether she needs to explain what she wants to do with her candy or whether she should just proceed with her agenda and hope they catch on. She proceeds, and they catch on—a good decision, she later acknowledges.

More decisions surface—(a decision being to do something not previously planned): How am I going to get these students into their groups? She knows she wants the candycanes with the candycanes and the tootsie pops with the tootsie pops, but she is not sure, at the moment, whether they should break into research groups before going to the library or after. On the spot, she decides to break them into groups before they leave. This decision, again, proves a good one, she later decides.
Oh no. The planner has the right amount of different candies for the right number of students for each group; but, some of the students are absent and the candies have been dispersed. Oh no. Quickly, Mary Ellen accepts the students' assistance. They realize her quandary and let her know that the two tootsie pops would not mind working with the two candycanes. What a relief.

Other decisions surface as well in this first week. For example, Mary Ellen constantly decides whether she will interrupt the flow of the class to make students be quiet or whether she will go this way or that with an instructional procedure. Somehow, though, she manages.

In the second week of teaching King Henry IV, Mary Ellen makes more interactive decisions. More of these are related to the students and their input; although she still adds to her original plan as she goes along.

Mary Ellen is confronted with a harsh reality within the classroom. The videocamera, which she set up the afternoon before, is not working properly. She has problems. The students, who are still trickling in, catch on and realize that the teacher has a problem. Among the many decisions Mary Ellen considers are 1) to get her cooperating teacher which means leaving the students alone; 2) to change her instructional flow to accommodate the technical difficulties; and 3) to move on to something else since the natives are restless.
With the video almost ready to go, Mary Ellen continues to try to get students on task. As she puts it, "I was practicing being mad and forceful."

Once the video is on, Mary Ellen turns out the lights although she asks the students to consider the questions on the viewing guide. Although many of the students obviously seem not to be paying attention, Mary Ellen does not interrupt the movie nor make discreet efforts to awaken the youth.

During the third week, Mary Ellen is most busy with interactive decision-making. In one class, for example, she makes over twenty-five in-house decisions. This abundance of decision-making is partially a result of her teacher-centered classroom. Mary Ellen decides before class to conduct a character analysis discussion by using a method that gets students to think about character motivations through the use of three questions: Who am I? What do I want? How do I get it? Mary Ellen uses the chalkboard to write up the students' responses to each of these questions as they are posed of each of the play's major characters. The teacher also adds a little twist to the method. She asks the students to rank each character on a scale of 1 to 5 in terms of their ambition and their power.
This created situation causes Mary Ellen to make many unplanned decisions. First of all, she has some discipline problems: the students are not giving her their full attention. She decides to separate them. As she states, "At this point, I still did not feel that I had complete control over the whole class." When asked later if she had a discipline strategy worked out, Mary Ellen said, "No, not beyond moving their seats."

Other decisions relate to targeting certain students who were not participating, deciding whether to tie-in student answers to previous content covered in previous classes, or deciding how to respond to student input. The teacher seems to be thinking much harder than the students who are sometimes hollering out comments like, "Give King Henry about a 3.752 for power."

By the last week Mary Ellen is making fewer in-class decisions. Since the students are performing, she only needs to provide a structure for their presentations. She makes decisions about when to have them wrap-up their practice time, what order they will present their adaptations of the play, and student misbehavior.

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During the first week Jennifer, the creative planner, has a slow start. She comes to the class fully
prepared for a lecture on the history and background of King Henry. She is equipped with visuals and overheads and a wealth of information. The students are asked to take notes as she delivers her knowledge. This works okay for about the first fifteen minutes until the teacher realizes that she is talking too fast, the students are not getting enough time to copy all of the material on the displayed overheads, and some have simply given up. She makes a decision to do something.

Jennifer looks at her mounds of overheads and decides to save some of them for a later time. As she puts it, "You can tell by the looks on their faces, the way they're kind of bending over their desks, they're just writing frantically and they're not really listening to what I'm saying."

As she proceeds with her reduced mound of overheads, she continues to decide "what material to weed out." She decides at one point to just lift the overhead on the screen, but this proves fatal since some have not finished copying. The students look around in disbelief.

To alleviate this mess, she quickly retrieves a transparency believed to be on the politics of the period. However, when it flashes on the screen, it is actually about the plot sequence.
Luckily, this proves a nice introduction for an on-the-spot decision: "Instead of really making anything worse than it already is, I'll just have them read the rest of the period." Thus, she gives them a backdrop for the opening scenes and then gives the students a meaningful reading assignment.

During the second week, Jennifer changes her whole classroom environment. Unimpressed with her teacher-centered atmosphere, she swears never again to put herself in that position. Throughout the rest of the unit, the students either sit in a seminar circle or work in small groups. This week the students work in small groups on dramatic adaptations of *King Henry* passages. Jennifer makes only one unplanned decision during this time: to postpone the student presentations to Thursday since an assembly, the Cupid Show is scheduled for part of sixth on Wednesday. Throughout the period, Jennifer, as planned, roams from group to group providing them with her repertoire of background information when they need it. She thinks this is a successful class for several reasons:

The students seem to be, like this whole period, they've been on task and they've not gotten antsy, they've not gotten up; and they weren't waiting for the bell. They stayed after the bell. They just seem to really be enjoying the activity. That's a good indicator—the reaction of the students themselves. Also, if, I'm happy. If I'm going around and I'm just completely interested because I'm learning things and
having a good time and laughing with students, or really pondering over a particular line, again, if I feel good about it, I think that's an indicator. I think that if you're meeting a particular objective, you don't need to deviate from your plans at all, and all these things are just, just beautifully mingled together.

The third week seems to be a replication of the second week: Jennifer makes only a few interactive decisions. Today she only makes one: she notices that a few students had been absent for a day or two and decides to give instructions for the day's activities although the students are working on an activity started yesterday with complete instructions in mind. Other than this decision, Jennifer is free from having to make impromptu decisions that were not planned ahead.

Throughout the period, the students, in a seminar group setting, discuss Act IV in a lively way. The teacher sometimes poses a provocative and dense question which she has prepared ahead of time based on a theory of questioning her advisor espouses. The students jump in and respond with support from the play, their own personal experiences, and the world at large. The seminar discussion goes just as Jennifer planned so, again, she is pleased and explains why:

This seminar discussion is what I wanted it to be. The students were prepared. They discussed, and even though the videocamera inhibits them a bit, just think of all the wonderful ideas we had going today. Again, this influences my
next period's lesson. I like to repeat, I like to keep going over, having them reflect on what has gone on in the play before and what is predictable in the future. That way, we can always tie what is happening in with what is going to happen. It's an ongoing thing, and it is really helping them internalize the play. I am always saying, "Well, look back at this particular scene," and I've seen them starting to catch on. Instead of saying page 85, they're saying, "in the first act," or "in the second act," like Stephen has even gotten to the point that even off the top of his head, he can say what particular scene it was and which act. Another thing that I think helps them is just the fact that they have their own self-manufactured plot summaries on their desks; and they can look at them as we go; that's a wonderful thing! I see them--without me even having to tell them at the beginning of class, if they know we are going to discuss Act IV in class, or they're going to read something in class, I'll see them at the beginning of the class flipping through and reading what they've written and looking at other peoples' and discussing it. It's real exciting seeing them do that because that's what I intended it to be. It has the potential to flop, but I think because I have been using that kind of prereading learning strategy, they are starting to utilize it more. And, they are doing the prereading and prewriting on their own.

By week four Jennifer just seems to get out of the way of her plan. She lets it flow and makes no interactive decisions that were not planned in advance. Today the students bring with them their questions and concerns about the King Henry video that they wrote out and delivered to the teacher in the form of "exit slips," a new methodological communique. The teacher, using the students' own questions, engages the class in discussion after they finish watching the King Henry video. Although Jennifer is pleased, again, with the flow of the class, she realizes that improvements or equally good paths could have been taken:
We were talking about preplanning and postplanning and how that not only relates to a lesson, to any of the activities, but also to the movie; and, I think perhaps we could have spent 10 minutes at the beginning; and we could have talked about what we had seen before. They commented briefly at the end of the movie yesterday on how hot-headed Hotspur was, and how much they had not anticipated that he would really get up and yell and shake his fist.

I would have loved, to maybe, have prefaced too, the persuasive techniques Worster used today. I could have spent as much time as we had today talking about the throne in the movie. It makes a wonderful backdrop: Here, the King has left, and the empty room, and all of this relates to the theme of order, their favorite theme. So, just when the King goes to the revolution, that's just a wonderful scene, and I neglected to bring that out. I think, too, I could have enriched the viewing, could have made them look for nuances, smaller details, because they do have a grasp of the play. If I had stopped the play five minutes earlier, I could have waited until tomorrow and put them in groups and let them discuss the characters and the actors and their differing interpretations. The director obviously cut out a few important scenes that I think are enriching for the play. As far as stopping in between the film, I thought about it. Just telling them every once in awhile to look out for something.

Even though Jennifer creates plans that seem to work beautifully, she believes that it would be more beneficial for an administrator to see her postplanning instead of her unit plans. Her reasons are interesting:

As far as a school supervisor coming in, it would be much more beneficial for him/her to see my postplanning, to see why a particular plan worked or didn't work and to see what resulted out of the plan you had written up earlier. It's one thing, it's fine and good to have a list of activities, but it would be so much more beneficial for the administrator or the supervisor coming in to see what worked and why. Activities are fine; but they don't tell you which the students enjoyed more, which ones they got the most out of, which ones were the ones where they discussed the most, how they reacted. None of
that is in your lesson plan and so it's not good if you don't know if the plan's successful. It's just the postplanning is so rich as far as I'm concerned. Preplanning is rich but in a different sense. Again, to reemphasize preplanning can be something different for everyone. Preplanning, for me, is visualizing things that could be. The postplanning is analyzing what was and how I can make it better. And, every single one of my lesson plans is different after I have implemented it. If I was going to implement it again, it would be completely different. If I don't document what happened, I may forget the next year, or perhaps someone who would like to use that plan won't know that I found out something that didn't work.

These comments about the significance of post-planning seem even more compelling when they come from a teacher who plans so thoroughly and so well beforehand. The point is, however, that the creative planner does not seem bound to her plan, that even though her implemented plan is consistent with her idealized plan, she still sees room for improvement in a more reflective, postplanning state.

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The rational means-end planner made more interactive decisions than the creative planner because she did not as fully predict pupil behavior and response, the instructional procedures for her many activities, nor did she work out management strategies for the classroom environment. Consequently, she had to plan on the spot. She had to work out strategies while "in-flight" as Morine-Dershimer would describe it. The creative
planner, however, made very few interactive decisions since she worked out not only her objectives and activities beforehand; but also, her classroom management strategies and her instructional procedures. As Yinger would have it, the creative planner worked out her activity, instructional, management, and executive management routines before she walked into the classroom. Her elaborate activities served as controlled behavior settings which minimized the teacher's and students' anxiety and frustration and the teacher's interactive decision-making since all knew the parameters within which their classroom life would be rich and meaningful.

The calibre of interactive teacher thinking seems to be influenced by the calibre of preactive teacher planning or thought. Fewer interactive decisions are necessary when the teacher has thought it all through ahead of time. When fewer interactive planning decisions are needed, it seems the teacher's cognitive space is freer to focus on, for example, the nuances of a Shakespearean act, the observation of a budding Shakespearean scholar, or just the monitoring of the classroom environment. This finding is unprecedented in the study of teacher thought and its impact on interactive teaching. Considerable planning seems to
free a teacher to be more fully present in the classroom environment s/he creates. Thorough planning does not necessarily strictly bind a teacher to an internalized plan that cannot be changed, especially when the planner is encouraged, as was the creative planner, to engage in postactive thought as well.

OTHER FINDINGS ON THE PLANNER’S INTERACTIVE THOUGHT

My hypotheses related to interactive teaching were not helpful. The findings, however, seem to suggest that the use of the prescriptive planning models can account, in part, for the differences in the preservice teachers’ interactive teaching. Tables 7 and 8 capture the number and types of interactive decisions made as well as the types of thoughts the preservice teachers were having at decision points. The categories listed along the left side of the table are explained in detail in Appendix 0. Also, in that Appendix examples from the findings are provided for each category.
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| Decision                        | 3.1 | 3.2 | 3.3 | 3.4 | 3.5 | 3.6 | 3.7 | 3.8 | 3.9 | 3.10 | 3.11 | 3.12 | 3.13 | 3.14 | 3.15 | 3.16 | 3.17 | 3.18 | 3.19 |
|---------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|
| 1.1 Pupil Related               | X   | X   | X   | X   | X   | X   | X   | X   | X   |  X   |  X   |  X   |  X   |  X   |  X   |  X   |  X   |  X   |
| 1.2 Plan Related                |     |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |
| 1.3 Supplementary Decision      | X   |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |
| 1.4 Explanation of Routine Procedure | X |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |
| 1.5 Description of Specific Events |   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 2.1 Pupil Learning              |     | X   | X   | X   | X   | X   | X   | X   | X   |  X   |  X   |  X   |  X   |  X   |  X   |  X   |  X   |  X   |
| 2.2 Pupil Attitudes             |     |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |
| 2.3 Pupil Behavior              | X   | X   | X   | X   | X   | X   | X   | X   | X   |  X   |  X   |  X   |  X   |  X   |  X   |  X   |  X   |  X   |
| 2.4 Lesson Content - Information|     |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |
| 2.5 Lesson Content - Skill or Process| X |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |
| 2.6 Typical Procedures          |     |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |
| 2.7 Modification of Procedures  |     |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |
| 2.8 Commercial Instructional Materials |   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 2.9 Teacher Instructional Materials |   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 2.10 Plan Related Pacing        |     |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |
| 3.1 Pupil's Verbal Behavior     | X   | X   | X   | X   | X   | X   | X   | X   | X   |  X   |  X   |  X   |  X   |  X   |  X   |  X   |  X   |  X   |
| 3.2 Pupil's Nonverbal Behavior  |     |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |
| 3.3 Teacher Expectation         | X   | X   | X   | X   | X   | X   | X   | X   | X   |  X   |  X   |  X   |  X   |  X   |  X   |  X   |  X   |  X   |
| 3.4 Teacher Recall of Prior Knowledge |     |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |
| 3.5 Teacher Materials           | X   |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |
| 4.1 Principles of Inst. Identified | X  |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |
| 4.2 Teacher Feelings Expressed  |     | X   | X   | X   | X   | X   | X   | X   | X   |  X   |  X   |  X   |  X   |  X   |  X   |  X   |  X   |  X   |
| 4.3 Alternative Procedures Identified | X |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      |      |
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### Table 8.

**Creative Planner's Interactive Decisions**

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The Rational Means-End Planner’s Interactive Trends

The rational means-end planner made many (N=51) interactive decisions during her four videotaped sessions (twenty percent of unit). Two trends emerged from the analysis. First, most of her interactive decision were pupil-related decisions (N=29). Second, the other decisions tended to be supplemental (N=15). Trends in the other categorical domains related to the thoughts of the decision maker were less apparent.

Most of the decisions were triggered by a combination of influences such as pupils’ verbal behavior, pupils’ nonverbal behavior, teacher expectations, or recall of prior knowledge.

Sometimes her interactive decisions were accompanied with cognitive and/or affective thoughts related to principles of instructions, feelings about students and their behavior, or thoughts about alternative procedures.

Since most of the rational means-end planner’s interactive decisions were pupil-related or supplemental decisions (N=44 out of 51 decisions); and, since she made so many decisions within four teaching sessions, perhaps the planner did not anticipate in the preactive stage many of the problems that caused her abundant interactive decision-making. Although she had planned for curriculum and instruction, as her planning model encouraged, she
did not work out instructional procedures or management strategies. Neither did she engage in student research so that she would be in a better position to predict the type of educational environment they would need. Consequently, in the interactive stage of teaching, she had to make many decisions since she had not planned ahead, that is she had not addressed possible problems before she walked in. Her planning model, however, did not encourage this type of preactive thought related to management strategies, instructional procedures, or student research.

Another factor that may have contributed to her large number of interactive decisions was that her class was largely teacher-centered. On day three, the day in which she made 27 interactive decisions that she had not planned to make, she lead a discussion with the students. Since she did not know the students very well, she could not predict their responses; so she had to "plan" on the spot. The entire discussion was a long chain of teacher-to-student-to-teacher-to-student responses. Rarely did the students discuss among themselves. This lack of student-to-student interaction caused the rational means-end planner to make many interactive decisions that she had not anticipated.
The Creative Planner's Interactive Trends

Unlike the rational means-end planner, the creative planner noted very few interactive decisions in her stimulated recall protocols (N=11). In fact, in the last three protocols, she made only two interactive decisions.

The interactive decisions that she did make were mostly supplemental (N=9). Since these occurred in the first session (Day 2 of the Unit), they were probably attributable to lack of experience in the classroom.

The only trend that emerged in her interactive decision making was that she made very few interactive decisions. Since few decisions were made, she was asked during the protocols, to explain why she made few decisions. Below are several excerpts which provide her reasons for lack of interactive decisions:

Researcher: Okay. Today was our last session in which I was trying to discern whether and when you made interactive decisions and why. You mentioned before that you've made very few interactive decisions in the last two stimulated recall protocols. Could you just elaborate once again, are there any new insights you had as to why you are making very few interactive decisions?

Creative Planner: I believe that part of the reason, it's been sort of a slow decrease in the decisions. In the very beginning I was making lots of them. I think I was still uncomfortable with teaching number one; and with just how to utilize preplanning and postplanning, how to maximize the benefits. And, I think I got more and more comfortable with using the model...I'm always postplanning; I'm always preplanning; but I've just gotten more proficient at it, I guess. Maybe the use of it has become so smooth that it's kind of like running; when you start off running at first during the first two weeks, you just die, when you get home
and feel like it is never going to be worth it; and then after
the third week, you start feeling good and the fourth and
fifth and beyond, then you look forward to running and look
forward toward the feeling that you get. It's kind of like
the runner's high and it's true in teaching too. It's been a
slow development, but I'm so comfortable with it now. It just
seems like I can anticipate anything, and I'm comfortable with
the way the class goes. I'm a little bit less structured I
think, as far as I know what I want to accomplish. I think it
is also a move towards a less teacher-centered atmosphere to a
more student-centered atmosphere. I think that's why I'm
less structured; I don't plan out all the questions I want to
ask. I just let them flow. I have a few guidelines in mind,
just an easier way to plan out how a class is going. I'm less
uptight now. I tend to have more conversations with them—to
bring in a little more of the personal experiences, and I
think this is benefiting them a lot too. But very few
changes. No major changes whatsoever—like in the last two
weeks. I guess. I remember at the very beginning I had just
a major change. It was like "just forget this" and we did
flip-flops, and it was the wrong time to change, too, but I
just wasn't anticipating it well. As I became more
comfortable with the planning model, I feel like all those
things are ironing out. It's wonderful to just go through a
classroom and not have any worries, because I've thought most
of them through...It's been nice, and I anticipate in the next
two weeks that I won't have any at all.

The creative planner seems to believe that she made
fewer interactive decisions toward the end of the unit
because 1) she could anticipate what would happen; 2) she
became more familiar with the planning model and how to
use it; 3) and she was less teacher-centered. This
analysis seems consistent with my analysis and the
analysis of her cooperating teacher (See Creative
Planner's Cooperating Teaching Impressions). The
prescriptive creative planning model had some impact on
the creative planner's decision-making. Since she
considered many design variables before she walked into
the classroom, she had few decisions to make on the spot.
POSTACTIVE TEACHING

HOW THE PRESERVICE TEACHERS THOUGHT ABOUT THEIR IMPLEMENTED PLANS

By the third week of her King Henry unit, Mary Ellen, the rational means-end planner, feels the reflective journal writing she is required to do takes away from time she could be planning. She does not see reflective writing as a useful tool in helping her improve her implemented plans nor as a part of the planning process:

I understand the purpose of the journal. That seems to be a concern in the seminar, that the supervisor says, "I don't want to know what you did all day, but reflect." And I have been reflective. I try to focus some on one particular topic. We do have assigned topics that we are supposed to do every week. But every day I try to focus in on something either in classroom management, discipline, planning problems, the snow days. I try to focus them, but I think more of what they are helping me do is vent my feelings. I do go back and read them. I put them away and I usually do them here at sixth period, then I put them away and, the next morning I go back and read it before I do my next journal, I read it. Mostly what I've found is that they are very emotional. And I think that it helps me in a way, but I don't think it is helping my actual teaching procedures or anything. I do keep notes on criticisms I receive or my strengths and notes on my discussions with you or my supervisor and with my cooperating teacher. Like when she says you need to be louder. After our discussion, I go back and cite what I thought was important, especially things I agree with. Such as today, groups--keep control, and I will go back and make a note of that. I think that is more helpful, lists are more helpful than actually writing at length about them. And the journals, a lot of times I try to do them on the day that I am discussing. I don't go back and write on each day. I think that would be purposeless, but they are just kind of busy work, like, "Oh my
gosh, I have to write in my journal today." I don't feel that they are as valuable, as I could spend that time doing something else, such as preparing.

Mary Ellen, however, does evaluate her plans after implementation, though not in writing. She evaluates them primarily in light of whether the objectives are met, but she also considers other environmental input as well:

My plans are successful when the objectives are met. Often you don't know until well into your plan if things have been successful or not. You might start off the first few days and the students really don't have a good idea of what is going on, that they aren't fulfilling those objectives yet. But I think after you get going, you can really tell a lot better. The first quiz that I gave, they didn't do well on it, but through the discussion it was obvious they knew what was going on...I just have a feeling when I come out of class. You know whether it went well or not. Usually it is not because of your performance but because of how the kids performed. And that is not very technical and probably not very reliable but it is just a feeling that you have. And from there you look at the quizzes and the discussion and see who doesn't understand and who does understand. I know there are certain kids in my class that I had expected to understand, and they are understanding. The kids who have always had problems are not understanding and I am working with them more. I am meeting some of them at their lunches, after school and helping them and working with them.

When a daily lesson is unsuccessful Mary Ellen attributes the weaknesses to herself as the teacher and partially to the students:

I think the natural thing to do when students aren't meeting the objectives is blame yourself. And I know that my inexperience and just my age, my position, coming into this classroom that has been someone else's, I think a lot of it does have to do with me in this situation. But, I said that it has to do with me, but there are other situations, like the
snow and it was someone else's classroom. But I am willing to take the responsibility that a lot of it has to do with me and my teaching methods. I think the kids themselves, the whole personality of the class has a lot to do with how successful it can be. As you know from that class, they are very mature but they goof around a lot. They, being seniors, are ready to get out of here; and they are tired of Shakespeare. So there are a lot of factors that affect the teaching. I know that a lot of it is me, so I think that you need to realize what is you and what isn't you and be in control. I think it is a mixture of both, but primarily it is the teacher that it comes down to.

Mary Ellen evaluates her entire unit in much the same way she evaluates her daily lessons. She looks to see if students have met their objectives:

I think that the unit, overall, was successful. It had all three of the elements that I wanted to bring together in the unit; the literature, language and writing. It met the objectives that I had planned, that they would understand Shakespeare's world and like the characters, and understand the language. I was a little upset yesterday when I got the first few tests in class and looked over them; the first three that I looked at were terrible, on just the objective part, and I was so upset, but those turned out to be the worst students in the class, and the rest of the class did pretty well. Maybe they had a minus 2, 4, or 6 on the front, and I haven't graded the part which involved a translation of a section from the play, and an essay. I imagine they will do very well on those since they've read both of those topics before, so I don't anticipate any problems. So, judging from the assessment of the students, I think they have learned a lot. That makes me think the unit was successful. There were a few places that were unorganized, but I asked the students if they thought seeing the video first helped them, and they said, "Oh gosh, yes." I think watching the video first was worthwhile even though it did take 6 classes, though I believe 3 of those classes were shortened to half an hour, so that's why it ended up taking so many periods. It was worth it if it helped them.
Jennifer, the creative planner, is highly committed to postactive thought, to reflection, to what she and her model call postplanning. Every teaching day during either seventh period or later that evening, Jennifer reflects in writing on the strengths and weaknesses of her lessons. She sees this reflective writing as a way to learn about how to become a better teacher and also sees it as part of the planning process.

Postplanning has helped me the most in terms of the three stages of the creative planning process—especially in this very integral stage of my career development. It's just like I said the other day. It's like running because at first it was kind of a chore putting my thoughts down on paper, but it was just so wonderful to go back through and read through some of the reasons...to go back through my postplanning entries and find out who worked hard this day and what activity we were on, or why a certain thing was unsuccessful. That has been, I guess, the main thing that has helped me, and it was sort of a surprise that the reflection and the postplanning was such an influence. The reflection is definitely a very important part. With the old model, sure, it just ends with the lesson plan. You know, Period. And, the awareness I have now that it doesn't end with the lesson plan is good. But, that was the format of the old model and that was that, Period.

Like Mary Ellen, Jennifer evaluates her lessons without the aid of writing. On a daily basis she considers more factors than just students' meeting objectives when she appraises her days:

I check my unit on a daily basis. There is no way you can just look at something in the beginning or at the very end and determine success. But some teachers don't even evaluate their unit at the end. They just go on, and it's a shame because that unit will probably continue to be unsuccessful year after year if it had been unsuccessful.
Let's see, I look at student products. I look at student feedback. I look at how much students participate in the classroom. I look at what I have achieved, the goals I have set out for myself, and I look back and I think, "Well, have the students met some of my objectives that I have outlined and if not, why not, and if so, were there any extras that they have achieved without me actually thinking about it at the very beginning?

Unlike Mary Ellen who attributes the strengths or weaknesses of the unit primarily to herself but partially to her students, Jennifer believes a successful or unsuccessful unit is the by-product of an effective or ineffective educational design:

I have watched their reading proficiency rise enormously—to the point that they enjoy acting out the play in class. With the journal, they have achieved summary skills; they have experimented with character and theme analyses; they have developed written commentary on the play, the activities we have studied, the mood, and finally the viewing of it. And, I'm sure the students have increased their understanding of the universality of human experience. I feel all of my objectives (with the exception of one) have been met and surpassed by the students. The one I feel was nearly met, but not quite was the goal to have them recognize the changing nature of language by comparing Shakespeare's language to ours today. We worked with the comparison in our modern interpretation of the lines. And looking back, I should have emphasized this activity more. The students seemed to really enjoy it, learned from it, and were beginning to get a real sense of the language changes, but I just didn't schedule more of this activity much to my regret.

My unit plan has greatly improved by this point, and looking back, I feel as though I am a completely different teacher now. The insights I have into the play, by seeing it through my students' eyes and actually teaching it, are remarkable, and very rewarding. I can honestly say, I have enjoyed every minute of it. And the reasons to me are clear. I have a well-thought out unit, well-organized, well-planned series of activities that build up from a foundation that was already present. I have put an enormous amount of time into this unit
(and I think it shows), but the rewards are great. I now have a unit I can build upon and execute much more easily the second time around. I have a sense of accomplishment that cannot be measured or even repeated.

****

Mary Ellen, the rational means-end planner, has less appreciation for reflection than does Jennifer, the creative planner. Jennifer, unlike Mary Ellen, sees reflection as a natural part of her planning process. Both planners do evaluate their implemented lessons but in different ways. Mary Ellen judges successful lessons in terms of students reaching set objectives. Jennifer judges successful lessons in terms of the quality of educational environment she creates. Mary Ellen thinks the teacher and the students are the primary factors that make or break a daily lesson. Jennifer thinks caliber of planning is the critical factor. Perhaps the planning models they used contributed to these differences.

OTHER FINDINGS ON THE PLANNERS' POSTACTIVE THINKING

Tables 9 and 10 vividly depict the categorical emphasis of the two preservice teachers' postactive journal entries composed during their twenty day unit. Each table lists the categories of thought that emerged from the analysis and from the review of the literature on teacher thinking. The tables
| Day | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | Total (minutes) |
|-----|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----------------|
| Rationale | 0 | 0 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 |
| Objectives | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 46 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 52 |
| Activities & Methods | 0 | 0 | 21 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 15 | 0 | 5 | 0 | 0 | 0 | 2 | 48 |
| Evaluation | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 46 | 22 | 82 |
| Class Composition | 0 | 22 | 0 | 0 | 3 | 1 | 13 | 5 | 7 | 0 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 6 | 8 | 84 |
| Individual Student Analysis | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 10 |
| Overall Impressions of Class Activity | 16 | 4 | 0 | 1 | 11 | 3 | 11 | 2 | 2 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 58 |
| Content and/or Materials | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| Teaching Style | 14 | 4 | 5 | 0 | 9 | 7 | 1 | 3 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 52 |
| Planning Process | 8 | 0 | 0 | 34 | 0 | 0 | 2 | 0 | 0 | 30 | 0 | 8 | 0 | 10 | 0 | 0 | 62 | 1 | 0 | 155 |
| Management Strategies | 0 | 0 | 49 | 0 | 0 | 23 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 79 |
| Instructional Procedures | 0 | 2 | 0 | 0 | 0 | 0 | 12 | 9 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 |
| Feelings About Teaching | 0 | 1 | 0 | 0 | 12 | 0 | 0 | 15 | 13 | 0 | 6 | 37 | 12 | 0 | 35 | 0 | 0 | 35 | 0 | 4 | 170 |
| Professional Teaching Goals | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| Thoughts Unrelated to Implemented Lesson | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 34 |
| Cooperating Teacher Concerns | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Total (minutes) | 39 | 37 | 98 | 35 | 41 | 38 | 39 | 35 | 53 | 46 | 65 | 57 | 40 | 0 | 50 | 0 | 0 | 111 | 67 | 42 |
| Rationale | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Objectives | 0 | 17 | 3 | 2 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 22 | 0 | 51 |
| Activities & Methods | 0 | 8 | 15 | 34 | 1 | 0 | 13 | 3 | 33 | 82 | 0 | 10 | 0 | 52 | 18 | 14 | 27 | 1 | 0 | 0 | 311 |
| Evaluation | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 15 | 45 | 77 |
| Class Composition | 7 | 0 | 14 | 10 | 36 | 8 | 21 | 11 | 6 | 51 | 0 | 10 | 5 | 5 | 39 | 2 | 0 | 10 | 12 | 9 | 256 |
| Individual Student Analysis | 0 | 0 | 20 | 0 | 7 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 210 | 6 | 6 | 3 | 0 | 0 | 0 | 0 | 259 |
| Overall Impressions of Class Activity | 0 | 4 | 5 | 3 | 8 | 0 | 4 | 1 | 15 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 2 | 0 | 56 |
| Content and/or Materials | 1 | 6 | 7 | 1 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 1 | 0 | 0 | 0 | 0 | 28 |
| Teaching Style | 12 | 10 | 2 | 1 | 2 | 2 | 0 | 0 | 0 | 0 | 14 | 0 | 2 | 0 | 2 | 6 | 0 | 0 | 4 | 0 | 0 | 57 |
| Planning Process | 8 | 15 | 5 | 2 | 3 | 4 | 0 | 0 | 5 | 4 | 0 | 12 | 4 | 8 | 36 | 5 | 15 | 9 | 22 | 0 | 157 |
| Management Strategies | 10 | 0 | 0 | 1 | 7 | 0 | 0 | 1 | 0 | 19 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 44 |
| Instructional Procedures | 20 | 8 | 23 | 9 | 0 | 0 | 16 | 0 | 0 | 0 | 0 | 6 | 5 | 14 | 3 | 0 | 19 | 0 | 0 | 0 | 123 |
| Feelings About Teaching | 0 | 0 | 0 | 0 | 2 | 26 | 0 | 0 | 8 | 0 | 0 | 0 | 6 | 0 | 16 | 0 | 3 | 0 | 19 | 4 | 84 |
| Professional Teaching Goals | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 14 | 0 | 5 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 24 |
| Thoughts Unrelated to Implemented Lesson | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Cooperating Teacher Concerns | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| Total (minutes) | 69 | 71 | 94 | 63 | 66 | 44 | 59 | 16 | 69 | 205 | 0 | 49 | 230 | 132 | 87 | 33 | 71 | 29 | 92 | 58 |
also include data on the foci for each daily journal reflection, the number of written phrases and clauses for each category across the twenty day unit and the total of written responses in terms of phrases and clauses.

The data from the tables and the analysis of them suggest that, to a certain extent, the postactive reflections of the preservice teachers are shaped by the planning models they used. Their comments in postactive interviews also support this assertion. The support data are provided below in terms of separate analyses of each table, analysis of both preservice teacher's longest journal entries (quantitatively, their most reflective ones), and insights related to the other journal entries and postactive interview data.

Emphases in Rational Means-End Planner's Postactive Journal

The categories of thought (as shown within rational means-end planner's postactive journal) that received the most emphases in terms of quantity of phrases and clauses were 1) Feelings About Teaching (N=170 out of 893 total) and 2) Planning Process (N=155 out of 893 total). The Feelings About Teaching category includes phrases and clauses related to emotive thoughts, thoughts that are sometimes connected with examples and explanations and are about the teaching experience in general. Examples
include the following taken from the rational means-end planner's Day 12 postactive journal entry:

To me the definition of teaching qualifies as much more than the standard being imposed. To explain this more fully, I will clarify what I think "teaching" is. Teaching does not just apply to classroom presentation, as it is being defined for measurement purposes. To me, teaching is every interaction that occurs between students and myself. This includes not just what goes on in the classroom, but, and perhaps even more importantly, all the feedback I give students. I've spent many, many hours carefully responding to each assignment I give my students. This is the most personal kind of teaching! I teach the students more than what can be measured, too. By that, I mean in my personality, attitude, and even casual conversation. I do not understand how an objective number of hours (hours needed for student teacher certification) proves we have had a complete experience. It is very frustrating. I'm finding more and more technical aspects such as the number of hours to get in, are becoming of increasing importance.

The second major emphasis was on the Planning Process (N=155 out of 893). The Planning Process category includes phrases and clauses related to preactive and postactive thinking and activities. Examples within this category include the sample below from the rational means-ends planner's Day 4 journal entry:

I have so much planning to do. I have everything in my head, and I make a day to day list; but it's such a pain to make up 5 daily plans ahead of time. I do know what I'm going to do as far as topic and activities are concerned, but to write out everything is not easy. I'm finding my unit plans are really helpful; however, I'm not sticking to them rigidly, which I don't think is a big problem. I could follow it verbatim, but that is highly unrealistic. I don't think even the perfect unit in writing would be strictly followed in practice.
Furthermore, I really don't know if changes, both minor and major, should never occur. Constant revision and change seems to be a natural part of my planning process, and I'm comfortable with that. I thought these would be some good ideas about planning. I have to go practice them now.

Perhaps the heavy emphases on feelings about teaching and the planning process (36% of total responses) is in some way reflective of the planning model used. The rational means-end planning model did not encourage reflection on implemented plans, and reflection on implemented plans is not present in her postactive journal entries. Only 6% of her comments are related to evaluation of the activities or methods she used in her class. Instead of close analysis of implemented lessons, her focus in her postactive journal is more on her feelings about teaching and planning. She does not see the journal reflections as part of her planning or as a learning tool. In fact, she sees these postactive reflections as a hindrance to her planning.

Rational Means-End Planner's Most Reflective Postactive Journal Entry

Day 18 in the rational means-end planners' postactive journal proved the most reflective in terms of quantity (N=111). The entry is presented in its entirety and analyzed below in terms of general content and general quality of analytical reflection. It is
presented to share a taste of her reflections at her most fluent moment:

I’ve been neglecting my journals lately, and I really don’t see the value of going back and trying to completely recapture my thoughts on each day. It’s Friday now, and I haven’t written since Monday. I’m sorry, but I have so many more important obligations to meet. I’m not saying that the journals aren’t valuable, but they fall low on my list of priorities. I think it’s because they are for me, and I am falling low on my list of priorities! I will (as I have been), reflect heavily now on the weeks events and problems.

I know I’ve talked before about how my 5th period (juniors) was so much more successful, but the tides are shifting rapidly! It doesn’t seem that I can handle both the American literature unit and King Henry at the same time and have both be interesting, motivating and effective. It seems as if one or the other is going well, never both at the same time. I know why that is, too, but I cannot seem to change it. I have not learned the knack of managing time well, yet. I either have to spend my time on one subject or the other, because I don’t have time for both. I need to figure out how to make interesting and valuable activities time efficient. I think I am trying to respond so much, particularly to writing, because it is important, but then again, it takes so much time! I graded essays all last night along with working through my plans, and to read through all of them and make general comments, record impressions—that took 4 1/2 hours. That’s not including actual grading or suggestions. After that, I started planning for the weeks left, and I had everything all laid out, it took at least 3 hours to finish it all up. I never knew teaching involved so much work.

I have the next two weeks under control, which is such a great feeling. All along I’ve felt like I’m just hanging on. Now that time is winding down, I’m finally figuring out a system. Actually, planning is one of the more enjoyable activities. I still find it exciting figuring out new ideas and things to do. I just wish I had more time! It gets easier as time goes on, as I’m realizing.

I’m so excited about how well the King Henry unit has gone. It has improved greatly. My organization could still be improved. The kids feel that way too. I do think they’ve enjoyed it overall. I said that in an interview that I might not teach Henry again, but I would. I would have to make some adjustments, but I’m pleased with my performance. Being an
inexperienced teacher, I think I've handled the situation well. It wasn't easy; but I feel a great deal of satisfaction. Just the same though, I'll be glad to move on to Macbeth. That will be cake compared to Henry as we've affectionately dubbed him!

You know I was absent Monday. I handled that fine. What I've found is that teaching is horrible when you don't feel well. My energy and voice levels were specially affected. They were both at an absolute low. The kids sense when I'm not well and are sensitive.

Most of this above entry is devoted to her feelings about planning and teaching (N=97 out of 111 total). Most of it is descriptive, but some of it is reflective in an analytical way. For example, she analyzes her ineffective time management: she realizes that she is spending too much time responding to student writings; yet she finds that important. Also, she analyses her implemented lessons and comes to the conclusion that her organization could be improved. Still, for the longest journal entry created, she has few analytical comments. Most are descriptions. This journal entry is more analytical than most of the others. Most of her journal entries were descriptive and contained few analyses. Again, this seems consistent, somewhat, with the way she was encouraged to plan. She was not encouraged to analyze her daily implemented lessons. Even though she might have naturally analyzed her days in the journal (without a planning model's directive), she did not, even
though her university supervisor encouraged the rational means-end planners to be more analytical in their postactive journals. Perhaps the lack of emphasis on postactive thought in the rational means-end model contributed to this planner's largely descriptive and concise postactive journal that was sometimes neglected.

**Emphases in the Creative Planner's Postactive Journal**

The three foci of the creative planner's postactive journal entries are consistent with the emphases of her planning model. They include Activities and/or Methods (N=311 out of 1536 total), Individual Student Analyses (N=259 out of 1536) and Class Composition Analyses (N=256 out of 1536 total). The Activities and Methods category includes phrases and clauses related to comments on and analyses of curricular and instructional procedures designed and prepared for student learning. Samples from this category are apparent in the excerpt of the creative planner's Day 10 postactive journal entry:

In their journals, the students all responded relatively or totally positively to the "acting" in class. The general consensus was that they hated doing it, but had fun after it was over and got a lot out of it. Some even said it wasn't so bad once they got up. Which brings me to the positive things in class. From listening to them read the lines today, I got a sense that they enjoyed putting emphasis in the lines with feeling. I was thrilled. Why is this easy for them? A number of reasons, I believe. First, I gave them the hardest drama assignment first, so anything afterwards was "cake", ha! And second, I have been gradually introducing them into
dramatic reading. First, we read aloud, then we worked with understanding the lines to put emphasis where it was needed, then we "got into" our characters a little more with the characters cards and strategically placed our desks in a sort of scene. Today we worked on emotion and speaking loudly with more special arrangement; and tomorrow I would like to bring in a few simple props to create a throne and give the character of Hal a defining prop. Slowly, we are working up to more dramatics and I foresee this culminating in the viewing of the film. The third reason, I believe, goes back to creating a safe, friendly, relaxed atmosphere in the class.

The second emphasis, Individual Student Analyses, includes phrases and clauses related to analytical comments about specific students and their unique characteristics. Below is an excerpted example from Day 3:

A few have a really good understanding of the language and the basic events. Bob, especially, seems to have all the answers to my questions...Mary has a good grasp of the characters and what they have been doing. She is probably the most intelligent of the crew, but she rarely has the motivation to complete her work. We'll see how she does in group work. I'm thinking she will excel. She likes to be in a leadership position, and I know she hates to sit still. Tommy is the best reader because he is a drama student. I need to remember to comment in his journal about his perceptive sense of timing in reading the lines.

The creative planner's third emphasis is on Class Composition (N=256). This category includes phrases and clauses related to comments about the whole group of students. It does not include comments about individual students and the comments are not necessarily analytical. Sometimes they are just insights about the class. The
following excerpt from Day 14 includes some Class Composition comments:

We were supposed to have an assembly today so they may have been disappointed or unprepared. Their basketball play-offs are tonight in Franklin... I know a lot have their assignments already and have already read the entire play.

Of all the categories listed in the table, the ones most apt to be related to designing a beneficial and stimulating environment for students would be the ones the creative planner emphasized. Her thoughts were more about the students and the class as a whole and analyses of methods and activities she tried in an effort to make the environment stimulating and beneficial. Maybe her use of the creative planning model had an impact on even the content and foci of her postactive thought.

Creative Planner's Most Reflective Postactive Journal Entry

The creative planner was most quantitatively reflective on Day 13. Her entire entry and a general analysis of its content and general quality are provided below:

Postplanning Day 13
2-24-87

I am so proud of my students!! This really must be what a successful lesson feels like. I truly felt as if I were in a college classroom today. Reasons for success, my postplanning yesterday and the day before helped a lot. I anticipated problems and I know my students well enough now to know that they did have the knowledge—my problem would be getting ideas. Kent is a consistently good writer and reader and has a strong grasp on the play.
Nick Daniel

Nick has consistently been the best contributor and I guess has the greatest knowledge of the play. He is a very intelligent, perceptive student; one that will have no trouble in college. Nick contributed the most at the beginning of the unit, mainly because no one else said anything. Recently, since I seem to have five or six consistent contributors, he has become more reserved. His writings have been excellent so far. I look forward to the next two assignments. He always has a lot of keen observations—things I haven't even considered some of the time.

Mat Overbrush

My Shakespeare protege! He has all of a sudden developed an interest in reading literature and has the strongest grasp on the play. Again and again his knowledge and keen observations astound me. What a joy he is in the classroom. He and Ruth comb the play two and three times before they come to class and sometimes even catch me in the library to ask me questions or suggest an interpretation. He and Tommy are wonderful actors too. They are definitely not the shy ones of the class and their interpretation of Falstaff and the Prince was positively priceless in the drama week we had. I am looking forward to getting it on tape.

Tommy Huggi

Speaking of Tommy, quite a ham. He is a man of paradox. I see the polite, gentlemanly side of Mr. Huggi in class, but recently he was in ISS for misbehavior in another class and he is always in brawls after school. It is hard for me to imagine him like that though. In class his favorite activities are the fun ones—acting, group work, listening and watching anything participatory or involving movement or otherwise engaging.

Ruth Northland

Ruth is so quiet, but with Mat's assistance, she had a firm grasp of the play. Her writing is superb—she enjoys the acting and writing but I can tell it is hard for her to organize her thought in response to class questions, mainly because of nerves in class. She is such a sweet girl and very diligent in her work. Where she lacks certain depth of insight she makes up for it with hard work.

Cheryl Jones

Cheryl is a very mature and bright young lady. She is shy like Daniel, but she will speak in class if prompted. She has been enjoying the activities for the most part, and she has a very firm knowledge of the events and characters in the play. She is not my best student, but again, she is also a hard
worker and a consistent one. Sometimes she arrives at very complex ideas, such as her presentation on the nature of a good king, which leads me to believe she is beginning to conceptualize the deeper elements of the play. The movie will help her form these ideas and mold them into a coherent entity before the test.

Jerri Kinsman
Jerri is a very creative student. She and Patti are working on miniature settings of the tavern, the court, and the battlefield. A nice visual representation of one of the major themes in the play.

Diana Flower
Diana has a firm grasp of the ideas in the play. I am continually surprised at the concepts she arrives at on her own. She has really internalized the play too. I can say—what was that scene? and she knows exactly. Unfortunately she suffers from the same weakness of almost every student in the class—reluctance to speak out loud. She has good ideas, but she is very slowly building confidence to express them out loud.

Sherry Smith
Sherry has enjoyed the play the most. She has been absent for at least 7 out of the 14 days we've been in this unit, but it has allowed her to read the play all at once, an experience many of the students have not been fortunate enough to have the time to do. I am a little concerned that perhaps she has missed out on a lot by not being in class, but she seems to view the play holistically, which I am hoping will aid her when we discuss the themes at great length. It definitely lends a fresh perspective on our discussion. She is not reluctant at all to contribute in class, and I am sorry she was out so much, because I feel she would have helped out the other students a lot.

Patti Kipps
Patti is probably my favorite student of them all. She is genial, helpful, and sweet young lady. Again, a very creative student with a lot of fresh ideas to contribute. She is not as strong a writer as some of the other students, but she is also less reluctant to speak out in class. She and Mat did a wonderful job exploring Hotspur in our character discussion day.

Daniel Frankenberger
He is painfully shy when it comes to talking about something in class. You nearly have to drag a thought out of him, and then he prefaces everything with "Well, I don't know
but..." When he speaks, it is very softly so you have to strain to hear what he has to say. But when it comes to cutting up he's one of the more boisterous ones. He had a great sense of humor and a gift for puns. Unfortunately, he is also very moody. He responds well to individual attention and I've noticed the most groans from he and Kurt.

Martin Folts

Martin is another quiet basketball player. He has a sheepish smile that he almost always wears and he is one of my better writers. He is very diligent in his school work, sometimes staying after class to finish tests and written assignments. I really would like to get to know Martin better, but he is so reserved, it is very hard. I have been trying to bring him out by writing a little more in his journal and giving him lots of positive reinforcement. He surprises me sometimes by just speaking right up in class. He doesn't seem to have the strongest grasp on the play, but he is certainly the most diligent and inquisitive of the group.

Kurt Caldwell

Kurt is a self-professed hater of school. He is bright, knows the play, does the work, but is not enjoying it. He is my problem child. If there is one person who I am doubting I'll reach before the end of the unit it is Kurt. He rarely participates, hates the dramatics, and is only motivated by evaluation. But he is a good student. I can count on him to have the reading done, to have his work in on time, to answer adequately on the written work, really he is quite a challenge.

Most of this entry is devoted to the creative planner's major emphasis throughout the journal: individual student analyses (N=210 out of 230 total). She also analyses the strengths in her successful lesson. Features of the analyses include insights about the students' personality characteristics; their feelings about the unit; their relationships to others in the class; their extracurricular activities; their academic gifts; and their recent contributions in class.
Again, this most fluent journal entry reveals her postactive emphases, on thought about the class, individual students, and her classroom environment. These additional data also suggest that maybe she is influenced in her postactive thinking by the planning model she uses. Her postactive interviews also reveal these same emphases.

In summary, when all the postactive data sources are analyzed, it seems that the differing prescriptive planning models used may have influenced their written quantitative differences, their written foci, and the quality of their written and nonwritten postactive analyses. As hypothesized, the creative planner generated more analytical postactive written statements than the rational means-end planner. The creative planner, also as hypothesized, devoted more statements to the evaluation of her educational design than did the rational means-end planner. The interview data suggest the same trends. Again, the prescriptive planning models seem to have an influence on preservice teacher thinking.
THE PLANNERS' CLASSROOM ENVIRONMENTS

ETHNOGRAPHIC VIGNETTE OF WHAT HAPPENED IN THE PLANNERS' CLASSROOMS

At University High Mary Ellen has no classroom windows. Her room lacks traditional desks and even modern desks. Instead, her room is full of tables that seat two students. The tables have no storage space for books or belongings. The tables, about 16 of them, are cut like the shape below:

Each table has two brightly colored plastic chairs with aluminium supports. When Mary Ellen's whole second period is present, the students fill thirty of the thirty-two chairs.

The teacher's desk is in the front of the room with a full-width chalkboard behind it. To the left of the teacher's desk, Mary Ellen displays a full genealogical wall chart of King Henry's family line which she developed. It has unusual shapes and colors. These shapes and colors supposedly represent different family associations; but, since there is no symbol chart, the shapes and colors seem meaningless—attractive but without purpose. The back wall includes a tan metal
bookshelf that is largely empty. On its shelves I usually set up my video box. The door to the classroom is on the far back right wall. The entrance to the room is crowded. You almost have to walk around the first tables to get inside.

The table arrangements make student conversations easy. Small group work almost has to be employed because it seems impossible for anyone to really do individualized work at such crowded tables. Avoiding unintentional cheating on a test must be quite a feat.

The room is really too crowded to be able to alter its structure too dramatically, so Mary Ellen does not bother.

Into this world of plastic and aluminum, Mary Ellen brings *King Henry*.

On the first day, Mary Ellen gives an oral overview of the unit. She and the students talk about their Shakespearean experiences for a few minutes and then Mary Ellen introduces the settings and themes of the play. She distributes a four page summary of the play to help the students get the overall idea of the play. They go over the summary sheet.

For the next few days the students do group research on teacher-selected topics and present their findings to
the class on Friday. One student brings her Elizabethan costume designed in a previous class. Others read summaries on Aristotle's elements of tragedy. Although the research is presented nicely, one student comments later in an interview, "I didn't even understand what I was reading to the class so I doubt the others understood. Maybe the teacher should have expanded on what we presented." For homework, the students are assigned Act 1.

The next class activity is viewing the King Henry video. In order to give teachers time to preview them, the Humanities Foundation has started sending out their movies as soon as they are requested. Mary Ellen decides to go ahead and show the movie since it has arrived instead of holding on to it or asking for an extension on a film that is not in demand in Virginia. For six days, although three were shortened periods, the students watch the video. On the first day, Mary Ellen distributes a viewing sheet. The students are asked to use it although the teacher turns out the lights at the beginning of the play. Many students put their heads on their desks and seem to be sleeping during the viewing. On only two of the six viewing days, for brief periods, the students display high interest in the video. The only previewing activity during this video is a reading of the synopsis.
Throughout this long viewing period, the teacher makes homework reading assignments and assumes the students are reading. For the most part, however, the students do not read the play. As one student puts it, "The teacher went over it so well and we had the movie and the plot summary, so we didn't have to read the play." To check their reading, Mary Ellen gives a comprehensive quiz on Acts 1 and 2.

On Day 12 the students begin analyses of the characters by thinking about the following questions: Who am I? What do I want? How do I get it? The teacher stands in front of the room and leads the discussions. The students provide, for the most part, one-shot responses.

On Day 14 life in the classroom picks up toward the end of the period. Students break into groups. The room is full of laughing, thinking students as they adapt some of the lighter scenes in *King Henry* to modern day language and antics. For the next two days the groups perform before the larger group. The larger audience is captivated.

The last three days are devoted to preparation for the final exam. After the teacher explains the flaws in the students' first writings, the students are then given an in-class writing assignment related to "creative
kingship" and how Act V completes the picture of the grown-up Prince Hal in a still imperfect, war-filled world. The assignment is summarized on the board, and the teacher explains it. However, according to the cooperating teacher, 30% of the students respond, "I don't understand what this [assignment] means."

On Day 18 Mary Ellen distributes review sheets for the exam and lets the students work on them in small groups. The class does not have time to go over them to make sure they have what the teacher wants.

On the last day before the exam, the students play Jeopardy to help them learn important facts about the play. The teacher wraps up by reviewing ideas for the test and returning the students' graded work.

On Day 20 the students reveal their understandings of the play few of them read individually.

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The creative planner's room is upstairs at the very end of the hall. When students pass through the hall, they often peer through the panes in the old oak classroom door and wave to a buddy or two. Through the paned glass, one sees old wooden desks which have the carvings of time. The floor is oiled, the boards are black, and the book cases are built-in and enclosed with beveled glass. The back wall is mostly paned glass with
200

a few brown shades hanging down to protect the class from the late afternoon rays. At one time the desks were lined up in the traditional five rows. After the first week, Jennifer daily switches the seating arrangement to a circle for fourteen.

The teacher's wooden desk is in the front of the room. On the wall to the right of it, Jennifer is given a place to create. She has a table decked with Shakespearean resources from the school library and her university library. Her self-made laminated project cards are on display as a reminder to students that they need to pick a project before the unit's end. Shakespearean posters enrich the wall as well as maps of England, a Shakespearean calendar, and a chalk board with listings of daily classroom happenings.

In this setting many scenes from Shakespeare's King Henry come to life.

*****

On the first day of class Jennifer distributes the real student folders she had imagined earlier. They are all yellow with the students' names on the front and the King Henry unit title highlighted. In the front of the inside folder is a syllabus written, in part, with Shakespearian calligraphy. The syllabus addresses the students personally: as one student put it, "It was like
she was talking to us on paper." Below is a snippet from the syllabus Jennifer provides:

Goal: I want you to develop an appreciation for Shakespeare's play *Henry IV, Part 1*. There is much to admire in this play, but only if it is given a genuine chance. I know it is hard to read!—I have read it before and I will be reading it again with you all. And, I don't expect everyone to fall in love with Shakespeare—it would be nice, don't get me wrong—but I know a love of Shakespeare's work is something one usually acquires over a period of time. What I do want is for you all to see how human experiences are reflected in literature in general, and in this play in particular. I want you to be able to effectively express your thoughts through writing, discussion, performance, and any other creative means available to you. I believe that approaching this play through our own personal experiences (people we know who have the same traits as a character, or a situation we've been in or seen that is like one presented in the play, etc.) will enrich the play's meaning and be occasionally entertaining!

After presenting the evaluation guidelines for the unit, Jennifer also describes the journals (the yellow folders) and their purpose:

This sounds more painful than it really is, believe me. The response journal is for me more than anything. I want it to be a way that we can communicate—if you hate something that we're doing, tell me, because I'm learning too. I won't always change it (the unit test stays) but I will tell you why we are doing a particular activity. I am always open to suggestions and I offer you 4 places to get points for telling me what you think, so use them, you might be surprised what they can do for you. This journal is also a way for me to give you feedback. If you made a particularly good point in class, I'm going to tell you so. If you seem not to be contributing as much as other students, I'm going to ask why.

You may write any/all additional information in these journals to keep me posted or to help you. As a matter of fact, I encourage it. Hint, the more material you put in this
notebook (like class notes and such) the better off you will be on the essay section of the unit test, since I am allowing you to use your journals and the text only to help you.

The journal will also help you to see how you are doing in terms of grades. All written work with the exception of the test will be done in your journals. I will periodically collect them (always on the weekend, and various day(s) during the week to evaluate papers and give you feedback) so stay up to date in your work. You may take them home, but remember to bring them to class every day.

Plot Summary:
For the first 5 minutes of the class following a reading assignment, I will allow you to write a 2-3 sentence summary of the scene(s) on the next two pages. This should help you remember the order of events (sort of like Cliff’s notes only better). Your plot summary will be a part of the journal grade.

These folders, waiting on each desk top for the students as they walk in, serve as helpers for the students throughout the unit.

To get the ball rolling, though none too swiftly, Jennifer decides to share her understanding of the play’s history through the use of overheads. The students write frantically to get all the information into their notebooks but seem confused and overwhelmed. Jennifer senses this and decides never to lecture again. Instead, she creates a seminar circle by the end of the first week and uses this environmental shift throughout the unit in many creative ways.

At first the circle serves as almost a training ground for getting the students to read the play dramatically and with meaning. By Day 3 Jennifer is
doing a little dramatic modeling and adding insights about the play as they seem needed (she shares the rest of her lectures in an impromptu way). The students shyly volunteer to read from Act I. In-class reading and writing and discussing continue in a variety of ways. By Day 5, the students break into smaller groups and begin to analyze selected passages and to brainstorm about ways to present the passages in both the original Shakespeare language and in modern-day language. From Day 5 to Day 8 the students are actively engaged: they come to class and automatically break into their groups and stay even after the bell rings to refine their presentations. During this student engagement, Jennifer roams from group to group. Occasionally, she hands a group a critical analysis of Falstaff to see if they agree or disagree with the interpretation; or she brainstorms with them on ideas for imaginative props.

On Day 8 the principal surprises the class and sits in on their dramatic presentations. The students are prepared and the presentations are good. The principal claps after each performance.

For the next few days, the students work on in-depth analyses of characters in small groups. To aid the students with each major activity, Jennifer distributes a handout, done in calligraphy, which explains the activity
in full. The handout is hole-punched so the students can place it in their notebooks. Below is a sample for this activity:

(She first explains character analysis, round and flat characters, and ways characters reveal themselves.)

Assignment: In Henry IV several characters contribute to this play's success. Considering character traits, motivation, indirect description, and dialogue for the particular person, analyze your character fully relating his character to possible greater themes in the story.

1. First, collect impressions, adjectives, phrases from all members of the group and write them down on the character card.

2. Next, look up specific passages where his characteristics are particularly reflected.

3. Analyze his motivations for actions, his physical characteristics, the setting where he is most prominent, his speech, and add this to the observations above.

4. Begin to conceptualize this character by formulating a presentation due at the beginning of class tomorrow. You might want to select a spokesperson to give the general ideas and have other members as support, or you may assign each member a specific aspect of the character. Your presentation should be quite involved; no time limit will be observed.

5. Overnight, each member should write an essay bringing together what was collected in the group and his or her own ideas of this character. This essay may be put in your notebooks and labeled as Writing #1 as this assignment will take the place of the first timed writing.

Be sure to consider how each of the characters fit into the larger scheme of the play and possible themes. Also, predictions of future actions of your character will be helpful to your audience and should be incorporated into your presentation and your essay.

Moving along, Jennifer, again, introduces the "themes" activity for Days 14-16, an individual
activity. Each student draws a theme from "Falstaff's Mug" and is given some time in class to develop a presentation related to the theme.

The culminating activity of the unit is the viewing of the King Henry video. The students watch the film for three days, comment on key pieces, write questions about the movie, and critique it at the end.

A writing-to-learn test is given on Day 20 and an extra day is added for students to present their projects: one male student brings in English foods such as Hot Cross Buns; and another brings miniature scenes from the play: the battlefield and the courtroom. On the last day the students seem happy and impressed with themselves for having transacted with the play. Jennifer, too, is pleased.

*****

The two planners had different physical settings, and these influenced group interaction possibilities. The planners had different class sizes as well: Mary Ellen has thirty students and Jennifer only has fourteen.

Mary Ellen created a learning environment full of activities that are designed to help the students meet the objectives: they were asked to read the play outside of class, watch the film, act our certain scenes, do research, and prepare for the final exam that tests their
mastery of objectives. Although Mary Ellen assisted the students with meeting the objectives by giving them a synopsis of the play, letting them watch the movie in the first week, and explicating the play for them in discussions, she seemed to fail in assisting them in other ways. She sometimes failed to make the assignments clear, provided no reading strategies, and did not monitor their reading assignments very carefully on an ongoing basis. Throughout my observations it seemed that Mary Ellen did more work than the students. One student said, "the students didn't have to study for the test since the teacher went over it so well." This comment is amazing in light of the fact that many did not read the play.

The creative planner also developed an environment consistent with her objectives. The students transacted with the text in a variety of ways, acted, wrote, read, played with the language, and thought about the universality of human experience. Unlike Mary Ellen, however, Jennifer made the assignments clear, helped the students develop reading strategies, and monitored the students' progress and needs throughout the unit.

Also, Jennifer let the students discover their own meanings about the play and develop their own expertise in analyses of themes and characters. Instead of
reducing character analysis to three simple questions such as who am I, what do I want and how do I get it, Jennifer encouraged extensive examinations of the text to help students get overall pictures of the characters in their many different moments. She let students do the work, and she provided assistance instead of doing most of the work herself and sharing her work with the students.

Both planners, it seems created environments consistent with the standards of their planning models.

OTHER FINDINGS ON THE PLANNERS' CLASSROOM ENVIRONMENTS

For each day of each preservice teacher's unit, the researcher or the cooperating teachers kept daily observation logs of daily classroom life (for example, see Appendix F). The data from those two sets of daily observation logs were summarized in Tables 11 and 12. The tables provide rough estimates (only rough estimates since sometimes the recorders did not record time expenditures on the minute—but there would be no more than three minutes difference for any recording) of the amount of active student involvement during the twenty day unit. Active time involvement in the four language arts—reading, writing, speaking, and listening—are also provided. In addition, the amount of time spent in whole
group, small group, or individualized work is detailed. The purpose of these data was to give a somewhat objective idea about the nature of the two preservice teachers' classroom environments. It was hypothesized that, since the creative planner was encouraged to monitor her environment on an ongoing daily basis in light of active student involvement, she would sustain an environment that had students more actively engaged more often. The data presented in the tables support this assertion.
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<tr>
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<tr>
<td>Individual Time</td>
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Approximate Total - 925 minutes
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<th>Total (minutes)</th>
<th>Percent</th>
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**Table 12: Classroom Environment**

- **Total Active Student Involvement**: 12
- **Total (minutes)**: 472
- **Percent**: 62.5

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**Approximate Total - 90 minutes**

- **Short Period**: 10

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**Data**

- **1st Day**: 37
- **2nd Day**: 0
- **3rd Day**: 50
- **4th Day**: 40
- **5th Day**: 50
- **6th Day**: 40
- **7th Day**: 50
- **8th Day**: 50
- **9th Day**: 40
- **10th Day**: 50
- **11th Day**: 50
- **12th Day**: 50
- **13th Day**: 50
- **14th Day**: 50
- **15th Day**: 20
- **16th Day**: 20
- **17th Day**: 20
- **18th Day**: 17
- **19th Day**: 17
- **20th Day**: 17

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**Data**

- **1st Day**: 37
- **2nd Day**: 0
- **3rd Day**: 50
- **4th Day**: 40
- **5th Day**: 50
- **6th Day**: 40
- **7th Day**: 50
- **8th Day**: 50
- **9th Day**: 40
- **10th Day**: 50
- **11th Day**: 50
- **12th Day**: 50
- **13th Day**: 50
- **14th Day**: 50
- **15th Day**: 20
- **16th Day**: 20
- **17th Day**: 20
- **18th Day**: 17
- **19th Day**: 17
- **20th Day**: 17

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**Data**

- **1st Day**: 37
- **2nd Day**: 0
- **3rd Day**: 50
- **4th Day**: 40
- **5th Day**: 50
- **6th Day**: 40
- **7th Day**: 50
- **8th Day**: 50
- **9th Day**: 40
- **10th Day**: 50
- **11th Day**: 50
- **12th Day**: 50
- **13th Day**: 50
- **14th Day**: 50
- **15th Day**: 20
- **16th Day**: 20
- **17th Day**: 20
- **18th Day**: 17
- **19th Day**: 17
- **20th Day**: 17

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**Data**

- **1st Day**: 37
- **2nd Day**: 0
- **3rd Day**: 50
- **4th Day**: 40
- **5th Day**: 50
- **6th Day**: 40
- **7th Day**: 50
- **8th Day**: 50
- **9th Day**: 40
- **10th Day**: 50
- **11th Day**: 50
- **12th Day**: 50
- **13th Day**: 50
- **14th Day**: 50
- **15th Day**: 20
- **16th Day**: 20
- **17th Day**: 20
- **18th Day**: 17
- **19th Day**: 17
- **20th Day**: 17

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**Data**

- **1st Day**: 37
- **2nd Day**: 0
- **3rd Day**: 50
- **4th Day**: 40
- **5th Day**: 50
- **6th Day**: 40
- **7th Day**: 50
- **8th Day**: 50
- **9th Day**: 40
- **10th Day**: 50
- **11th Day**: 50
- **12th Day**: 50
- **13th Day**: 50
- **14th Day**: 50
- **15th Day**: 20
- **16th Day**: 20
- **17th Day**: 20
- **18th Day**: 17
- **19th Day**: 17
- **20th Day**: 17
Amount of Active Student Involvement

The rational means-end planner actively engaged her students in language arts activities about 50% of the time (N=480 out of about 925 minutes total). Active engagement was defined by the recorder as a situation in which at least 90% were on-task and participating actively in at least the use of one language art. Recorders were free to document a time period as active engagement in more than one of the language arts. Most of the class time was passed in a whole group setting. For about a third of the time (30%), the students were involved in small group activities. Active student involvement was almost always associated with the small group work. About 23% of the time the students were actively reading and 21% of the time they were actively writing. Speaking received 12% of the time and listening 24%. The rational means-end planner had 10 days in which students were actively engaged in a variety of language arts activities.

Of the approximately 970 minutes of the creative planner's unit, the students were actively engaged for about 698 minutes or 72% of the time. About one-third of the time the students worked in small groups which almost always encouraged active student use of language arts in meaningful activities related to the King Henry unit.
Although there tended to be more active listening (64%), the students read about 44% of the time and wrote for about 34%. Speaking was obvious about 45% of the time. For example, if the students were reading Shakespearean passages and then translating them into modern language in their *King Henry* notebooks, that time period would count equally for both reading and writing. It is interesting to note that many of the creative planner's active classroom moments were dense in terms of number of active language arts encouraged at any given time. On at least ten days, more than one language art was actively encouraged in the same classroom activity.

In summary, the only significant difference in the objective pictures of their classrooms in terms of active student involvement is that the creative planner had students actively engaged in language arts activities more often than the rational means-end planner. Translated into actual minutes, the students in the creative planner's class had about two hundred and four extra minutes of active engaged time. Translated into daily estimates, the creative planner's standards had about four extra daily sessions of active language arts engagement.

As hypothesized, the creative planner had students more actively engaged more often than the rational
means-end planner. This difference, unlike some of the other findings in previous sections, cannot be as strongly attributable to the prescriptive planning models used for several reasons. First of all, the creative planner had fourteen students in her seventh period class, and the rational means-end planner had thirty in her second period class. Although it could be argued that the creative planner would have a more difficult time keeping students actively engaged since her class was conducted in the late afternoon after students had had a long day, the difference in class size was probably more significant and may have contributed to some of the differences in engaged time. Although the significant difference in engaged time noted here cannot be solely attributable to the planning models used, it can be used as additional support in light of other findings related to the planners' classroom environments such as the cooperating teachers' impressions of the environments and the students' impressions of the environments.

Types of Classroom Activities Presented in Daily Sequence

What follows is a listing of the daily activities of each preservice teachers' class. They are presented chronologically and were taken from the daily observation logs. The daily activities were all
prepared in advance as is evident from the daily plans. About 95% of all the activities presented in Tables 11 and 12 were written up in each preservice teacher's daily plans or planned out mentally before walking into the classroom. This insight supports the overall assertion that planning has a powerful impact on the classroom environments that preservice teachers create. The activity tables presented in Tables 11 and 12 will be analyzed to see if they in any way reflect the influence of the prescriptive planning models used. If they do, the rational means-end planner should have many activities designed to help students meet the objectives of her unit. The creative planner should have many creative activities designed to have students actively engaged in beneficial and stimulating classroom environments. To get a feel for the caliber of active student engagement on each day, refer back to the preceding objective environment tables.
Table 13.

The Rational Means-End Planner's Daily Classroom Activities

Day 1
roll call
overview of unit requirements
students talk about Shakespeare experience
teacher explains summary of play and genealogy chart (distributes 5 page handout)
teacher introduces setting
teacher introduces aspects of characters to look for
students read introduction of play
teacher distributes map

Day 2
roll call
teacher distributes candy as means for breaking students into groups
research cards are distributed
library instructions are given
students work in research groups in the library

Day 3
roll call
students work in research groups in the library

Day 4
roll call
research groups present their findings to larger group

Day 5
roll call
remaining research groups present their findings to larger group
teacher gives overview of week's work
teacher does prereading activity
students write a reaction response
students read reaction responses
students begin to review Act 1 by analyzing characters
teacher assigns Act 1

Day 6
teacher sets up video and discovers that it is broken
teacher calls in other teachers to repair video
roll call
teacher goes over viewing guide
students watch KING HENRY video
Table 13. continued

Day 7
teacher goes over homework
roll call
teacher goes over new viewing guide
students watch KING HENRY video

Day 8
roll call
teacher reads synopsis of what will be viewed
students watch KING HENRY video
teacher wraps up with homework assignment
teachers makes vocabulary-dictionary assignment (short period)

Day 9
roll call
teacher alludes to viewer’s guide and synopsis
students watch KING HENRY video (short period)

Day 10
roll call
students watch KING HENRY video (short period)
teacher asks for problems with the viewing of the video

Day 11
students take short comprehensive quiz on Acts 1 and 2
teacher reviews content of Acts 1 and 2

Day 12
roll call
teacher analyzes Elizabethan vocabulary
teacher and students review Act 2 by discussing assigned questions from text
students begin character analyses in small group pairs

Day 13
roll call
teacher goes over instructions for character analyses worksheets
teacher and students analyze characters in large group discussion

Day 14
teacher asks for questions on Act 2
students break into assigned groups
students work on adapting selected HENRY passages to modern language and theatrics

Day 15
students begin class in previous groups
students refine their adaptations
4 groups present their modern HENRY adaptations to the whole group
Table 13. (continued)

Day 16
1 remaining group presents modern HENRY adaptation to whole group
teacher reviews progress students should have made
students analyze characters by use of analogy: Is King more up or down?
teacher goes over student responses

Day 17
students complete analysis of Hotspur with previous strategy
teacher points out flaws in students' first writing assignments
students work on in-class writing theme

Day 18
teacher introduces review sheet
teacher talks about review sheet
students review individually
teacher conferences with students
students break into review groups

Day 19
students break into performance groups
students play a game of jeopardy related to facts in HENRY
teacher reviews some discussion ideas suggested by student responses
teacher reviews ideas for test
teacher returns graded work

Day 20
teacher introduces test
students take test
The above crisp picture of the rational means-end planner's classroom life suggests that she did create an environment that included activities designed to meet her unit objectives. Basically, the students conducted research to learn about the world in which Shakespeare lived and wrote. They also participated in activities related to the understanding of Shakespeare's language: the vocabulary activity and the modern adaptations activities. Lastly, the students analyzed the characters through the use of two different activities. A comprehensive test was also provided at the end of the unit to make sure the students had met the objectives. The other evaluative measures also assessed the objectives of the course.

It seems that the rational means-end planner created an environment that is quite consistent with the objectives of her unit. Perhaps the prescriptive planning model used did have an impact on the classroom environment she created since her environment is so closely consistent with the objectives of her unit.
Table 14.

The Creative Planner’s Daily Classroom Activities

Day 1
teacher distributes class folders
teacher outlines requirements for course
teacher explains assignments and journal requirements
teacher uses overhead to show the "set" for HENRY
students respond in writing to questions posed about "set"
teacher assigns some reading

Day 2
roll call
cooperating teacher goes over research paper
teacher introduces historical background of play with use of
overheads
students complete a freewrite
some students read

Day 3
teacher gives instructions about folders
teacher gives thumbnail sketches of the major characters;
students copy
students volunteer to read passages from HENRY
teacher periodically explicates the readings from Act 1,
scene 1

Day 4
teacher reviews Act 1, scenes 1 and 2
students and teacher discuss selected passages
students read selected passages
teacher occasionally models dramatic reading
teacher assigns Act 2 scene 1

Day 5
teacher summarizes what should be in notebooks
teacher explains group activity
students work in groups on adapting scenes to modern language
teacher roams from group to group

Day 6
students work in groups on adapting scenes to modern language

Day 7
students automatically break into groups to continue adapting
scenes to modern language
Day 8
students continue to adapt scenes to modern language
3 student groups present dramatic adaptations to larger groups

Day 9
teacher summarizes activities that should have been completed by now
students read and do plot summaries through Act 2

Day 10
teacher summarizes action of Act 2
teacher selects readers and attaches reading cards to their desks
selected students read out loud
teacher occasionally explicates
students pause to create indepth pictures of each character
student reading resumes
teacher and students discuss King Henry's character

Day 11
roll call
2 student groups left over from Day 8 present their dramatic adaptations
students read aloud from Act 3 scene 2
teacher occasionally explicates
teacher provides brief overview of rest of Act 3
teacher makes weekend assignment

Day 12
students analyze characters in groups
teacher roams from group to group

Day 13
students analyze characters in groups
teacher roams from group to group

Day 14
teacher praises students for yesterday's work
students freewrite on Act 4
teacher passes out viewing guide for HENRY video
students discuss Act 4
students respond to diagram on board that shows characters' relationships to geographical areas
students read the rest of period
teacher asks students to think about theme of honor and look over viewing sheet
Table 14. continued

Day 15
students pull themes from "Falstaff's mug" and are given 15 minutes to prepare a presentation on their selected theme
teacher models explication of first theme
students give their individual presentations
teacher explains worth of theme sheet and how it will be beneficial on later paper

Day 16
teacher summarizes assignments due for notebook on Friday
students continue to discuss selected themes
teacher elaborates on themes and questions
teacher explains purpose of theme sheet
students watch the HENRY video

Day 17
teacher gives few reminders
students watch HENRY video

Day 18
teacher asks for questions related to theme handout
teacher passes out "exit slips" for students to fill out on their movie viewing
students fill out at least one question and one comment on "exit slips" related to viewing of HENRY video
students read along in texts occasionally as they watch
teacher collects "exit slips"

Day 19
teacher comments on exit slips
teacher provides previewing activity
students watch rest of HENRY video
teacher questions students on their responses

Day 20
teacher explains test
students take test

***Day 21 Although not official data, the creative planner used an additional wrap-up day after the test as a day for student presentations of HENRY projects. One group of students created a miniature scenes from the play: the king's palace and the battlefield; one male student brought in English foods that he had made; hotcross buns and watercress salad; one female student presented a collection of taped modern songs that captured the personality characteristics of key figures in the play; one student completed a genealogy chart; another created a modern day short story with the same deep structure plot presented in KING HENRY.
The creative planner's classroom activities suggest that she used her planning model's evaluative standards in creating and sustaining a beneficial and stimulating environment for her students. Like the rational means-end planner's environment, this environment, too, is one that is consistent with the written unit objectives. Activities were encouraged to help students meet all of the written unit objectives. For example, discussions and writing assignments were often geared toward helping students increase their understandings of the range and depth of human experience through the study of the play. The students also wrote about the characters and other features of the play such as the themes. Introductory lectures were provided to help students with the background of the play. Students spent quite a bit of time in class developing their ability in dramatic reading. Throughout the unit, the students kept chapter summaries of the play as a writing-to-learn activity. They also translated Shakespeare's language into modern day language. Hence, activities for all the objectives were encouraged.

Unlike the rational means-end planner's environment, the creative planner's environment seemed to have more time devoted to helping students cultivate the skills
encouraged in the unit objectives. In other words, it seems, from the thumbnail sketches presented and from the many participant observations, that the creative planner deliberately made strides to assist the students in learning or cultivating the skills they needed in order to successfully meet the objectives. For example, the creative planner assisted the students in learning the play by having them keep summaries of each act, summaries that the students themselves created after their readings. The rational means-end planner, in contrast, distributed synopses of the plays on the first day and went over them. Also, the creative planner devoted quite a bit of class time to the modeling of reading strategies. For example, she modeled effective ways to read dramatically and analytically; then, the students tried those methods. Much of class time was spent as practice time for the students: they read in class, wrote in class, and acted in class. The rational means-end planner's environment had less practice time. In fact, the students rarely read the play in class. Instead, it was assigned for homework. No reading strategies were deliberately modeled or taught. At one point in the unit, however, the rational means-end planner did tell the students to try and put Shakespearean language into their own language (See Student Impressions). The
students did work on dramatic reading presentations in the rational means-end planner's class; but, again, they were not really given a model or strategies for performing.

One other striking difference in their environments was that the creative planner spent more time sharing her plan with the students than the rational means-end planner did. For example, she distributed a syllabus at the beginning which included the objectives of the course and a general time line for classroom activities and products. She often spent the first few minutes of class refreshing memories and reminding the students about future classroom happenings. Almost all of the activities were prefaced with a handout that explained the logistics of the activities. These sheets were discussed and then they served as mnemonics throughout the activity. The rational means-end planner made less of an effort to share her plan with the students. She did not provide a syllabus or handouts that helped explain the activities.

The differences in their environments noted above may be partially attributable to the planning models used. The rational means-end planner was only encouraged in her planning model to create an environment that would help students meet the objectives. In fact, she did much
of the work for the students. She gave the students the whole synopsis of the play, for example, on the first day. The creative planner, on the other hand, created an environment that encouraged the students to discover meaning for themselves. The students created the synopses, not the teacher. The students learned to read the play and did not need to have the teacher interpret as much toward the end of the unit. Perhaps this difference in the two environments is due, in part, to the creative planner’s desire to create an environment that was student-centered, that was beneficial and stimulating for the students. The rational means-end planner, however, created an environment that was largely teacher-centered: she provided the synopses, she provided the video, she provided the review sheet for the exam. The students, as is evident especially in the student interview data, had little to do. As the interviewed student put it: "She went over everything so well, we didn’t have to study for the test. I think I can speak for most of the class. Not many people read the play. We should have read it in class." Perhaps the rational means-end planner was so objectives-driven that she sometimes elected to do the work for the students so they would be ready for the final exam, the exam that was designed to evaluate the students’ overall mastery of the play and the success of her unit.
The rational means-end planner was given no directive to make her unit plan available for the students. The creative planner, however, was encouraged, in the presentation of the creative planning model, to make her vision of her design visible for the student. She did this, throughout the unit, in creative ways.

**Cooperating Teachers' Impressions of the Planners' Classroom Environments**

Below are quotes of the cooperating teachers' overall impressions of their preservice teachers' planning and the classroom environments they created along with analyses of them. In order to make the case that the prescriptive planning models had an impact on the classroom environments the preservice teachers created, the cooperating teachers need to share their impressions of the preservice teachers' planning and its relationship to the classroom environments created. The cooperating teachers were able to share insights about this important planning/environment relationship since they reviewed all plans, saw the preservice teachers in action most often, and talked with them about their planning and environments. In looking at the cooperating teachers' comments, it is important to remember that both cooperating teachers had visions of planning that were
consistent with their preservice teachers. The creative planner had a cooperating teacher who understood creative planning and who was in a smaller community school that is conducive to creative planning and addressing student needs and interests. The rational means-end planner had a cooperating teacher who understood rational means-end planning. Though in the same county school system as the other cooperating teacher, her school is much larger, has larger classes, and is based much more on a scientific management model, a system more in line with rational means-end planning. In other words, the cooperating teachers' interview comments reflect the planning cultures of which they are a part.

The Rational Means-Ends Planner's Cooperating Teacher's Impressions of Her Planning

She is doing real well planning. She is putting a lot of time into what she's doing. The lesson plans are showing different approaches, different strategies which are good. She's experimenting. Her plans need to be, I think, a little more detailed than what they are. I think she needs to have some questions sort of written out to fall back on when she gets in front of the seniors. She's, I think, she feels a little intimidated by the class.

I think she, if her plans were detailed a little bit more and she had some questions to fall back on, I think she would not fall to pieces sometimes in the classroom. It's like her frustration can come across and you can feel she's lost confidence in what she's doing when she's before that group. I think her planning needs to be a little bit more reflective of the students' abilities. I don't think she's really learned the ability of those students yet.
One way that I tried to get her to realize the personalities and the abilities of the students was I had her read their journals. And in the journals the kids write, their personalities and their abilities really come out in what they've written. And she picked up on two or three of the really bright kids. But I think her main concern, the thing she thought she needed to do, was just to put faces with names and not to get to know the personality of the student.

I think she's underestimated the ability of these students. I am somewhat wondering if she's challenging them. I really believe that one of the reasons King Henry right now seems to be failing with her is because she has taken a negative attitude. I'm not sure that she likes Henry IV.

Her first day's experience in the classroom when I saw her plans, I thought, Gosh, she's just got too much to cover. She was going to introduce them to what she was going to do in the unit, she was going to go over the bulletin board, she was going to give them sort of a synopsis of what happened. By the time she finished her synopsis, it was about 17 or 18 minutes left. O.K. I think that's kind of a natural experience for the first time in front of them, but from what she did I think she really needed more notes for herself to rely on. It was like it was a very impromptu situation.

To save the unit, the first thing she's going to have to do, I believe, is gain a little confidence in herself and realize that she can turn it around. I think she's going to have to do a little bit more in class direction of discussion.

Well, she is going to have to be more realistic herself and realize once she starts teaching, that if she's given a curriculum that she's going to have to follow it, if it says she's going to teach Shakespeare, she's going to have to find some way to motivate them or she's going to be a lame duck for a long time.

She doesn't know her students, and I really do think that she needs more notes for herself and better questions that might direct the students toward comprehension of the play.

I don't think she knows the students. I'd say there are some students in there that are probably wiser than her in some areas of the literature. Some of those kids should be in advanced placement. And that says to me that they can reach that speed. They're in there because they're taking so many other demanding courses or they could not work it into their schedule and they're involved in extracurricular activities.
and just decided that they would have some degree of less pressure than what they usually have. And I would say that, I'd say that the class has around 30 students. I would say at least 20 students should perform well and of the other 10, three or four may have a hard time, but the others all have the ability to read that play.

I think that she could have supplemented the homework assignments with some originality, maybe she didn't have to use, just do the questions kinds of assignments. The thing that we have to deal with in high school kids is their use of notes, rather than the material, and if she had used some original things of her own to double check their reading, she would have had a better handle of their comprehension of things, rather than just relying on the questions connected to the book.

She could have incorporated the standards of learning more. But that's a lack of experience. She could have done some interviews (which was a standards of learning activity).

I'm not really sure there is any profit in rehashing the Shakespearean theater, the stage, and the world of Shakespeare again. It's in the curriculum that this has been covered.

She did not seek out information about what they had had.

She did not ask what the students had covered. Maybe, I should have told her. But, by the same token, I believe the preservice teachers need to have lots of independence to work, and I would, I tend not to give anything to them. Let them plan it out, cause that's where they learn. Then after the lesson is over, I say, "Now, this is where you should maybe ask." And I think maybe next year she is going to have to ask someone for help in order to be successful. And I think teaching is a profession where most teachers help one another when they first come in. Often you come in with the attitude "I know everything, and I know what I'm going to do, and I don't need your help." And in that case you tend to stay away. My preservice teacher came in and said, "I've got my unit all ready, I'm ready to go." "She was very enthusiastic about it; then once she got in the classroom, it was like her balloon popped and she was very upset that they had not all given her a hundred percent attention.

One of the students said, "We've been Shakespeared to death." And she agreed. And she said, "I can understand that from you as a student." I don't think she had gotten this message but from one or two students and these one or two students would
find that attitude with everything they do; but she was so willing to accept that.

She did a very nice job with her unit planning. She had a lot of resources that she used, as far as her planning of these projects and things it was excellent. The major criticism of the projects is that maybe some of them were maybe incorrect because they had already had this information. They did not need to go through it again.

The test, the homework, the classwork, the projects, the things that she has done in class do evaluate the objectives of her units. But as far as the grading, I'm not certain. I could predict on the writing assignments she is using an A to F scale.

She has been a little bit lax in getting me the daily plans a week ahead of time.

Now the rationale standards she gave me had the objectives of why Henry IV was a good selection for high school kids.

The weather has really been a factor in this unit. Reversing activities and things like this, and you know, she did not have the film planned and the film was here, so things had to be adjusted. Maybe that's why the activities didn't really come across.

She had her unit thought out. The rationale—where she was going to deal with loyalty, the themes of loyalty; nobility; ambition; power—those were the themes she worked toward in meeting her goal. Her activities move toward that goal. I think she had it all thought out. It was all thought out. The plans indicate that, especially in the daily plans, she was going toward her objective; her planning is good.

I think she needs to work on evaluating her lessons. Her reaction to things that happen in class is "It went well, it went well." And from what I saw, it didn’t go so well. I also got this impression from the librarian. If you’ve got kids that you know are obviously not paying attention; it is not going well. To me it is like she is not really reading the situation as it exists. Things do not always go real well. Now, you were speaking about the movie; okay, now when you show a film, I think you have got to introduce the film and motivate them to want to see it. She had done nothing with it. Then, when the movie finished, she did not go back and go over what they had said in the movie. It seems to me a teacher should sort of be a little bit more keyed into this... I know a couple of times within the classroom when she is in
charge, she would come kind of say, "What do you think I should do? Should I go to the activity I have planned now?" I think she needs a little more confidence in herself and she needs a little more perceptiveness and assume the initiative for what she is doing. It is like she doesn’t perceive that the problems are there.

She does not take ownership for the classroom she creates. I think she is too willing to maybe cop out in this area. If she is going to be a classroom teacher and she is going to come across a problem, then she is going to have to determine what to do to combat the problem or she is going to have a very unsuccessful year. And, I think the only way she can maybe do that is to say "How could I do this differently?"

Again, she needs to evaluate the use of the groups. If it is going to be evaluated, have it done in a way that she is sure that everybody is getting credit who does the work and if everybody is not doing the work, then everybody does not get credit. I like to see the groups for brainstorming, to discuss things and to do little things. I take away credit if I know they are not participating, but I give them a warning. But that’s the tricks of the trade that comes with experience.

According to the cooperating teacher, the rational means-end planner seemed to plan as her model encouraged. The features of Mary Ellen’s planning listed below as determined by the cooperating teacher seem to be consistent with the model she used. This cooperating teacher also seemed to feel that rational means-end planner’s preactive and postactive thinking tended to impact significantly on the classroom environment she created. Even though she had a thorough unit plan developed—a unit with activities and evaluation standards that were consistent with the objectives—the preactive and postactive thought related to other key variables of classroom teaching were sorely missing. Of
course, the rational means-end planning model does not encourage the planner to address these other variables—variables such as pupil needs and abilities; revisions after implementation; self-monitoring; ongoing classroom monitoring; quality of activities and motivational strategies to just name a few. The features of her planning listed in Table 15 seem to be quite reflective of the planning model she used.
Table 15.

**Cooperating Teacher’s Impressions of Rational Means–End Planning**

1. Unit plans was product of much hard work and thinking.
2. Unit was prepared before she walked into the school.
3. Activities were consistent with objectives.
4. Whole unit moved toward meeting objectives.
5. Many different activities were listed in the unit.
6. Unit could have been more detailed—tests could have been included, etc.
7. Unit not based on strong understanding of students.
8. Unit could have been more motivational.
9. Activities and assignments could have been less traditional.
10. Ongoing student performance could have been assessed better.
11. Planning was sometimes unrealistic.
12. Teacher could have evaluated her lessons better.
The Rational Means—End Planner's Cooperating Teacher's Impression of Environment

I think she feels a little intimidated by the class. I think it's the difference in their ages. It's just maybe four yours. I think she feels a little bit of intimidation from them. They are also the type of students who would like to trip up a teacher, whether it's a preservice teacher or a regular classroom teacher. They live to trip them up. I think if her plans were detailed a little bit more, she would not fall to pieces sometimes.

I really think that she might have had more success with this class if she had tried to rearrange the seating arrangement.

Now the day that I observed, she started off, she had the kids within her attention. They were paying attention to her and the attention span went from high involvement to low, but she dragged it out. She did not challenge them. She says they don't know what they read. She said this play is too hard for them. It's like she has taken a kind of defeated attitude.

Her approach to Henry is coming across with a very low attitude type right now. But that may be because of frustration. Okay. I think she is a little bit worried right now. I think the one thing that really bothers her is am I going to be able to get my hours in because we had these snow days; and it's like she's still in a certain degree of pressure. And then she feels frustrated because she feels she had to get this unit taught. I know, I have only four weeks time here, what am I going to do?

If they're coming to her and saying "I can't understand this" then she needs to figure out some type of homework activity that will give them reading direction while they're reading.

I taught where the other preservice teacher is teaching for a long time. I know how those kids would be grouped together and I would say that in this second period class, my preservice teacher has the same type of grouping of students. She's got some students in there who have come out of the honors programing this year. She has some in there who have been in college-bound, she has some in there who are labeled college-bound but who probably have general ability; and it's the type of grouping that you find at the other school. The thing is I'm not certain about the number. The number may be larger. That's one of the primary differences that I see in the two schools is the actual number of students. I think that maybe my preservice teacher has come in with a little bit on an idealistic view in thinking that you can just have any
of them go home and read this and then they're going to go home and read it with perfect understanding; but she isn't going to find that with the most advanced students—that they can read Shakespeare. They cannot. They need direction with it. That first day she did not lose control of the classroom, but she had very few people paying attention to what she was saying. And she dragged it out.

I didn't understand the purpose of the viewing sheet at all. You don't have time to use that viewing sheet. All you're trying to do is understand what's happening in that play. The ones who fell asleep— I could just predict who they would be. Probably those should be in general classes.

I think she needed more preparation for the movie than what she did.

The thing about it is, that I think she is really sort of feeling "Well, I'm doing the best that I can and if they're not getting it, it's simply their fault."

Comprehension has got to come before reaction. I mean, it's fine for them to have reader's response. I mean, I'm very supportive of that. But they don't even know who the characters are. How can they say well, this is my response to that character?

She improved with the unit. I think it gave the students an example of nobility of character that the kids could profit from. They could see the character of Prince Hal and could maybe see themselves; and I think maybe the selection was good; and it was something they could identify with. I think she brought out in the analysis how Henry changed, ways that kids could see themselves growing. The entertainment quality did come across with the students.

I think one of the better things she did, was the log she had them keep on characters: who am I? What do I want? How do I get it? And the way that she had them use the log with each act of the play helped to show how the characters changed and how some did not change. It did a good job for character analysis. I think that was using some of the higher levels of the taxonomy (Bloom's taxonomy of objectives).

Some of the activities she did seemed a bit juvenile; but then after she came in and realized that she was dealing with young adults, she made some changes in the activities she had planned. And I am really glad that she did because they would have been a flop.
Her second inclass writing assignment was a little bit vague in what she was going for.

When she showed the video, the timing was really off. The unit would have been more successful had she replanned the viewing of King Henry. The review sheet she gave them to study for the test was a nice blend of the taxonomy.

Reader's Theater, that was very successful.

Overall, the assignments were good assignments, they were just traditional assignments.

The projects that she had them do, about character analysis, she had them do "Was the Prince more like a Monday, or a Friday?" Okay. She was able to use those types of activities and to manipulate the discussion in such a way that she did bring out the character traits of the characters. That was successful. She did a very nice job.

She was very heavy on group activity sometimes to the detriment of individual students.

I haven't seen her tell the students yet how they will be evaluated. She is aware of how I evaluated that class, and I'm really hoping that she did let the students know about the evaluation because that is what we're supposed to do. That is what the goals or the objectives of the school are.

Henry IV had greater potential than what came across with her kids. It was really kind of a ho-hum type of thing; but by the same token, they were really amused by the character of Falstaff and maybe she could have picked up there, a greater student interest. A unit to me is a good unit if the kids learn something from it.

Her unit was successful. The test that she gave the kids did give her feedback on whether her objectives were met. If the kids could recognize the characters. There are a lot of kids that in that second period class that got more out of Henry IV than she knows, or that I know, because they will not speak up. Some kids have said, "Hey, this hasn't been so bad." They would say it in the hallway but never in class. So the kids would say "her unit was O.K." We know whether or not the unit is successful by the reactions in the hallway. Our kids do stay in touch with us and they will say, "Oh, I will be so glad when we get through with this." I have not heard that about her. I think that she has been successful with these kids, although at times she felt some frustration and lack of confidence that her unit hadn't been successful.
I think she is a quiet person within the class. I'm not sure if it was a reaction to that class. I saw that reaction a little bit with the 7th period class, also seniors. She's warmer with the 11th graders. She comes across as very mild-mannered. Being more enthusiastic is not going to be her method of teaching. And I'm not sure that lack of enthusiasm would be a factor to say that she would not be a great teacher. Some teachers can be very quiet and still be great teachers. If you can motivate your students to give you their attention, that's good.

The features of the rational means-end planner's environment seemed to be influenced by the planning that was encouraged in her model. The mark of a successful rational means-end plan is to have the objectives met and assessed in a legitimate way, and the objectives were met and assessed. Also the activities seemed to be ones that were intended to help the students meet the objectives. The cooperating teacher believed that the rational means-end planner created a successful unit for the above mentioned reasons, even though she had reservations about the teaching style, the pacing, the traditional assignments, and the students' "ho-hum" attitude toward the unit. The environmental features cited below make up a picture of a successful rational means-end planner's environment since they meet the evaluative standards of such an approach.
Table 16. 

Cooperative Teacher’s Impressions of How Preservice Teacher’s Rational Means-End Planning Impacted on Classroom Environment

1. Objectives were met.
2. Cognitive skills within Bloom’s taxonomy were encouraged.
3. Many group activities were used.
4. Some activities, though consistent with objectives, did not seem meaningful.
5. Most assignments were traditional.
6. Evaluation standards assessed the objectives.
7. Teacher was not in close touch with students’ needs and abilities.
8. No change in seating arrangement was made to facilitate unit.
9. Teacher was not too enthusiastic.
10. Pacing was sometimes off.
11. Evaluation standards were sometimes unclear to students.
12. Students probably learned more than the teacher was able to assess.
I probably could start by talking about her preparation for the classes which I think has been really extraordinary. She had a real clear idea of what she wanted to do with the students very early on, like two, three weeks in some cases before she actually got into the classroom to do it, although she has been very flexible about modifying these plans because I have seen rough drafts of her units, and I've seen the more recent ones, the ones that she actually is turning in for the final draft, and I believe that all this advance preparation did help a great deal.

She was willing to be flexible in the way that she was modifying what she intended to do.

She went to a great deal of trouble to create these notebooks for each individual student, which gives them in a very concise fashion, I think, exactly what she expects of them throughout this special Shakespearean unit.

So I have been real pleased with her creativity, her preparations, which are so thorough and her willingness and desire to be creative and to change the classroom environment and to do things with the students that she, although she was a little worried about some of them beforehand, she still had the guts to go ahead and do it--take the chance to see if it would work.

I know she has made some changes in her plans, based on her reflections about the class. But I think that she is pretty much on target and because of her preplanning activities, she has been successful in this. So even though she is reflecting and has the opportunity to think about things and certainly to change things for the future, I don't think she has had to do as much change as she might normally if she hadn't done all that thinking beforehand to create a successful lesson.

She does a tremendous amount of preparation for a class. I really marvel at it.

I have very little knowledge of the play that she is dealing with so she has had virtually no input from me as to what she is going to do. She has developed everything on her own and it is really a tremendous accomplishment. She has done so much and has been so creative. Most teachers have at least a teacher's guide or teacher's unit if they can find them to follow. She started at zero, there was nothing out there to use in working out a unit for this particular class. She has just done a remarkable job. She has tailored it to the students' ability, I think.
She is just graceful, hardworking, does a nice job. She is so organized. I just can't believe that she is never behind in anything. She always does what she is supposed to. Everyday after class, she always sits down and does her reflective work. Everything is prepared days in advance for what she is doing. She is always working with them as rough drafts. She is always tentative, because she always knows that she can change things as she goes. And I think that is a good sign. I think she is prepared but she is also flexible.

She seems to have down a nice system on deciding how many activities she wants to have per period so that she has it paced nicely.

She is showing a depth of thought here and thinking about all kinds of parameters for the lesson, what can be done, what can't be done, what can be brought in, comparisons, and contrasts and other kinds of things...

I was pleased with her entire unit; I was pleased with her methods and goals of the class she developed, and the way she's evaluated it.

The cooperating teaching of the creative planner describes her preservice teacher's planning as having characteristics which are consistent with her creative planning model. In other words, the creative planner used a creative thinking strategy and thought about many design variables as she developed her unit plan. Table 17 supports this assertion.
Table 17.

Cooperating Teachers’ Impressions of Preservice Teachers’ Creative Planning

1. Unit had clear focus.
2. Planning was done long in advance.
3. Planning was flexible: she made many modifications.
4. Unit was by-product of much thoughtful work.
5. Unit was clearly presented to students in a way they could understand.
6. Unit was creative.
7. Unit was daring.
8. Teacher was reflective.
10. Unit was done from scratch.
11. Unit was tailored to students’ abilities.
12. Unit suggested organization.
13. Unit evidenced refined pacing of activities.
Impressions of Creative Planner's Environment

In this class in particular I think what she has done is try to take students who, although they are very bright, in many cases tend to be less motivated or it just sort of depends on the particular time of day, and they’re tired or whatever. They just don’t want to perform very well but she has taken them, and I think she has had a lot of success in making them more excited about what they’re learning and more interested in interacting with each other and with her most of the time. I believe, when I have taught them before, I would be standing in the front of the room doing a little bit of lecture, more discussion and reading of literature and answering questions and so on, but I often felt that the classes were not nearly so lively as they appear to be now. She has made a great effort to try to restructure the environment of the classroom by introducing the circle which I think has helped promote the intimacy among the students, and I think, too, that she has gone through a great deal of trouble to try to provide extra resources that the school does not have available so that the students can take advantage of material that can make them understand Shakespeare a little bit more. For instance, as you can see over on the bookshelf, she has brought quite a few books from the university library, and she also has a special little box there which she has lined up for them to look at.

She got really into the literature and that is when she began to come alive, and I think the students have too, much more than they have before.

She tries, very nicely I think, taking control of the class without being obtrusive. She has a nice touch with them. She can pull them in when she needs to if they get a little out of hand, but she also knows too that they are pretty mature and they can handle themselves. She doesn’t harp on them all the time. She has got a nice middle ground there, which I have been very pleased to see. In fact, I have absolutely no qualms about this class and my preservice teacher. I knew that if I wouldn’t be here for a week that it would be absolutely fine, that she doesn’t need that kind of supervision really. I know the students would learn and she would continue with her lesson plans just the way she has been... She is always careful about pacing her lessons and gets the most out of her 55 minutes. But I think there is no question about an immature preservice teacher, a poorly prepared one, one who hasn’t thought through the goals and objectives of that day’s lesson, nor have thought through the abilities of the students and natural constraints of the material she is working with. I think a person who had not
done these things would come in and mess it up within a couple of days. I have seen it happen, not with me, fortunately, but I have seen it happen with other teachers who have had bad preservice teachers. And we don't get them very often, but when one comes in, they are usually a lulu...The students are quick to see through people who are not doing their job well...they completely turn off, or have discipline problems, or they just become zombies. They just walk into the class everyday and do not do the work.

It seems to me that everything that they are doing is a meaningful learning activity. It seems to me, she zeros in a great deal on the students' responses to what she is doing. She is always aware of whether or not the students are actively engaged in the task or whether they are drifting, whether they are bored, whether there are behavior problems for one reason or another. And she is aware of those things, she is aware of those responses. She wants to see in those journals why they are enjoying something and if they are not enjoying the learning activity, why they are not enjoying it. So she can reach that student, perhaps on a different level. I think that is real important that she is always aware of the environment of the classroom and what is going on; interactions between students and among students, between her and them and so on. She is really on target about watching that sort of activity. I think she comes back and reflects on what she has done that day and how the students responded to it—what she could have done better, what she did do well, and she gets it all written down; and I think all of that thinking and reflecting helps her to plan the next day's activity. I think, of course, she is looking to see what they have learned, what kind of objectives are met, those ultimate unit objectives that she has. But, I don't think that..., I think for her it is more important for a student to have a good time in class and enjoy what they are learning, than it would be for them to meet some sort of nebulous objective somewhere along the line. I think she is not quite so driven in that particular direction.

I have seen a lot of enthusiasm for what she is doing and they respond to her respectfully and they are amiable to any of the suggestions that she makes to them as far as evaluating their activities and their writings and so on, and they pay attention to her when she is describing a passage. She does very well. She tries so hard to make it accessible to them, that they have a great deal of respect for her because they know she is doing it all for them.

In the beginning I was really worried about her not being forceful in the classroom. I thought this girl was going to
have difficulty in projecting her voice and being enthusiastic and engaging their attention. And I was really surprised that she was able to take control so very quickly. But what I was afraid might be a lack of forcefulness or a lack of enthusiasm, never materialized. And I have to say she has the best plans I have ever seen. I have worked with a lot of preservice teachers.

Jennifer was very sensitive to their needs and she tried to be nonthreatening and to give them many opportunities to interact so they could learn from each other. I think that was the best thing, that they learned from each other, and that they didn’t just sit and learn from her; or, in my case, just from me. And she did all kinds of high cognitive activities... Her questioning techniques, you could see she would start off with easy questions and then she began to move quickly into the more far ranging kinds of questions. Those questions didn’t always have answers to them, but they were exciting to the students because they have to think so much about what they believed in, in some cases.

I think there isn’t a single objective in her unit that she did not meet. There wasn’t a single one that I felt was not met.

Now one of the affective goals was that the students would assume responsibility and feel confidence about the materials they were studying. And I think the way she designed the structure of the class itself helped to meet those. For instance, I have always had the traditional class, six rows, five chairs, I’m in the front; I stand behind the podium and if I feel really intimate, I get in front of the podium; sit on my desk; swing my legs, that sort of thing. Occasionally walk up and down the class rows, but she immediately restructured the class to a semicircle kind of seminar environment and she sat at a desk along side the students so she became more like one of them.

The point I’m making is that the students feel she is part of them. There is no dominant force in class, although she directs them, but it’s still all that sharing; they could talk to one another, where as the way I usually have them sit, they are looking at backs of heads, in some cases, or they are just looking at me because everyone else is behind them, and I think that tends to stifle their desire to contribute.

Although she is student-directed, she is not student-driven. I think that is a real difference there. She’s really in tune
with how her students are responding in class and to herself, and to the material and to each other, but not driven by them to make unwise decisions in terms of their educational careers.

They have learned to be more responsible about their learning about each others' learning and participating in group activities; by being a part of a superstructure if you will, in which each part has to contribute equally or the superstructure will fall down.

They may take the ability to analyze a little more carefully, by asking questions like, not just accepting something they value, but ask "why".

We have had a lot of snow this particular session. I want to commend her for maintaining the continuity of the unit, and I think her preplanning and her careful organization of the course helped to create that continuity because we were out so many times, day after day, after day and yet so many times when the kids came back it wasn't as if they were at a loss, or saying like, "What were we doing a week ago?" They always knew where they were and they were right on track, and I think that was a real important thing.

The cooperating teaching of the creative planner believed that the creative planner created an educational environment that was beneficial and stimulating for the students. This overall impression is, of course, consistent with the overall evaluation standard of the creative planning model: Is the educational design beneficial and stimulating for students? This creative planner created an educational environment that meets the standards posed in the creative planning model.

And, too, from the comments of the cooperating teacher, the environment was a direct outgrowth of
creative planning. The cooperating teacher made sure that it was understood that the creative planner's design was not the by-product of a design already in place—her design—nor the acquiescence of the mild-mannered students. Clearly, the cooperating teacher attributes the successful learning environment to creative planning.

The features of the creative planner's environment are all indicators of a beneficial and stimulating environment for students. The features are presented in Table 18.
Table 18.

Cooperating Teacher's Impressions of How Preservice Teacher's Creative Planning Impacted on Classroom Environment

1. Environment had much student interaction.
2. Seminar atmosphere was used.
3. Extra resources and projects for students were available.
4. Many meaningful learning activities were encouraged.
5. All objectives were met but class was not objectives-driven.
6. Shakespearean material was accessible to students.
7. Many higher-level cognitive strategies were encouraged.
8. Community spirit was obvious in classroom.
9. Class was student-centered.
10. Activities were nicely paced.
11. Teacher provided unobtrusive leadership.
12. Environment was carefully monitored by teacher.
13. Continuity was evident.
14. Lively literary discussions arose.
In summary, the two planners both planned successful environments within their planning cultures according to their cooperating teachers' impressions. Both cooperating teachers also attributed the successful environments, in part, to their preservice teachers' planning. From the perspective of the cooperating teachers, it seems that the prescriptive planning models had a significant influence over the way the preservice teachers thought about their units as well as the classroom environments they created. This assertion, of course, lends support to the overall assertion of the study, that is, that the prescriptive planning models used do influence, in a significant way, the thought and classroom environments of preservice teachers.
The Students' Impressions of the Classroom Environments

Below are lists of impressions from a representative student in each preservice teacher's classroom. To reiterate, these students were picked by their cooperating teachers because they were judged to be responsible students who could give the class' global impressions of the preservice teachers' environments. Impressions from the actual students can give insight into the nature of the classrooms. Of course, unlike the cooperating teachers, who have professional perspectives, these students could only offer student perspectives about what they learned, what types of activities they liked and disliked, and ways the class could have been improved. The impressions from each student will be presented and then analyzed. Then, the two sets of impressions will be compared to see if they reveal any differences and if those differences could perhaps be attributable to the planning models used.

The Student Impression from the Rational Means-End Planner

I think she is really creative in her thinking. Just like doing the play, or Jeopardy; there was something else I think she did; but I think she ... it was never like we just sat there and listened to her talk, or lecture; it wasn't like I took that many notes. I thought she went over it well enough that when I took the test I didn't have to study for it because I felt I knew everything that we had gone over, except I did think that she would assign some questions and then not go over them. She would half-way go over them, but then I
felt like we were doing work that was useless. Like there was no point in doing it; she never checked it or anything. And I think when she said that we may not turn it in, I know my class, and nobody will do it. I guess that is just something that she has to learn. We did a worksheet and that summed up everything, and she never went over that; she put us in groups for us to go over it with each other and there wasn't time in our group to go over it, and I wasn't sure if I answered it right because we didn't have time to go over it. But I thought she was really creative. She thought of fun way to do things; it wasn't just like boring; It wasn't bad. I generally don't like that kind of stuff, but it wasn't that bad.

I didn't like reading the play, and I really didn't read too much of it. I didn't understand reading it; but she went over it, it wasn't bad, but I just don't really like that stuff.

Well. I read, like when we had to do questions on it, I would read it but I wouldn't understand what I read, so I mostly would go to the first review sheet on it that summed up the whole story and just look at that, or I would think about what she talked about in class and try to answer because I really didn't understand what I was reading. Then, in the movie I could understand better.

I just don't enjoy reading that kind of stuff. It wasn't bad watching the movie or anything like that. I didn't really have to read it, and I think I did O.K. on the test because she had explained it enough in class, and we went over it enough.

I think I can speak for a lot of people; they didn't read the play, but like the main reason I didn't read, I mean like if it had been a normal book, I wouldn't have read it no matter what it was.

I think she did a pretty good job. She needs to have a little more control over the class, I think. Be a little more, the class liked her, she was one of the better student teacher I've had, but I think she needed to be more strict. I mean more stern a little bit. When she was telling the class to be quiet; she should say, "Be quiet or you have detention." You know, I think she needed to be a little more stricter or people won't take her seriously.

Well, the questions that we had to do after we read, those were, like the first set we did, no one really knew what to expect and how to write them but after that, it got a little
bit easier because we knew she wasn't looking for ... you didn't have to have it perfectly right. She was looking for generalizations. I don't know if everyone did them or not, but I think most people did them. I think she should at least, I mean when she says she's not going to pick them up, I think that really is sad because everyone has at least attempted them.

Well, the first set of question was taken up and those were checked, and the second ones weren't checked or anything. I think we went over them a little bit in class, but they weren't taken up and checked, which doesn't matter, but for her own, she might want to let people know they need to do it, or they will get in trouble. And the worksheet that we did, she did it in groups but like she never did go over it because she thought by us going over it together we would get the answers. And if we would have had a little more time I think we would have, but she was a little rushed trying to get a certain amount of stuff done each day. I think we should have gone over that. That was alot of what the test was. And the writing assignments we did in class, the only thing I had bad about that was there wasn't enough time to write a whole paper with the amount she was saying, but she would say. "If you don't get it done, don't worry about it." Then when we had the test and the essay part of it, she would ask us to write what time we started and even if you couldn't put it in good paragraph form, write all our information down which meant she wasn't going to take off if you didn't have enough time. It is hard to write a whole page and a half paper in twenty minutes or whatever we had for the test.

Like Jeopardy worked out really good and that was fun. And, there is something else she did and I didn't think I am remembering what all she did... then, like acting out the play got really good. I mean everyone got involved and enjoyed that. The only thing was, like, when we had to write the paragraphs in class there wasn't always enough time but you know, alot of time we had enough time, so but then in a way, I think it is better that she did have the writing in class because then people would do it because they have to turn it in at the end of the period. But if she would do it for takehome, she would have people not turning it in and not doing it.

I would say there were days with alot of homework, but I didn't feel alot. I mean, I didn't see people really bored, because normally she had enough involved. It is only when you are bored that you start to do other stuff.
Her class, when she assigned homework, I mean I think it's good that she didn't assign a lot of homework. I think she should make us take homework every once in awhile, but if she started assigning homework a lot people wouldn't do it. I mean, they have like six other classes and I think she assigned homework in a good way. Or she would assign it, like I always like a teacher to do, she would assign it and says "This has to be done by next Wednesday" which gave you an opportunity to, you know, if you had tons of homework, like questions after the different acts, and the worksheets and the the reading, that pretty much kept us busy. And, then, if we would have extra time, then I would read or something. Doing the library research and then presenting our findings was, the only thing with that was, she never really, like, how can I say it? Like even the part I said to the class, I didn't understand, you know even the part we said I didn't even understand. Maybe after our presentations she could have said it in better terms and maybe we would have understood it better. Like when we talked, maybe she should have said "The five parts of the play are this and they do this and they do that..." Maybe after we said our piece she should have gone back through and said it in better words and kind of summarized for the class. I mean, the class couldn't have ever gotten what we said up there; I didn't understand what we said up there. Maybe she should have gone through that more. It is a good idea to begin, start off Shakespeare, to have people learn different parts and being in groups and stuff, because that is always a lot easier, but she maybe should have gone over each presentation a little more, and like explained it more. Really that is the only project we did. There were other presentations that I did understand. One group did the Shakespearean theater, and I understood that part, there were just certain parts that I didn't understand, and it probably wasn't that helpful. If she maybe would have gone over it a little bit more, it probably, we would have probably known a little more, but then maybe she felt like it wasn't important enough, like we needed to know it, but that she didn't want to spend a whole day on it. Maybe that's just the way she did it to try and make it a little more interesting.

Well, the only time I can remember being evaluated graded like that, was for the first project we just talked about it and when we act out a scene then she just gave us little pieces of paper and graded then 1 to 5 and then wrote like "Good Job" or "You need to do this" That is the only time I've seen that kind of grade. I've seen on paper an A or B but not on participation. I think she did that good. On those plays everyone tried and I think pretty much of them got a good grade on that. The project, I don't know, I think she, you know, if you try and look like you participated everyone did
their share, then you got a good grade on it. I never heard any gripes about that.

I don't know how she's grading. I mean, not exactly, not really no. Like I mean, I know we have had that paper and the test and another paper, and, I don't really know if she is taking them all and adding them up or what she is doing. She probably should have explained that a little more, how she is grading and stuff. She might have, maybe, I just don't remember, but I really don't know exactly what she is doing it.

It bothers me about not knowing about my grades, but it doesn't surprise me because I'm just like that. My teachers explain about their grades, but teachers in this school, they don't feel like getting papers back. Like in government, I've haven't gotten one paper back this whole six weeks. Teachers are weird about that. I'm just used to it.

She writes a lot more on my papers than any other teacher I have ever had, which is really good. But, I feel all student teachers are like that because I've worked with a student teacher in a clothing store, where she worked part time, and I would watch them grade papers and she would write all this stuff, and none of my other teachers did. My preservice teacher wrote a lot, and like explained exactly what was wrong and explained why I got the grade I did which I thought was good, because normally you just get a grade.

I liked watching the movie. If I hadn't seen the movie, I wouldn't have known on thing what we were doing. I wouldn't have understood anything. I know it kind of takes away from it, but, I mean, the only way I remembered was that I remembered seeing it in the movie. I thought seeing the movie first was a good idea. It's easier to see it and understand it than have to read it because reading is so boring. That kind of reading. It's hard to understand.

She didn't really provide us with an easy way to read it. The only time was when we did the play and she went over that and like you know, said, "put it in your own words." I think she said that a couple of times.

I'm sure she had objectives daily to get through the acts and to get through the questions and make sure we understood it, and stuff, and I'm sure she was on a time period where she had to make sure she got everything done. I remember hearing her say that Shakespeare was really hard to teach and I don't really know. You know, I could tell she was really trying hard not to be boring, you know, to find different ways to get
everyone's attention and do things, but I don't really know if she followed her objectives.

The overall purpose of the unit was to learn more about Shakespearean time and learn about Shakespeare's plays and learn about... well, she did go over a lot about what was happening during that time so we could see why certain things had happened in the play, and, I think it was just overall to make us realize what was important to those people then. Like since we don't have Kings or anything like that now, not here anyway. I think she was trying to show royalty and the church and things like that were important back then. She went over that a lot before we read it.

She had a hard unit. I mean, no one likes that kind of stuff, but I honestly think she made it a lot more interesting than it would have been normally. I think watching the movie was good. It wasn't that the movie was boring, it's just that when you are sitting in class it is just hard. She shouldn't take that personally. It is not that people are bored with what she is doing, it's just, I don't know. I think she really tried to make it exciting. I heard a lot of people say that she did interesting things. But I just think she had, I heard some people say she didn't have control over the class.

People liked her because was really nice and really helpful and she didn't act, like you know, she acted humane, but maybe she should have been a little more stressful. I mean like being strict and what she said, like following through with what she said, like "If you aren't quiet you're going to get detention." And then if they weren't quiet, give them detention, which shows someone that they would get in trouble. The only thing I've heard bad is that she couldn't control the class and that she took a lot of stuff off people, like if the people said something to her, she would just kind of take it. Other teachers would just say go to the office, not that she should have done anything like that, but maybe she just needed to show authority more.

I kind of think if we would have read it in class that would have been better because if we would have read it in class, she really good about going through after we had read it and explaining, or going through the questions and explaining what had happened. But I think if we had taken time out to read it in class, after, you know, the person read... like in everyone in the class would have read, everyone in the class would have a part they would have had to have read it and then if after a certain part she could explain, like, "he's saying that I'm mad at the King." or whatever then we could have gone through the whole book and understood it, because
reading it by yourself, first of all, no one is going to read it at home, very few people are, and then if they don't understand it, they might not remember the part they didn't understand and then they might say, "Well, forget it." I think reading in class everyone ends up having to read it. And at least having to listen to someone read it so it helps. If we had read a part and she had gone over it right then, it would have helped. Then, we could have done the questions at home. And that would have been a lot easier because then we would have understood just what we had just read.

She could maybe have done a few more things, like when we were acting out the play. I thought that was a really good idea, just because I think people really got involved in it and that was something. And Jeopardy was a good idea, or maybe if she had put us in those groups and had each group think of an activity, you know, and like present that activity to the class, and then, that way they could have gotten involved. I think it helps when a teacher puts a responsibility on the students and makes them see how it feels when they are trying to teach and the rest of the class is talking. Normally, in all my classes, you just sit there and take notes, and that is why it was such a relief when you went there because she, because you knew you weren't just going to sit there and take notes. I thought that was good. Like we did the characters.

The character analyses were good but we never really did anything with them. It just never seemed like we did anything with them. Or, maybe she could have taken those characters and given them to each person in the class, like they could have acted them out, like played Charades or something, they could have acted out and guessed who the character was. That would have showed people the emotions and stuff.

The writing assignments were good. They sounded a lot like our teacher's questions did. I mean, they weren't, I heard a lot of people complaining, "That's not what it says up there that she wants you to do," so maybe she could have, she explained it verbally what she wanted, and then, but I thought they were good and I thought they were fairly easy to figure out. We only did two, so, but I understood them. Well, she really went over the play. Normally, I would really have to study, and I didn't study at all for the test, and I felt I knew all of it. The only thing I didn't know was we had to, we took a part out of the book and she said to rewrite it in our own words, but I even think I kind of got that right; but I just kind of guessed at that so I don't know.

I think the main thing she wanted to show us was how Hal changed.
I think she was trying to show different parts of the play that were relating to life today. When we first started she said to start thinking about being compared. Hal was sick of trying to be as good as Hotspur was, and then how your parents want you to be responsible and they want you to grow up and like how you have to feel that you want to grow up. You have to feel like you want to grow up and by showing that, it gave people a little more realistic outlook.

I think that any teenagers that had any brothers or sisters could be feeling like he was Hal. I think everyone feels like that. I think anyone who has had brothers and sisters and have seen parents favor one or the other, like whenever one of them does something good or whenever one does something bad. I think everyone has gone through that. I know I have with my brothers and I think that's normal. I know all of my friends at least, we want to make our parents proud, and if we aren't doing it, you look at the bad side and say, "I never do anything right. I'm always wrong."

I think the only thing she could have done better was to have had us read in class. But I think she did a very good job.

The impressions of the student in the rational means-end planner's class all seem to support the assertion that the rational means-end planner created and implemented a unit that was predominantly designed to provide students with activities that would enable them to meet the objectives. In other words, it almost seems that the preservice teacher believed she was doing an adequate job if she sequenced learning activities designed to meet the objectives. Modeling of reading strategies, management strategies, and instructional procedures seemed to be largely lacking according to this student's impressions. Of course, the rational means-end model did not encourage the preservice teacher to think
of these design variables in the preactive or postactive stage of teaching. Perhaps they were not addressed in the classroom environment since she did not address them during planning time. The features of the rational means-end planner's classroom provided by the interviewed student support the assertion that the unit was largely teacher-centered and that the environment was basically a set of activities designed to help students meet the objectives. The assertions from the data are presented in Table 19.
Table 19.

**Student Impressions of Classroom Environment; Rational Means-End**

1. Students did not have to study because the teacher went over the material so well.

2. Most students did not read the play since it was not read in class and since their checks on reading were rarely evaluated.

3. The teacher needed more control of the class in terms of discipline.

4. Teacher needed to make sure the students were doing the assignments: ongoing daily monitoring of student activity was missing.

5. Teacher was rushed to get a certain amount of material done each day.

6. Many activities were fun.

7. Teacher kept everyone's attention.

8. The one project was not helpful since most students did not even understand what they were presenting in the class.

9. The grading policy was not made clear to the students.

10. Teacher responded personally to student papers.

11. Students understood the objectives.

12. Students liked the teacher.

13. Students disliked the play because it was so difficult, but they were able to relate to the characters and themes.

14. Reading strategies were rarely provided to assist students with the difficult reading material.
The Student Impressions from the Creative Planner’s Classroom

Well, for one activity, we each divided into different groups and did different things, and translated passages into what would be easier to understand passages. That helped a lot, I think, because I really didn’t understand what I was reading at first, and then by the time she had us to do that, which was early in the unit, I could understand it better after that, because I’d talk to my friends about the different things that were going on. If I had a question, or they would ask me, it was easier. I have a good understanding of the play.

I was able to follow the play that we watched, but it was her (the teacher). They would talk real fast in the film and everything but the action, you know what was going on pretty much since we’d read the play.

We had different writing assignments that she made us do, and I think she did that so we could understand or relate to the characters better. She did that pretty early in the unit. That helped a lot. I personally couldn’t understand why we were doing it, but after we read the play, it made more sense, and I understood her reasoning behind that.

Well, here recently, especially I guess since we have had the whole feel of the play she, we’ve had to write a theme paper on the character analysis and we, it was easy to do, I thought, because we discussed it so much in class and got everybody’s opinions of different characters and the characters’ attitude toward each other, and what was going on, and it was easy to do those papers. I think the class as whole was probably didn’t mind doing them. I mean, I’m sure they didn’t jump for joy when she gave it to us, but who would? It was a good assignment I think.

What did I learn from this unit? I, this is really the first time I’ve ever even heard about King Henry IV. I mean, I didn’t know what it was, and it’s different than Shakespeare’s other plays. I think. I thought it was neat to see the changes from like Romeo and Juliet, and Julius Caesar. I really didn’t like, well, at the beginning I really didn’t like it, but now that we’ve finished it, and I’ve studied it and done papers on it, I can relate to it really easy. I mean, through some of the characters, I can see myself. I relate to Prince Hal. He just feels like, well, like in the beginning, he’s just going along with the group, he’s trying to find himself and doesn’t know what to do with his life, and I don’t know what I want to do with my life. I don’t know
either. I'll go to college, but, I don't know after that. As I was reading it, I would see other people in the characters too. I'm not going to name any names, but I mean not exactly, but tempers that just flare whenever; and Falstaff, just the easy life. I don't know. Not that there is somebody exactly like Falstaff, but there is someone who has some of his good and some of his bad characteristics. I can see those in people.

I didn't want to do the project at all. I really didn't because I just wanted to listen to the radio, just listen to the music. I thought it was hard to do. It took me three days. It took me a long time to do because I would have to, well, I was pretty familiar with most of the music because I did it from tapes that I have at home; and so I was really familiar with the words and stuff, but some of it I had to go back and listen to it, make sure I got just the right part, and then I would decide which songs went with what character and then I had to put all those different songs that I'd gathered on one character and then I had to put it all together so that it would kind of make sense. It really did help me have a greater appreciation for the play. When you can relate this to something modern, it's easier to understand, it's easier to have a greater appreciation for the play.

She's pretty fair in grading, I think. Nobody complained about their grades or anything like that; but we've never had a syllabus before and I thought that was neat. I kind of liked that. It let me know what we were going to be doing and what she expected, which was helpful because I was used to my teacher's format, her lesson and everything, and wasn't sure, well, she was new; and I had never had the experience in the way she taught and also it helped because I know, in college, they usually have a syllabus, I think, don't they? I thought it gave me an example of how it would be next year so I'm glad she did that.

As far as objectives, I felt like she wanted us to have some kind of appreciation for King Henry because, well, like she told us, she loved the play. She told us before that it was her favorite and she wanted us to see where she was coming from at the very beginning, but now I have a better understanding of it and appreciation for it.

I don't know. A lot of students thought the play was boring, and at times, I thought it was boring too; but, I guess that's just the attitude of a high school senior no matter what you're doing. But she (the preservice teacher) did the best she could with it. Maybe one girl really liked it. She was
really impressed. She was really impressed from the start. Because I talked to her and she really liked it, so maybe her.

She (the preservice teacher) wanted us to read dramatically, and she probably had some problem with that because, I don't know, I guess our class is pretty shy reading. We always, as a whole, never like to read. And I think she wanted us to and we got better at the end. I think the first activity she had us do with the changing the scenes into modern language helped us start reading it more dramatically and she lead more class discussion and it was pretty slow some days. I think it was boring because of the snow days, I really do, because it was like we kept doing the same thing over and over again, but she had to do it or we would have just been lost, we would have forgotten what had happened two day earlier so it was pretty rough on her the snow days. I think it would have gone a whole lot faster if we hadn't had that.

I guess her class was just an experience. I mean, nobody hated it, but nobody really loved it, so it was just something that we did. I don't know. I like parts of it and I didn't like parts of it. I think most of the other students felt the same way. I think as a whole, everybody loved the characters, but I don't think they liked the story.

I liked doing the project the most. It was a way where I could relate to it better because of the music. Well, some of it wasn't because of the music but it was, I listened to and I put it in perspective with the play, so I could kind of relate to it that way better. I just liked doing the project.

I didn't like the dramatic reading in class. I guess I'm just too shy in that way, but there isn't anything that really stands out in my mind that I disliked about the unit. I liked the way she, the first day when she explained or told us like about our notebook and stuff, it's like she is really talking to you when she's writing. Her comments in our notebooks, you know, after we would turn in our assignments, she would give them back and talk to you about it and it's like she's just talking to you. I thought that was real interesting because usually teachers don't take that much time out to write that page or a comment like they are writing a letter to you, and she's really friendly and I really did like that. It was like she cared enough, and everybody's was like mine, as long, so there is what 15 people in our class and she took that much time to write 15 pages, then I think she really cares enough. It's not like it's just her job. She wanted to do that. I mean, she, didn't have to, so I really did like her.
Everybody liked her. I mean she's a likable person. Nobody disliked her, but they might have disliked the play, but they didn't dislike her, and I don't think they related King Henry to her either.

To improve the unit, she could have stopped the snow, I guess. She really had a lot of good activities. I don't know how she could have improved the unit. By reading the play, you can see yourself in any of those characters, and you can relate it to your life, I think. Or, you can relate it to everybody in general because it is really about growing up, I think, and everybody goes through all that, and I think that's what Shakespeare was trying to point out, but growing up is the same for everybody.

I liked the scene that my group did, the little skits we did in class. It was, I guess, I liked it because we acted it out according to modern day.

Some students disliked the play probably because it was hard to read and it was hard to understand, but she made that easier when she explained it and we would have our little discussions and hear views of other students. It was better, but it was hard to read, and I think that is why people didn't like it that much, or why they wouldn't like it that much because it was hard to understand.

I think it's the language. That is where it gets boring and because it is hard to understand. I think that's why everybody liked putting it into the modern day language, because it was easier to understand.

I liked the seminar circle. I thought it was good because you could see everybody and you could face everybody and hear when they were speaking; and I liked that. It was different. And with a small class it was easy to do.

Some of the discussions. There were good days and there were bad days. They were all right. They were good discussions, I think. People would get into them on some days.

I liked the journal we kept in this class better than the ones in the ninth grade because all we had to talk about was everyday things, but in this we talked about the class, and we talked about the characters and why they did what they did and we put some thought into it. It helped me understand the play better than just reading it; so, I guess I liked it because of that, being able to understand it better.
The (preservice teacher) was always pleasant. She never acted like she was in a bad mood, and I thought that was pretty impressive because everybody has bad days; and they're either not going to be happy everyday, but she always was. If she was in a bad mood any of the days, she like never showed it to us.

She was pretty well prepared because she would type everything up. She typed it with calligraphy letters and that was really neat the way she did that, so she was always pretty well prepared. She had handouts. She knew pretty much what we were going to be reading or what we were going to be discussing, or if we were going to be reading or what. But it was hard for her because of the snow, the plans; she probably had to replan so I think that was probably not very easy for her to do.

She's good. She knows what she's talking about. She's trying and you can see her trying, caring about what she is doing. She's pretty good.

According to this student, the creative planner created an educational environment that has the following features which all tend to fall within the umbrella of a beneficial and stimulating environment. The features mentioned in the interviews are provided in Table 20.
Table 20.

**Student Impressions of Classroom Environment (Creative)**

1. Group work was encouraged to help students deal with difficult Shakespeare language and to develop reading and dramatic strategies.

2. Writing-to-learn activities were encouraged to help students deal with difficult Shakespeare language.

3. Plenty of prewriting activities before formal writings were required.

4. Play included characters students could relate to, even though the play itself was difficult.

5. Meaningful outside projects were required to help student relate the world of Shakespeare to their own experiences.

6. Teacher made objectives, procedure, and standard for evaluation clear.

7. Students had plenty of practice time and experience with reading the play dramatically in class.

8. Teacher addressed students as personal learners in creative ways.

9. Students liked the teacher.

10. Students liked the community atmosphere created through the use of the seminar circle.

11. Teacher was well-prepared.
The above impressions of this student suggest that the creative planner may have internalized the evaluation standard of her creative planning model and used it in developing and sustaining her environment. It seems clear that this environment is not just the byproduct of a list of objectives that needed to be met through the use of certain student activities. Instead, throughout this list of impressions, the student's impressions suggest that the teacher was trying to make the environment as beneficial and stimulating for them as possible. She tried to help the students meet objectives, and she tried to help them meet those objectives in stimulating (motivational) ways such as group work and drama activities. This environment was not predominantly objectives-driven. Instead, the teacher made efforts to make the entire environment appealing and helpful for the students.

THE PLANNERS' BELIEFS

ETHNOGRAPHIC VIGNETTE ON THE PLANNERS' BELIEFS

Before the study began, Mary Ellen and Jennifer had similar theories about teaching English/language arts. Their theories were consistent with the ones espoused in their teacher preparation program. Their teacher preparation program's goals, in turn, are consistent with
NCTE's Guidelines for the Preparation of Teachers of English and Language Arts. In fact, the coordinator of the English education preparation program helped create the recent 1986 national guidelines. From their interviews it seems that both planners believe in and are committed to teaching writing as a process. Both believe in a transactional theory of teaching literature, the theory espoused by Louise Rosenblatt. Third, both respect creative approaches to language study and realize that natural language growth should be encouraged in all students through guided practice in the use of all the language arts. Fourth, both mentioned dramatic activities such as reader's theater as an effective method; and Mary Ellen, especially, thought games were sometimes helpful in the learning process. In interviews, both of the planners emphasized that active student involvement and feedback on student papers and products are important. They also mentioned group work as an effective means for helping students engage in active language arts use.

In the beginning of the study, before Jennifer was introduced to the creative planning model, both preservice teachers defined planning as a rational means-end process that was basically a set of steps beginning with a rationale followed by objectives, activities, and evaluation procedures.
Both, however, resented every step of rational means-end planning. They resented writing the rationale, the objectives, the evaluation, and all the other steps in the unit plan model. Although both planners thought each step was very important, they saw unit planning as a way to overcome being scatterbrained and as an accountability measure for administrators and supervisors.

After teaching the King Henry unit, however, the pre-service teachers' thoughts about planning change. Mary Ellen resents planning a bit less but thinks the daily plans are "a pain in the neck." Still, she believes in her planning model and is really impressed that her cooperating teacher really plans the right way although many teachers do not plan at all. Mary Ellen also expects to continue planning in a rational means-end way even if she is not required to because she could not imagine going into a classroom unprepared. She does not expect, however, to follow her planning model's prescriptions step by step and will probably make the descriptions of the activities more brief; but other than that, she will create unit plans just as she was taught even if she is not required to and no one else in her school plans that way.

Jennifer, after being introduced to the creative planning process, has no resentment whatsoever about any
facet of creative planning. She believes in it even to the point of introducing it to other preservice teachers. She, to use her words, "just finds it amazing." Now, Jennifer sees planning as including almost everything she does. She sees planning as the most integral part of teaching. She just cannot believe, now, that teachers do not think of reflection as a natural part of the planning process: "It just kills me." Jennifer sees planning as an ongoing creative thinking process geared toward designing an educational environment that is beneficial and stimulating for students. She no longer sees a unit plan as an accountability check but as a blueprint for her educational design.

The only other noted difference in the planners' beliefs is that Jennifer, after teaching her unit, seems to have much more confidence in her ability to teach and to plan rich learning environments. She seems to be highly actualized and ready for teaching. Mary Ellen, however, is glad King Henry is over. She may teach it again, but she seems exhausted and a bit frustrated.

Jennifer's cooperating teacher and her students felt she was confident in a very justified way. She was in charge of a free-flowing classroom and felt good about it. She was prepared and felt good knowing that.
OTHER FINDINGS ON THE PLANNERS' BELIEFS

This last section of my findings is related to the preservice teachers' final beliefs about teaching and planning. At the beginning of the study, I conducted interviews with both preservice teachers and used the data from those interviews to develop beliefs matrices that both preservice teachers filled in (see Appendix L for the Belief Matrices on Teaching and Planning). Analyses of these matrices on preservice teachers' beliefs about teaching and planning revealed that initially both of the preservice teachers had very similar beliefs about teaching, beliefs that were consistent with the larger population of teachers' beliefs (Eisenhart et al., forthcoming), and that their initial understandings about planning were also consistent with each other as were the attitudes they had about planning (see Appendix L for Beliefs Matrices).

As the beliefs matrices of teacher activities suggest (see Appendix L), both preservice teachers had about the same beliefs towards certain teacher activities at the beginning of the study. "Beliefs" is defined as "attitudes consistent by applied to an activity" (Eisenhart et al., forthcoming). For example, they both felt positive toward activities in which the teacher had responsibility, expertise and control. They found
motivating students to learn, developing materials, setting educational goals and other similar teacher activities "very rewarding." They did not, however, like teacher activities in which they had little responsibility, expertise, or control. Neither liked, for example, following time schedules. They equated following those schedules with "depression." For a fuller look at their initial beliefs on teaching see, Appendix L.

At the end of the study, the two preservice teachers still held the same attitudes about teaching activities, since neither noted changes in their attitudes in the final interviews on teachers' beliefs. Because no changes were noted the data will not be presented on their beliefs on teaching activities after they completed their units.

The beliefs matrices of planning also revealed that the preservice teachers had similar planning beliefs at the start of the study. For example, both associated "resentment" with just about every phase of planning (See Appendix L). Secondly, despite their resentment, both thought each phase of planning was "very important" (See Appendix L). Third, each step in rational means-end planning tended to help them "overcome being scatter-brained;" yet, the planning steps also served other
purposes such as serving as "an accountability standard for administrators and supervisors." For a further look into their beliefs on planning, see Appendix L.

The rational means-end planner's beliefs and understanding about planning changed very little after the study; but the creative planner's beliefs and understanding about planning changed dramatically. What follows is the data that supports these assertions on their final beliefs about planning.

The Rational Means-End Planner's Final Beliefs on Planning

Again, I can not stress this enough because it was one of my weaknesses in my planning, but you need to know the students so well. You really do. And before this actual experience, we created a unit lesson plan for any student you wanted. You could describe the student after you made the plan, perhaps, to see if that plan fit. But that is not how it is at all. That's one thing that I think you should do before you begin planning, and it would help people who are going through the education process to really describe your class before you begin anything. Describe those students. Because I know that isn't how I did my plans. I would say o.k. this is an eighth grade class and we have girls and they like this and they don't like this. So then I would make a plan. Then I would figure out who that would benefit. So...

But mostly the rationale is the reasoning or the reason why you would teach that. The class description is not even on the unit planning sheet that we received for this course. So I included that in my rational. That is again a main part of the unit and I can't stress that enough. The objectives would be, after the rationale, and again alot of my objectives were included in the rationale but I wrote out the objectives, what I wanted them to achieve, broad objectives.
You have to know what you want them to learn in that period and that is the objective...that sets a goal for you. And then, your activities are created to help the students achieve that goal. So I think that you do need a goal every day when you walk in the classroom.

As long as I do have a goal that day when I walk in the classroom, I think that's fine. Next would be activities and we would have an introductory activity. Then a list of general activities, not necessarily general activities, but they have to be in order. Activities that you will use or might use in the unit. And again those are to achieve those general objectives that you have set to achieve for the unit. And then the culmination of, you know the kind of finale to the unit might be a paper, a test, or some kind of project which I had originally anticipated being a project, but there wasn't enough time.

I don't think it is that bad. I don't think there is anything wrong with changing or revising your plans. I think if you didn't, that would be forcing your unit to be, to fit the students and not...that isn't right. I can understand her wanting to see that but she never had any questions about my daily plans or the daily activities that I used. She never said to me "Well, this wasn't in your unit."

But, all activities still did meet all the objectives that I had for that unit. And they were consistent with the rationale.

I always made that clear, you know, how much it would count, what scale it would be graded on, but probably not until after the video.

The daily plans are more bothersome if they are too detailed. I know they are supposed to be very detailed, but that's what we've learned in our methods class, but if they are too detailed it is very difficult when you are in the class to follow that plan. You lose your place, if there is too much down there I think you tend to rely on them too much. Before I go into the classroom I know very well what I am going to be doing. And if I had too much in front of me I think I would be too tempted to look at it. If they aren't as detailed I think they are easier for you to follow, they don't put as much pressure on you, like, "Oh my gosh, well did I miss this step?" If there is any particular items or aspects or ideas that I might miss I will write that down in great detail, and I have all my questions written down, that I want to ask. But just in general description of every activity, I find that in the way of the actual teaching. Again, trying to follow your plan, describing all the activities, cause you know what the activity is.
I think in the beginning planning it was definitely helpful, I mean it is still helpful for me to have a plan, but just to have that paper in front of me now is not as helpful as it was in the beginning.

So, I would definitely keep daily plans but decrease the description, and then the evaluation for the day; daily evaluation wasn’t on the sheet, or the form, we received this quarter, but I found you don’t always need some kind of an evaluation, so I don’t really include that, when it was necessary. And it has been helpful to have, gather up all my materials the week before, have all my tests typed up, run off, which is...

The steps involved in planning: The unit title, which would be the name of the unit, not the individual works you would cover, but the over-all pictures. I mean it could be a theme, doing conflict and celebration with my juniors and that would be the name of my unit. There would be your rationale. You would write why you were teaching, what you were teaching, why you think the students should know it, and again class description and I would detail that as much as possible perhaps if you have seen that certain individuals have problems I would put that right in there, and how to plan what they specifically need help in, I don’t think I would deal with it right then, or if you have extraordinarily bright students and you plan to give them some extra over-all goal that you want them to accomplish with the unit. Again their overall general ideas and we have been told to be specific or you might try to do too much within the one unit. I didn’t mention the length of approximate time you will be spending on the unit. The activities would be next. The introductory activity will be how you will introduce them to the ideas you will be covering, with the themes they will be looking at, give them any background on the material that they need, or having them find out for themselves, but doing research projects and letting them present the to each other. So there would be the introduction, then the activities themselves, just a list, not necessarily in order of the activities that you will be using to accomplish this objective that you set previously and all the activities should link to those objectives striving to accomplish them. The activities should be, ideally, very detailed so that anyone could pick up the unit plan and use it. Explain, you know, I mentioned admit slips, you would have to explain in detail what that was, what would you be using it for, just an idea of what that admit slip was, and again do it in as much detail so that anyone could pick it up and use it. They keep the unit plan for all the people that pass through and you should be able to pick that up and read it. Those activities do not have to be in order. I divided mine up further into literature, the
works that they would be covering, and then the writing and
language activities...I didn’t specifically show it...I didn’t
specifically mark it as such, but I did do the very general
areas. Then the materials would fall after that...I would put
it after that because if you didn’t know the materials you
needed to carry out those activities, the means there has to
be a list, and again make it as detailed as possible. If you
say you are going to show a film, well you need the film
projector and you might need an extension cord, and you might
need a screen, make that as detailed as possible. But you
don’t always realize what you will need this early in
planning. But just try to include as much as possible. Then
would be the evaluation, and that would be how you will assess
other students accomplishing the goals, the objectives that
you set. I think that they should be very clear. I think
that has been one of my main problems, or my weakness, is that
with my unit they were clear in the beginning, but somehow
they kind of got bogged down in the shuffle of activities.
The scale they would be graded on, the one to five, check
minus, check plus, how much they will weight in the final
over-all unit grade, then how you will be grading it. What
you will be looking for, what is required for, I don’t want to
say the best grade, but, you know what you will be looking for
in the evaluation process. And that would be it.

I think it is a valid planning model, and effective for me. I
know some teachers have said "Oh get out of here, we don’t
even have to do all that stuff, unit plans, what’s a unit
plan?" I think if anything you wouldn’t make out those formal
plans for dailies, but you need a unit, you need to see an
overall picture of where you are going to take those students,
and I really feel bad for those students who don’t get that
from the teacher that doesn’t have a unit plan.

The rational means-end planner’s beliefs about
planning remained about the same. She did demonstrate,
however, less resentment for planning and more
appreciation for it. She also felt that more emphasis
within the model should be focused on pupil character-
istics since she perceived not knowing the students to be
a major weakness in her teaching. She also became a bit
more committed to seeing planning as necessarily requiring revision. But, for the most part, her understanding of planning remained consistent. She is committed to her planning model and plans to use it next year.

**Creative Planner's Final Beliefs About Planning**

The creative planner's beliefs about planning changed markedly. After being introduced to the creative planning model, her definition of and the steps listed in her planning process changed. Instead of resenting every facet of the planning process, she cultivated an appreciation for them since they enabled her to be the effective teacher she had hoped to be. The steps for planning that she mentioned are all consistent with the creative planning model she was introduced to. Basically, she sees planning as a creative three-stage recursive thinking process. Throughout this creative planning process she examines design variables to see to what extent they impact on the strengths or weaknesses of her education design. Below are the data to support these assertions:

O.K. Planning, to me, includes just about everything that teaching is made up of. You can develop managerial strategies through planning, obviously the actual activities that you use in the classroom are directly related to planning. I found pre-planning and post-planning take care of alot of discipline
problems that perhaps I'm having; if I can't get a certain student motivating with the literary material, again pre-planning and post-planning would perhaps allow me the time to think and process some of the different things that I can do, or just analyze the individual and see perhaps there is some other factor that is influencing. As far as the significance, I think that relates to the influence. It is the most significant part of teaching, I feel. A well planned lesson, a well planned year of teaching is a successful year, I feel. I, at the beginning, had no idea how much planning was involved, or how much it should be involved in teaching. I feel like a lot of teachers do not put enough emphasis on planning because they think of it as something which just takes up valuable time where they could be creating, or they could be collecting materials, watching T.V., whatever. In planning, I tend to think of the whole experience of planning. Even grading comes in. I'm continually evaluating different students, you know, to find out where they are. I think that is a part of my post-planning. When I sit down and read a collection of 25 essays on theme or whatever, that is a part of post-planning. I'm sitting her thinking, "Now wait a minute, this student did not get as much out of it as I thought." He would perhaps, maybe he just had a bad night; maybe he had a couple of other projects that were due, or just perhaps it was the way it was presented in class. It's more of an influence than I ever thought it would be and it's very important to concentrate only three sections. I think the pre-planning then just helps me illuminate and I guess define certain problems or certain pluses that you've found in your unit.

I manipulate the planning model to fit me so that it is just an integral part of the teaching experience. It's not in anyway, you know, "I have to go home and plan tonight," because I am doing it all the time. It's an on going process that you can't put any boundaries on. I just, the way that my mind works, you know, I'm continually a week ahead. On my next unit, they seem to be interested in this activity so maybe I'll add that on there. And then putting it down in writing, or not even putting it down in writing, just being aware of the actual design is a part of it. I feel like there is no way I could present all of the ideas that I have, you know, stewing in my mind for a month, or even two weeks, whatever, and I put the important ones down and then the other ones I just kept in the back of my mind and perhaps I'll use them later. Again, just to re-emphasize, it is not something that is structured, you have to be able to use it to fit your needs.
My overall impression, I guess, it is something that the planning model can be manipulated to fit the general teacher. It should be something that is just intuitive, something that you do after the first two weeks, like out of habit, and it's not something that is strenuous. It is not something you have to spend hours on it, and it's not something you even delineate. I spend three hours planning, and then five hours teaching. When I was filling out my student teacher chart, it was hard to define, you know, actually how many hours did I spend planning, because planning entails so much more. As far as the creative planning that I was involved in, as opposed to the traditional one that the other student teachers were involved in, I feel like that it has just made an amazing difference. And the strength that I've developed, just as far as, you know, management; as far as organizing, things that I never thought would touch on planning...

Personal teaching refinements are a part of the planning model. Oh certainly. I wrote that in my evaluation, that I felt that because I actually outlined and put down on paper the goals, I was more able to go back and reflect upon them, because they were written out there. And then I was more inclined to think of them, just to think of the awareness of the goals I wanted to get and...making sure that I am not consumed with so much other things, (that I don't recognize that teachers are continually striving at becoming better in certain aspects of their career). And I just feel that, and again especially in student teaching, you need to develop those good habits early. I think the creative planning model, again, just helps you outline them; helps you define them. You actually do the improving, it is just something that makes it a lot easier for you, alot smoother. It is an amazingly smooth transition, from basically an inexperienced student teacher to one that I feel like now. It is something that has helped me and is going to continue to help me.

My image of myself as a planner is a very positive image. I've had so much confidence this quarter as far as...it is just amazing. I walk in and I feel confident. I get organized, I'm ready for my class to come in and it is just so nice, and I've experienced when at the beginning of the year I was uncomfortable with what I was doing, you know, you just go home and you are feeling so depressed, and you feel like you'll never get the hang of this. I would get nervous before classes, and now I just walk in and I already know, it's in my mind what I have to do. I have my lesson plan in front of me with probably a lot of notes scribbled on it, and I'm just so comfortable. And I go in and the problems that had been developing, I try to go back through in my post-planning to make sure I address them. I make little notes like "So and so
was talking" and then later on I'll address the reasons why. Because I've been more analytical about it I feel like that my strength has just, I don't know, I felt like I had strength through the quarter that some people are only acquiring now. It is so much more, just a thought process. The critical thinking process. Things that I was stressing for my students I was stressing for myself. But yeh, the confidence that is overwhelming. But that is the one thing that I am surprised at, that I can go in a classroom and I can even go in a strange classroom, which I have done a couple of times, and just feel very confident, with someone else's plans because I've learned skills through the planning and through just the experience that allows me to walk into a strange classroom and just take over.

I think that teaching itself is a learning experience as far as the literary material, and that's just inextricably bound to the planning. Because you are presenting the material, so you are learning about the material, you're learning about the presentation at the same time. And I think that you never finish learning...because teachers can always improve, and teachers can always find new and better ways to reach more of their students. I have realistic goals now, as opposed to the beginning when I had...you know, I thought that I would touch every single one of the students and this is going to be such an overwhelming experience. It has been, but now looking back, it, I guess its toned down with realism. I know now that I am probably not going to touch every one of the students to the most. I know that I have touched all of them in one way or another, but maximally I am happy with what I have achieved, and I think that I have probably achieved a great deal more than most student teachers because I've been so well prepared. I have put alot of thought into what I'm doing and again that just reflects in the confidence and the success of my unit.

I know I have created a successful unit because I look at student products. I look at student feedback. I look at how much students participate in the class room. I look at what I have achieved, the goals I have sat out for myself, and I look back and I think "Well, have students met some of my objectives that I have outlines out and if not, why not, and if so, were there any extras that they have achieved without me actually thinking about it at the very beginning? I checked my unit's effectiveness on a daily basis.

Some teachers don't even evaluate their units at the end of the unit. They just go on, and it's a shame because that unit will probably continue to be unsuccessful year after year if it had been unsuccessful. Because there is no reflection put
into it. The ideas you have fresh in your mind at the end of a unit are going to be just dead ideas by the next year, and I think you would tend to forget all but maybe one that would stand out. And, you know, like I said, it is an ongoing process. You begin and you just don’t finish with the unit and, you know, you just don’t finish period. I’ve put away my first unit probably storing it for some time, perhaps, when I can come up with something later on or for next year when I teach the same unit, if I do. I feel like I changed my unit probably six or seven times all the way through. The first thing I added were more objectives because I felt the students were reaching so much more and I hadn’t outlined some, I hadn’t anticipated some. Adding activities, and to teacher goals I had in there, I tried to do that on a daily basis just to make sure that I was aware and that I was working on particular strategies; questioning strategies in one of the things I really wanted to work on...coming home from a hard day you need to reflect on what you are in the classroom for. It’s just all a part. Again, reflection and the gathering and the organizing of activities. It’s all a part of planning, and I guess teachers don’t realize that the things that they do are related. They need to somehow bring that in as a transition, I guess, but they need to realize that planning, the word, connotatively, is something that just puts alot of fear in some teachers. I feel like, and they don’t realize that they are probably doing it anyway and they just need guidelines or design, or something to direct, more of the reflection, I guess more of the organizing. almost a controlling of the force just to get the maximum amount out of the unit or the lesson plan. I guess awareness. I guess I feel I would have done this anyway, I just wouldn’t have been aware of it, and the effects would not have been, I don’t know, as great, I guess. It is such a simple thing to implement into student teachers and into regular teachers. It’s amazing that, I don’t know, that teachers are not aware. That this is kind of the way they do it, it’s not strictly planning, pre-planning and post—planning, but it’s just mixed all in and I don’t know, I felt like the awareness of it has just really enhanced my teaching.

I wouldn’t even be able to rank what was more important with any reflection because I have felt, post—planning has helped me, I guess the most, especially in this very integral stage of my career development. It’s just like running because at first it was kind of a chore putting my thoughts down on paper, but it was just so wonderful to go back through and read through some of the reasons...to go back through and find out who worked hard this day and what activity was on, or why a certain thing was unsuccessful. That has been, I guess, the main thing that has helped me, and it was sort of a surprise that the reflection and the post—planning was just kind of an outlet of my pre—planning was such an influence.
Reflection is definitely a very important part.

I feel like part of the richness of my experience was being able to know my class inside and out. I can always learn more, but it's just, from the very beginning, right from the onset I felt like I was completely prepared and nothing would really catch me off-guard. A few minor things perhaps, but, I never ran out of tests; I never put two students together that didn't get along in a group work and make that unsuccessful. Things like that I just think that builds on the confidence of going into a classroom knowing it really well. You have your confidence and then of course, I think it contributes to the students respect for you as a teacher which is very important. I think my pre-planning just forced me almost to get to know the class on a much deeper level. Certainly if I had started out without the design variables and without the ones that perhaps I addressed that weren't involved, or listed, or whatever, I would have got the superficial things. I think students number would have been up there. I would have addressed them on the more obvious things but I never would have gotten into the depth that I did with pre-planning. Just thinking about different activities that they might enjoy. It was a wonderful way to, while I was observing the classes, I observed them I guess for two weeks, in a lot of different situations, it was just a wonderful way to really delve into the class deeply and I guess, yes, problem solve before I even got to the problem. Or be aware of problems so that the never come up.

I guess you brainstorm ways to get rid of problems and then also you think about, well, "If this would continue, what type of problem would it become?"

It was nice to have the two weeks in the beginning just to be able to sit there and observe. But I think that ;I feel comfortable enough with the model that my first year of teaching that I can go in and the first two weeks I can do the pre-planning along with the planning and the post-planning. It was nice to just gradually go into it, I just feel like they can be done simultaneously.

I do see the process as creative because it seems to me it gives you so much more freedom, freedom to create a unit plan that will enhance the material, enhance student learning, just...it is a creative process.

I'm creating a learning environment, I guess, more than anything. It's not only the activities; it's not just only the reading materials; not only the writing skills, it is just
a complete environment, and you have just so much creative autonomy in the classroom that if you're not a creative person, you can still be successful because you can develop skills that allow you to think of new, original, innovative ideas to implement in the classroom, plus just the total environment. You don't have to be a wonderful artist. I'm a terrible artist, you've seen my bulletin boards, but just knowing your classroom; thinking about different things; things that students would like; listening to students feedback. They know what they like. And then just a lot, I think that any good teacher is going to be looking in some of the periodicals that come out. You are in a constant state of learning and gaining more materials, more ideas, more work. Again, it is not creative in the sense that you are artistic, or that you have an I.Q. of 160, or whatever, it is just a means, a freedom almost, of being able to create, I guess, implement ideas that allow you to enhance the learning environment, as if it were already present. I felt like that I had creative control. Definitely. To a certain extent. I know I've heard teachers here say you know, "well I can't do this here because of the standards of learning." Say in my grade I am not supposed to address this, or whatever. I just cringe at that because obviously they are not using the standards of learning the way they are designed to be used. In no way are they restrictive in any sense of the word. Again, all curriculums are going to have certain guidelines that you work with; not around; not fighting the whole way.

Exactly. So many things can be done with Shakespeare; things that can be done with poetry; any type of literary or writing activity that, I don't know. There just isn't any way that anyone could be lacking even in the most restrictive environment. I've even heard teachers say the discipline problems, that they just can't get anything constructive done and there's no way to bring in creativity. I just think "I wonder how well this teacher knows her students. Has she, has he ever tried some of the activities that they swear will not work?" Who knows, maybe the reason for the discipline problems being there is because perhaps the students have never been given any freedom at all and never been able to express themselves in a creative way. I think if you go in knowing that you are going to be restricted then you will be with a creative control over the classroom, some people might see a paradox in that. It is possible for the teacher to have creative control over the environment and still allow the students to creatively participate. I guess it was in the first two weeks, we completed two reflective entries where the students gave me their ideas about what the classroom should be. And their ideas were amazing. Again, it, I just added to mine, you know, I used theirs and I used
mine and we created a successful unit together, I guess. I shouldn't take all the credit, I guess, because alot of my ideas were my students. Again, I would never have let them create a test of anything like that, and they realize that and then, too, activities can be very non-restrictive. My project, I gave them reams of ideas on every end of the spectrum, you know, whatever they wanted to do they could do as long as there was something that reflected the piece that we were studying. And again, you know, in one sense of the word I am creating this environment for them to work within, but I'm also giving them enough leeway that they can bring in whatever they enjoy doing. I felt that was very successful. I'm always flexible.

Yes. Yes I will. Because it has been so helpful to me this particular experience, I mean it is so enjoyable. It is so much more profitable. I feel like I can walk pretty much into any school system and be a successful teacher my first year. Probably not as successful as I will be ten years down the road, but again, it's just something that's done intuitive to me now that there is kind of like there is no way I could quit now if I tried. It's just pre-planning and postplanning in the car, in the bathroom, you know, everywhere, and I must tend to think of things and address things that I probably would not have addressed before. It's just so easy to do. It's not in any way work. Certainly it takes some time but anything that you are going to do that is worthwhile is going to take some time.

The creative planner drastically altered her understanding of and beliefs about planning. Jennifer no longer sees planning as a lock-step procedure as she did in the beginning. She does not resent the creative planning process nor does she see it as an accountability standard for administrators. Instead, she enjoys planning because it helps her. Planning still helps her avoid "being scatterbrained," but is also helps her think about her teaching and educational design.
In summary, both preservice teachers had similar beliefs about teaching activities and planning in the beginning. At the end of the study, however, their attitudes about teaching activities remained about the same. The rational means-end planner's beliefs about and understanding of planning remained about the same; but the creative planner's beliefs about planning changed dramatically. These assertions are consistent with my original hypotheses.

Conclusion

Throughout this chapter findings were presented in the form of ethnographic vignettes and in low-inference analysis of all data sources. What follows is a summary of all the key findings and a listing of all the data sources that can be used to support each finding.

Fourteen data sources were used to make the overall assertion that prescriptive planning models do impact on preservice teacher thought and on the classroom environments they create. These data sources are presented at the top and center of Table 21. The findings for each research question are presented in the left and right columns. One column lists the findings for the rational means-end planner. The other column lists the findings for the creative planner. Whenever a
data source was used or could have been used to support the findings, an X was placed in the appropriate box. Many findings were often the byproducts of at least three data sources. These findings will be the most reliable and valid since they stem from triangulation of data sources.
### Table 21.
Summary of Data Sources That Support Each Finding

<table>
<thead>
<tr>
<th>Findings</th>
<th>Rational Means-End Planner</th>
<th>Creative Planner</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. PREACTIVE</td>
<td>X X X X X</td>
<td>1. devoted more thought to developing unit plan</td>
</tr>
<tr>
<td>2. devoted less thought to developing unit plan</td>
<td>X X X X X</td>
<td>2. devoted much preactive thought to pupil characteristics</td>
</tr>
<tr>
<td>3. devoted little preactive thought to pupil characteristics</td>
<td>X X X X X</td>
<td>3. developed many Insights about teaching in preactive stage</td>
</tr>
<tr>
<td>4. developed few insights about teaching in preactive stage</td>
<td>X X X X X</td>
<td>4. focused more attention on internalizing thinking strategy for making and implementing unit</td>
</tr>
<tr>
<td>5. gave few reasons (N=2) to support her unit’s rationale</td>
<td>X X X X X</td>
<td>5. gave more reasons (N=21) to support her unit’s rationale</td>
</tr>
<tr>
<td>6. considered fewer educational variables in making her rationale</td>
<td>X X X X X</td>
<td>6. considered more educational variables in making her rationale (educational theory and grade level)</td>
</tr>
<tr>
<td>7. created a written rationale format consistent with planning model’s format</td>
<td>X X X X X</td>
<td>7. created a written rationale format consistent with her own thinking about the rationale</td>
</tr>
<tr>
<td>8. saw rationale as a statement of the importance of the unit</td>
<td>X X X X X</td>
<td>8. saw rationale as a justification for unit and as a document of prior thinking which helped her think clearly about the focus of the unit</td>
</tr>
<tr>
<td>9. developed objectives that were general and sometimes unclear, and seemed to be products of little preactive thought</td>
<td>X X X X X</td>
<td>9. developed objectives that were detailed and clear, and seemed to be products of much preactive thought</td>
</tr>
<tr>
<td>10. did not incorporate state standards of learning into objectives</td>
<td>X X X X X</td>
<td>10. incorporated state standards of learning into objectives</td>
</tr>
<tr>
<td>11. made statements about the class that were not the byproducts of thoughtful observations of student products and actions</td>
<td>X X X X X</td>
<td>11. made statements about the class that were the byproducts of thoughtful observations of student products and actions</td>
</tr>
</tbody>
</table>
Table 21 (continued).

Summary of Data Sources That Support Each Finding

<table>
<thead>
<tr>
<th>Findings</th>
<th>Rational Means-End Planner</th>
<th>Creative Planner</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. PREACTIVE (cont.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. did not comment on ways she could become a part of the classroom environment and enhance it</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>13. sought out and used a variety of activities</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>14. selected activities that would meet objectives</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>15. designed evaluation tools that would help her assess the degree to which students met or failed to meet objectives</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>16. conducted detailed research on the play</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>17. saw planning as a fairly nonrecursive, step-by-step process designed to set goals and develop design ways to have those met and assessed</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>18. made many (N=51) reported decisions Interactive decisions which were pupil-related and supplemental</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>19. did not anticipate as many interactive problems</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>20. worked out some instructional activities and activities routines</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>21. was often unable to predict student responses</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>22. was more teacher-centered</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

12. commented on ways she could become a part of the classroom environment and enhance it

13. sought out and used a variety of activities

14. considered many design variables in selecting her activities

15. designed evaluation tools that would help her monitor her classroom environment

16. conducted detailed research on the play

17. saw planning as a 3-stage recursive process that encouraged her consideration of a host of variables that would make classroom environment beneficial and stimulating

18. made very few (N=11 reported decisions) interactive decisions

19. anticipated many interactive problems

20. worked out instructional, management, and executive management routines

21. was often able to predict student responses

22. was less teacher-centered
Table 21 (continued).

Summary of Data Sources That Support Each Finding

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<tr>
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<tr>
<td><strong>III. POSTACTIVE TEACHING</strong></td>
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<td></td>
</tr>
<tr>
<td>23. devoted most written postactive thought to: 1) feelings about teaching; and 2) planning process</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>24. does not often reflect in writing on implemented lessons and their effectiveness</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>25. tended to be more descriptive in her postactive journal</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>26. evaluated unit based on student meeting objectives</td>
<td>X X X X X X X</td>
<td></td>
</tr>
<tr>
<td>27. considered written reflection as less valuable</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td><strong>IV. CLASSROOM ENVIRONMENTS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28. created environment in which students were actively engaged in language arts activities 50% of the time</td>
<td>X X</td>
<td></td>
</tr>
<tr>
<td>29. engaged students in small group work 1/3 of the time</td>
<td>X X</td>
<td></td>
</tr>
<tr>
<td>30. 95% of the activities encouraged in the classroom were written out in daily plans or planned out mentally before the class session began</td>
<td>X X X X X X X</td>
<td></td>
</tr>
<tr>
<td>31. created an environment that provided activities to help students meet unit objectives because activities were introduced and then students were left to accomplish them</td>
<td>X X X X X X X</td>
<td></td>
</tr>
<tr>
<td>32. did not share her plan as thoroughly and did not let students assist in the creation of the environment</td>
<td>X X X X X X X</td>
<td></td>
</tr>
<tr>
<td>33. teacher did most of the work: provided the synopses and interpretations of the play</td>
<td>X X X X X</td>
<td></td>
</tr>
</tbody>
</table>

23. devoted most postactive thought to: 1) activities and/or methods; 2) individual student analyses; and 3) class composition analyses.

24. reflects often in writing on implemented lessons and their effectiveness.

25. tended to be more analytical in her postactive journal.

26. evaluated unit based on effectiveness or ineffectiveness of educational design.

27. considered written reflection as valuable.

28. created environment in which students were actively engaged in language arts activities 72% of the time.

29. engaged students in small group work 1/3 of the time.

30. 95% of the activities encouraged in the classroom were written out in daily plans or planned out mentally before the class session began.

31. created an environment designed to be beneficial and stimulating for students because modeling and practicing of skills were encouraged.

32. shared her plan with the students and let them assist in the creation of the environment.

33. students did most of the work: discovered their own meanings of the play.
Table 21 (continued).

Summary of Data Sources That Support Each Finding

<table>
<thead>
<tr>
<th>Findings</th>
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<tbody>
<tr>
<td>IV. CLASSROOM ENVIRONMENT (cont.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>34. classroom environment was by-product of much rational means-end planning</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>35. cooperating teacher believed classroom environment was designed to help students meet objectives because (and sometimes in spite of the fact that)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>A. objectives were met</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. cognitive skills within Bloom's taxonomy were encouraged</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. many group activities were used</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D. some activities, though designed to meet objectives, were not meaningful</td>
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<td></td>
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<tr>
<td>E. most assignments were traditional</td>
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<td></td>
</tr>
<tr>
<td>F. evaluation standards assessed the objectives</td>
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</tr>
<tr>
<td>G. teacher was not in close touch with students needs and abilities</td>
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</tr>
<tr>
<td>H. no change in seating arrangement was made to facilitate unit</td>
<td></td>
<td></td>
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<tr>
<td>I. teacher was not too enthusiastic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>J. pacing was sometimes off</td>
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<td></td>
</tr>
<tr>
<td>K. evaluation standards were sometimes unclear to students</td>
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<td></td>
</tr>
<tr>
<td>L. students probably learned more than the teacher was able to assess</td>
<td></td>
<td></td>
</tr>
<tr>
<td>36. students believed classroom was designed to help them meet the objectives because</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>A. teacher went over the material so well that students didn't need to study</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. teacher was rushed to get certain amount of material done each day</td>
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<td></td>
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<tr>
<td>C. many activities were fun but related to objectives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D. teacher kept everyone's attention</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E. gave final test on objectives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>37. students believed classroom was beneficial and stimulating for students because environment included</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>A. group work to help students with Shakespearean language</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. writing to learn activities that helped students deal with the difficult language</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. plenty of prewriting activities</td>
<td></td>
<td></td>
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<tr>
<td>D. a difficult play that had characters they could relate to</td>
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<tr>
<td>E. meaningful outside projects</td>
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<tr>
<td>F. teacher who made objectives, procedures and standards for evaluation clear</td>
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<td></td>
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<tr>
<td>G. practice time for reading and acting</td>
<td></td>
<td></td>
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<tr>
<td>H. teacher who addressed students as personal learners</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I. likable teacher</td>
<td></td>
<td></td>
</tr>
<tr>
<td>J. community atmosphere</td>
<td></td>
<td></td>
</tr>
<tr>
<td>K. well-prepared teacher</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table 21 (continued).

**Summary of Data Sources That Support Each Finding**

<table>
<thead>
<tr>
<th>Findings</th>
<th>Rational Means-End Planner</th>
<th>Creative Planner</th>
</tr>
</thead>
<tbody>
<tr>
<td>V. FINAL BELIEFS ABOUT PLANNING</td>
<td></td>
<td></td>
</tr>
<tr>
<td>37. resented planning process in the beginning and still does to a lesser extent</td>
<td>X</td>
<td>X X X</td>
</tr>
<tr>
<td>38. sees planning as a one-stage, largely nonrecursive step-by-step process that helps teachers create an environment that will help students meet objectives</td>
<td>X</td>
<td>X X X</td>
</tr>
<tr>
<td>39. has less confidence in herself as a teacher</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>40. thinks planning influences what happens in the classroom</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

37. resented old planning process but was enthusiastic about creative planning process
38. sees planning as a 3-stage, recursive process that involves considering many design variables in the making and implementing of beneficial and stimulating learning environments
39. has confidence in herself as a teacher
40. thinks planning is most critical variable in teaching
CHAPTER 5

CONCLUSIONS

SUMMARY OF FINDINGS

In light of this ethnographic study, it seems that prescriptive planning models do have an impact on preservice teacher thought and on the classroom environments they create. Specifically, the prescriptive planning models impact on their preactive, interactive, and postactive thinking as well as on the classroom environments they create. They also impact on the preservice teachers’ beliefs about planning.

In terms of preactive thinking, the prescriptive planning models impact on preservice teacher thought in terms of quantity, content, and quality. The models also seem to affect the thinking strategies the preservice teachers engage in during the preactive stage of teaching.

In terms of interactive thinking, the prescriptive planning models impact on preservice teacher thought in terms of the quantity of interactive decisions made and the degree to which the planners can predict interactive problems that might arise. Although further study is needed, the models may influence, to a certain extent,
the degree to which the classroom environment is
teacher-centered or student-centered.

In terms of postactive thinking, the prescriptive
planning models impact on preservice teacher thought in
terms of quantity and quality of reflection on
implemented plans. The planners' evaluative schema for
classroom life is also influenced as well as the
preservice teachers' appreciation of reflection.

In terms of classroom environment, the prescriptive
planning models impact on the preservice teachers'
overall organizing principle for the classroom
environment. They also impact on cooperating teachers'
and students' impressions of the environments.

In terms of the planners' beliefs about planning,
the prescriptive planning models impact on the preservice
teachers' beliefs in terms of their understanding of what
planning entails. Their beliefs about teaching
activities, however, remained steady.

Table 22 is a summary of the findings presented and
detailed in Chapter Four. In the center of the first
chart is a check list that shows the degree to which the
findings on each preservice teacher's thought and
environment were consistent with or were perhaps the
by-products of the directives of the planning models
used. This summary of findings suggests that to a
certain extent, the models did, indeed, impact on pre-service teachers' thought and on the classroom environments they created.
### Table 22.

**Summary of Findings**

<table>
<thead>
<tr>
<th>Rational Means-End Planner</th>
<th>Consistent</th>
<th>Inconsistent</th>
<th>Creative Planner</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PREACTIVE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. devoted less thought to developing unit plan</td>
<td>X</td>
<td>X</td>
<td>1. devoted more thought to developing unit plan</td>
</tr>
<tr>
<td>2. devoted little proactive thought to pupil characteristics</td>
<td>X</td>
<td>X</td>
<td>2. devoted much proactive thought to pupil characteristics</td>
</tr>
<tr>
<td>3. developed few insights about teaching in preactive stage</td>
<td>X</td>
<td>X</td>
<td>3. developed many insights about teaching in preactive stage</td>
</tr>
<tr>
<td>4. focused little attention on internalizing thinking strategy for making and implementing unit</td>
<td>X</td>
<td>X</td>
<td>4. focused more attention on internalizing thinking strategy for making and implementing unit</td>
</tr>
<tr>
<td>5. gave few reasons (N=2) to support her unit's rationale</td>
<td>X</td>
<td>X</td>
<td>5. gave more reasons (N=21) to support her unit's rationale</td>
</tr>
<tr>
<td>6. considered fewer educational variables in making her rationale (educational theory and grade level)</td>
<td>X</td>
<td>X</td>
<td>6. considered more educational variables in making her rationale (educational theory, management strategies, professional teaching refinements, content, and pupil characteristics)</td>
</tr>
<tr>
<td>7. created a written rationale format consistent with the model's format</td>
<td>X</td>
<td>X</td>
<td>7. created a written rationale format consistent with her own thinking about the rationale</td>
</tr>
<tr>
<td>8. saw rationale as statement of the importance of the unit</td>
<td>X</td>
<td>X</td>
<td>8. saw rationale as a justification for unit and as a document of prior thinking which helped her think clearly about the focus of the unit</td>
</tr>
<tr>
<td>9. developed objectives that were general and sometimes unclear, and seemed to be products of little proactive thought</td>
<td>X</td>
<td>X</td>
<td>9. developed objectives that were detailed and clear, and seemed to be products of much proactive thought</td>
</tr>
<tr>
<td>10. did not incorporate state standards of learning into objectives</td>
<td>X</td>
<td>X</td>
<td>10. incorporated state standards of learning into objectives</td>
</tr>
<tr>
<td>11. made statements about the class that were not the byproducts of thoughtful observations of student products and actions</td>
<td>X</td>
<td>X</td>
<td>11. made statements about the class that were the byproducts of thoughtful observations of student products and actions</td>
</tr>
</tbody>
</table>
### Table 22. (continued)

#### Summary of Findings

<table>
<thead>
<tr>
<th>Consistency with Planning Model</th>
<th>Consistent</th>
<th>Inconsistent</th>
<th>Not Applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rational Means-End Planner</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. PREACTIVE (cont.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. did not comment on ways she could become a part of the classroom environment and enhance it</td>
<td>X</td>
<td></td>
<td>12. commented on ways she could become a part of the classroom environment and enhance it</td>
</tr>
<tr>
<td>13. sought out and used a variety of activities</td>
<td>X</td>
<td></td>
<td>13. sought out and used a variety of activities</td>
</tr>
<tr>
<td>14. selected activities that would meet objectives</td>
<td>X</td>
<td></td>
<td>14. considered many design variables in selecting her activities</td>
</tr>
<tr>
<td>15. designed evaluation tools that would help her assess the degree to which students met or failed to meet objectives</td>
<td>X</td>
<td></td>
<td>15. designed evaluation tools that would help her monitor her classroom environment</td>
</tr>
<tr>
<td>16. conducted detailed research on the play</td>
<td>X</td>
<td></td>
<td>16. conducted detailed research on the play</td>
</tr>
<tr>
<td>17. saw planning as a fairly nonrecursive, step-by-step process designed to set goals and develop ways to have those met and assessed</td>
<td>X</td>
<td></td>
<td>17. saw planning as a 3-stage recursive process that encouraged her consideration of a host of design variables that would make classroom environment beneficial and stimulating</td>
</tr>
<tr>
<td><strong>Findings Associated With Use of Each Model</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. made many (N=51) interactive decisions which were pupil-related and supplemental</td>
<td></td>
<td></td>
<td>18. made very few (N=11) interactive decisions</td>
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<tr>
<td>19. did not anticipate as many interactive problems</td>
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<td></td>
<td>19. anticipated many interactive problems</td>
</tr>
<tr>
<td>20. worked out instructional routines</td>
<td></td>
<td></td>
<td>20. worked out instructional, activities management, and executive management routines</td>
</tr>
<tr>
<td>21. was often unable to predict student responses</td>
<td></td>
<td></td>
<td>21. was often able to predict student responses</td>
</tr>
<tr>
<td>22. was more teacher-centered</td>
<td></td>
<td></td>
<td>22. was less teacher-centered</td>
</tr>
</tbody>
</table>
Table 22. (continued)

Summary of Findings

<table>
<thead>
<tr>
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<td><strong>IV. CLASSROOM ENVIRONMENTS</strong></td>
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<tr>
<td>23. devoted most postactive thought to 1) activities and/or methods; 2) individual student analyses; and 3) class composition analyses</td>
<td>28. created environment in which students were actively engaged in language arts activities 72% of the time</td>
</tr>
<tr>
<td>24. does not often reflect in writing on implemented lessons and their effectiveness</td>
<td>29. engaged students in small group work 1/3 of the time</td>
</tr>
<tr>
<td>25. tended to be more descriptive in her postactive journal</td>
<td>30. 95% of the activities encouraged in the classroom were written out in daily plans or planned out mentally before the class session began</td>
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<tr>
<td>26. evaluated unit based on students meeting objectives</td>
<td>31. created an environment designed to be beneficial and stimulating for students because modeling and practicing of skills were encouraged</td>
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<tr>
<td>27. considered written reflection as less valuable</td>
<td>32. shared her plan with the students and let them assist in the creation of the environment</td>
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<td>28. created environment in which students were actively engaged in language arts activities 50% of the time</td>
<td>33. students did most of the work; discovered their own meanings of the play</td>
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<td>29. engaged students in small group work 1/3 of the time</td>
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Table 22. (continued)

Summary of Findings

Findings Associated With Use of Each Model

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<tbody>
<tr>
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<td>34. classroom environment was by-product of much rational means-end planning</td>
<td>35. cooperating teacher believed classroom environment was beneficial and stimulating for students because the environment had</td>
</tr>
<tr>
<td>35. cooperating teacher believed classroom environment was designed to help students meet objectives because (and sometimes in spite of the fact that)</td>
<td>A. much student interaction</td>
</tr>
<tr>
<td>A. objectives were met</td>
<td>B. seminar atmosphere</td>
</tr>
<tr>
<td>B. cognitive skills within Bloom's taxonomy were encouraged</td>
<td>C. extra resources and projects for students</td>
</tr>
<tr>
<td>C. many group activities were used</td>
<td>D. many meaningful learning activities</td>
</tr>
<tr>
<td>D. some activities, though designed to meet objectives, were not meaningful</td>
<td>E. objectives were met</td>
</tr>
<tr>
<td>E. most assignments were traditional</td>
<td>F. class was not objectives-driven</td>
</tr>
<tr>
<td>F. evaluation standards assessed the objectives</td>
<td>G. Shakespearean material was made accessible to students</td>
</tr>
<tr>
<td>G. teacher was not in close touch with students needs and abilities</td>
<td>H. many higher level cognitive strategies encouraged</td>
</tr>
<tr>
<td>H. no change in seating arrangement was made to facilitate unit</td>
<td>I. community spirit</td>
</tr>
<tr>
<td>I. teacher was not too enthusiastic</td>
<td>J. student-centered classroom</td>
</tr>
<tr>
<td>J. pacing was sometimes off</td>
<td>K. activities were nicely paced</td>
</tr>
<tr>
<td>K. evaluation standards were sometimes unclear to students</td>
<td>L. teacher provided unobtrusive leadership</td>
</tr>
<tr>
<td>L. students probably learned more than the teacher was able to assess</td>
<td>M. environment was carefully monitored by teacher</td>
</tr>
<tr>
<td>36. students believed classroom was designed to help them meet the objectives because</td>
<td>N. continuity was evident</td>
</tr>
<tr>
<td>A. teacher went over the material so well that students didn't need to study</td>
<td>O. lively literary discussions occurred</td>
</tr>
<tr>
<td>B. teacher was rushed to get certain amount of material done each day</td>
<td>38. students believed classroom was beneficial and stimulating for students because environment included</td>
</tr>
<tr>
<td>C. many activities were fun but related to objectives</td>
<td>A. group work to help students with Shakespearean language</td>
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<tr>
<td>D. teacher kept everyone's attention</td>
<td>B. writing to learn activities that helped students deal with the difficult language</td>
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<tr>
<td>E. gave final test on objectives</td>
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<td>D. a difficult play that had had characters they could relate to</td>
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<td>E. meaningful outside projects</td>
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<td>F. teacher who made objectives, procedures and standards for evaluation clear</td>
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<td>G. practice time for reading and acting</td>
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<td>I. likeable teacher</td>
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<td></td>
<td>J. community atmosphere</td>
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<tr>
<td></td>
<td>K. well-prepared teacher</td>
</tr>
<tr>
<td>Rational Means-End Planner</td>
<td>Creative Planner</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td><strong>V. FINAL BELIEFS ABOUT PLANNING</strong></td>
<td><strong>37. resented old planning process but was enthusiastic about creative planning process</strong></td>
</tr>
<tr>
<td>37. resented planning process in the beginning and still does to a lesser extent</td>
<td>38. sees planning as a 3-stage, largely nonrecursive step-by-step process that involves creating an environment that will help students meet objectives</td>
</tr>
<tr>
<td>38. sees planning as a one-stage, largely nonrecursive step-by-step process that helps teachers create an environment that will help students meet objectives</td>
<td>39. has confidence in herself as a teacher</td>
</tr>
<tr>
<td>39. has less confidence in herself as a teacher</td>
<td>40. thinks planning is most critical variable in teaching</td>
</tr>
<tr>
<td>40. thinks planning influences what happens in the classroom</td>
<td></td>
</tr>
</tbody>
</table>
POSSIBLE CONFOUNDING VARIABLES

Of course, in all fairness, other factors not controlled in the study could have contributed to the differences noted, or could have been exclusively responsible for the differences. However, the convergence of findings from the multiple sources of data and the multiple methods of data collection and analysis make this possibility unlikely.

TEACHERS' BELIEFS AND ABILITIES

To a large extent, teachers' beliefs were controlled in my study. Two detailed ethnographic interviews were conducted for each preservice teacher related to her beliefs about teaching and planning. The data from these interviews were used to create beliefs matrices which both completed. These were analyzed and used as controls in the study. Additionally, I conducted interviews related to their philosophies of education and their feelings about Shakespeare and King Henry. This research of their beliefs revealed that both preservice teachers had similar beliefs about teaching activities, planning, Shakespeare and King Henry. This exhaustive process controlled quite a few variables, but conceivably the preservice teachers may hold beliefs that would have been
influential in the study but that were not controlled through matching.

In terms of ability, the planners were closely matched in the ways mentioned in Chapter 3; but, again, no two thinkers will ever be exactly the same. The rational means-end planner actually had the upper hand in terms of standard assessments of ability. She was a dean's list student and the creative planner was not. She was asked to be in the education honors seminar and the creative planner was not. Still, both were considered high ability preservice teachers.

After working with the preservice teachers closely for over four months, I have noticed no other significant differences in their beliefs or abilities. This lack of difference is not to say that they are identical in terms of beliefs. It just means that the deep structures of their beliefs are similar. This similarity of belief is to be expected since they went through the same preparation program for four years. They do, of course, have differences on more surface beliefs. For example, although both preservice teachers believe students should be actively involved in creative ways, the rational means-end planner has more respect for the use of games to encourage motivation than does the creative planner.
TEACHERS' ACTIONS AND THEIR OBSERVABLE EFFECTS

In the world of teachers' actions and their observable effects, less control was possible. In other words, showing the impact of the prescriptive planning models on teacher action was more difficult. Obvious differences in the planners' classroom environments that were beyond their control may have influenced the data reaped in relation to their environments instead of or in addition to the planning models. This, however, was documented in the findings. For example, students' classroom behavior affects teachers' classroom behavior and, consequently, the teachers' beliefs and thoughts. No two sets of students will ever be the same; but in this study, the students could have been better matched. Even though the students in both classes were college-bound 12th graders within the same ability grouping, there were still differences. The major difference was class size. In the rational means-end planner's classroom, there were thirty students. In the creative planner's classroom there were only 14. Another significant difference may have been that the rational means-end planner had more sophisticated students since many of them were from university families, and the students from the creative planner's class were not from university families.
CONSTRAINTS AND OPPORTUNITIES ON TEACHER THOUGHT AND ACTION

Several constraints and opportunities differ in the two planners' school communities. Even though the schools are in the same county system, they differ as was noted and considered in the findings section. To recall, the rational means-end planner was in a larger, departmentalized school and worked with a cooperating teacher who was more open to rational means-end planning. The creative planner, in contrast, was in a community school and worked with a cooperating teacher who was more open to creative planning. This matching was done to help insure that the environments would provide planning opportunities instead of constraints.

Second, both preservice teachers had to deal with snow days and delayed openings of school. These interruptions affected them both and have certainly affected the data collected. Perhaps, if the snow had not been a planning constraint, both planners would have done a better job.

A third planning constraint that was deliberately imposed but that influenced the findings in ways not predicted was the planning task assigned. I originally assigned the planning task for a host of reasons but, primarily, because I wanted the preservice teachers to
have the same challenging task. Even though the King Henry play can be considered a piece of young adult literature since it has a young adult protagonist, the archaic language and the students’ preconceived notions about Shakespeare prevented the students from engaging in the unit as fully as they might. In future studies, it might help to have the preservice teachers give their students a list of possible unit ideas and let the students pick the ones they like. From the "likable list," then, the researcher and teachers could pick the matching unit selection.

Despite these possible confounding influences, the consistency between the directives of the models and what and how the preservice teachers thought and acted seem to suggest that the planning models impacted on their experience in the ways mentioned.

IMPLICATIONS FOR RESEARCH ON TEACHING THINKING

This research study has implications for the research field on teaching thinking. First, this study suggests that, within one comprehensive study, all three phases of teacher thought (preactive, interactive, and postactive) as well as teachers' beliefs can be examined in-depth. Furthermore, through participant observations
and ethnographic interviews, pictures of classroom life can be developed and analyzed in light of the collected data on teachers' thinking. Thus, researchers can begin to see what impact "the hidden side of teaching" (Jackson, 1968) has on the nature of classroom environments.

Secondly, my research findings are the first to use ethnographic methods to suggest how prescriptive planning models impact on preservice teacher thought and the environments they create. Since my findings suggest that prescriptive planning models impact on teacher thought in many significant ways, further research could be conducted in other preservice teaching cultures concerning the impact of other types of prescriptive planning models on preservice thought. For example, an informal study on the use of the creative planning model in a science education program is being conducted at my university.

As a follow-up to this study, my next ethnographic research study will address the following question: Can the active use of a prescriptive creative planning model (based on a theory of creative thinking) enable preservice middle grades teachers (from a wide range of academic backgrounds and abilities) to eventually adopt and use creative thinking in making and implementing
educational designs? This study may help confirm or refute Vygotsky's (1986) basic contention that higher cognitive processes are developed in social communities which encourage them.

Much research is still needed in the field of teacher thinking. The "hidden side of teaching" does seem to have an impact on the more visible side of teaching. Furthermore, prescriptive planning models seem to impact on the ways preservice teachers think in their "hidden" moments.

IMPLICATIONS FOR TEACHER PREPARATION

The findings from this study are especially pertinent to teacher preparation programs since the data were collected on two preservice teachers. It seems that prescriptive planning models can have significant impact on preservice teacher thought and on the classroom environments they create. Teacher preparation programs need to be aware of this impact. The programs would do well to examine their prescriptive planning models, especially those handed down by tradition, to see if they do, indeed, encourage the types of thinking desired of preservice teachers and that they do not confound preservice teachers' ability to create effective
environments or limit their preactive or postactive thinking.

For example, in the English education program chosen for this study, the goals of the preservice teacher preparation program are consistent with the goals of the teacher preparation program presented in the recent NCTE Guidelines for the Preparation of Teachers of English Language Arts (1986). With the findings I have on the impacts of the rational means-end and creative planning models, I can see which planning model is most apt to help preservice teachers think and teach in the ways the goals of the program advocate.

The goals for NCTE's successful teacher education program are cited below. A successful education program should include:

1. instruction based on a conception of the prospective teacher as an ACTIVE learner,

2. teaching strategies in all courses (but especially in English language arts) that assure active student participation,

3. experiences that develop prospective teachers as effective language users,

4. instruction that models sound scholarship and reflects knowledge of research and theory, and

5. faculty attitudes that model concern for the individual student.

Active use of the creative planning model could help teacher preparation programs meet the above stated
goals because it 1) encourages teachers to be active learners in the preactive, interactive and postactive stages of thinking, 2) encourages teachers to create active learning environments, 3) encourages writing-to-learn strategies which help prospective teachers develop into effective language users, 4) is a planning model based on sound scholarship and knowledge of research and theory, and 5) is a model that takes into consideration the special needs of the preservice teacher since it provides a thinking strategy that helps him/her create effective environments.

Active use of one rational means-end planning model, in contrast, does not as adequately prepare preservice teachers to carry out NCTE's guidelines because it 1) does not encourage as much active learning in the preactive, interactive or postactive stages of thinking, 2) does not as strongly encourage teachers to develop active learning environments, 3) does not encourage writing-to-learn strategies beyond making the written unit plan, 4) is a planning model based on a tradition of scientific management that is not based on recent knowledge of research and theory, and 5) is a model that sometimes fails to address the needs of the preservice teacher since it does not provide a cognitive strategy that helps him/her implement the developed unit plan.
Based on the example analysis above, it seems possible to assess differing prescriptive planning models in terms of their help in or hindrance to preparing preservice teachers in the manner desired.

Since prescriptive planning models do impact on the thought and action of preservice teachers, teacher preparation programs should examine their planning models carefully to see that the models do encourage desired preservice teacher thought and action.
BIBLIOGRAPHY


APPENDIX A

STAGE ONE OF YINER'S PLANNING PROCESS MODEL

Environment and Organization

Curriculum and Resources

Pupil Characteristics

General Teaching Dilemma

Knowledge and Experience

Planning Dilemma

Teaching Goal Conception

Materials

The Problem Finding Stage of Teacher Planning
APPENDIX B

STAGE TWO OF YINGER'S PLANNING PROCESS MODEL

The problem formulation and solution (design) stage of teacher planning.
APPENDIX C
STAGE THREE OF YINER’S PROCESS MODEL

RETURN TO DESIGN CYCLE

REJECTION

IMPLEMENTATION AND EVALUATION

REPERTOIRE OF KNOWLEDGE AND EXPERIENCE

ROUTINIZATION

PROVISIONAL SOLUTION

IF SUCCESSFUL OVER TIME

THE IMPLEMENTATION, EVALUATION, AND ROUTINIZATION STAGE OF TEACHER PLANNING
## APPENDIX D

### SAMPLE BELIEFS MATRIX ON PLANNING USED IN THIS STUDY

<table>
<thead>
<tr>
<th>X: Attitudes</th>
<th>Y: Planning Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>very structured</td>
<td>need to think it through</td>
</tr>
<tr>
<td>helps clarify why/what</td>
<td>helps fulfill aims of schooling</td>
</tr>
<tr>
<td>I'm teaching.</td>
<td>needs to be detailed</td>
</tr>
<tr>
<td>very important</td>
<td>resent it</td>
</tr>
<tr>
<td>I use my own judgment</td>
<td>overcompensates for being scatterbrained</td>
</tr>
<tr>
<td>helps make unit fit class</td>
<td>can just forget about it</td>
</tr>
<tr>
<td>a good practice to get into</td>
<td></td>
</tr>
</tbody>
</table>
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APPENDIX E

SAMPLE INFORMED CONSENT FORM USED IN THIS STUDY

INFORMED CONSENT FORM

I consent to participate in the study of student teacher planning being conducted by Beatrice Naff (Virginia Tech, College of Education). I understand that I will be asked questions about student teaching and planning. Participation in this study will involve approximately 60 hours over a six or seven week period during January and February, 1987 as indicated on a schedule supplied by Beatrice Naff. I understand that my classroom teaching will be monitored by Ms. Naff and that records of these observations will be included in this study. Further, I understand that impressions of my performance may be obtained from my cooperating teacher and students in the classroom in which I student teach. I understand that some of my responses will be recorded on audio and video tape and that these data will be used to discover patterns in the ways that student teachers plan. The results of this study may be reported in presentations, articles and reports prepared under the direction of Beatrice Naff. Further, I understand that: 1) my responses will be kept completely confidential; 2) I may ask questions regarding the study at any time; 3) I may obtain copies of all presentations, articles and reports on the study; and 4) I may choose to leave the study at any time without penalty or prejudice.

I agree to voluntarily participate in the research described above and under the conditions described above. If you have questions, you may call or visit my committee chairpersons Dr. Robert Small (961-5537) or Dr. Margaret Eisenhart (961-5598) or Dr. Thomas Sherman (961-5121) in the College of Education, Virginia Tech.

______________________________  ______________________________
Print Name                      Date

______________________________  ______________________________
Signature                      Researcher's Signature
### SAMPLE DAILY OBSERVATION LOG FOR CLASSROOM ACTIVITY

**CLASSROOM ACTIVITY**

<table>
<thead>
<tr>
<th>LANGUAGE ART/S</th>
<th>LEARNING TYPE OF ACTIVITY? GROUP/S INVOLVING</th>
<th>STUDENT TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>example: teacher calls roll</td>
<td>0</td>
<td>no</td>
</tr>
<tr>
<td>teacher gives instructions for reader's response activity</td>
<td>listening</td>
<td>no</td>
</tr>
<tr>
<td>students read Act 1 sc. II of Henry silently at desks then respond to it in writing by answering open questions</td>
<td>reading writing</td>
<td>yes</td>
</tr>
<tr>
<td>student discussions of postreading questions</td>
<td>reading speaking</td>
<td>yes</td>
</tr>
<tr>
<td>teacher wraps up</td>
<td>0</td>
<td>no</td>
</tr>
<tr>
<td>bell rings</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Additional Comments: The students really liked the reader's response idea. I think picking out the key features in the scene that appealed to them most and then explaining why they liked it got them personally engaged in the scene. They were ready to share their favorite sections in the small group discussions. Group 3 seemed to be goofing off at first, but Anne let them know she was eager for them to get started. Anne is having students keep these reader's responses for the whole play in a Shakespeare journal. Wonder how she will evaluate these? She hasn't explained her evaluation procedures to the class either.
COOPERATING TEACHER GUIDELINES FOR WORKING WITH STUDENT TEACHERS

GUIDELINES FOR ASSISTING STUDENT TEACHERS AS THEY TEACH

SHAKESPEARE'S KING HENRY IV

1. FOR THIS ONE MONTH UNIT ON SHAKESPEARE'S KING HENRY IV, PLEASE LET THE STUDENT TEACHER CREATE HER OWN UNIT. FEEL FREE TO PROVIDE SUGGESTIONS AND RESOURCES IF ASKED, BUT DO NOT OVERTLY DIRECT THE COURSE OF THE UNIT—even if you see minor problems that could be corrected.

2. DAILY, AFTER EACH LESSON, PLEASE WRITE OUT ONE STRENGTH AND ONE WEAKNESS OF THE DAILY LESSON, GIVE THEM TO THE STUDENT TEACHER, AND DISCUSS THEM IF NECESSARY. THESE REPORTS WILL PROVIDE EACH STUDENT TEACHER WITH SOME FEEDBACK, ABOUT THE SAME AMOUNT OF FEEDBACK BUT NOT ENOUGH TO MAKE THE FEEDBACK TOO DIRECTIVE.

3. AS YOU OBSERVE THIS ONE CLASS ON A DAILY BASIS (EXCEPT WHEN I'M OBSERVING WHICH WILL BE OFTEN), PLEASE COMPLETE THE ATTACHED DAILY RECORD OF STUDENT TEACHER ACTIVITY. THE DIRECTIONS ARE ON THE FORM, AND I HAVE TRIED TO MAKE THE PROCEDURE SIMPLE.

4. PLEASE INFORM YOUR STUDENTS BEFORE THE STUDENT TEACHER BEGINS HER UNIT THAT THE STUDENT TEACHER WILL BE IN CHARGE DESPITE THE FACT THAT YOU ARE SITTING IN ON HER CLASS. HAVING THE REAL TEACHER IN THE CLASSROOM ALONG WITH THE STUDENT TEACHER MAKES THE CLASSROOM ENVIRONMENT DOUBLY CONFUSING. ANYTHING THAT YOU CAN DO TO HELP THE STUDENTS REALIZE THE STUDENT TEACHER'S IMPORTANT LEADERSHIP ROLE WILL BE HELPFUL.

5. PLEASE FEEL FREE TO CONTACT ME AT HOME OR AT THE OFFICE IF YOU ARE HAVING PROBLEMS WITH THE STUDENT TEACHER OR THIS STUDY. MY HOME NUMBER AND OFFICE NUMBER ARE AS FOLLOWS: HOME 951-0140 OFFICE 961-5537.
INTRODUCTION SCHEDULE—December 12, 1986; researcher's office

PLANNING ACTIVITIES AND ATTITUDES TOWARD THEM

1. The purpose of this interview is to help us get a better understanding of student teachers' beliefs about planning. Describe to a new student teacher how she should plan a unit for your methods class. Let her know how you feel or think about each step's usefulness so she can have a feel for how other student teachers think and feel about planning. Be as detailed as you can. You are her teacher. Use your own voice and language. Pretend she is sitting here with us.

probe: Are there any other steps she should know about? Can you think of any other steps?

2. Are there any other types of planning that this new student teacher will be required to do? If so, could you describe those types of planning and your thoughts about them?

3. Okay, thank you. Those were detailed descriptive responses. Now, could you describe more specifically your thoughts about and strategies for each step of unit planning that you mentioned. Let's begin with the step you mentioned first. You said the first step was to ___________.

Describe the strategies you used to accomplish this planning activity. Describe your feelings about this planning activity.

4. Describe the second step ___________ and your thoughts and feelings about it.

5. Describe the third, fourth, fifth etc...steps and your thoughts and feelings about each. Describe the steps in the other types of planning etc...

Probes along the way: Can you think of any more steps, strategies, feelings, thoughts you had?
6. Okay. This is a little different question. Can you compare or contrast this planning activity to any other type of thinking process or strategy? Take a moment to think about it. Does this process of making a unit plan in any way resemble any other type of thinking strategy or activity you have encountered before. If not, why is it so different from any other type of thinking or activity you have encountered. Describe.

7. Okay. Thank you. Describe, honestly, whether you think planning for instruction is a good idea. Why or why not?

8. Do you know of any way that planning could be done differently to make it an easier/ a better process? Explain. How could we improve on this planning strategy?

9. Describe the types of problems you had with making your first unit plan for your methods course. Remember, she has never created one before and has "no clue" as to what she is in for. Give her the inside scoop.

10. Describe the types of positive experiences you had with making your first unit plan for your methods course. What parts of planning did you like the best?

11. Okay, thank you. Those were detailed, descriptive responses. Now, I want us to focus on something a little bit different. Let's talk about the content of your first unit plan. The new student teacher now knows how to create a unit plan for your methods class. Could you describe for her what your first unit plan looked like. What was your plan about? What did you include in it? Why did you include what you did in the unit plan? How did you feel about your first unit plan? Were you proud of it? Ashamed of it or what and why? Just share thoughts about all of these questions as they come to you. Don't worry about trying to organize your response. Just brainstorm on these questions. I will repeat any of the questions at any time.

12. Good. Can you think of any other content and your thoughts or feeling about that content?

13. Two more questions. Describe what an ideal unit plan for this methods course would look like.
14. Describe what a really shabby unit plan would look like. What kind of unit plan would make a failing grade in this class.

Thank you. This will about do it for our discussion on planning. I may, however, ask some more wrap up questions next session. I'll look forward to next week's discussion.
APPENDIX I

A SAMPLE OF A TYPICAL TRANSCRIBED INTERVIEW USED IN STUDY

Mary Ellen
Friday
December 12, 1986
Researcher's Office
Beliefs on Planning
2:00-3:30
began typing 10:15 December 13, 1986
finished typing 3:35 (straight through--one 5 minute break)

R.: Describe to a new student teacher how she should plan a unit for your methods course. Let her know how you feel or think about each step so she can have a feel for how other student teachers think and feel about planning. Be as detailed as you can. You are her teacher. Use your own voice and language. Pretend she is sitting here with us.

M.: I know a lot of people when they start to plan they think more about the activities and they brainstorm ideas first before they actually think about the objectives and a good thing to keep in mind when you are first starting planning is the level you will be dealing with. I think that is something you should set first before you think about the activities. And, usually I write down general things. Prereading or prewriting or anything that I will be using and then some activities. And I don't usually think about the materials until I do those activities unless I'm supposed to be dealing with a certain work of literature or a certain aspect of language. And one thing that I think is important is describing the student population in detail because that gives you the advantage of knowing exactly who you are dealing with. Do that first. I know a lot of people think it is easier to do the activities and then go back and write the population to suit what the activities are. I don't think that is right because in reality that's not what you're dealing with. You have to make those activities fit your class. So I think that's a good practice to get into. And, the follow-up activities or the culminating activities, I usually don't do that until I've done my intro and the main activities cause you have to see where you go with that
because I don't think you should unless you have one big culminating activity that you're working toward, you should just wait. And for evaluation, I have trouble with and a lot of teachers do because I've never been in a position where I have to evaluate and its so hypothetical because I just don't know how it would work the best and that's going to be something I'm going to have to try and work on. And the objectives I know, just limit them. You can't try to have a lesson try to fulfill 5 or 6 objectives. Probably four objectives at the most I would say. So try to limit them. And make sure your activities fulfill those objectives. And also what you evaluate, you need to make sure your evaluation is evaluating those objectives.

R: Okay, thank you. Are there any other steps she should know about? Can you think of any other steps?

M: Well, materials. I mentioned that briefly. I like to make that very detailed because when you look at your unit plan you need to know ahead of time what you're going to need. You don't need to rush around that day that you'll be doing that lesson gathering up what you need to gather so I make that detailed. And the rationale for the unit. You usually do that for daily's, but rationale is where you explain why you're teaching what you will be teaching--not necessarily what your objectives are but the value of that lesson for the students.

So the parts, I guess, are five: the rationale, the student population, the objectives, materials, activities, and evaluation. So there's six parts to a unit. And like I said, the daily plans are within the unit and you don't usually use the rationale with this.

R: Okay, you mentioned unit planning. Are there any other types of planning that this student teacher will be required to do? If so, could you describe those types of planning and your thoughts about them. You mentioned the daily planning. How does that in any way differ from unit plan?

M: Cough, well, a unit plan isn't as detailed, a general idea, an overall look at what you will be doing in a longer time span--maybe a week, maybe ten days--if there's an activity you want them to carry out over the weekend. And, the daily plans are detailed and in order whereas the unit plan is a type of brainstorming. In the daily's you have step by step what you will be doing for that day. And it's ideally planned for that one period. And...
APPENDIX J

SAMPLE OF COMPLETED DOMAIN ANALYSIS WORKSHEET USED IN THIS STUDY

DOMAIN ANALYSIS WORKSHEET
(adapted from Spradley, 1979, p. 113)

Date December 14, 1986

1. Semantic Relationship: Strict Inclusion

2. Form: X (is a kind of) Y

3. Example: An oak (is a kind of) tree

4. Cover Term: Kinds of Student Teacher Planning Activities

Included Terms

Distinctive Features Scratchpad

making daily plans
making and securing materials
brainstorming unit ideas
making cognitive objectives
keeping an activity file
finding activities
sequencing activities
mentally rehearsing plan
revising unit parts
making affective objectives
making general objectives
making up introductory activity
describing student population
making specific objectives
generating evaluation procedures
1. Semantic Relationship: Strict Inclusion

2. Form: X (is a kind of) Y

3. Example: An oak (is a kind of) tree

4. Cover Term: Kinds of Student Teacher Planning Activities

stating the rationale
making & choosing main activities
making list of things to do
writing out unit/daily plans
designing culminating activities
selecting content
doing research for unit
making unit title
creating unit plans
APPENDIX K

MORINE—DERSHIMER’S METHOD OF CODING STIMULATED RECALL PROTOCOLS

WITH EXAMPLES FROM MY STUDY

The category system used in my study to code stimulated recall protocols is an adaptation from Morine—Dershimer’s South Bay Study. Part IV(1979) on Teacher Plan and Classroom Reality. This system includes four major types of categories:

1. Type of Decision Point (1.1 PUPIL-RELATED DECISION, 1.2 PLAN-RELATED DECISION, 1.3 EXPLANATION OF ROUTINE PROCEDURES OR 1.4 DESCRIPTION OF SPECIFIC EVENTS)

2. Instructional Concerns (2.1 PUPIL LEARNING, 2.2 PUPIL ATTITUDES, 2.3 PUPIL BEHAVIOR, 2.4 LESSON CONTENT-INFORMATION, 2.5 LESSON CONTENT-SKILL OR PROCESS, 2.6 TYPICAL PROCEDURES, 2.7 MODIFICATION OF PROCEDURES, 2.8 COMMERCIAL PRODUCED INSTRUCTIONAL MATERIALS, 2.9 TEACHER-PRODUCED INSTRUCTIONAL MATERIAL, 2.10 PLAN-RELATED PACING)

3. Sources of Information (3.1 OBSERVATION OF PUPILS’ VERBAL BEHAVIOR, 3.2 OBSERVATION OF PUPILS’ NONVERBAL BEHAVIOR, 3.3 TEACHER EXPECTATION, 3.4 TEACHER RECALL OF PRIOR KNOWLEDGE, OR 3.5 TEACHER RECORDS)

4. Teacher Awareness (4.1 PRINCIPLES OF INSTRUCTION AND MANAGEMENT IDENTIFIED, 4.2 TEACHER FEELINGS EXPRESSED, OR 4.3 ALTERNATIVE PROCEDURES IDENTIFIED

General Explanation

The above category system contains four major categories, each of which contains several subcategories. The major categories can be defined as:

1. Type of Decision Point—kind of decision that the teacher is reporting;

2. Instructional Concerns — the elements of instruction that command the teacher’s attention, i.e. that the teacher reports noticing;
3. Sources of Information — the types of input that the teacher indicated s/he is alert to during the lesson; and

4. Teacher Awareness — the varieties of cognitive and affective responses that the teacher mentions experiencing during the lesson.

At each teacher-designated decision point, the teacher's comments in the stimulated recall are coded to indicate the type of decision point under discussion, the instructional concern(s) mentioned (more than one may be reported at any given decision point), and the sources of information referred to (may be more than one). When a type of teacher awareness is reported, this is also coded, but this does not occur at every decision point.

In the section which follows, each subcategory is defined, and examples are given of teacher's comments that illustrate each subcategory. The sentence or phrase that determines the coding designation is presented in the context of the teacher's other comments, rather than in isolation, in order to give the reader a clearer idea of the application of this coding system (Morine-Dershimer, 1979).

Okay. Right there. Stop it. I didn’t know whether I should go ahead and explain to them that I was going to have them choose a piece of candy and get them into groups according to the piece of candy they got (Type of Decision Point — Supplementary decision). I thought that was stupid. I thought it was a fun way to do it but just explaining it seemed silly (Instructional Concern — teacher-produced instructional materials). So I just decided that they would catch on as soon as I decided to do it, (Sources of Information—expectations) so I didn’t really know how I was going to do that beforehand. Originally, I thought that I would give the candy as they came through the door, but I decided that was a bad idea (Teacher Awareness — alternative procedures identified) because, first of all, they would come
through at many different times.

Subcategory Definitions and Examples

1. Type of Decision Point

1.1 Pupil-related decision. Teacher reports a decision to behave in a particular way, based chiefly upon characteristic or behavior of an individual pupil or group of pupils. Example:

Right there. I had to decide whether or not to give them tardies (for walking in late) because their cooperating teacher has been lax.

1.2 Supplementary decision. Teacher reports a decision to include a topic or activity that was not part of the original plan, based on a sudden idea, or on the suggestion of a student. Example:

Right there. I didn’t know whether I should go ahead and explain to them that I was going to have them choose a piece of candy and get them into groups according to the piece of candy they got. I thought that was stupid, so I thought they would just catch on.

1.4 Explanation of routine procedures. Teacher explains a routine that is being used in the lesson but, does not report an interactive decision in relation to use of that routine. Example:

I hate taking roll, I really do. I don’t do it in other classes because I know them well enough and I know those records are very serious documents but I would not want to make a mistake. So that is why I do it.

1.5 Description of specific events Teacher describes what is happening at that point in the lesson and may give background information, but does not explain routine procedures related to the event or report and decision related to it. Example:

No data related to this category

2. Instructional Concerns

2.1 Pupil Learning. Teacher comments upon what pupil(s) already know or about recent pupil changes in knowledge, or about what pupil(s) does not yet know but may need to know. Example:

Right there. I decided to go ahead and target specific students to begin answering how the king goes about getting what he wants. Again, that particular student was one that had not been responding very much in class. I even questioned his whole understanding of the play. I don’t think he really understood it as well as the rest of the class.
2.2 **Pupil Attitudes/Affect.** Teacher comments on feelings that pupils may be experiencing. Example:

I wanted to show him that I was glad, you know, that I was glad that he was interested, and I always try to do that. I think that makes them feel good.

2.3 **Pupil Behavior/attention.** Teacher comments on observations of pupils related to discipline or classroom management. Example:

While I'm passing out the cards, people are talking.

2.4 **Lesson Content-information.** Teacher comments on the facts or concepts that are being covered in the lesson. Example:

I felt that everyone should understand that question that I started asking. Where as if maybe one person blurted out a response before I could finish stating the question, I would "hold on" and then I would finish my question since it wasn't particularly clear when they interrupted me. Does that make sense?

2.6 **Typical Procedures.** Teacher comments on the instructional or management routines that are being used in the classroom example:

I hate taking roll. I really do.

2.7 **Modification of procedures.** Teacher comments that a typical instructional or management technique is being changed slightly during this lesson. Example:

They aren't much later than a few seconds but we did go over policies that I would be sticking with— that as soon as the bell rang— that's it; but they weren't really paying attention so I didn't think it was really necessary to give them tardies...

2.8 **Commercially produced instructional materials.** Teacher comments on published textbooks, or other manufactured teaching materials being used in the lesson. Example:

When the video didn't go right, I was upset because I came in and made sure everything was okay with it... so I knew that I had to go get someone when I couldn't figure out what was wrong.

2.9 **Teacher-produced instructional materials.** Teacher comments on materials he/she has prepared for use in the lesson. Example:

Like I pass out a card to each kid, a different candy, and say when you get to the library you will be working with the people who have the candy.
2.10 **Plan-related pacing.** Teacher comments on timing of activities, or speed of content coverage in a lesson, giving a lesson plan, daily schedule, or long-term curriculum outline as the principal reason for what is occurring. Example:

So, my decision there was to try not to drag the rest of them (the students) out so much. I guess I looked at the clock or something.

3. **Sources of Information**

3.1 **Observation of pupils' verbal behavior.** Teacher indicates awareness of an oral communication from a pupil. Example:

While I am passing out the cards, people are talking.

3.3 **Teacher expectations.** Teacher's comments focus on their expectations regarding pupil behavior and learning, rather than on their actual observations. Example:

Originally, I thought that I would give the candy as they came through the door, but I decided that was a bad idea because, first of all, they would have had it eaten before they ever sat down, and they would come through at so many different times.

3.4 **Teacher recall of prior knowledge.** Teacher indicated awareness of information relative to a pupil or event, specifically, information that was obtained before the lesson began. Example:

Because I had read the instructions (yesterday) once before I handed them out; but I know there was some talking going on then and that they weren't listening.

3.5 **Teacher records.** Teacher indicates use of information that has been previously recorded. Example:

no data collected for this category

4. **Teacher Awareness**

4.1 **Principles of instruction.** Teacher states a general rule that s/he follows in a certain type of situation. Example:

Even if I ask a throw away question like that, if somebody says something, I'll try to respond.

4.2 **Teacher feelings expressed.** Teacher describes emotions s/he was experiencing at a particular point in the lesson. Example:

I don't feel like, we don't have real chemistry between us... and I've just decided that I'm not going to put up with it anymore and I was practicing being mad and forceful... I was just tired.
of classes not being on task and talking.

4.3 **Alternative Procedures identified.** Teacher describes a technique or procedures that s/he considered using in a given situation in place of the one s/he actually used. Example:

Well, I thought about names, I didn’t want to assign in groups because that’s too judgemental on my part, but a good variety, I didn’t want to consciously say these 2 can’t be together since they don’t work well. I didn’t want to let them into groups for obvious reasons because they always work with the same people. But, I thought about names in a hat but that was too much trouble to cut up all the slips of paper.
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Rational Means-End Planner's Beliefs Matrix on Teaching Activities

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Legend:
X = Teaching Activities
V = Attitudes

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<th>Wanting to Do Much</th>
<th>Satisfaction</th>
<th>Discovering</th>
<th>Boredom</th>
<th>Working with Students</th>
<th>Leaving Class</th>
<th>Making Students</th>
<th>Following Time Structure</th>
<th>Being a Role Model for Students</th>
<th>Learning from Students</th>
<th>Accepting Students</th>
<th>Setting Educational Goals</th>
<th>Setting Standards</th>
<th>Developing and Using Students</th>
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Note: The table contains ratings for various teaching activities and attitudes, with values ranging from 1 to 5.
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### Appendix L

**Creative Planner's Beliefs Matrix on Teaching Activities**

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**Note:** The table represents the planner's beliefs on teaching activities, with a scale from 1 to 4 indicating the level of agreement or importance.
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