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THE VISION AND THE REALITY: THE DESIGN AND IMPLEMENTATION OF A DIFFERENT KIND OF GENERAL SECONDARY METHODS COURSE

by

Carol Susan Wolfe

A DISSERTATION

Submitted to
Michigan State University
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ABSTRACT

THE VISION AND THE REALITY: THE DESIGN AND IMPLEMENTATION OF A DIFFERENT KIND OF GENERAL SECONDARY METHODS COURSE

By

Carol Susan Wolfe

General secondary methods courses best serve preservice students when they are structured in ways that invite students to view pedagogy through the lens of their subject matter. This study examines student and instructor responses to components of a new general methods course designed to help students see connections between what they know and what they teach.

This study is framed around inquiry into teacher practice, grounded in qualitative perspective, and conveyed to the reader through narrative. Data consist of transcribed conversations with colleagues and committee members during the design and implementation phases of the course; a personal teaching journal where instructor and student responses to course texts, tasks, and social organization are documented; student content journals; formal student papers; and instructor-prepared final student course evaluations.

The major findings of the study indicate that teaching a general secondary methods course with subject specific concerns is a difficult undertaking for a teacher educator because of limited subject matter knowledge on the part of the educator. However, it is possible to craft a general secondary methods course that helps students think about learning and teaching in less conventional ways. Many teacher candidates realized, through the course format, that they did not know their subject matter in ways to teach it for student understanding.

DEDICATION

I would like to thank my husband, John,

and my children, Megan and Adam,

for their love, support, and great patience

while I pursued a lifelong dream.

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CHAPTER I

THE VISION AND THE REALITY: THE DESIGN AND IMPLEMENTATION OF A DIFFERENT KIND OF GENERAL SECONDARY METHODS COURSE

This is a story about a novice teacher educator's attempt to rethink a general secondary methods course that is part of a university teacher preparation program. The story chronicles the planning and implementation of a different kind of methods course, one that is designed and organized around the subject specific concerns of teaching. The story provides a view into the novice teacher educator's learning and change through her actions and reflections as she attempts to make sense of the ensuing challenges, dilemmas and hurrahs of her experience.

Second Chances

Often, with time to reflect on past experiences, aided by new information and new insight, many of us have uttered the phrase, "If I'd known then what I know now, I would have done things differently." Rarely, however, are we presented with a second chance, particularly armed with new understandings and the motivation to change what we perceived to be problematic in our first experience.

I was offered such a second chance when I was invited to teach a general secondary methods course at a small midwestern university. I had taught the same methods course in this university, as an adjunct faculty member before entering the doctoral program at Michigan State University. My past teaching experiences, my study of teaching and learning and my teaching experiences in an innovative introduction to teaching course, led me to rethink this general secondary methods course. Because I had begun to think about teaching in a different way, I inevitably was led to think differently about learning to teach and about the contribution of teacher education to that process.

The Problem

The premise of my study is that there were clear problems inherent in the general secondary methods course that I had taught before during a one year appointment. I will examine this larger premise in relation to four areas of neglect that I perceived in this particular general methods curriculum: (1) this general methods course ignored teacher candidates' entering beliefs about teaching and learning; (2) methods, techniques, strategies that were promoted as ends in themselves, disconnected from purpose, content, and learners; (3) it assumed that secondary teacher candidates entered the methods classroom with adequate subject matter knowledge for teaching; (4) finally, it was an ingredient of a flawed recipe for learning to teach: start with presumed knowledge and understanding of content, add some generic methods, some practice in the field,

and students know how to teach. Research tells us that preservice secondary teachers think they will "learn how to teach" in their methods courses, but in the end students give these courses low marks for content and carry over (Goodlad, 1990, Lortie, 1975) and students leave, in many cases, with a view of teaching that is congruent with the naive conception with which they entered the methods course. It became clear that this was true of the students I taught when I encountered them later in student teaching. Many were using the same conventional methods their own high school teachers had used.

My review of the literature, including the history of teacher education with an emphasis on general methods courses, preservice and beginning teaching, and research on teacher knowledge, suggested to me that the problems that I identified might not be unique to the course I taught.

Teacher Candidates' Entering Beliefs Were Ignored

In the general methods course I taught before coming to Michigan State, students were not recognized as individuals who knew something about teaching and learning. They were considered to be "raw recruits" in need of training to develop skills that would enable them to perform as competent classroom managers. The training was quick, intense, and targeted teacher behaviors deemed appropriate for effective classroom management. Thinking about teaching in this manner does not call for the teacher educator to recognize and examine teacher candidates' entering beliefs. This

approach to preparing teachers places learning to teach outside of the student as information to be acquired, not information to be examined in relation to their beliefs already held about teaching and learning. A different approach to preparation of teacher candidates which considers learning to teach as self-examination, discovery and conceptual change, and teachers as learners, necessitates that candidates surface and examine existing beliefs about teaching and learning.

Preservice teachers carry many tacit beliefs about teaching and learning into their teacher preparation courses informed by a long "apprenticeship of observation" in schools (Lortie, 1975). These ideas, based on observation of their teachers, are unexamined and carry little understanding of the actual work of teaching. Many methods courses do not consider these privately held notions as they introduce ideas, methods and strategies for preservice students to use. Teacher candidates' beliefs that teaching is telling, assigning tasks, assessing task performance, and that learning is basically a singular event consisting of accruing facts (Tharp and Gallimore, 1989), are not recognized as an important context to explore in teacher preparation. This view contradicts what researchers know about new learning and efforts to effect conceptual change in preservice students. McDiarmid (1989) posits that, learning is "relational" (p. 7) and that students learn by connecting new ideas to preexisting experiences and beliefs that define their knowledge base. The "new" ideas offered by the methods course I taught before fit comfortably into preservice students'

existing schema about teaching and learning because they were familiar fare students could connect to their experiences in high school. To become a more effective teacher, one did not have to give up lecture, simply become a more interesting dispenser of knowledge, or one might enhance a lesson and address different pupil learning approaches by using overheads, bulletin boards and other media. Group work was also offered as an approach to help students learn but it was isolated from a knowledge base. Preservice students were mainly caught up in managing the logistics of group work, not in learning how and why heterogeneous grouping might engage pupils in learning about a particular concept. This manner of teacher preparation rarely, if at all, gets beneath the surface to look at students' entrenched beliefs about what teaching is, rather it soundly reinforces those beliefs.

In order to move toward change prospective teachers must become dissatisfied with their existing beliefs through experiences that offer alternative ways to view their thinking. The methods course that reinforces comfort in existing beliefs becomes the adversary of change. Creating experiences that help preservice students uncover their tacit knowledge about teaching and learning, in order to view it in light of new ideas, becomes necessary if teacher educators want teachers to begin thinking about teaching and learning in a different way

The powerful influence of students' entering beliefs about teaching and learning and their effect on new learning is highlighted by the following selection of authors. Kagan (1992)

writes about the centrality of teacher candidates' preconceptions about teaching and learning fostered by their experiences as students ". . . in filtering the content of education course work (p. 140)." Feiman-Nemser and Buchmann (1985) recognize teacher candidates' entering beliefs as part of a "continuum that includes powerful early experiences with parents and teachers (p. 53). . . ." Feiman-Nemser and Melnick (1992) point out the necessity of examining preservice students' extant beliefs about teaching and learning as a crucial step in effective teacher preparation. "[T]eacher preparation if it is to open possibilities and promote greater responsiveness to the challenge of teaching, cannot simply add new knowledge and experience to existing stores. It must also help prospective teachers to transform initial beliefs so they can envision richer possibilities for teaching and learning than those derived from their own schooling (p. 5)."

Professional courses such as methods courses, need to consider the goal of conceptual change as a precondition to exploring pedagogy, and this necessitates that teacher educators recognize the existence and power of student beliefs that compete with any efforts to change conventional teaching. Buchmann (1987) does not see that college teaching, by example, challenges entering beliefs about teaching, and teacher preparation courses ". . . tend to confirm these notions by being either of a commonsense nature themselves ('too easy') or by not being or seeming to be about teaching at all ('too theoretical')" (p. 13). Unless teacher educators recognize the power and presence of their students' everyday understandings of

teaching, new ways of thinking about teaching will most likely be rejected for those which have already been experienced.

The course that I designed begins by eliciting secondary students' beliefs about teaching and learning and the format of the course continues to provide opportunities for students to examine their beliefs through texts and tasks that elicit reflection on and analysis of beliefs.

Methods, Strategies, Techniques as Ends in Themselves

Preparation for teaching one's subject matter capably has been interpreted by many teacher educators as "training," in allegedly generic methods, taught without reasoning about purpose, or student learning and out of context with any particular content. This training is about fostering certain behaviors in teacher candidates that would enable them to become effective classroom managers (Lortie, 1975; Gage, 1978). This was the focus in the general methods course I taught. This technical penchant is displayed in much of general methods preparation and has promoted the view that preparation for teaching consists of practical tips, prescriptive lists and steps that reveal to teacher candidates the "how-to" of teaching (Veenman, 1984; Goodlad, 1990). Many general methods courses portray pedagogy as a separate content to be learned and applied to the candidate's content area at another time. Students in these general methods courses are exposed to a melange of techniques and strategies with little concern about encouraging them to reason from the lens of their content as they select an

appropriate method to teach a content concept. Connections between subject matter knowledge and pedagogy are not clearly drawn.

Grossman (1990) sees methods courses as a forum to explore what it means to teach a particular content area as well as how to reason about such teaching from a subject matter perspective. Even though Grossman writes about subject specific methods courses, much of what she posits connects with my thinking about the aims of general methods courses. "Methods courses may offer prospective teachers the opportunity to acquire both knowledge about the overarching purposes for teaching a particular subject and knowledge of specific strategies and techniques with which to achieve these larger purposes. Through integration of theory and practice, methods courses can encourage students to engage in the ends-means thinking that may be absent from more purely experiential learning (p. 16)."

Some methods instructors define their role as teachers of practical skills and strategies such as writing lesson plans and framing objectives while structuring field experiences for the practice of those skills and strategies (Lanier and Little, 1986). I thought of my role in this manner while teaching a general secondary methods course before my graduate study. The practice of methods instructors has remained fairly static, as Dewey (1916) observed: "Nothing has brought pedagogical theory into greater disrepute that the belief that is identified with handing out to teachers recipes and models to be followed in teaching (p. 172)." Goodlad (1990) referred to the process of teacher education students picking up and collecting colorful strategies, when he called them

"pedagogical bag-ladies and bag-men" (p. 225), as they wandered through general and "special" methods courses learning how to "perform" as a teacher. My study challenges this view of preservice teachers arbitrarily selecting and collecting pedagogies for later use without thoughtful consideration for the subject matter and its connections within and outside of the discipline, and its connection to the students to be taught.

The organization of the general methods course that I initially taught, stressed decontextualized objectives, lesson plans, and generic teacher actions. It strengthened the notion for students that content and pedagogy are independent of one another and that methods are ends in themselves. Such courses are likely to produce teachers who do not reason about their practice in ways that assess what they know, what their students know and why their decisions are sound or unsound. Dewey (1904/1971) writes about training students to imitate teacher behaviors that allow them to appear competent in the classroom setting but without understanding why their actions are effective or ineffective, and with little attention to the characteristics of the students who populate their classes. He writes about these "craftspersons," who are technically prepared without considerations of content or learners. Training alone infers a separation of content and pedagogy and ignores the subject specific nature of teaching (McDiarmid, Ball, and Anderson, 1989). Teachers must consider the substantive as well as the conceptual understanding of their content in creating particular objectives and plans (Grossman, 1990; McDiarmid, 1989).

The new course I designed focuses on helping students view teaching as complex work. The work of the course required them to examine their subject matter knowledge and how to draw meaningful connections from subject matter to diverse pupils, as they thought about learning to teach from looking at teaching and learning in the context of their content. Recipes for teaching were not provided, rather students were asked to discover ways to teach their content based on new knowledge of content, students, and learning fostered through course texts and tasks.

Assumption That Secondary Teacher Candidates Already Have Adequate Subject Matter Knowledge for Teaching

Secondary teacher candidates enter their methods courses most typically after completing or nearly completing their major and minor content requirements. Therefore many teacher educators assume that teacher candidates have adequate subject matter knowledge for teaching. The course that I initially taught was structured around this assumption. While it may be true that preservice students have spent many hours memorizing and accruing information about their content, it cannot be assumed that they know their content in ways that allow them to teach for understanding. Further, the view of learning to teach that separates content and pedagogy does not encourage preservice teachers to question their knowledge of content. Shulman (1987) conceptualizes teaching in terms of core intellectual processes--"comprehension and reasoning, transformation and reflection" (pg. 13). Instead of making arbitrary decisions

about how and what to teach, "teachers must learn to use their knowledge base to provide the grounds for choices and actions. Therefore, teacher education must work with the beliefs that guide teacher actions, with the principles and evidence that underlie the choices teachers make" (p. 13). Shulman's statement suggests that teachers may not know how to think from their knowledge base to make decisions about practice. It may also imply that the beliefs guiding teachers' actions may not direct their attention to the understanding of content concepts. Unless beliefs about content are examined in relation to teaching, teacher candidates will continue to teach their content as they were taught.

Most students of education and most teachers do not understand their content in ways that enable them to teach for understanding (Shulman, 1987). For example, they are not likely to appreciate that the knowledge in their discipline is continually examined and revised because of ongoing discoveries made by researchers, nor are they inclined to consider making connections from their content area to the learner and his or her prior knowledge and beliefs about the content. McDiarmid (1989) addresses the idea that learners' conceptions within a discipline have been constructed from informal and formal learning experiences and those conceptions must be dealt with if the university educator's aim is that students understand their content. Too often undergraduate content courses do not consider students' prior knowledge, promoting the idea that one need not think about student conceptions to teach content. "For prospective teachers, the lack of attention

to learners' background and initial understandings they encounter in many of their liberal arts classes communicates that knowledge of subject matter alone is sufficient for teaching" (p. 7).

Shulman (1987) identifies subject matter knowledge as a category of teacher knowledge. To possess subject matter knowledge is to be aware of the key ideas and facts in one's field and to understand the relationship between those ideas and facts. It is also knowledge about how new ideas are added or withdrawn as new understandings evolve in the field. Developing subject matter in ways to teach it for understanding requires not only an understanding of how key concepts and facts in the field are related but the added ability to make connections across disciplines and to the learner's context. McDiarmid, Ball, and Anderson (1989) refer to this as "flexible subject matter understanding" and point out that most students in school do not develop this flexible understanding because of the conventional teaching-learning belief that omits making meaningful connections between the content and learners' prior knowledge (p. 194). It would seem that this flexible understanding might also have roots of development in the university content classroom as well as the teacher education classroom. While it is true that preservice students enter the methods classroom with knowledge about their content, it cannot be assumed that they know enough content, or know it in a way that will help them to teach it.

Undergraduate content courses have not been aimed at helping teachers to understand the content in ways to teach it and many promote the view that the knowledge base exists in the text.

Teaching content in ways for students to understand, requires pedagogical content knowledge. Pedagogical content knowledge is developed over time and is described as "knowledge of the learner, knowledge of the curriculum, knowledge of the context, [and] knowledge of pedagogy" (Wilson et al., 1987, p. 114; Grossman, 1990, pp. 3-9). Teachers transform what they know about these four categories into a repertoire of metaphors, clear explanations, helpful models and analogies that "represent" their content to students. McDiarmid, Ball and Anderson (1989) write that the concept of representation "tightens the connection between subject matter and method, and between what teachers know and what they do" (p. 197). Preservice students in many general methods courses as well as the one I initially taught, thought about knowing as using strategies to teach. These strategies were defined in a methods text book and in lecture in the methods classroom. In the new course, students would be looking at teaching and learning from their content areas and in this small university with scant content methods courses, I hoped this course format would help my students become engaged with the concept of pedagogical content knowledge. Smith and Neale (1989) write about the importance of focusing their science teachers on "particular content and the ways in which that content is translated in teaching. In this way teaching principles are embedded in teaching practice (p. 17)." Skills and strategies

taught out of context will not promote pedagogical content knowledge.

Teachers who are able to discover a method of effectively teaching a concept through their understanding of content are reasoning through a knowledge base of teaching. In Wilson et al. (1987) the authors discuss a pedagogical reasoning model that displays and explains the steps taken by a teacher reasoning through a teaching event (p. 119). Shulman (1987) writes about what this reasoning process looks like; "[R]easoning one's way through an act of teaching . . . is to think one's way from the subject matter as understood by the teacher into the minds and motivations of the learners" (p. 16). He helps us see further into the student and teacher interaction that occurs when one reasons through an act of teaching, "This image of teaching involves the exchange of ideas. The idea is grasped, probed, and comprehended by a teacher, who then must turn it about in his or her mind, seeing many sides of it. Then the idea is shaped or tailored until it can in turn be grasped by students. Students must then interact with the ideas as well" (p. 13). In addition, the pedagogical reasoning model can be useful in helping teacher candidates and teachers become aware of their content knowledge limitations and the implications of those limitations for teaching.

My course attempts to help students begin to develop a view that they need to know their content in a different way to teach it as a secondary teacher. Students become aware that they do not know their content in ways to teach it as they read some of the same

texts referred to previously, and as they involve themselves in tasks that require them to make teaching decisions based on their entering content knowledge.

A Flawed View of Learning to Teach

Students who enter general methods courses like the one I initially taught are encouraged in their view that learning to teach consists of learning skills and strategies and then practicing those skills in a fieldwork setting (Lortie, 1975) (Goodlad, 1990). The skills and strategies in the methods course I initially taught were considered by my students and me to be generic, therefore applicable to any content represented in the class. We did not examine subject matter closely in ways to teach it and strategies practiced in the field component through lessons were assessed as strategies not content. Learning about teaching in this manner promoted the view that teaching was a technical skill to be mastered and once mastered the learning was complete. Veenman (1984) compares the preparation that teachers receive in relation to other professions, "[T]he educational program, compared with other professions, is not very complex with regard to intellectual demands and organizational features" (p. 167). This highlights an extended view reinforced by the methods course format that I initially taught, that learning to teach is not a complex process. Goodlad (1990) writes about the simplicity of the learning to teach preparation as well and the view of teacher candidates in relation to how they perceive their role upon exiting educational preparation sequences. "The perception of

teaching that candidates near completion were developing called for them simply to fit into existing circumstances. Thus . . . the transition was not a deeply intellectual one-from reflective student to reflective practitioner. . . . Rather, students saw themselves as observing what teaching requires and then taking on the mantle of teachers observed" (p. 219).

The most powerful belief that teacher candidates carry is that they will learn to teach in their field component and in the previous methods course all of the substance of the course was focused on what would happen in the field. Once students taught a "successful" lesson in the field they believed they could teach and many applied for substitute teaching jobs to "get more experience." Feiman-Nemser and Buchmann (1985) write about the power of field experience in the development of the teacher candidate. Feiman-Nemser (1983) writes about a view of learning to teach and teaching that promotes the belief that once the teacher preparation courses are completed so is the learning. She attributes this in part to preparation in professional courses (p. 150).

The course explained below does not promote a learning to teach experience that considers teaching as simplistic or generic. I attempt to project a realistic view of what my students will need to know and to learn in order to move toward effective teaching.

This Study: My Research Questions

The problems identified above were evidenced in the general secondary methods course I taught. They may also be more

widespread. I tried to address these problems in redesigning the course. This dissertation research is a study of that effort. I framed my research around the following question:

> How does a beginning teacher educator conceptualize, design, and implement a general secondary methods course grounded in considerations of subject matter?

To pursue this question, I generated three sets of research questions regarding the conceptualization, design and implementation of the course.

Conceptualization. In order to begin to conceptualize what a different kind of methods course might look like I had to think through existing general secondary methods courses, to identify some of the important problems and issues they raise and consider how I might address these problems and issues. Identifying the problems and crafting responses through a new kind of course were informed by my experience as a novice teacher educator before entering the doctoral program at Michigan State University and by my experiences in the doctoral program. So I also framed questions to help me explore these influences. Finally I needed to consider how my new approach might affect my perceived limitations in the present typical general methods format. The following questions guided my thinking during the early conceptualizing phase:

I. What is my initial vision of a new kind of general methods course that is both university and field based?

   A. What is my initial analysis of the problems inherent in general methods courses?

B. What formative ideas do I have about how to address these problems through a different kind of general methods course?

C. What are some of the key influences in formulating these ideas for a new kind of general methods course?

D. How and in what ways do I believe these ideas will address some of the major limitations of generic approach to teaching secondary methods?

Design. I wanted to remain true to a vision, informed by my past teaching experiences and formed during my doctoral experiences. The design questions reflect this intent. My beliefs about effective teaching and learning to teach, my view that teachers need to have something to teach and powerful ways to teach it, and my concern with helping all students to realize that they must understand their content in particular ways to teach it, informed my design decisions. I did not want to leave anything out of the practical crafting of the vision. Initially, with the guidance of my committee chair, I came to see that the goals I developed for the course were actually goals for myself, rather than my students. I had jumped ahead to the implementation phase and my role. This emerged as an important concern in my study and one that I continue to try to understand. I spent a lot of time developing and exploring the design questions, imagining and organizing the components of the course (the texts, tasks, and social organization). Here are the questions I framed:

II. How in the design of the course did I attempt to make my vision real?

A. What goals did I frame for the new course?
   1. How did my beliefs about teaching, learning to teach, and subject matter concerns shape the framing of these goals?

   2. What other influences contributed to my thinking about the goals for the course?

   3. What difficulties did I encounter in trying to frame goals for the course and what help did I receive?

   4. What dilemmas still remain?

B. How did I think about the social organization of the course. Why was this an important piece for me?
   1. Why are the content groups an important vehicle for getting work done in a general methods course with subject matter concerns?

   2. How can collaboration and group reflection about subject matter concerns move group members toward an awareness of how they know their content?

C. What texts were selected for the course and why were they considered important to the work of the methods course?

D. What tasks did I design and why were they considered important to the substance of the course? How would the tasks help students in thinking and preparing for the field component?

E. What uncertainties did I face in the design of the course and what issues still remain unresolved? What new issues have surfaced that affect the course design?

Implementation. During the implementation phase, I wanted to focus on my role and what I did to assist students in understanding

the format and carrying out the work of the course. In this part of the study, my questions were designed to help me examine what I intended and what I did to elucidate the texts, tasks, and social organization of the course. I wanted to explore and reflect on the strengths and limitations of the course and how they affected my ability to "pull it off," and how they affected students' abilities to do the work of the course.

III. To what extent am I, as the teacher, able to implement this course as I intended, and what shapes my ability to do so?

A. What guidance do I provide in relation to the discussion of course texts, and the performance of group tasks? What is my role in relation to the content area groups?

B. What difficulties do I encounter in implementing this curriculum?

1. What are the factors that constrain my ability to implement this course? How do I manage these factors?

2. What enables me to accomplish some aspects of the course? What do I do? What might I do differently in the future?

Overview of the Course

I thought about this study from a social-constructivist perspective. The social constructivist view sees learning as a social and cultural endeavor not solely an individualistic one (Tharp and Gallimore, 1989). My students and what they brought to the classroom as far as beliefs about teaching, learning, and subject matter knowledge, formed a beginning context. From this

starting point we worked together through texts and tasks in a collaborative format to attempt to build new understandings about teaching and learning. It was my intent that the collaborative format of the content groups and my assistance would allow the students to move further in their understandings of teaching and learning concepts. They would accomplish with my assistance and more capable peers' assistance, understandings they could not arrive at on their own (Rogoff, 1990; Tharp and Gallimore, 1989). The students' efforts to create these understandings were the central part of the course, and my attempts to assist them in their understanding informed my role as instructor and researcher.

The beginning methods course I designed and taught involved the establishment of representative content area groups to implement the work of the course. These groups provided a subject specific focus for students, as they worked through the four organizing questions: (1) **What does it mean to teach in a secondary school?** (2) **What does it mean to know one's content?** (3) **What does knowing one's content have to do with teaching it?** (4) **What does it mean to teach [content] for understanding?** We spent about four weeks examining each question. Content groups read particular texts selected to help them think about each course question and they worked through tasks together as they focused on exploring what a content teacher must consider in planning and decision making for effective teaching and learning. Texts were discussed in the format of whole group sharing and questioning while maintaining the focus of the content group perspective. Tasks were implemented by both content groups

and individuals. My role was to assist learning by questioning and by providing relevant experiences and information when needed.

My dissertation study is framed around the planning and implementation of the course described above and how it was informed by my learning. In the study I explore my decision making in relation to the initial plan and how the actions and reactions of my students, as they worked through the course, affected those decisions. The original motive of my study was to examine, through reflective inquiry, my conceptualization, design, and implementation of a new kind of secondary methods course grounded in the context of disciplinary content. I wanted to focus particularly on the texts, tasks, and social organization of the course to see how these factors impeded or facilitated the development of a preservice view that content and pedagogy were interwoven. Although the questions I developed did not change, I found my concerns focused primarily on one of the questions developed for the implementation phase of my inquiry: **To what extent am I, as the teacher, able to implement this course as I intended, and what shapes or impedes my ability to do so?** This question directed my thinking throughout the study. Even though this became my major concern over the course of the study, I grappled with weaknesses in the conceptualization and design phases of the course trying to understand their influence on the implementation phase. A problematic design made the implementation of the course difficult.

Organization. This dissertation chronicles my movement through and reflection on the design and implementation of the course. Chapter two delineates how I conducted my study considering methodology, data sources and analysis. Chapter three discusses what I brought to the planning of the course as I consider my own conceptual change through my graduate preparation at Michigan State. Chapter four details the actual planning of the course, looking at pivotal conversations and personal decisions that led me to the present form of the course. Chapter five describes the first day of the new course, and six, seven and eight each explore how my students and I investigated one of the core questions. In each of these three data-based chapters, I discuss the main texts and tasks I assigned to help students explore each of the organizing questions, and what I hoped they would gain from these tasks and readings. I describe how I introduced and monitored main tasks, and how we discussed main texts. Student responses to the texts and tasks are discussed in relation to their congruence with my intentions. Finally, I explain what issues were foremost in my thinking at the time, and how I am currently thinking about those issues with some time for reflection. Chapter nine highlights important issues surfaced by the study, along with some personal insights and comments on the challenges of living inside of my study.

CHAPTER II

METHODOLOGY

The Setting

The university I returned to in the Fall of 1992 is situated within an agrarian setting of corn, dry beans, and sugar beets. It rises from the flatlands just as the crops rise in the spring, and the sounds of farm machinery intermingle in an unlikely symphony with the university crowd's cheers for baseball and football competitions during the planting and harvesting seasons. It is a small campus, founded in 1963, with four major wings that house separate colleges within the university. There is a large three story administrative complex, a fine arts gallery, a theatre and a sprawling new physical education complex. Some classes used to be held in "out-buildings" or trailers and at the time I left, four years ago, the student teaching department and some faculty were housed in such an out-building. This is no longer true. The student teaching department and all teacher education faculty are now housed in the main buildings of central campus. The campus has a few dormitories and some university apartments. A small cafeteria and student union sit close to a small dorm aggregate.

The university serves a student population of approximately six thousand with campus housing for only four hundred. This campus could be best described as a commuter campus. There seems to be a different feeling for learning on a commuter campus as compared to a residential campus. There is a drifting in and out of learning, as students attend to their lives and work outside of the university each day, instead of the immersion or preoccupation with learning I observed on Michigan State's campus. I once complained about the lack of meeting places for students here to spend time discussing their academic discoveries and challenges. I was told that students would not have time to gather in such places. Access between students and professors seems limited on this campus because of complex student schedules.

The Students

Many of the students who attend this university travel from northern and southern locations one to two hours away, and there are also quite a number from local areas surrounding the campus. More than half the student population is twenty-five years or older. Many of them enter this university to begin a second career, because of the economic instability inherent in farming and massive layoffs that have resulted from automotive plant closings. Some of the students here have come from factories where some of them enjoyed the power and limited autonomy of being in charge of others, while other students come from the farms that paint the landscape for this university setting. A smaller number of students have decided for

one reason or another to change careers in mid-life. Most of our students are the first in their families to attend college and they are proud of their efforts. It is difficult for these students to negotiate the "system" and peer support networks are difficult to develop on a commuter campus. Our minority population is extremely small, even though the area that the university services has a fair number of African-Americans and Hispanics. The numbers will hopefully grow because of an aggressive recruitment program that is now in place.

Many of our non-traditional students decide to become teachers and they believe they have considerable knowledge and understanding about what teaching is and what teachers do. These beliefs appear partially to come from having large families and being involved at some level as a parent in the school system, as well as from their "apprenticeship of observation" (Lortie, 1975) as a student. When these students talk about education they have a lot to say about teaching, but they do not naturally offer comments about learning in the classroom or in general. There seems to be an attitude about teaching that I have noticed as I have interacted with many of these students that is similar to the more traditional students I taught at Michigan State. The students in the two sections of the general methods course I taught during the Fall of 1992 were more diverse in their backgrounds than the groups of students I had taught three years before. Some already had completed an undergraduate degree and were returning for secondary teacher certification. Some explained to the larger group, as they introduced themselves at our

first meeting, that they were changing professions because they had grown tired of working alone, or they had become overwhelmed with the monotony and the lack of renewal and challenge in their work. Others had been victims of downsizing in business, manufacturing, and health care. A few students had just received degrees in marketing from other colleges and universities and had been unable to find jobs in their field. The age of my students ranged from 23 to 51. Individuals within the group defined themselves as geologist, chemical engineer, parent, electrician, artist, social worker, music therapist, art therapist, construction worker, chemist, dancer, computer analyst, and Department of Natural Resources naturalist. One student was African American.

Method Choice: Genre of Research My Study Fits Best

My study is best characterized as a novice teacher educator studying her practice, the intellectual and the practical, and what she learns. It is carried out in the spirit of both accomplished and novice teacher educators such as Lampert, 1985; Wilson, 1989; Reid, 1993; Cochran-Smith, 1990, and Heaton, 1993. This is a new genre that is most like teachers studying their practice. Cochran-Smith and Lytle (1990) consider teacher research "as its own genre, not entirely different from other types of systematic inquiry into teaching, yet with some quite distinctive features" (pg. 4). They view teacher research as a means to teacher change with implications for both public school and university classrooms. My role is of "an unusually observant participant who deliberates

within the scene of action" (Erickson, 1986, pg. 157). Studying one's practice is grounded in a qualitative perspective with a heavy emphasis on reflection, and interpretation of personal decisions and actions as well as students' responses to those decisions and actions (Bogdan and Biklen, 1982; Schon, 1987). It is a "systematic and intentional inquiry" (Cochran-Smith and Lytle, 1993) based on my hypothesis that general secondary methods courses best serve preservice students when they are structured in ways that invite students to view pedagogy through the lens of their content. Connecting content and method is a less conventional view that I tried to promote as I taught and studied the components of a new methods course designed to help students see connections between what they know and how they teach. Framing my research around inquiry into my practice provided me with a vantage point to observe, record and reflect on what was happening in the course as my students responded through writing and discussion about the texts and tasks of the course. I also was able to reflect on and record my own thoughts as the designer and implementer of the course as I worked inside the course.

The challenges, dilemmas and celebrations of the investigation are conveyed to the reader through narrative. Narrative, a process of reflection and learning based on one's experiences, is internalized by teachers as they live their professional and personal lives. Little is written down for others to learn from. Experientially based learning is not reported and valued in the same way that inquiry based research is (Hollingsworth, 1990; Connelly

and Clandinin, 1988; Carter, 1993). Relating the experience of my inquiry through narrative will make it accessible to teacher educators. A thoughtful retelling of my decisions, experiences, and my learning as I attempted to understand student responses to the substance and intent of a new kind of methods course, and my actions informed by student responses, will provide an insider perspective not often available to an observer. I also extend the insider perspective and how it changes over time as I analyze how I thought about the course as I was living it with my students, and later, how I thought about the course as I wrote about my research. Woven into my larger inquiry is my personal story as I interacted, with difficulty, inside of the study as a novice teacher educator, novice researcher, and a learning teacher educator (Feiman-Nemser, 1983).

How I Carried Out My Study

My data were generated by my colleagues, myself, and my students. I studied my comprehensives project prepared for my doctoral committee in the Fall of 1991 as I started conceptualizing the course I would study. I tape recorded and transcribed formal and informal conversations with colleagues and committee members as I designed and implemented my course. I documented personal thoughts and student comments in the margins of my course lesson plans as well as in my syllabus prepared as a course guide for me and for my students. I also recorded student responses to texts, tasks, and the social organization of the course and my subsequent

reflections about their responses in a personal teaching journal. I developed a "fastwrite" task to begin to identify students' entering beliefs about teaching and learning in their content and their exiting beliefs after the course and instructor intervention. Student generated content group journals were used for my reflection during and after the semester. Final course evaluations designed for student response helped me reflect on the influence of course texts, tasks, and social organization.

Sources of Data Generated by Me

Comprehensives committee project. This project was the final step in my written comprehensives examination upon completion of my graduate coursework. I had been asked to return to the university where I held a temporary full time faculty position before I started my graduate work. I would return as adjunct faculty to teach the same methods course I had taught before. I approached my committee with the idea of rethinking this course as a final project and they agreed. This project crystallized for me that I wanted to implement a change when I returned to teach this secondary methods course. It helped me to think about the secondary methods course I had taught and what problem(s) the new course was a response to. This documented my first formal thinking about what the course might become. Even though the vision seemed idealistic, it was very much like the course I continued on to develop.

Syllabus. My "Methods of Teaching in the Middle and Secondary Schools" syllabus represented a history of my thinking about what the methods course should look like at the time I developed it. It is a document that was constructed with the framework and substance of an "Introduction To Teaching (101)" syllabus that I taught from during my teaching assistantship at Michigan State University. It is also a document in which I incorporated experiences I had as a student in the doctoral program to formulate texts and tasks for the new methods course. In many ways, it was a history of my learning about teaching and learning to teach in the doctoral program and my colleagues' learning as well. It was a collective effort built upon an idea of teaching a secondary methods course with content specific aims, accomplished through content area groups as focused learning vehicles. My syllabus is also a statement of expectations for my students and myself. My role expectations are tacit but with every text or task documented, my work as facilitator seems clear. My beliefs about teaching and learning and what I considered to be effective teaching undergird the selection of texts and tasks and how the work would be accomplished in the methods course.

Lesson plans. I developed fifteen lesson plans, some of which I annotated during the lesson taught or after the class ended. Some of my thoughts were recorded so that I could teach or think about something in a different way when I taught the second section of methods later in the week. A few notations designated readings students favored at the time or did not favor. Some chronicled

student responses from class discussion. Other notations were directed toward what I needed to do to clarify lessons that were not particularly effective because my understanding was incomplete at the time. My plans documented my ongoing revision and thinking about useful and not so useful texts and tasks.

Personal teaching journal. My personal teaching journal was a record of my reflections about the texts, tasks, and social organization of my course. It chronicled most of the days that my methods students and I met for the sixteen weeks of the Fall '92 semester. I initially started out hand writing each of my entries, but very quickly I became overwhelmed with the magnitude of the work of managing a new course and the work carefully studying it. At that time I started using a tape recorder that I carried with me at all times. I virtually "talked" my teaching journal and had someone transcribe my narrative. I recorded the summaries of the lessons and how they were accomplished and various student responses to the lessons. I was particularly interested in recording what I did to manage the lesson. Comments were recorded for my teaching journal in reaction to student comments in their dialogic journals used for analysis and interaction with the texts of the course, content journals, fast writes, field work lessons, personal narratives, field reflection papers, unit plans, and content group discussions. I would try to incorporate some analysis as I spoke about student responses. Often, because of the complexity of the course and my full course load I was only able to record responses, with the

thought that I would revisit them at a later time. After the transcription I would read the words I had spoken and sometimes extend my comments with written notations. Included in my teaching journal are all of my conversations with graduate colleagues and committee members, formal and informal, and my thoughts about our conversations. My journal was also the place where I wrestled repeatedly with my uncertainties about the course and my emerging identity as a teacher educator and researcher.

Data Generated By Students

Student "fastwrites." These spontaneous pieces of student thinking in written text, solicited on the first and last days of class, gave me information about how students were thinking about teaching their content and what feelings or descriptions of actions might describe their beliefs about teaching their content. These artifacts also gave me evidence for claims about students' entering beliefs and how they seemed to change over the semester. As a teacher and a researcher, I was looking for signs of movement toward change, revision or readjustment of entering beliefs as students wrote their first and last fastwrite. I was also looking for new realizations about teaching and learning and whether students were making connections between knowledge of content and pedagogical decisions that must be made.

Content group journals. Content groups were to write an entry in their content journal every week. Journals were turned in for my response. Content journals were one more avenue for instructor assessment of student understanding. Each content journal, written by various members on a rotating basis from all of the content areas, contained approximately twelve entries. These entries discussed articles we read and discussed in content groups and whole groups and recorded content group reactions to those articles. These journals also chronicled the two mini-teaching lessons that students were required to accomplish for the semester; teaching a content concept using the context of the moon, and teaching a content concept and representing it in more than one way for student understanding (Wilson, Shulman, Richert, 1989). My students, in their final entries, wrote about the concept of the content group and whether it was a valued and educative experience for them.

Final course evaluations. I developed the final course evaluation to ask some particular questions about the texts, tasks, and social organization of the course. I asked students to respond in writing to five questions: (1) What texts in the course seemed most powerful for you? Why? (2) What tasks in the course seemed most helpful for you in relation to planning and thinking about teaching and learning in your content area? (3) Comment on the idea of working through the texts and tasks of the course within content groups . . . was it helpful? not helpful? (4) Write about what helped or did not help you access your subject matter in the course?

and (5) A course is more than texts and tasks. Write about another aspect of the course (See course evaluation and results in Appendix.) More than one response from each student was possible for each question. I thought of this evaluation as a place to begin to think about what I needed to do differently or rethink in relation to the course organization.

Data Generated by Committee Members and Peer Colleagues

Pivotal conversations. Conversations with peers and committee members helped me to clarify and extend my thinking about the course as a whole and the components that defined it. The conversations were recorded in field notes. Early discussions helped me get clearer about my initial vision of a different kind of secondary methods course, as I thought about the problems inherent in existing generic methods courses. These conversations naturally evolved as I started to seriously think about the course.

Other conversations that I engaged in from the summer of '92 until the fall and winter of '93-94 were with my committee members. These were scheduled and were audio-taped and transcribed. These conversations were important in the implementation phase of the new methods course and in the concomitant inquiry into my practice.

Data Analysis

Initially I read my reflection journal and chunked the various entries into the categories of conceptualization, design, and implementation with a color code. This also provided me with a time

frame to think about each phase within and in the case of the first category and some of the second, conceptualization and design, a location to situate the work within as well. Conceptualization had taken place at Michigan State University throughout the early spring and summer of 1992. The design phase took place in the summer, a smaller time frame than conceptualization and implementation, and it took place in my home without a lot of discussion with others. The implementation phase was the longest and most difficult of the three and took place at the small university where I taught the new course. It is clear that the difficulty in the implementation phase, an unrealistic amount of work for my students and myself, had a lot to do with the small amount of time spent on the design. I divided conceptualization, design and implementation categories further into concerns with texts, tasks, and content groups. I letter coded these, A, B, C . . . I broke these divisions down further into particular texts, particular tasks, and content group management and identified them with post-it notes affixed to the pages.

I took each of the categorized sections of my teaching journal and wrote about my statements in a clear summary. After the summary I identified any questions I had about the entry, or anything I wanted to explore or think about further. Some of those explorations or questions I addressed in analytic memos. I then wrote a section about "where I was in my thinking at the time" as I reflected on each particular summary I had written. I identified which research question(s) each particular entry would help me answer or think about.

My study was organized around a specific analytic framework of texts, tasks, and course social organization which grew out of the more general framework of the course organizing questions. This is the framework I will use in my data chapters.

Analysis of student data. As I reread, summarized, and reflected about my entries, I looked for evidence that I was seeing students' thinking about teaching and learning in ways different from their entering conceptions of teaching and learning; connecting teaching and learning to an engagement between the teacher and student with content (Hawkins, 1975), learning content through collaboration, representing content concepts in a multiplicity of ways for student understanding (Wilson, Shulman, Richert, 1987), and becoming "learning teachers" (Feiman-Nemser, 1983). I also looked for evidence that students were beginning to consider content and method as connected (Dewey, 1904). In addition I looked at counter evidence-no change or only partial change in student ideas and beliefs. This sort of evidence would give me information about the course I had designed and its effectiveness in fostering the kinds of dispositions I mention above, and it would also give me information about how I was managing the course and how I might need to rethink my approach and manage in a different way. As I read my reflective journal over and over I began to hear the voices of my students guiding me to think in certain ways and my responses to them, sometimes from the stance of teacher and other times from the

stance of researcher . . . a few times from the stance of a human being, overjoyed, shocked, or bewildered.

I read and categorized the student fastwrites to identify any evidence of change. I read the initial fastwrites and collected some fairly conventional beliefs about teaching: "fun," "fulfilling," and so on. These gave me a place to begin to understand my students' thinking. The final fastwrites were examined for beliefs about teaching and learning and whether initial beliefs had changed in any way. I looked for commonalities across the papers. I looked particularly for a more realistic view of what teaching in a content might entail after the course intervention. These views are discussed in chapter five.

As I carefully read the content group journals I also looked for evidence that students were thinking about teaching and learning in a different way. I looked for statements that displayed an understanding of a relationship between the teacher, student and content, and also statements that indicated collaborative thinking about a particular article discussed or task accomplished. This was also a vehicle for information about the way the course was influencing students. Important information about student understanding or lack of understanding was often conveyed through students' writing.

The final course evaluations were a direct appeal for student input about the texts, tasks and content group organization. I was looking for articles and essays that all or most students found to be helpful in thinking about teaching and learning, in a general

sense and in a content specific sense. I was also looking for answers about the social organization of the course and whether students felt it had helped or hindered them in thinking about ways to understand and teach their content. This was also true of the required tasks. Students were also asked to identify anything else about the course that had helped in their learning about teaching and learning. This provided positive and negative information for me that I may never have connected with.

The following chapter explores my beliefs about teaching and learning, past teaching experiences, graduate preparation and current thinking about what I brought to the process of planning, as I tried to make clear my vision of a new methods course.

CHAPTER III

EVOLUTION OF MY EARLY THINKING ABOUT PLANNING A NEW KIND OF METHODS COURSE

Overview of the Chapter

In this chapter I explore where my ideas for a new kind of methods course originated. It is a personal reflection about significant learning experiences that prompted me to reevaluate and begin to craft anew the content and format of a secondary methods course I had previously taught.

Chapter III begins with a description of the old technically oriented methods course, what I brought to teaching the old course, my experience teaching it and my growing dissatisfaction with its impact on secondary students. From there I move to a discussion of my learning as a graduate student, focusing on key experiences that provided me with new learnings and understandings. These experiences not only compelled me to evaluate the "old" methods course but ultimately led me to a clearer and sometimes painful reassessment of my prior conceptions of teaching and learning and my history as a novice teacher educator and a secondary teacher. Throughout my graduate training, problems with the previous methods course became clearer to me, enabling me to begin thinking about teaching the course in a different way.

The "Old" Methods Course

This beginning general secondary methods course depended upon a lecture format to transfer information about general teaching methods and accepted teacher actions. Students practiced instructor selected methods through a thirty-hour field component consisting of observation, tutoring, and actual teaching with a cooperating teacher. The course met once a week for three hours of lecture with some time to practice various methods and write behavioral objectives. Students completed the fieldwork on their own time.

Social Organization

Students sat in rows, facing the instructor who stood in the front of the room. Students "received" information that the professor disseminated. They had no opportunity to get to know one another; nor were they encouraged to exchange information or study together in preparation for writing papers or taking the mid-term or final examinations. Occasionally students were grouped to practice the methods they were supposed to implement in the field.

Tasks

The preservice students performed various tasks in this course. For example they practiced writing instructional objectives, developed lesson plans, made classroom observations, wrote reaction papers on classroom management systems, learning styles research, and current educational issues, completed two micro-teaching lessons, taught three prescribed lessons in the field (one was to be

video taped and analyzed by the student and instructor), prepared a fieldwork log, and developed a unit plan.

When I observed students in the field, I found they often failed to integrate the information disseminated and memorized in the university classroom with the practice of the high school classroom where they did their fieldwork. When I saw these students again, during student teaching, I watched them grope to convey concepts to their students. Because they had not drawn important connections between pedagogy and content, they could not devise ways to represent content concepts for their students to understand. They appeared to be very involved in getting the method or strategy "right" while the student and the content occupied a back seat.

Text

The single text required for the course, Joseph Callahan and Leonard Clark's (1988) Teaching in the Middle and Secondary Schools: Planning for Competence, is behavioristic in orientation and promotes the view that teaching is "training." Each learning module is followed by a post test composed of true-false, short answer, and multiple choice questions asking students to reproduce information from the chapter. While information in the text was found on the multiple choice mid-term and final exams, the modules were not formally discussed in lecture. Students were expected to read and process assigned modules individually.

Course Purposes

The methods course was built on a competency-based approach to teaching teachers in order to prepare effective classroom managers who would be accepted and "successful" in surrounding schools. The stated goals in the course description explicitly defined this intent.

> This course is designed to provide secondary students with the basic planning, organizational and instructional skills needed to function effectively in the secondary schools. Course participants will practice these skills through on campus classroom experiences and through field experiences in the area schools (course syllabus, 1988, general secondary methods instruction).

The goals and objectives, also delineated in the syllabus, speak to the belief that preservice students can be trained through a body of scientific knowledge.

> After this course participants will be able to:
>
> -- generate appropriate lesson and unit plans,
>
> -- explain the ITIP model,
>
> -- discuss the 4MAT system and learning styles theory,
>
> -- explain four different classroom management systems,
>
> -- know the purposes for formative and summative evaluation, and
>
> -- explain at least three teaching strategies in addition to lecture (course syllabus, 1988, general methods instruction).

The voices of the preservice students and what they brought to the course were not recognized as important to discuss. Subject matter knowledge, knowledge of curriculum, content, and pedagogical

content knowledge (Wilson et al., 1987) were also not considered. This implied that method and subject matter can be considered separately when thinking about teaching and learning. The course purposes were for students to accrue a repertoire of skills and management systems that would enhance their effectiveness as teachers. Students were expected to recall and explain the above goals for assessment. They were not expected to practice these in the field, with the exception of the lesson plan selected by the student from a variety of formats presented in the course text, or provided by the cooperating teacher in the field.

My Experience Teaching the Old Course

As an adjunct instructor, I believed that I was expected to implement this course as it had been designed by someone else. I saw little room for personal interpretation. Moreover, I did not know enough, at the time, to design and implement a different secondary methods course, even if given the chance. My "training" as an adjunct instructor of secondary methods consisted of observation and minimal participation in the course I would be teaching the semester before I actually taught it. As I observed, I was struck that a methods course that professed to help preservice teachers understand ways to teach middle school and high school students was seriously lacking in information about how one might come to know and understand those students, with the ultimate intent of becoming engaged with one another around subject matter. My history as a secondary teacher first brings to mind the faces of my

past students and many of their names. I vividly remember how they spoke about and dealt with life, in school and out, and how they reacted to one another, me, and to learning in school.

I also kept waiting for subject matter considerations to surface in the lecture format of the course. They never did. "Methods" were the substance of this course. They were isolated from subject matter and therefore given an inappropriate significance as preservice students learned how to "do" methods. The inference was that any method would do, just try them out and pick the most effective. This methods course seemed very much like the "methods of teaching" course I had taken as an undergraduate student many years before.

There were some new approaches however, that I observed and subsequently taught. Microteaching, a reform introduced in the methods course, seemed to be an interesting way to get preservice students to practice parts of a lesson and become familiar and comfortable with those parts before actually teaching a full lesson. And I read research that indicated that students tended to imitate the behaviors they practiced in their "scaled-down teaching" (Gage, 1978) long after their methods classroom experience.

The microteaching sessions I observed and later taught were uncomfortable and anxiety provoking for students and did not follow the recommendations of teaching parts of a lesson until the students felt comfortable with their practice. I remember, however, that some students found it was helpful to teach in front of the methods class before teaching in their field assignments. In their ten

minute mini-lesson students were evaluated on introduction, organization, clarity of concept, dress, grammar, closure and timing. It was an extremely rigid, lock step experience and I was never comfortable doing it. It seemed a part of the "training" emphasis that I sensed in the format of the course. I taught this component of the course as I had observed it even though the form seemed different from the reform intent. I thought there must have been a good reason for this difference.

As a novice teacher educator, I taught this methods course according to the syllabus that had been developed by the instructor I had observed. I remember spending hours viewing the Madeline Hunter "Instructional Theory Into Practice" tapes and thinking about the effectiveness of many of the components of "good" teaching that Hunter identifies. I also remember being excited that some of the components fit with elements of my own practice. Hunter's model of "effective teaching" seemed like an effective way to pull my students into the content and help them learn it. It offered a way to think about organizing a lesson for the most impact and understanding. Starting a lesson with a particularly engaging activity to focus students' thinking, tapping into students' prior knowledge and histories, having students practice their new learnings through writing, simulations, panel discussions were ideas I had used as a secondary teacher to make my lessons interesting for my students.

ITIP as a formal "way" of teaching was new to me and new to the fieldwork sites where the beginning methods students would teach

four lessons. Since these sites wanted the preservice students to have knowledge about ITIP, it was taught, within the methods course as a "way" to teach. I remember outlining ITIP on a set of overheads and lecturing about it. I modeled my own teaching in the methods classroom after a modified Hunter format with anticipatory set, directed teaching, guided practice, and checking for learning. I was vaguely bothered by the prescriptive nature of the Hunter format and by the fact that my students did not appear to do a lot of thinking about what they plugged into each of the categories. It did accomplish one thing; however, preservice teachers appeared to know what to do in the classroom. Their lessons were organized and they were fairly certain about what they would do in front of the class. This format also provided the preservice student with a means to include the classroom student, in a more active way, in the lesson. ITIP provided preservice students with answers and told them what to do next.

My students thought of ITIP as a strategy to use to increase the effectiveness of their teaching because that is how I presented it to them. Their classroom performance was enhanced by the positive evaluations they received from their field teachers and school administrators who also watched. Even though the practices of microteaching and Instructional Theory into Practice were considered reforms, they did not feel educative to me. They were ways to train and create what Dewey (1964) referred to as "craftspersons," those slight-of-hand smooth individuals whose

". . . later 'progress' may . . . consist only in perfecting and refining skill already possessed" (p. 320).

ITIP, microteaching and the traditional format of this methods classroom did not interfere with my placing all of the responsibility for knowing and teaching in the secondary classroom on the teacher. I modeled this effectively in my university teaching. Even though I encouraged student involvement by inviting questions, initiated conversations about the course content and my teaching experiences, and used infrequent collaborative groups, I taught with the idea that teaching was telling, advising and encouraging just as I had taught as a secondary teacher. I communicated that there were prescriptive approaches that one could utilize to teach well.

When I supervised student teachers and field students who used the methods I taught them and they experienced an unsuccessful experience, I started to wonder what was wrong in my teaching of the methods course. However, when I talked to students about what didn't work, I initially focused on "the method didn't work . . . could they think of another method to use?"

I didn't question students about their content knowledge. I was a teacher of methods, content was not my concern. At this point, I really thought of methods and content as disconnected. I was a practitioner who "managed" a classroom by teaching my content in an interesting and organized fashion. I knew also that I needed to know my students in a particular way in order to teach them, but I didn't know how to discuss that in a methods course.

At the same time, I knew nothing of the theory behind my practice. Nor could I give any reasons as to why a particular approach worked. It just did. As a practitioner, I had never been encouraged to take time to think about my reasons, nor had I consciously challenged myself to think about them. My knowledge was experientially based. My view of teaching and learning was never challenged as I worked toward and earned the degree of masters in teaching with a major in reading at a small midwestern university. I maintained and perhaps even strengthened my vision as a conventional practitioner, and my practitioner view had limitations for me as a teacher educator.

My experience as a novice teacher educator caused me to begin questioning the difficulties I had with my student teachers and field students who were prepared through the course I was teaching. They selected lecture most often as their method of choice. It most fit their dependence on the text book and matched the models they experienced in high school and university classrooms including their methods course. As I consider their approach it makes sense. I taught them mostly from a text and lecture driven approach, much like the approach I has used as a practitioner. As a secondary teacher, my content knowledge was limited to what I had learned in my university content classes and what was contained in the textbook and teacher's manual I was issued as a teacher of English or science. I had not been challenged to think about teaching my content in ways to foster student understanding. I had no knowledge of pedagogical reasoning skills. I was well schooled in the

pedagogy of lecture and teacher performance which is what I practiced still. This was also modeled by the professor I observed before I taught the course.

Student attempts, in the field component, at group work, demonstration, and questioning were still couched in a lecture format. They were not receiving preparation that enabled them to grow beyond their university "training" or their own school experiences.

While I was teaching this methods course, I became dissatisfied with this kind of preparation. While I did not understand exactly what was wrong, I knew many of my students had problems teaching their content when they moved into their student teaching and into their first year of teaching. My concerns for them and their students moved me to look for more depth in my own preparation. I started an intensive search for answers through further graduate work at Michigan State University. I entered the doctoral program at Michigan State believing that I would learn how to teach teachers. I did not imagine that I would undergo fundamental conceptual changes in my thinking about teaching and learning.

My History as a Graduate Student at Michigan State University

When I entered the doctoral program I was looking for knowledge about how to prepare teachers more effectively. Through my coursework and teaching assistantship, I began a process of conceptual change that led me to a new level of understanding about my past teaching experiences. This helped me to think differently

about teaching and learning as I prepared to teach preservice teacher education students.

Early Movement Toward Change

"Teacher as Learner," one of my first classes in the doctoral program at Michigan State University, challenged my belief in ready answers for teachers. The instructor, Dr. Feiman-Nemser, pushed me to think about the connection of content and pedagogy through reading "The Relation of Theory to Practice in Education" (Dewey, 1904/1965). Dewey wrote about the need for teachers to acquire particular mental habits that would allow them to teach effectively. He postulated that students of education could not make the kinds of decisions about teaching subject matter that fostered understanding if they were simply schooled in "practical" ways of operating in a classroom. Supplying education students with only "practical tools" would allow them to achieve technical expertness but that would not enable them to reach their students in a meaningful manner. Dewey believed that experiences for education students based on inquiry and reflection into and about subject matter also provided a way of thinking about practice. This step beyond only using "commonsense and practical knowledge" moved students from a superficial treatment of a content concept into a thoughtful realm of developing pedagogy for teaching a concept derived from deep knowledge of education theory and content (Wilson, Shulman, Richert, 1987).

I remember tripping over the word "pedagogy" and feeling very foolish because others in the class seemed to be using it quite

naturally. I felt that I lacked some high status knowledge that many others seemed to have. I attributed this to the fact that I was taking this course out of sequence, before the pro-seminar which was designed to provide a common knowledge base for all of the doctoral students in the department of teacher education. I struggled with the texts and discussions and did not feel like I belonged in this graduate program.

I remember one of the students stating that ". . . the pedagogy would be revealed by the content." I didn't connect with what my fellow graduate student had said, but I did not feel confident enough to ask what it meant. Everyone else seemed to accept the statement which implied a different way of thinking about teaching and learning that I had never encountered before. During the following months I spent a lot of time trying to understand the meaning behind this statement which left me so puzzled. I thought about it almost continuously. Gradually, I realized that I needed to think about my content first as I considered ways to teach it. I needed to know the concept I would teach in ways that would help me develop important questions and experiences tailored to enable my students to discover their own understandings about the concept being explored. Knowing my content in this way meant studying, researching, and collaborating with more knowledgeable others in exploring the concepts I would teach, in order to enhance and extend my understanding. At this point, my understanding of the content would help me select the pedagogy. In

the past I had always started with the "method," and then I figured out how I could make the content fit.

Placing My Practice in a Broader Context

Other graduate courses helped me to gain a social-historical perspective on American education, which shed light on the dilemmas and problems of schooling and the tensions and obstacles that had directly affected me as a secondary teacher. I had never had a knowledge base to think through these problems of practice. I had also never understood why I didn't seem to making a difference for my secondary urban students. Their attitudes and beliefs that they could not succeed were not changing even though we explored many things together--prejudice and its consequences, important African American leaders, classic literature, young adult literature, and scientific adventures inside and outside of school.

As I moved through the various graduate courses at MSU, I eventually came to view myself as a caring but fairly ineffective teacher. This realization was pretty sobering because I had thought of myself as a "good" teacher who could take care of her students. "Taking care" meant many things, from teaching careful dissection technique in the biology labs I conducted, to engaging my English students with the Romantic Poets. It also meant finding articles of clothing and hygiene products for my students when their families could not or would not supply them, protecting them from rioting factions in their community, working with home-school coordinators to remove students from dangerous living conditions,

and trying to understand student histories and how they defined the culture of the classroom. I was confronted often in my urban teaching experience with the realization that all of my knowledge would not help my students until I understood their daily life situations. The "curriculum" here was very different from the fare I had sampled in my secondary methods courses and in my student teaching. I was dealing with the "out-of-school-curriculum" (Melnick, C., 1992) that tacitly shaped my students' lives in school as well as out.

My ideas of good teaching were in an undeveloped stage, but I do not think that I was very different from other teachers I taught with. In the graduate program, I began to realize that good teaching wasn't about taking on drug companies for grants or drug dealers or gangs. I came to see that I couldn't make a difference for my middle school or high school students in a lasting way, because I didn't know what I was fighting. I was not simply fighting the hopelessness of my students and the ignorance of many of their parents, who entered my classroom with hostile ideas about getting along in their neighborhoods. I was, in reality, trying to fight dominant social views of what certain kids should know and others should not. I was dealing with the issue of denial of access to high status knowledge through the absence of materials and resources, the bureaucratic sorting of lives, and inadequacies in teacher preparation.

Graduate school helped me develop a larger picture of what it means to be a teacher. Teaching wasn't about taking care of

students, it was about teaching in ways that would imbue students with the power to take care of themselves. It was about helping students construct knowledge and providing access to dominant culture knowledge. And, it was about teaching preservice students in ways that would allow them to construct and understand a vision of "good teaching" that I had not been able to do on my own. It was about creating a community of learners who explored and attempted to understand the diverse students they would teach, the content they would teach and how they knew it, the bureaucratic institutions they would teach it in, and the whys and ways in which they would decide to teach it.

Learning From Teaching an Introductory TE Course

Besides my graduate course work, teaching in an "Introduction to Teaching" course infused my study with new insights about teaching and learning and helped me figure out my existing ideas and where they might have come from. This really was a time for questioning, reflection and change. Good teaching was even more complex than I had imagined. (I sound like my students) I remember watching Dr. Feiman-Nemser teach this introductory course and being puzzled by her approach. The articles she assigned were so powerful and the students could learn so much if she would only "tell" them more about it. I watched students leave the classroom angry and confused after a session about one of these readings, where all Dr. Feiman-Nemser had done was ask questions. When a student answered the question she did not indicate whether or not

the student was correct. Rather, she continued to probe for further understanding and clarification. I couldn't figure out what was going on here. Where were the overheads with the outlines of key points in the reading? Where were students who felt confident about their understanding of a reading or concept? I was also learning because I had not encountered these articles or issues before. I was leaving without getting answers to questions as well. I really never asked questions of Dr. Feiman-Nemser either because I felt as though I already should know these things.

As the quarter progressed, I realized that she was artfully challenging student beliefs about teaching and learning through her questioning. This realization developed through listening to other instructors of the same introductory course at the weekly staff meetings. They were doing the same things in their class sessions.

I really could do little more than listen and learn. While I recognized some of the issues these instructors were grappling with, I was also coming to grips with the fact that what I had done as a teacher had been ineffective according to the standards of "good teaching" promoted by the course. I isolated myself within this very open and supportive group. Even though I had been a teacher, I had not been the kind of teacher this group seemed to value. As I listened to the instructors searching for insights and ways to make sense of their students' beliefs, I was trying hard to understand why I had taught in the ways I had, and how I could begin to teach in ways that enabled students to find their own answers.

I tried so hard to change my way of looking at teaching and learning. I remember my first quarter teaching this course, I spent most of the time feeling paralyzed, unable to think of questions that would require students to look at their beliefs and eventually challenge them. Because I had never taught this way, it was slow going. It was difficult to fashion questions that would not dead end student thinking or mine and to come up with follow-up questions.

The only thing that I could rely on was my masters training in guidance and counseling where we learned to question and rephrase what clients had said, to test our own understanding and theirs. I really had a difficult time trying not to praise students for every response they made and to probe for further understanding. It was also difficult each time students became frustrated and angry because I would not supply answers. I was beginning to see, however, that there were not codified answers here.

This course was about inquiry and understanding students, subject matter knowledge, societal norms, and the institution that promoted those norms. It was not about ready answers. It was about getting smarter about the complexities of teaching and learning, and thinking about how to manage those complexities.

My first brush with "good teaching." During the first quarter I taught TE 101, my students and I had looked at two classroom video tapes that offered very different views of teaching. Marva Collins' traditional classroom was academic, teacher-driven, authoritarian;

Leslie Stein's "open classroom" was flexible and student centered, with a thematic approach to learning, assisted by the teacher.

Marva and Leslie provided contrasting examples in our search for the characteristics of "good teaching." We were also looking for classrooms that promoted student understanding. All of my students had definite reasons to like or dislike Marva or Leslie's style and discussed these reasons extensively. While some questioned Marva's curriculum, few questioned her commitment to the students, and few questioned her role as teacher. On the other hand, many students were uncertain about whether Leslie was teaching and whether kids were really learning.

We had also discussed the "hidden curriculum," as defined by Philip Jackson (1968), and the "code" that a child needed to understand to be successful in school. My students were fascinated by the notion of a "hidden curriculum." They felt they had experienced it, but lacked a language to talk and think about it.

I asked my students to describe the hidden curriculum in Marva and Leslie's classrooms, using Jackson's framework. How did the students handle the "crowds"? What sort of "praise" did the students in each class receive and how did they value it? Who held the "power" in each of the classrooms? I also wanted my students to think about how this helped them think about teaching and learning in new ways. I had observed Dr. Feiman-Nemser doing this exercise the previous term when she had students fill out a grid comparing the two classrooms. I decided to have my students discuss the task as a group.

As soon as I had the request out of my mouth the class grew wings and flew with it. I happened to be sitting in the middle of the classroom and I became invisible to the students. They took up the categories of crowds, praise and power Jackson had posited and started to identify Marva and Leslie's classrooms in certain ways. They argued and submitted, discussed and compromised for nearly twenty minutes. I listened and took notes for later questioning. I left my class that day with a feeling of exhilaration and wonderment.

Driving home that night I thought, so this is teaching and learning? I had never experienced this before, and I might add, I have not experienced anything quite like it since. I guess I keep aiming for that as I continue this inquiry into my practice. I had so many questions as I thought about my students that evening: What was it that happened in that class that caused such passionate student discussion? What did I do? What did they do? What did the reading contribute? How did the make-up of the group affect what happened? I could not wait to meet with my students again later in the week.

The learning that took place for me in TE 101 was profound. I could no longer be the educator I had been. Having experienced good teaching, I was running with the memory. I wanted to know more about teaching and learning and I wanted to experience it through my students' eyes, ears and minds.

In TE 101 I started to redefine my identity as a teacher. Within the framework of this course, discussions with other

instructors and my own teaching, I got back in touch with a long ago lost part of myself that sensed there was more to teaching than providing answers. I also faced the realization that my need to "take care" of my students was misconceived. Rather, I needed to provide opportunities for my students to become powerful in their own right, through inquiry, collaborative learning, and questioning of their beliefs and conceptions about teaching and learning.

Becoming a Constructor of Knowledge

Another important awakening happened for me through a course taught by Dr. Magdalene Lampert. Until that point I believed that I would continue to attend school where I would keep learning about teaching. I always assumed that I would just continue to read books and articles by the "experts" who were recognized in the field of teacher research, and, of course, I did throughout the program and I'm still doing so.

Dr. Lampert turned my thinking around one night when she answered a question I had asked, out of frustration, while our small group attempted to develop and publish assertions about teaching and learning. We had worked and argued and refashioned so many of our thoughts. I finally asked Dr. Lampert that night, wondering if I would sound too simplistic in my query, "Why is this so hard . . . I don't understand."

She asked me if I was serious about wanting to know and I said that I was. Dr. Lampert explained that throughout our education most of us had studied someone else's knowledge about various

subjects. We were now trying to create new knowledge as we grappled with our own beliefs and that was probably something we had not been asked to do before.

At that point I realized that I would, at some point in the future, be joining and contributing to a group of individuals who set the pace and through their research efforts added to the body of knowledge in teacher research. This realization affected me deeply then and it continues to move me as I write about this new kind of methods course.

A New Tool for Thinking: Dialogic Journals

I encountered the dialogic journal in two courses taught by Dr. Jim Gavelek. Dr. Gavelek required that we deal with some very difficult, yet exciting, texts. In order to interact with those texts and with him at a personal level, he asked us to keep a dialogic journal. He described it as a vehicle for the authors(s) of the text, the reader, and the professor to have a conversation about the text. We handed our journal entries in each week, and he read and conversed with us about our thinking through his responses in each entry.

Writing and reflecting on the articles I read and conversing with Dr. Gavelek in the journals brought me to a level of understanding that I could never have reached in a different format. I mentioned in class one day, after reflecting and writing about a particularly difficult series of articles, that I had reread my journal response and I was convinced that someone else had written

it. Others agreed they had felt the same way at various times in the course. We decided that through our writing we had worked hard at developing new understandings and perhaps fragile new learning. We often talked about the times when "someone else" did not arrive to write our responses. I have lived since then with the memory of the power of understanding "beyond myself" through the dialogic journal.

Comprehensives Committee Project

I first started working on a new version of secondary methods when I took my comprehensive exams. My doctoral committee and I agreed that I could use part of the exam as an occasion to rethink the teaching methods course I had taught three years before. Since I knew I would be returning to teach the course in the Fall of 1992, this seemed especially timely. I viewed it as a chance to draw on all that I had been learning in my doctoral program.

As I thought about the planning of a new kind of methods course, I was struck by how long I had been working on this idea without my conscious knowledge. The notion of the need to better prepare preservice teachers probably had its inception in the difficulties I experienced for seven years as a secondary teacher and years beyond that as a secondary substitute teacher. Certainly, as an adjunct novice teacher educator and clinical supervisor of student teaching, I found myself dealing with many of the same "uncertainties" and dilemmas I had lived with as a secondary teacher, such as how to help my students understand the

concepts I presented, how to find ways to make the concepts important to them, and how to realistically understand and accept my students' histories and how they affected my teaching and their learning.

In the process of imagining and planning for my committee project, I examined my personal assumptions and beliefs about teaching and learning and how they had changed during my graduate program. I thought hard about how my new knowledge would inform the design of a new methods course and how I would manage constraints such as the university course and fieldwork requirements for certification, as well as cooperating school expectations for teacher education students' classroom performance.

The vision I wrote about in my comprehensives "project" was very nearly the same vision I attempted to implement. Subconsciously, this first conceptualization, a symbol of my own learning and evolving conceptual change, became my guide as I planned the course.

Content Area Groups

In my comprehensives project I first talked about the idea of content groups as a way of addressing content specific concerns in a general methods course:

> . . . it is my intent to form permanent content area groups to push their (preservice teachers) thinking about their content at all times, and, further, to invite their responses to come from the context of their particular content area. . . . I want my students to begin to think as subject matter

> specialists within the framework of teaching and learning." [Comprehensives project for guidance committee, Fall 1991, pg. 18]

Later, I defined the role of the content groups in my syllabus. These groups would serve as the vehicles for discovery, inquiry, and perhaps even the beginnings of conceptual change. They represented the key social organization in my new approach to a general secondary methods course.

> Content area groups: It is important that we not separate teaching strategies and the work of secondary teachers from the content areas they have chosen to teach. Working in content area groups will provide opportunities for individuals to think about planning for instruction through the lens of their individual subject matters. Together, math majors, physical education majors, music majors, biology majors etc., can help each other to become smarter about why certain methods and planning work, or do not work with their particular content. The work of content area groups in TE 204 will take on the form of group inquiry as they read, write, question, plan and initiate discourse from the focus of their content areas. . . . [syllabus, Fall '92, pg. 3-4]

I also thought about content area groups as subject matter lenses for looking at the work of the course. The members of the groups would provide many voices from various levels of knowing and understanding subject matter for my methods students to consider and challenge as they thought about what it might be like to address important issues of teaching as a content area teacher.

I wanted my students to recognize that they needed to know their content in a particular manner. They needed a kind of knowing that would enable them to think of a multiplicity of ways to represent their knowledge to their students for understanding.

I wanted my students to realize that they needed to develop a depth of knowledge and pedagogical reasoning skills as they entered the profession of teaching, and that it would be hard to do anything beyond packaged textbook thinking without these skills and understandings.

I decided that content groups would be the vehicles to do the inquiry work of the course; here I hoped that students would begin to see together that as content teachers they embodied their contents in the ways in which they thought about them. The powerful texts and related tasks they would explore together would begin to bring about the realization that they were indeed representations of their content areas.

The texts and tasks, explored and implemented by the content groups would also help my students examine the students they would be teaching and the kinds of teacher-student-content interrelationships that need to happen for meaningful learning to occur (Hawkins, 1978).

The course I conceptualized in my committee project was a colossal attempt to address the weaknesses of the generic secondary methods courses I had taken and taught, as well as the personal weaknesses I had displayed as a secondary teacher and novice teacher educator. The experiences and new knowledge I garnered as a graduate student and graduate assistant provided substantive tools for addressing these weaknesses and suggested new content and goals for the course. I had started to think about teaching and learning as a deeper process, one that was defined by reason and thoughtful

decision-making on the part of the teacher. This decision-making had to be informed by content knowledge, knowledge of students' lives outside of school, and connections of one's content inside and outside of the discipline. The context and curriculum of the classroom called for much more flexibility than a textbook and lecture driven approach would provide. I wanted my students to construct a vision of effective teaching. To accomplish this, I wanted them to focus on teaching and learning in a more specific sense of thinking about learning to teach their content. It was with this conceptualization, developed through my comprehensives project, that I started to think about the actual planning of my course.

Identifying and Addressing Problems of the Old Course and Looking Forward to the New

As I planned and wrote my comprehensives project in the Fall of 1991 I was beginning to analyze the methods course I had taught before I entered the graduate program. My analysis and personal reflection about this course continued through planning the design and implementation phases of the new course. My thinking about the old course, informed by my graduate experiences and preparation, helped me to begin to articulate problems I had only sensed in the old course. The four problems discussed in chapter one stood out to me: (1) It ignored teacher candidates' entering beliefs about teaching and learning, (2) methods, techniques, strategies were promoted as ends in themselves, disconnected from purpose, content

and learners, (3) adequate subject matter knowledge for teaching particular content areas was assumed, (4) the idea that generic methods added to unexamined subject matter, practiced in a disconnected and unreflective manner equalled effective teaching, promoted a flawed view of learning to teach. My new course would be designed to address these problems.

CHAPTER IV

THE ACTUAL PLANNING

Overview of the Chapter

In this chapter I describe how I gathered materials and information that helped me design the course I envisioned in my comprehensives project. I relate important conversations with fellow graduate students as I think through the main components of the new course: organizing questions, social organization, texts and tasks. In describing each component of the course I include these pivotal conversations, as they occurred, as historical evidence in the planning phase. I also explain the main elements of the new course: how I formulated the idea, influences on my thinking, and how I imagined the course elements working.

My graduate preparation directed my planning of the new course. The course became the embodiment of all of the program experiences that were important to me. I valued what I had learned as a doctoral student and wanted my students to begin their exploration of the complexities of teaching and learning early, without blindly accepting someone else's answers as I had in my own teaching experience.

The course I designed was influenced by my comprehensives project discussed in chapter three, problems with the old methods course that were becoming clearer as I thought about my analysis in that project, the conversations I had in the spring and summer of '92 with fellow graduate students about my new course, the syllabi I collected from my colleagues who had taught graduate courses in the college of education, my TE 101 syllabus, and texts and tasks I knew about from my experiences as a graduate student and teaching assistant.

My conversations with my graduate peers helped me to further clarify and extend my initial thinking about the course as a whole and the components that I wanted to define the course. I gravitated to individuals with similar interests in teacher education. The conversations that occurred in the thinking stages of my inquiry tended to be informal. I would stop by one of my graduate colleague's desks or offices with the hope of discussing an important idea with them. I only had a piece of the conceptualization at this point-- the idea of content groups as vehicles to help methods students think about the issues and complexities of teaching within their particular content areas. I recorded these conversations in field notes. These informal, yet important conversations provided me with opportunities to try out my thinking about a new kind of methods course and they were integral to the development of the course components.

The components of my course design (organizing questions, texts, tasks and social organization) would provide a framework

through which the work of the course would be accomplished and studied.

The organizing questions provided direction and focus for me as I sequenced the new course and later for my students and me as we explored how to plan to teach content for understanding in a secondary setting to diverse students. These questions provided a map for the planned direction of the course.

Texts were selected to help students study the organizing questions. I chose texts for my students that offered alternative ways to think about the pupils they would teach, the context they would teach in, how they knew their content areas, and how they could think about their content in ways to teach it.

Tasks were crafted and selected to examine the organizing questions as well, working in concert with the texts. The tasks required students to reflect on their beliefs about teaching and learning, helping them view their beliefs from a different place.

I selected content groups as the social organization of the course. I believed that forming content groups would create subject specific environments in which students could consider the work of teaching and learning. Each group, I hoped, would provide various views and levels of content knowledge to consider while they explored learning to teach content concepts for our university classroom as well as the field classroom.

Elements of the Course

Content Area Groups

I carried the idea of content area groups as a social organization and a way of getting work done into many conversations with my fellow graduate students and mentors during the spring and summer of '92. I had spontaneously separated my methods students into content groups the first time I taught the previous version of a general methods course. It seemed a logical way to help students think about developing curriculum, writing lesson plans and objectives, and it was well received. Now I wanted to extend this idea as a way to organize student learning in a new methods course with subject specific aims. I thought that each content group would become a community of learners working through the larger issues of teaching and learning in the secondary environment. I was worried yet excited about this key idea. I was worried that I was departmentalizing and perhaps reinforcing incomplete or incorrect knowledge through a subject specific focus within content groups. I was excited because I saw these groups working to uncover and correct incomplete and misconceived knowledge of content. I also saw the groups working to understand connections between their content and appropriate pedagogy for teaching, the evolution of effective teaching in their content, the power of collaboration in learning and planning to teach, and how disciplines fit into a larger integrated collage of teaching and learning.

My graduate colleagues were thoughtful about what I was proposing. We discussed the "Mickey Mouse" general methods courses

we had taken as undergraduates. We also discussed the reality that small universities with teacher education programs would continue to have generic methods courses for secondary teachers for economic reasons. We also felt that conventional philosophical beliefs that secondary students are prepared to teach through their immersion in content would continue in many of the smaller universities. The conversations encouraged me. My graduate colleagues felt the idea of content groups was interesting, but hard to pull off because I only had knowledge of two content areas, English and biology. I agreed with their cautions, however, I reminded them that it was not my intent to teach content, but to push my students to consider how they might choose appropriate pedagogy through their knowledge and understanding of their content. They pushed me to think more deeply about the idea and the practical logistics of it:

> When I shared my ideas about using content area groups to approach the content areas represented in a generic methods course they (my colleagues) had a lot of questions . . . would this be all year? [same groups]. What if I had only one person in a major field? What readings would I use? Would groups share common readings? Which ones? How would I decide? [j #2, 7-'92, p. 3]

My colleagues were intrigued by the idea of content groups as a social organization of the course and a way of getting work done in a general methods course, but they anticipated a lot of difficulties. Like me, they were concerned about whether I would be able to supply texts for my content groups; they also expressed concerns about the feasibility of addressing all of the contents represented in my course. Would I be able to help students access their content when I didn't have a deep knowledge of their content?

These were valid concerns and proved problematic for my students and me at some key places in the course.

> My colleagues felt the idea of content groups was a good one, especially since [few] content methodology courses existed at the university at which I taught. Even if I could not address each one in depth, at least they would be addressed through collaborative efforts and projects guided by sound texts. The prospect for reflection on beliefs [about teaching that content] was also very high in content groups where somewhat different takes would be put forth about content [substance]. (j #2, 7-'92, p. 3)

Even though I felt disconcerted by my colleagues' concerns about the reasonableness of implementing a methods course with subject specific concerns, I felt that powerful content specific texts would help me manage the various contents. Further, a careful selection of texts that cut across contents and looked at effective ways to think about teaching and learning would bring expert content voices and teacher education researcher voices into the course. These voices would be heard in concert with mine.

Organizing Questions

I encountered the idea of organizing a course around a set of questions in an "Introduction to Teaching" (101) course during my assistantship. I remember thinking that was an excellent way to focus learning and teaching. My graduate colleagues had also taught courses developed around important questions and asked about questions for my new course in our early informal conversations. I framed the course around four organizing questions: (1) **What does it mean to teach in a secondary setting?** (2) **What does it mean to know one's content?** (3) **What does knowing one's content have to do**

with teaching it? (4) What does it mean to teach[content] for student understanding? These questions developed from key ideas I identified as I actually planned the course and my syllabus. In addition, the questions grown from these important ideas addressed many of the problematic areas in the old methods course.

An awareness of equity and access to knowledge in the secondary school, the diversity of the student population and the constraints of the secondary setting could be developed through exploring the question, **What does it mean to teach in a secondary setting?** Student beliefs about teaching, learning and knowing their content and a vision of the kind of relationship that might be developed between the teacher, learner and the content could be surfaced through the question, **What does it mean to know one's content?** The ideas of reflection, representation of knowledge, and informed pedagogical decision making could be examined through the question, **What does knowing one's content have to do with teaching it?** Thinking about how teachers understand and teach content effectively and ineffectively, and how students understand content so they can build new connections to their current knowledge base, could help preservice students examine the question, **What does it mean to teach [content] for student understanding?**

The organizing questions also provided a basis for identifying specific texts and related tasks that provided a window into each course question. As I developed my syllabus and course calendar certain texts seemed appropriate for each question,

and tasks developed naturally under specific questions as well [see figure 1, appendix].

Texts

In helping the content groups think about teaching their content, I believed I needed texts related to each subject area. I believed that with powerful readings specific to teaching and learning in the various contents, I could help my students begin to think about how their knowledge of content directed them toward appropriate method.

My course texts, subject specific and specific to teaching and learning, emerged out of early conversations during the spring and summer of '92 and my own memories of key texts I had taught in TE 101 as a graduate teaching assistant. These texts would help students make the kind of connections within their content that I could not, given the limits in my own subject matter knowledge in many fields.

Many of the content specific texts came from suggestions of colleagues who had taught sections of two other courses, "Learning of School Subjects" and "Curriculum for Academic Learning," and others who had worked with specific texts and authors through research in some of the Professional Development School sites. Many of the texts that cut across contents to talk about good teaching and the issues, reforms, and constraints of the institution of school, came from teaching "Introduction to Teaching" (101). Others surfaced through listening to others who also taught TE 101 as

they met to try to make sense of how entering preservice teacher beliefs could be surfaced and examined through the texts and tasks they were reading and implementing.

> T gave me one of his papers which looked at understanding the student and how students perceive content. R gave me the NSF guidelines and "Real Students Take Chemistry and Physics: Gender Issues in the Classroom," a chapter from Kahle's Looking in Science Classrooms (I've ordered the book] and "Teaching Science" by Anderson and Smith, a piece that looks at conceptual change teaching, and also the video, "Private Universe." This looks at scientific misconceptions and how to intervene as a teacher to help students correct their misconceptions. [j#2, 7-'92, p. 3]

I decided to use the above texts for the science content groups, I thought at the time that the Kahle chapter would also be a good choice to use across content as we looked at gender issues in the secondary classrooms. It would help me question students' thinking as they thought about the responses given to males and females in each content area.

Using common texts that all content groups would read was a necessary part of this idea of collaboration within and among content groups. The big ideas explored in these texts would help students learn about teaching in general as well as teaching content areas.

The possibility of putting together a packet of excellent materials that were also content specific in a short time did not make sense and probably would prove miseducative. I needed time to pull together content specific articles. While I had a few good ones suggested by colleagues I respected, I did not have time to go

in search of more. That search would be ongoing as I developed this methods course further, over time.

Because of this constraint my colleagues and I felt I would need to become skilled in trying to help my students make connections to many contents with common readings.

> We also talked about how difficult it would be to find [good] readings that would address each content area, so I would have to make connections from other readings to content groups that might not have a specific packet of texts. [j#2, 7-'92, p. 3]

As we talked about the difficulty of finding subject specific texts, a graduate colleague mentioned her experience in the course "Teacher as Learner" and how the instructor, Dr. Feiman-Nemser, had asked them to write pedagogical autobiographies, and how personally helpful and powerful the experience had been. These pedagogical autobiographies could certainly represent and provide texts for different disciplines. My fellow graduate student offered me hers as a science educator and suggested another doctoral student as a math educator. I really became excited thinking about the possibility of having papers for each discipline, and I was also excited about how this might help my students as they wrote their own personal narratives, an idea I had started to think about as a task for my students. I thought at the time that it would be something they could read after they had gone through the process of writing their narratives to help them think more deeply about their experience as they compared it with a content teacher who had done a much more detailed "looking back."

I asked a number of people if they would share their pedagogical autobiographies with me and many were not willing to do so. Some who were willing had backgrounds in elementary education and I did not think these would be appropriate for secondary content groups. However they might be appropriate for an introductory teaching course at some point in time.

> I became really excited thinking about using these autobiographies because of the [personal] 'story' of beginning to think about a discipline in a different way and the process of getting there and beyond. I envisioned one for each content group to use for information and for a model about how they needed to be thinking about their content. I was also excited about using these autobiographies as a sort of model to help students look at their own personal narratives as they developed them over the semester. [j#2 (added as I reread early entry) pp. 8-'92, 50-51]

My science education colleagues and I met again for a brief time in the Spring of '92. I was still trying to think about and collect texts that might help students think about their content areas, how they knew them and how they could translate their thinking and knowing into ways to teach for student understanding. They suggested that I talk to another mutual colleague about other texts because she had taught, as part of the science group, two courses--Curriculum for Academic Learning and Learning of School Subjects--in a thematic teacher education program at Michigan State University called "Academic Learning."

Cindy seemed interested in my ideas for the revision of a general secondary methods course. I explained that a lot of what I had been thinking about, as far as format and intent, was based on my experience teaching TE 101.

Cindy was interested in the idea of content groups in a general methods course and the content specific texts I was seeking, but like my other colleagues she expressed doubt that I would be able to manage it with knowledge of only a few of the content areas.

> C thought that the content groups sounded like an interesting idea but she wondered how I would pull it off since I did not have knowledge of more than two contents. I told her I was worried about the same thing but with readings specific to teaching and learning in various contents I felt I could help them to begin to think about how [their knowledge of] content directed them toward appropriate method. [j #2, 7-'92, p. 5]

By this time my doubts had dimmed, pushed to the background by my excitement and my conviction that if I could get the right texts, create effective projects, and question effectively, the contents would become the lenses through which we would view all that we thought, talked and wrote about good teaching and learning. Cindy suggested Wilson's article "Peering at History Through Different Lenses" (Wilson and Wineburg, 1989), and "The English Teacher as Respondent to the High School Writer" (Dunn, Florio-Ruane and Clark, 1989), as well as "Understanding Understanding" (Nickerson, 1985).

Tasks

Accomplishing course work through reflective writing. I decided that most of the work the students would do in the course would be through reflective writing. They would keep a dialogic journal where they would discuss and react to their assigned readings; a content group journal where they would write about the discussions of their content groups and any insights/discoveries

they made connecting discussions and readings to teaching their content; a personal narrative where they would analyze an instance of content teaching in which they were the learner with the help of class readings and discussions; and a field reflection paper in which they would report, reflect on and analyze their field experiences in relation to new information they were exploring in TE 204. I hoped that my students would develop new understandings of old experiences and beliefs as they wrote about and examined new conceptions of teaching and learning.

Dialogic journals. My students would be required to keep a dialogic journal for the entire semester to examine their reactions to the texts and tasks of the course and new understandings they would hopefully reach. I hoped this journal would be a place where my students and I could discuss their questions and entering beliefs about teaching and learning, and begin to develop new questions and realizations about teaching and learning. Here is how I introduced the dialogic journal in the syllabus.

> Much of the material we will encounter together will be difficult and not easily integrated into any existing framework of knowledge about teaching and learning you may already possess. We will be exploring and, perhaps, building new frameworks together and adjusting some existing ones. Writing about the issues and concepts we encounter in the texts, class conversations, and content group interaction will help to develop and clarify your understandings. Dialogic journal writing will initiate a conversation with the authors of course texts and your TE 204 instructor that will continue throughout the semester. This conversation will be focused on assigned readings, class discussion, group work field experience, and related questions posed in response to your journal entries. Journals may also be shared with your peers

> in 204. Journals will be collected on a rotating basis. [syllabus, Fall '92, p. 3]

Content journals. I also decided that my students would keep another reflective journal, the content group journal. Each content group would be responsible for one journal, and the members would share the responsibility of writing in this journal each week for the duration of the semester.

> Each group will be expected to keep a group journal. You will be given time in class to write about the activities, discoveries, conversations, new ways of thinking about the work of teaching, etc. Each week a different member will be responsible for recording the journal, however, all members are asked to contribute ideas and information to the recorder. [syllabus, Fall '92, p. 4]

I believed this journal would provide great insights into the content group process for me, and into students' thinking about their content in relation to the texts and tasks of the course.

Thinking about dialogic journals and content journals. I told Cindy about my intent to use dialogic journals. I also shared the idea of a content group journal for each content, that individual members would take responsibility for each week. She was skeptical about the amount of work I had planned for myself and whether I could do all that I planned. She suggested that I collect both journals on an alternating basis.

> I told C that I wanted my students to keep a journal in which they responded to the readings in detail each week. I also wanted them to keep a content group journal in which they would write about their discussions, thinking, decisions, they would perform within the content group, taking turns after each

> week's class meeting. We talked about the reality of my being able to correct [respond to] all of these journals each week/close to 70 [dialogic and content group] between the two methods groups. With the graduate course I would also be teaching as part of my load, this sounded impossible. C's suggestion was that I collect journals on a rotating basis so I would see each journal 4-5 times per semester. This was her approach in TE 205 . . . sounded much more manageable. [j #2, 7-'92, p. 6]

Fieldwork and the unit plan. I also discussed my concern about changing the field component with Cindy, especially the observation portion. The secondary department and the teacher education department required fieldwork for each methods course. For this course, twenty seven hours of field experience, divided between observation, tutoring, and actual teaching in a secondary content classroom, was required. I wanted the ten hours of required observation to be structured, so that students were looking for specific things, discussed by the texts we were reading, not just what the classroom teacher was "doing."

Cindy gave me copies of her syllabi (from TE 205C and TE 200C) as well as information on unit planning and field observation from these courses, to help me in my thinking about these tasks for my students. I wanted the unit plan to be more than just a list of materials and resources that my secondary students would check off as they added them to their plan. I wanted the plan to be a collaborative effort within the content groups, and I wanted the unit plan to be developed through their knowledge of content as it evolved through the semester.

I wanted each of them to take away a unit plan that they could indeed teach, and that embodied the depth of thought that can happen through the contributions of many. This unit plan and the steps they would follow in conceptualizing and planning it would be not only a product they could be proud of but a model to approach planning a unit. They would not have any sense of the implementation because they would not be required to teach it.

The old methods course seemed like an ideal beginning to think about structured observation, tutoring and lesson planning, and the actual implementation of some of those lessons, designed by content groups. I thought the unit plan would have been more appropriate in the advanced methods course, taught right before student teaching with much more field teaching. At this juncture, however, the unit plan was required by the department and had to be implemented.

Field reflection paper. I asked my students to describe, in a narrative, what they observed and did during their twenty-seven required hours of field, based in rural, suburban, and urban sites with regular and special education students. Then they were asked to analyze their narrative according to realizations they had reached through course texts, tasks and conversations.

Requiring the paper instead of the standard field log was an important decision. My students would be able to tell the story of field and then proceed to interpret it according to the understandings they had achieved during the course, at many

different levels. I hoped this would help them make connections to the course instead of looking at the field experience as isolated from their content and the content of our methods course.

Thinking through the mini-teaching assignment. Because my course was heavily field based as part of the larger program, my students would need to teach three lessons in assigned secondary classroom as part of their requirement. I believed that they would need to practice teaching lessons using the new knowledge about teaching and learning they would discover in class through readings, discussions, and reflective writing. Toward that goal, I decided to have students teach two lessons as content groups to the rest of their peers. Each lesson would be a collaborative effort in planning and implementation. I wanted their first mini-teaching lesson to occur early in the semester to assess what they thought they already knew about teaching a lesson.

Their first mini-lesson would be based on a "teaching about the moon" project I knew from my involvement in the Introduction to Teaching course (Feiman-Nemser and Featherstone, 1992). In this project students looked at their own learning and developing subject matter knowledge in ways to teach it. I wanted to take a different slice at the TE 101 project, however, and ask my students to teach a concept from their content area using information about the moon as a context for their teaching. I thought this assignment would help them begin to see how they could connect their content concepts to interesting ideas outside of their field. My students would also

use observation and moon journals to think about the moon as a context to teach their content concept.

I wanted their second mini-lesson to occur later in the semester right before they had to teach in the field. This mini-lesson would be an attempt to teach about a content concept in more than one way, based on the article "'150 Different Ways' of Knowing: Representations of Knowledge in Teaching" (Wilson, Shulman, Richert, 1987). The concept of "representing knowledge" is a difficult one and my students would need lots of exposure to the idea and to practicing the idea in a teaching situation. I thought that these mini-teaching lessons would help my students collaborate in conceptualizing the work that goes into teaching a lesson and in actually teaching the lesson. They could also teach these lessons again in their field placements.

Thinking through the personal narrative. I spent an afternoon in late July with Laura, discussing narrative as a vehicle for surfacing student beliefs. Another colleague had told me that Laura was basing her dissertation study around teacher narratives and I was very interested. Laura thought my idea about using the personal narrative was a good one but she gave me some advice that I didn't want to hear. Laura thought it sounded viable, but as the major vehicle, not combined with all of the other things I was talking about--dialogic journals, content journals, unit plans [j#2, 7-92, p. 7].

I really was not expecting Laura's counsel to take this tone. I perceived her words as negative even though, looking back, they were reasonable. I felt pretty insecure at this point and it took me a while to pull myself back to a point where I could begin to put this methods course together as it existed in my original vision. I had lots of excellent advice, but I tenaciously held onto my original conceptualization of keeping all of the parts of the course intact as I had imagined them, and that included the personal narrative.

I had been interested in the personal narrative as a vehicle for preservice students to surface beliefs about teaching and learning since I had listened to Dr. Diane Holt-Reynolds relate how she had used the personal narrative format in the Introduction to Teaching course (101). I had also found it to be revealing for my 101 students as they looked at their beliefs about teaching and learning. I had taken a little different turn on the idea for my methods course.

> I conceptualized the personal narrative as a context for students to view teaching and learning[through] as they progressed through the course. I thought it would be a place that I could look for change in beliefs/confronting beliefs/identification of beliefs/understanding where some[their] beliefs about teaching and learning had come from . . . [j#2, 7-'92, p. 7]

I planned to use the writing process approach with my students as they started with a significant learning episode in their content area as a student. This task would provide another window through which students could view their beliefs about teaching and learning as they examined their own learning. It was also a place where I

could intervene and direct their thinking toward certain concepts explored through the texts of the course. Revisions of the personal narrative were scheduled after students read and discussed key texts in the course (Hawkins; Wilson, Shulman and Richert; and Anderson and Smith). I hoped these revisions would show me how they were thinking about their learning and teaching episode in light of new information about effective teaching and meaningful learning.

> You will be required to write a personal narrative about teaching and learning in your content area. Your narrative will concentrate on an episode of teaching and learning, in your secondary content area, in which you were the learner. You will begin writing your narrative on the first day of class and you will continue to revise and extend it as the semester continues. Your narrative will look somewhat different as you expand your knowledge base about teaching and learning through your experiences in TE 204. You will do three revisions and a final analysis of your narrative. [syllabus, Fall '92, p. 5]

Laura suggested two books, Teacher Lore: Learning from Our Own Experience, Shubert and Ayers (ed.), and Stories Lives Tell: Narrative and Dialogue in Education, Witherell and Noddings (ed.), and an article " Retrospective: autobiography and the analysis of educational experience" (Grumet, 1990), that I might read as I thought this task through.

Conversations with my peers highlighted problematic areas again and again and forced me to think about the realities of the course again and again. I remember listening and feeling that they were right; however, I was unable to bring the objectivity they possessed to the task. My colleagues were looking at a "course"; I was looking at a symbol of what I had learned and who I was becoming as a teacher educator and an individual. My vantage point

prevented me from seeing the problematic areas of the course in the same ways my colleagues did.

Course Structure and Syllabus

My syllabus was very detailed because I attempted to explain for my students the ideas behind the course, the organization through the focused course questions addressed earlier in this chapter, and the purpose of the course projects (tasks) and readings (texts).

I organized the course around some important ideas that spoke to the essence of what I wanted to happen in this course. I wanted my students to walk away from this course with an awareness of the profundity of teaching in relation to who they were, in relation to their content and their interaction with their students. I wanted to foster the beginnings of a new understanding of the work of teaching. I wrote about this in my introduction in my syllabus.

> TE 204 is designed around classroom and field experiences that challenge you to examine your beliefs about subject matter knowledge and what it means to teach for student understanding in the context of a secondary school. You will be asked to consider how what you know and how you know it informs your choice of what to teach and how to teach it. [syllabus, Course Description, Fall 1992, p. 1]

I wanted my preservice students to grapple with certain key ideas through the content and experiences of the course. I felt that they needed to become aware of issues of equity and access to knowledge in the secondary schools they would teach in; the diversity of the adolescent population they would teach their content to; and the myriad constraints of the secondary setting. I

also wanted my students to examine their beliefs about teaching, learning and knowing their content, and to compare their beliefs with those of other content teachers introduced through the texts of the course. I wanted my students to realize that teaching and learning presupposed a relationship between students and content, fostered by the teacher.

My students needed to recognize that they could be limited in their teaching by the level of their content knowledge. I wanted them to recognize the importance of pedagogical reasoning and informed decision making. I hoped they would come to see how one content area links to another content area.

Finally, I invited my students to participate, as a members of content groups, in a collaborative learning experience. I hoped that they would carry this idea into the professional setting of teaching.

> The design of TE 204 will also provide opportunities for extensive peer collaboration, as you wrestle with the work involved in planning for instruction in your particular content, as well as personal and group reflection on issues that arise from course texts, individual writings, experiences in the field, and course conversations. [syllabus, Course Description, Fall 1992, p. 1]

Ready for the Adventure

The decisions that I made during the planning of the course had a lot to do with the conversations I had during the spring and summer of '92, the experiences I had as a secondary teacher, a novice teacher educator, an Introduction to Teaching (101) instructor, and a graduate student for three years at Michigan

State. Most of the texts I selected I had encountered as a graduate student or instructor of TE 101. I wanted my methods students to begin thinking about teaching in the secondary schools differently. I wanted them to surface and think about their beliefs about teaching their content to diverse student populations so they could clarify and define those beliefs and defend them in the face of current research on teaching and learning. I also wanted them to think about their content and how they needed to understand it in a multiplicity of ways to teach it effectively.

The decisions concerning the texts, tasks, and social organization for the course were made to facilitate student identification of and reflection on personal beliefs, and to provide a good measure of dissonance to mix into their firmly held beliefs. This plan seemed possible and even powerful. As I thought about my hopes for my students and myself, I pictured us a learners and researchers involved in the study of teaching. I was very excited to see how the idea of content groups as focused communities of inquiry would work to surface or clarify misconceptions about teaching in secondary schools. I was also interested to see how small collaborative learning communities might help all students have greater access to the content of the methods course, and whether these groups would help one another deepen their knowledge of content in some way.

I was gently cautioned during my early conversations about the scope of the course I wanted to implement. I sensed that my colleagues were correct in their counsel, but I chose to ignore them

at the time. An inner struggle, however, ensued and continued throughout my inquiry, as I replayed their warnings. Was I somehow misrepresenting myself as someone who could teach this course? Was I being dishonest with myself and ultimately with my students? Would my lack of knowledge in some content areas cause some students to benefit more than others? In attempting to make my vision of a new secondary methods course real would I compromise my students' learning?

I knew that I had planned a complex course and recognized, at some level, that the amount of work for the students would be great, but they would not be doing the work of the course alone. They would have the support of their content groups and I would be working with them and learning right along with them. I had my syllabus, thought provoking texts, and interesting tasks for my students and me to interact around. I was buoyed by my excitement and the unknown things we would discover together and separately. I was nervous, expectant, and ready to begin an adventure with my students.

CHAPTER V

GETTING THE COURSE STARTED

Overview of the Chapter

In this chapter I describe my first meeting with my students and what I brought to our opening encounter-my beliefs, anxieties, uncertainties and excitement. What my students brought is considered as well. I describe initial organizational tasks necessary to begin the course and the students' responses to those first tasks. Finally, I discuss what I took away from our first class--my thoughts, continued uncertainties and new questions. This is a chapter about the importance and impact of beginnings.

The Importance of the First Day

The first day of any course I teach is very significant to me for a number of reasons. It is the time when lasting impressions are sometimes formed about the instructor and the work of the course. It is also the time when students begin to develop notions about their role in the course. In this instance, the first three hours my students spent together were given over to getting to know one another in relation to closely held beliefs about teaching a content, and teaching and learning in a broader sense.

At this first meeting my students and I prepared for a journey together and began to build an atmosphere of trust as we shared beliefs about teaching and learning we brought to the classroom. It was also the time that I explained and began to model my teacher role as facilitator and learner.

What My Students and I Brought to the First Day

My students came to our first meeting with preconceptions about the methods course. They had knowledge of the other beginning secondary methods course that had been taught before, as well as information about how the previous instructor taught, passed along by peers who had taken it before them. So they brought preconceived ideas and expectations about what a secondary methods course would be like.

On the first day of class I asked students: "What do you hope to take away from this course?" They said that their methods course would be where they would find out all they would need to know about how to teach, especially since this methods course contained a field component. For example students expected to learn about components of the teaching process that they would then apply to their content in some manner in the field [j#1, 9-1&3 '92, p. 5].

I also expected students to measure the information in the course against what they already knew about teaching from years of observing it (Lortie, 1975). I sensed that they would think of me as a new instructor teaching the same things that were

conventionally contained in a fairly typical secondary methods course.

I did not do a very good job of containing my excitement about our working together, but I was more successful in covering up my uncertainties generated by the advice given by my graduate colleagues, momentarily pushed aside by my construction of this complex course and my vision of what could be.

The mood at our first meeting together was one of reservation on the part of the students, indicated by sighs, incredulous facial expressions and initial quietness, along with a measured willingness to "go along" with a plan that seemed to be different than the conventional fare of typical secondary methods courses. Students indicated this by unsolicited positive comments such as "sounds like fun," "sounds like hard work but interesting" or "wow, I never knew there was this much to think about" [marginal notes, lesson plan 1, 9-1, '92].

Organizational Tasks

Explaining My Study

I knew I had a lot of ground work to lay before we could begin to think about planning and instruction, which secondary methods students believe should be the entire focus of the course. I suspected that the students would not be receptive to this foundational preparation. They would expect answers and packaged steps to insure their success in the field, historically considered the most important part of the methods course.

> It seemed necessary to me to help these students build a foundation of knowledge of teaching and learning [based on current educational research] because they have only had an introductory course at this point, that consists primarily of a field observation (80 hours) . . . while the observation is helpful because of conversations with teachers and students they teach, it is not particularly structured or designed for preservice students to come away with new knowledge of teaching pedagogy, rather it seems to add to the hours of Lortie's apprenticeship of observation [j#1, 8-92, p. 1]

I spoke to my first section about my work as a graduate student at Michigan State University and about my belief that the "method" in teaching grew out of one's knowledge of content and context. I explained that this course was my response to those general secondary methods courses that separated content from methods and proposed a list of strategies to be utilized in any content area. I also explained that this course had never been taught in this way before. Their response and mine, as I watched all of us approach this course in secondary methods with content specific concerns, would define my dissertation study.

I explained my intent that our early meetings would be given over to interpreting the plan for the course, given to the students orally and formally through the syllabus. It would also be the beginning, I hoped, of a co-construction of some shared understandings of issues and concepts in teaching secondary students content, and teaching in a secondary setting. I also intended that these early meetings would help us to begin to know one another through our beliefs about teaching and learning, surfaced by the early texts we would read and related tasks we would work through.

A common "text" we would share through the semester was the syllabus.

Introducing the Syllabus

As I invited my students to look over the syllabus, a silence settled over the group. They read the syllabus along with me and made notations on it, rarely lifting their heads as they read. I commented a few times on their silence and attempted to persuade them to think of the course in chunks instead of in its entirety. Some stated that they had never had a syllabus this long before and that it was difficult to comprehend it all at once [journal #1, 9-1, p. 7]. I explained that the syllabus would be a constant reference for them as the semester progressed, through the indepth explanations of the course components and tasks and the focused calendar listing due dates for course texts and tasks.

The silence was daunting and my excitement was tempered by the air of anxiety created by the exploration of my syllabus. I thought a thorough explanation of each course element would relieve student anxiety. This was the first time I doubted, if only momentarily, whether I could teach this course in this form. I mentally noted how difficult the course sounded and the enormous amount of reflective work, all designed to help my students connect their content to learning to teach. They were not expecting this and did not yet know how to think about it [j#1, 9-'92, p. 6].

Fastwrite #1

For a first step toward getting to know one another through our content, I asked my students to perform a fast-write (free-write), "Teaching [their content area] is . . . ." This would provide interview information as my students took time to know something about a fellow student and their content area, and would provide me with information about entering student beliefs about teaching in their content areas and teaching in general.

When they exchanged fast-writes I asked them to interview one another. They were asked to pose, and, in turn, answer the question. . . . **Where do you think these beliefs originated?**

After completing their fastwrites, exchanging them and interviewing one other based on the fastwrite, students introduced one another as content majors and relayed the beliefs their fellow student held about that content, sometimes agreeing with their content peer's views.

Many of the responses were predictable, and echoed typical preservice teacher beliefs, and tended to define the majority of preservice beliefs of both sections of TE 204, across the boundaries of all contents represented. Even though they spoke about teaching a content, many still connected familiar characteristics to teaching a content well (e.g. making it fun, interesting) and attributed to good teachers' patience and understanding. A student of mathematics based effectiveness on personal characteristics rather than knowledge of content, while a music student stated that she already knew all she needed to know to teach:

> ". . . secondary math teachers are successful only if they are patient and understanding . . ." [fw #1, 9-'92]
>
> "Teaching art is fun and interesting." [fw #3, 9-'92]
>
> "Teaching in music is anything and everything but a challenge to me in terms of working . . . with high school students." [fw #11, 9-'92]
>
> "Teaching English is fun for both the student and teacher. . . . English is used everyday so it's easier to explain "why" it's needed, unlike math . . . (fw #23, 9-'92)

A few student responses did not fit with typical preservice student beliefs and represented a minority of students in the two sections. These individuals tended to be older, non-traditional students, who had worked for a number of years in other professions.

> "Teaching art is experiencing life . . . I see my world as an artist . . . communicating political, worldly visions through the creation of artwork . . ." [fw #8]
>
> ". . . teaching music must be done at the student's level, must have elements they can relate with . . . an openness on the part of the teacher to be sensitive to the students' attitudes, belief systems, and build on what they already possess [fw #5]

These fastwrites gave me information about how students were thinking about teaching in their content, what beliefs about teaching their content they brought with them and where they might have come from.

Forming Content Groups

The social organization of the course was a key component of the larger plan. All of the work of the course flowed through and out of the content groups. Because of their importance to the "plan," early formation and tasks were critical in setting the stage

for further work in the course. During our first meeting, I asked students to write their majors and minors on a 3x5 card. During the break I grouped the cards and formed tentative content area groups. In a few cases I had singular majors who did not have others to form a group with. These students were encouraged to join groups which represented their minors. In the teacher education program, they would be required to teach, observe, and tutor in their minors and majors at some point in time.

I tried to match groups for interrelatedness; a drama major became a member of the art content group and an art major, English minor became a member of the English group. These groups were encouraged to incorporate these majors into their thinking and planning.

Since the content area groups would be the locus of the texts and tasks in the course, I spent a long time explaining the expectations, focus and role of the content groups in this methods course.

> When I spoke to students about expectations for content groups, I told them that I expected them to share all of their thinking with one another even if there happened to be conflict in agreement . . . I wanted to know what they found hard or helpful about thinking about the "substance" of the course, texts, planning, discussions, analysis of articles [and essays], and [other] group tasks through the lens of their subject matter. [j #1, 9-'92, p. 9)

I again expressed my belief that content and pedagogy cannot be separated. I explained that it was critical to make knowledgeable decisions about how one might teach a particular concept within a content area, and that all methods would not accomplish an effective

connection/bridge for students to understand the concept being considered.

I told my students that the formation of the content groups would allow them to have a particular context from which to view and co-construct elements of good teaching from texts and tasks we would involve ourselves in during the tenure of our course. I repeated the importance of this organization often throughout the first weeks of the course.

I posited notions about group endeavor and what might happen. I gave examples of group members who were not verbal or giving of thoughts and ideas during discussions, members who did not show up for meetings outside of class, if they were needed, or did not come prepared to discuss texts or perform tasks in their content area groups. I described members who had accepted a job or role but did not perform it wholeheartedly, or at all, and equality of commitment.

I used examples from my own participation in groups and brought home the idea that all participants needed to contribute their strengths to the group in ways that would carry the group forward with their teaching and learning inquiry, in the course. I shared a personal experience as a member of a group during my graduate course work. I was faced with the uncomfortable fact that many members in my group, and I, were silenced by two dominant voices in the group. This went on for a time and I became more distressed by these events as did others. I told my students that I finally decided that I needed to approach these individuals separately and

let them know what they were doing. I really did not believe their actions were deliberate, so they needed to know how they were affecting the dynamics of the group. Because of my communication with these members things changed and other voices then had a chance to be heard.

I questioned my students about the choices I had as a group member and asked them what might have happened had I chosen to do nothing, or to confront within the group. Most students were against confronting in the group. Some students offered a "wait and see" solution, writing a letter to the offender, or ignoring the situation and getting the work done. I was surprised at their responses. I thought they would have been in favor of confronting, negotiating, in some way making their voices heard. These were individuals who said they had not been asked to collaborate, especially in instances of learning. I found, however, in the course of the study that this notion of collaboration was easy for most to implement.

The basic investment here, with a content area group, was commitment to the idea of collaboration and then taking the responsibility to be a fully functioning member of the group, therefore supporting the other members and approaching problems that might occur within the dynamics of getting work done.

My students appeared to be initially intrigued by the concept of content groups as a social organization for the course and by the notion of thinking and talking about teaching and learning through the context of their content. Students were talking to one another

about who would be in their content group as they returned from break. I heard a few students commenting that the course sounded like it might be interesting. I did not hear any negative comments about the idea of content groups at this time.

Goodlad's Goals for Schools

Our first task together within the social organization of content area groups was to work with "Goals For Schooling In The U.S." framed by John Goodlad (1984, pp. 51-56). These pages from "We Want It All" in A Place Called School, list the most commonly identified goals for schooling gleaned from a historical search and review of multiple school documents, state and local, as part of his study of U.S. schools. Goodlad presents these goals as a "guide" for those involved in the work of school and as a "beginning point in the dialogue about education" (p. 51). Goodlad groups his goals under the headings; Academic, Vocational, Social, Civic, and Cultural, and Personal. I thought this would be a good piece of text to get my students working together in their content groups, as they considered some identified concerns for schooling. I also thought that initially dealing with nationally perceived goals for schools from the perspective of students who wished to be secondary content teachers, would move us nicely into my first organizing question **What does it mean to teach in a secondary setting?**

Student Responses to the Task

In this early part of the course the students took on the idea of content groups with enthusiasm. As I visited each group on the first day, I observed them exploring their first group task, reading and responding as content teachers to Goodlad's Goals, in relation to the following questions: How do these goals concern you as a teacher of content? How do they concern you as a teacher in a secondary school? Are they realistic? comprehensive? What do they imply for teaching and learning? Do you see any problems in carrying out these goals? Students' voices were animated, excited and everyone, without exception, contributed to the content group discussions. As I walked around, pausing at each group, I found my own excitement growing. Students were interacting with one another and sharing their ideas and views freely. I had assigned particular groups to particular headings: science, physical education and mathematics to academic and vocational goals; history to citizenship participation and enculturation under social, civic, and cultural goals; English to interpersonal understanding and moral and ethical character under social, civic, and cultural goals; art, drama and music to emotional and physical well being and creative and aesthetic expression under personal goals. Each group attempted to decide how these goals would affect them as secondary teachers of content, what their responsibility might be to promote these goals as a secondary content teacher, whether they were comprehensive, and what they might imply for teaching and learning. I also heard my

English group struggling to think about how they might deal with the moral and ethical goals Goodlad sets out.

I gathered the following statements from the various groups I visited as they discussed their assignment. The mathematics group thought that goals were "the things that school board meetings addressed" and made sure the community knew that the goals were being addressed. They saw teaching and Goodlad's goals at odds and appeared to want to take no responsibility for working toward goals; "There is no time to teach and cover goals. There is only time to focus on content areas and curriculum. I wouldn't even read these goals . . . a teacher needs to accept responsibility for his own decisions" [j#1, 9-'92, p. 14, grp. 2) This group seemed to see teaching, curriculum design and content decision making as a solitary endeavors. The history group considered Goodlad's goals "outdated but noble" and questioned the relevancy and the possibility of working toward them. They did agree that understanding one's teaching environment is important in presenting the content and must be considered if teachers intend to be effective with students. They spoke of the environment as "relative and relevant" and they believed that events in history needed to be presented in ways that "do not sacrifice important pieces of content" [j#1, 9-'92, p. 13, grp. 2] They spoke of utilizing many sources to create a true rendition of a historical event. This group projected an interpretive view of history that seemed to embrace the goals they referred to as "outdated but noble."

One English content group struggled with the moral and ethical goals and how they might apply these goals to their classroom. They tried to connect some part of Goodlad's goals to what was happening now by connecting them to the teaching of The Scarlet Letter. They thought, together, how they might connect the novel to a contemporary moral issue their students might be dealing with, that might have the same or similar social impact that adultery had during Hester Prinn's era. They linked this Puritan view to current societal beliefs about AIDS victims today, and tried to make some connections for their students. I asked them whether their students could understand the implications of adultery from their vantage point in 1992. I asked them what they would need to do as teachers to provide a background for their students in order to bring the issue of adultery into focus [j#1, CSW, p. 16, 9-15-92].

Some students talked about time constraints preventing them from thinking about broader goals for schools. I got a sense that some students thought they alone should be the ones to decide what goals needed to guide their teaching.

A history student expressed a belief that teachers in urban areas are unable to teach because of the environment, so the "ideals" that Goodlad compiled would not apply there. He stated further that these goals might work in a suburban area, but "never in an urban area." I was intrigued by his statement and his group members' seeming acceptance of it so I probed further as I took on the role that I wanted to play with the content groups. His view of the urban area schools was a stereotypical one. He didn't think the

urban teachers taught much, "they just basically survive." I said, "It sounds like you are saying that urban students cannot be expected to learn anything and the teachers cannot be expected to teach anything because of the constraints of their environment." I asked him further if he was giving the teachers an excuse not to teach and the students an excuse not to learn, and further, if he believed that teachers did not teach in urban schools. He stated that "urban schools are war zones" and students are equipped with "guns and knives" so teachers were afraid of their students and that he was "just stating reality." I asked this student if he had ever attended or been inside of an urban school and he responded that he had not. When I asked him what he was basing his belief on his reply was "the media" [j#1, 9-'92, pg 11, grp. 1]. Other students said the goals were too perfect and did not apply to the reality of any of the schools.

One student was upset by the task and told me, in class, he didn't need this "theory," what he needed was "real" information to help him in the classroom. When I asked him what he meant by "real" information he stated that he needed to know what to do when a kid wouldn't do his homework or come to class. He didn't want to know what the ideals were. They would not help him become a good teacher. I told him that I understood that many individuals did not think that theory was important in the profession of teaching. These individuals believed that teaching consisted of codified rules of behavior to follow, quick tricks, and easy solutions. I told him that I believed there was more to learning to teach effectively and

asked him to stick with our course plan and write about his feelings in his dialogic journal. He agreed [annotated lesson plans, p. 2 9-3, '92].

Some student responses were predictable, such as placing the responsibility for learning with the teacher" . . . the goals must not be being met if students are graduating with a third grade reading level . . . in order for the teacher to get the student motivated to learn the teacher must be motivated to teach. . . ." [English, group #1, p. 2].

Others were surprising, reflecting views that students had about their content, its role in the secondary setting, and the students they might be teaching; "Our second set of 'goals' related to social and civic goals. It was unanimous that although the science disciplines will not actively teach these goals . . . we, as teachers, must understand them in order to successfully negotiate the classroom dynamics. We will reinforce and influence, not instruct. We must present the positive values by demonstration" [Science group #1, p. 3]. This group of individuals seemed to think of the goals as almost foundational to understanding their role in the classroom. They also stated that they will "live" the goals and teach them by example. As a group of potential science teachers, they did not see "their goals" as limited only to Goodlad's academic goals.

During our first meeting I explained that we would routinely bring closure to our small group discussions each class session by debriefing in the larger group. Content area groups would discuss

and carry out tasks in their focus areas and then bring their ideas and conclusions to the whole group for consideration. My students, in their first group experience, took this debriefing to a level I had not even considered. I envisioned that my content area groups would stay focused within their own group. As they were debriefing in the larger group after the Goodlad task, I was surprised to hear one of my "academic goals" groups advising the physical education group about how they might think about connecting the academic goals that Goodlad had listed to their content. The physical education students stated that they had found it hard to connect their content to these goals. The advice was spontaneous and positively accepted. The English group suggested that they could have their students "write about the experience of running a mile, climbing a rope, scoring a goal, or what it felt like to be part of a team." The science group responded that physical education could "certainly be connected with physics, biology, running and figuring velocity, wind resistance, blood pressure, blood levels at different altitudes, respiration, flight of a ball when thrown, hit or kicked . . ." [j#1, 9-'92, pp. 16-17].

This phenomenon of thinking across content occurred many times as the semester progressed. The members of one group would help members of another think about how they might teach something, interpret something from another focus. The groups did not become isolated communities, they always retained their membership in the larger group of members of TE 204.

My Thinking about the First Day

I remember sitting in my office after my first meeting with each section and replaying my introduction of the course syllabus. I had not looked at it all together until our first meeting and the magnitude of the course was just then settling in. Would I be able to do this? What if I couldn't? What if the students couldn't? What would happen if we couldn't? What would happen to my study?

I also remember reading the fast-writes and highlighting with marker the common beliefs about teaching content that many students had and a few uncommon ones. The general terms "fun," "patience," "easy," "challenging," "understanding" applied to teaching and content teachers were expected, but "experiencing," "openness," "sensitivity," "building," "communicating" were not. I was excited about the uncommon responses and the interdisciplinary thinking that had spontaneously occurred.

Responses to the first content group task helped me to begin to know my students in relation to their beliefs about their content, who they would teach it to, what they would teach, and perhaps how they would think about teaching it. Listening to the content discussions and probing students' statements provided a window into their personal views, views that would influence their professional focus. This kind of important information provided me access to sensitive issues that needed further exploration. Some of my students thought of their content in interpretive and creative ways in relation to teaching and learning it, while others held more

conventional views. Some of my students had inaccurate ideas about the schools they would teach in and the students they would teach.

From the representative statements documented in my reflective journal, I gained insight into what my students thought about the whole business of developing goals that secondary schools would be expected to carry out. I also learned about student beliefs about the role of the teacher, what they were willing to do and what they thought they would be able to do.

These first tasks also helped to bring my students together through conversations about personal beliefs about content teaching as well as broader issues of schooling. Their beliefs about teaching were not very different from the students I had taught at Michigan State University. I was surprised at the strength of the beliefs that surfaced about teaching and learning in urban settings, however, it confirmed my suspicion that my students needed to learn about the differences they would encounter when they taught in diverse settings. I had already planned for this through the texts that I selected for discussion during the first course question explored in the following chapter, **What does it mean to teach in a secondary setting?**

The initial meeting with each section set the tone for the remaining classes, acquainted students with one another and the social organization of content groups, provided students with a long glimpse of the content of the course, and allowed me to "try on" my

complex role as facilitator, learner and researcher. I moved forward from the experience of the first day with high expectations for the semester.

CHAPTER VI

WHAT DOES IT MEAN TO TEACH IN A SECONDARY SETTING?

Overview

When I thought about where to begin, it seemed logical to start with an exploration of the place my students would teach and the pupils they would teach. This was a missing piece in my own preservice education and in the previous secondary methods course I had taught. While field observation, tutoring, and limited classroom teaching experience provides contact with secondary schools and students, contact should not imply understanding.

I designed this organizing question to initiate a challenge to my students' entering beliefs about secondary teaching. Their attempts to answer the course question, "What does it mean to teach in a secondary setting?" would require them to examine closely the context of the high school setting that they had spent so much time in. I wanted students to approach this question as though they were unpacking an old trunk in the attic filled with high school memorabilia, once powerfully defined by emotions garnered from experiential knowledge and now, artifacts of learning and schooling. I would ask them to carefully lift and slowly examine these artifacts in light of new information about learning,

teaching, and learning to teach, gleaned from the texts and tasks of this beginning secondary methods course.

Students explored through instructor selected, commonly shared texts about how schools are structured for some students to succeed while others do not. Through these texts students examined the institutional aspects of schooling, issues of fairness and differential access to knowledge in secondary schools, the diversity of the adolescents they will teach, and what exactly is involved in developing a teaching-learning relationship. Students developed a more realistic, objective picture of the secondary school through selected texts, and begin to look differently at the context of their work. Involvement in learning tasks built around the texts and the course question help students begin to look critically at their own secondary experiences and beliefs about teaching based on their experiences.

Our exploration of the question "What does it mean to teach in a secondary setting?" began with students reading important texts to create a common context for content group and whole group discussion and their responses to those texts. Students worked through learning tasks centered around reflective writing about course texts and personal experiences as learners. In this chapter I report on student responses to these learning tasks.

I also discuss my thinking about the work of the course at the time, including some important conversations I had with committee members as I worked through some difficulties in implementing elements of the course. These conversations were formal in that

they were scheduled, taped and transcribed. Finally I report on what I think about the work of the course now with more experience and distance.

Main Texts for First Course Question

Shopping Mall High School and "Brookline High School." It was important to me that my students first take a realistic look at the complexities of the secondary setting and the pupils they would be teaching there. Cohen, Farrar, and Powell's first chapter in Shopping Mall High School and Lightfoot's chapter "Brookline High School," from The Good High School (1983), provided a common frame of reference for our discussions. I used these two pieces to begin to look at the issue of the different kinds of knowledge pupils in high school are exposed to and the assumptions that drive choices of what to teach and how to teach it.

These two writings portray large urban and suburban schools, providing an arena for talking about teaching and learning and teachers and pupils in diverse secondary settings. I wanted my students to become informed about urban schools since future teaching jobs will be available in the urban areas. Most of my students had never entered an urban high school or a large suburban high school. Their experiences were in small rural settings and culturally homogeneous communities. I tried to assess what they knew about urban schools through the questions "Can you describe the inside of an urban high school?" "What's going on there?" "Have you ever seen the inside of an urban classroom?" "What was going on

there?." Typically, their answers consisted of misinformation in relation to the urban secondary schools here. Answers ranged from inner city schools are "dirty," doors are "chained" to keep the students from "cutting class," to schools are "chaotic." [annotated lesson plans, 10-6, p. 7] Through further questioning, ("Where are your statements coming from-what has happened to make you say this?"), I learned that students' knowledge about urban schools and neighborhoods came from media reporting, "It's all over the newspapers and television." Personal cultural bias seemed to be implied because most students denied ever being inside of any urban school unless they were competitors in sports or sports spectators in the local university area. One student stated that when he went to basketball games there were "always fights and coach got us out of there fast." [annotated lesson plans, 10-6, p. 7] When I asked the students who had been involved in sports competitions in the urban setting whether they had ever seen a fight or been involved in one, all but one individual denied involvement, and most had observed only small altercations involving two or three individuals.

The readings raised questions about issues of fairness, access to knowledge, tensions and constraints of an urban high school, and the diverse student populations found in large urban and suburban high schools. Many of my students were not aware of these ideas; nor had they questioned them in relation to their own secondary experience, something I hoped they would do. I handed out the two excerpts from Lightfoot (1983), and Powell, Farrar and Cohen (1985), and asked students to read them for the following week,

commenting that they would find these high school settings very different from their own, yet they might find similarities as well.

Students picked up study questions at the beginning of our next class and began discussing them in their content groups for thirty to forty minutes. I sat in with each group and joined the conversation by asking for a clarification of a statement, or by asking a question about something I felt the group had not covered in depth. Groups became very comfortable with this procedure and over time I sensed it became expected and welcomed. Early in the course the students would stop talking about the text and/or discussion questions as I joined their groups to listen and question. As they became used to the idea of my listening to what they said and my questioning to challenge them to think more deeply about a text concept, they would "make a place" for me by putting an extra chair (I had brought my own earlier) in the midst of their group. Often they would greet me with a question or a statement beginning something like, "We were just discussing . . . and we were surprised that we had different opinions about what it meant...." Many times I would become engrossed in a content group's discussion and my own questioning to understand their statements, and spend too much time. Members of other groups would approach me and ask me if I would spend some time with them. Many times "spending time" just meant listening to what they were saying and probing now and again to clarify what they meant.

The Daily Grind. I thought that Jackson's (1968) chapter, "The Daily Grind," would provide an opportunity to view a part of school that is sensed yet rarely discussed, the unpublished curriculum. I wanted my students to reflect on their own school experience in light of this idea. In their content group discussions, I asked my students to look closely at what learners are asked to endure as they enter school. I asked them to get in touch with memories or feelings they might have had about the hidden curricula in their own school experiences. I suggested that it was probable that they had learned to deal successfully with the unpublished curriculum and that they probably knew others who had not been successful. This text was important in exploring the first course question because my students would be promoting unpublished curricula driven by their beliefs and expectations of the community their school was a part of.

The Out of School Curriculum. Melnick's (1992) chapter, "The Out of School Curriculum," further developed the context of the secondary setting by introducing my students to the whole student they would be teaching. Melnick helped my students think about how to utilize their students' lives outside of school to enhance their teaching. The article discussed teachers' out of school curriculum as well, and how it affects their teaching and interactions with their students. It highlighted the students' realities outside of school and how that entered the classroom each day. I thought reading this piece would help my students understand better the

students and teachers they encountered in Shopping Mall High School Powell, Farrar and Cohen (1985) and Lightfoot's "Brookline High School" (1983).

I, Thou, It. Hawkins' essay, "I, Thou, It," was particularly important for my students to read because I felt it coalesced all of the important components of teaching and learning that I wanted my students to know and think about. The article articulates a role for teacher and students in the "plan" of teaching and learning. It also identifies ongoing processes that need to be mastered to teach well to a diverse student population. Hawkins does not depict teaching as a singular act or attempt. Students are ever present defining the act of teaching and learning. The teacher is also ever present, but in a far different role than the one internalized by preservice students. Hawkins' teacher is always listening, observing, diagnosing, providing students with myriad resources to learn from and with, yet not always in the foreground.

I introduced the essay by modeling the reading of an early passage on "love and respect." I read a sentence and then stopped and asked myself aloud what I thought this meant in everyday thinking and then in relation to teaching and learning. For example, the sentence: "An environment of 'loving' adults who are themselves alienated from the world around them is an educational vacuum" (p. 48), caused me to ask my students, "How does one become alienated from the world? Why would this alienation create an educational vacuum? What is an educational vacuum? Where does one find an environment of "loving" adults? Why does Hawkins mark the

word "loving" with quotation marks? How can I relate this statement to teaching and learning?" and so on. When I encountered a word I did not understand, I tried to figure it out from the context or I looked it up and tried to connect it with my own knowledge.

The other important aspect of this essay for me was to try to help students begin to understand the relationship that must exist in a classroom between the teacher, student, and content and how that could look in the secondary setting. This relationship (Hawkins' I, thou, it triangle) contained the substance of effective teaching and learning at any level. I asked groups to select a teacher from the chapter assigned from The Shopping Mall High School and describe the "triangle" of "I, thou, it" in that teacher's class and describe whether or not they saw a balanced relationship in the classroom. Hawkins' essay provided a window for viewing the interrelationship of student, teacher and content.

How Students Responded to Main Texts

Students found the excerpt from Cohen, Farrar and Powell's Shopping Mall High School intriguing. They expressed their amazement at the size and selection of courses in a large urban high school, since many had come from schools where the graduating class may have been twenty or thirty. They found the issue of access to high status knowledge for some students and not others disturbing, and the idea of teachers teaching in ways that did not facilitate student learning startling. They also discovered that they had different ideas about what good teaching of content was. Some

students had a problem with Mr. Lynch, who taught the elements of the short story through comic book form, while others thought his approach was wonderful and that the students learned a great deal about writing and illustrating a short story. It was difficult for me to present a neutral "face" as I queried students about their belief that Mr. Lynch was doing a good job with his students because "these students didn't want to be in school anyway and they probably couldn't read very well" [annotated lesson plans, 9-15, p. 4].

My students liked the idea of comparing a high school to a shopping mall and it introduced them to the issue of equal access. Most content groups recognized that students were offered different preparation in school. While some attributed the difference in preparation to school and teacher expectations, "lower class (SES) kids never get the chance to excel because schools are set up for the middle class students . . . teachers have low expectations for these students and will not push them to succeed [cgj, math. #7, p. 7], others blamed the students, "what you put forth determines what you get, things like enthusiasm, willingness, a good attitude" [cgj.#5, math, p. 5], "students who succeed are committed and in search of an education while others are not interested in learning . . . they lack the motivation of the committed student [cgj#4, Eng., p. 3]. Students found themselves referring back to this particular reading and the teachers in the first chapter, (Mr. Lynch, Mrs. Fish, Dr. McBride, Mrs. Jefferson) as they read other articles about teaching and learning.

Students used the characters of Mr. Lynch, Mrs. Austin and Ms. Fish as they thought about Hawkins' essay and the engagement of student and teacher with the content. They drew triangles for these teachers' classrooms and designated with arrows the interaction of student, teacher and content. This was helpful to clarify quality and equality of engagement between the student, teacher, and the subject matter as students thought about the kind of knowledge each teacher offered his or her students.

My students also liked Melnick's "Out of School Curriculum" and found it to be helpful in their inquiry into the students they would be teaching. They realized as they read this article that they would have to deal with what the students brought to school from their lives outside of school. This reading also helped some students in looking at their own lives outside of school and how that life will influence their role as a teacher in school. One student reflected on the students he will have in a fairly realistic manner: "In the out-of-school-curriculum article the discussion regarding the problems that face kids out of school opened my eyes to the fact that these problems are brought into the classroom, they are not left on the doorstep of the school" [#44]. Another student perceived that problems could exist for students and teachers, "Teachers and students often carry so much baggage with them to the classroom, learning becomes secondary" [#45]. One student believed he would be able to meet student needs because of his own out of school experiences, "I've been through a lot outside of school and I believe it will help me deal effectively with at risk students"

[#22]. [Course evaluations #'s 22, 44, 45] These statements display a particular insight into students and teachers as human beings with a history.

Melnick's article seemed to have a profound impact on many of my students as they thought about their future students' experiences outside of school and how those lived experiences shaped students' views of school. As the content groups discussed this particular article, with prepared study questions, they found value in the substance of the article:

> Math group-Section one: Our group agreed that the teaching life is made easier if the child's background is known. Every child brings a different family life, friends, outside activities and interests into the classroom. The out-of-school curriculum must be considered before one can teach. A good teacher does not ignore what the child brings to school [cgj #7, p. 8]

> Art and Drama Group-Section one: We agreed that teachers as human beings need to be sensitive to the child's background without being prejudiced by it. Care must be taken to exercise fairness. Teachers have been known to lower their expectations for children from lower SES backgrounds [cgj #6, p. 13]

Many students tended not to focus on the teacher's out of school curriculum. When I questioned them about the section of the article that talked about teacher beliefs and how those beliefs were connected to the teacher's out-of-school curriculum, they were unable to make any connections to their own beliefs about teaching and where they might have developed. Many of the beliefs they talked about were more general beliefs they had as observers of teaching: "teaching is fun," "teaching requires a lot of patience," "teaching means being a strong disciplinarian" [annotated lesson

plans, p. 3]. Perhaps this was a difficult question for them because they have not lived inside the role of teacher, they have only observed what appears to be the role and they view the teacher only in the context of school.

A similar problem occurred when I asked my students "Where do you think your beliefs about teaching your content come from?" in relation to their fastwrites in the beginning of the course. Many were not able to identify where the beliefs they expressed in their fastwrites had come from.

David Hawkins' "I, Thou, It," was an essay that my students found difficult to understand on their own. They came back to class after the assignment with some pretty negative comments about the writing and the language that Hawkins had used.

Students found the essay laborious to work through even after a modeling of reading and thinking aloud by the instructor in the introduction of the essay. They were impatient with his language and said such things as, "We wondered why Hawkins wrote the article in the way that he did. Why didn't he just say what he was trying to tell us?" [cgj. #5 Science, p. 10]. Students were also convinced that his educational essay was all theory and they railed against having to study theory in a methods course. A few said it was the hardest thing they had ever read [annotated lesson plans, 9-15, p. 4].

After looking at the study questions in their content groups and having a whole group discussion about their findings in regard to the questions, many students came away from the Hawkins essay

with new understandings about teaching and learning. One student talked about his understanding: "I feel very strongly about "I, Thou, It;" I reread it after we talked about it in class, and I felt the importance of the relationship between the teacher, student, and content. There has to be a strong connection between these three" [#2]. Another student saw movement in the I, thou, it relationship.' "I, Thou, It'" helped me think about teaching in a more systematic manner. It made me aware of the flow patterns of knowledge in the classroom" [#18]. A third student thought about evaluating a lesson's value based on the Hawkins' relationship: "I doubt that I will specifically aim to create a triangle, but I'll be able to evaluate a lesson's potential on whether or not the triangle is present" [#46]. [course evaluations, #'s 2, 18, 46] Students referred to this essay throughout the semester. The Hawkins' triangle became a litmus test as they studied teachers and looked at how the relationship between teacher, student, and content developed, in their personal narratives, other essays and articles, and their field observations.

Students still thought they could be the kind of teacher Hawkins talked about, yet still lecture almost exclusively. They made themselves fully responsible for "engagement" in subject matter as they planned their field lessons and mini-teaching lessons, yet appeared not to notice that Hawkins' classroom was student centered and not teacher-centered.

Phillip Jackson's "The Daily Grind" was also well received for its content, but not necessarily for the language and writing style.

Students said he was talking down to them in the reading and some were put off by it. One science student's statement summed the feeling up nicely. He said that "Jackson offered some good information" but he couldn't stand his "pompous" language [cgj, sci.#2, p. 14] However, students experienced an awakening of sorts through their interaction with this article and our content group and class discussion. They remembered the "hidden curriculum" but had not had a way to talk about it. It had always been one of those defining "things" or "feelings" about elementary school and high school that students endured but did not necessarily understand.

As we discussed the issue of learning to deal with "crowds, praise and power" in school, some felt they were victims of it positively and negatively. One student talked about leaving high school with a very high grade point average, yet not being prepared for the work in college. This student had been questioning his capability even though he had excelled in high school. After Jackson's article he believed he might have been one of the kids who always followed the rules, figuring out how to win praise, manage crowds, and knowing where the power was. As a result he felt he might have been rewarded for things not always classified as academic. Another student who had "slipped through" felt that he had known what was required but he had resisted "playing the game," as he put it [j #1, p. 5, 9'92] Connecting the unpublished curriculum to their school experiences was a powerful step toward understanding the first course question. The issues of victimization and access based on figuring out the dominant group's

code became real because of their personal involvement and appeared to move my students closer to the deeper issues of equity and access to knowledge.

According to the final course evaluation, students liked the essays by Jackson, Hawkins, and Melnick. Even though these three texts did not speak about secondary students, they spoke to the shared experience of school children. They detailed how schools measured success, the importance of the substance of the interrelationship between teacher, student, and content, and what students and teachers brought to the learning/teaching situation.

Main Tasks to Explore First Course Question

In the overview of this chapter I indicated that I wanted students to examine their entering beliefs about teaching and learning, much as they would unpack and examine school memorabilia stored in an old trunk. The tasks designed to explore this first question promoted that process of examination as my students were continually required to nudge their own experiences and beliefs up against the issues explored by the instructional tasks. These tasks, many which would continue throughout the course, were crafted to enhance and promote understanding of the issues involved in teaching and learning highlighted by the texts.

Content group journals. When I introduced the concept of content groups, I also introduced the group task of content area journals and my expectations that content groups would discuss

issues, tasks, and their personal experiences as secondary learners, reflecting on those together, offering their thoughts to one another. These thoughts would then be recorded in a journal by a different group member each week. I hoped these content journals would be a source of many insights, fruits of a collaborative effort.

> Each content group will be expected to keep a group journal. You will be given time in class to write about the activities, discoveries, conversations, new ways of thinking about the work of teaching, etc. of the group. Each week a different member will be responsible for recording in the journal, however, all members are asked to contribute ideas and information to the recorder. [syllabus, Fall '92, p. 4]

I collected the content journals on a weekly basis. This was another way of assessing what students were thinking about the texts and tasks of the course.

Dialogic journals. Early in the course, students started to write in a dialogic journal about the educational research articles and essays they were reading and discussing. I decided to leave the journal format open. However, through my comments and questions I directed to students in their responses, their entries increased in depth and in length as they approached their texts with an ever expanding framework to think about the issues written about in the articles and essays.

My hope, for my students, was that they would begin to get inside of the authors' thinking and their own as they read our texts and begin to write about their beliefs in relation to certain educational issues. For example, for the first question I wanted

them to begin to think through their writing about student access to knowledge, equity, student diversity, and how the school environment changes students and teachers. My intent was for students to publish their thinking about these issues, explored in the texts they read, so that I could have a conversation with them, joining in and offering alternative ways to think about what they were saying. For example, if a student wrote that "students were responsible if they failed, because they had not put enough effort into their class," I might respond, "What do you mean when you say a student is responsible for learning? What is the teacher's responsibility for student learning? Explain what you mean by "putting effort" into a class. What might be going on if a student provides a lot of effort, but still fails? What is the teacher's responsibility then?"

I collected the journals initially on an alternating basis, calling for a content group's dialogic journals each week. Entries were read, responded to and returned the following week. One student in responding to Hawkins' "I, Thou, It" wrestled with the issue of understanding the "it": "A person cannot teach another when there is little or no understanding on their part. We need to get personal with our "it" before we can try and build a bridge for others to cross." I wanted to know more about what my student meant by "getting personal with her 'It'." I probed "What do you mean by getting personal with your It? Do you mean you want to increase your personal knowledge? Know more about your content? Know your content in different ways to teach it? Explain" [dj. #3, 9-92].

Over the course of the semester students started to respond in depth to my questions and to hand in their journals more often in order to get a written response from me.

Personal narratives. I introduced the personal narrative as a process paper that my students would work on throughout the sixteen weeks of the semester. It would be an occasion for them to get to know themselves as learners and prospective secondary teachers. It would also be an opportunity to examine their secondary student experiences and beliefs about teaching and learning in a different way.

During this first four or five weeks of the semester, my students wrote about an instance of teaching and learning in their content in which they were the learner and handed in the first draft. I read the drafts and posed questions such as "What did your teacher need to know to teach this lesson? What did you need to know and to do to learn this concept? Explain what you learned from this lesson? What was the "it"? Was there a connection between you, the content and your teacher? Describe the connection for me." My purpose was to help them begin to extend and analyze what had actually happened in this instance of teaching and learning. My questions were based on the articles, essays, and discussions we shared as a group of learners. I used the issues and examples from many of the texts we read to push students further in their thinking about what the learning episode really looked like. Writing in the margins of students' drafts, I sometimes asked them if they could

make a connection to Hawkins here or there. Other times I asked them what some other author might have to say about this experience or that statement. I would often ask whether there was a relationship between the teacher, student, and content and if there was to describe it for me.

It was my hope that the personal narrative, over the course of the semester, would help students begin to see what they had written about in a different light. Their beliefs about good teaching were woven into the instances they had recounted, so the narratives were an excellent vehicle to directly converse with my students concerning their beliefs about teaching their content, especially about the methods they recalled, for example, active lecture, lab demonstrations, working problems on the board and then practicing them in class with instructor help, games for review, and simulations in a few cases.

Mini-teaching lesson #1. My intent, in this assignment, was to have students use the moon as a context to teach a concept from their content area. I thought this would help secondary content students realize that they could go outside of their discipline to look for interesting ways to teach their content. The physical world is not simply the domain of the scientist and the mathematician, but also of the teacher of languages, literature, music, art, history and physical education.

I expressed to my students that I wanted them to understand themselves as learners and knowers of content. I wanted them to

know what that kind of understanding meant in their individual and collective experiences. I also wanted students to experience developing a way to teach a concept from their discipline that was not textbook centered. In addition, I wanted my students to realize that new learning could be connected/scaffolded to "partial learnings" that their students might already have, and finally, that effective teachers were learners about and researchers of concepts and phenomena they did not totally understand.

I began by asking my methods students to observe the moon for two-three weeks and record in a "moon log" what they saw and thought about as they carried out their observations. I asked them to think about and record any past memories from school or life where they had learned something about the moon, through science, literature, math, history, family members, friends etc. Once they had observed for the two-three weeks, I asked them to bring their logs to class to share and discuss in their content groups. I looked at their moon logs during this work session and asked questions about drawings, thoughts and conjectures I saw in the log.

Students were asked to complete an individual and a group task that would help them look at their content knowledge, what, where and how they had learned about the moon, and where they could go to learn more. They also began discussing together, as content groups, what they might teach based on what they had learned. This mini-teaching session would also become a common referent for us as we moved into the second course question, **What does it mean to know one's content?**

Student Responses to Tasks

Students were dealing with a lot of reflective writing in the tasks in this part of the course. Since this was the beginning of the course they did not appear to be overwhelmed or disgruntled with the assigned writing tasks. Rather many seemed to welcome the opportunity to write about the texts they were reading, in the dialogic journal, and their personal experiences as a learner in their personal narrative, while having a one on one conversation about their ideas and experiences as their instructor read and responded.

Students appeared to be forthright in their content journal responses as each member took his or her turn scripting the weekly entry. I noticed that the entries dealt with the generalities of the group's work together on their tasks rather than specifics but I attributed that to unfamiliarity with group journal writing.

Most students took part in the moon observation sequence of mini-teaching #1. I would hear them talking about seeing the moon or not seeing the moon before class formally started. I observed members of the science group instructing members in a mathematics group about the phases of the moon, with the use of an astronomy textbook they brought to class to use in their own group's preparation. A few times as I walked to a meeting I would hear students conferring about the moon's position or size in a student lounge near my office. Some students chose not to observe the moon and depended only on science texts, the newspaper, or their personal knowledge for information. I heard one student state that

she did not have time for this kind of thing while I sensed that others did not see the value of the observation in their preparation to teach a lesson [j#3, 10'92, p. 25].

What I Thought about How Things Were Going at the Time

My Entering Beliefs about My Students

As I began to implement this beginning secondary methods course with the focus of the first organizing question, I anticipated some of my student's entering beliefs about teaching content in a secondary setting. I carried with me the realization that all of my preservice students already had a particular view of teaching in high school and middle school. Because of their required attendance and participation in the American high school "experience," all students were able to call up similar internalized images of teaching. These images drew their substance from existing personal frameworks constructed by students who had operated successfully and unsuccessfully within the boundaries of typical high school settings. Further, their every day conceptions of the work of secondary content teachers were gathered from their personal observation of teaching as secondary students (Lortie, 1975).

I imagined that, with my help and the help of their peers, many of whom had had work experience with the content they now wanted to teach, my students would continually compare new information about teaching in a secondary setting with their personal remembered knowledge. As they performed this comparison, they would begin to reach levels of disagreement with their personal remembered

knowledge and begin to question the validity of their beliefs. I also supposed a distance from their experiences as students in secondary school, because of their age and current life situations. This was an incorrect supposition. Even though details of instances of learning or not learning may have blurred over time, the feelings connected to episodes were still alive.

On the first day of class, as I thought about how I imagined this methods course, and I became aware that I had given a great deal of thought to the students I would teach in one manner, but very little in another. I wanted to provide important experiences for these preservice students to guide their thoughts about teaching and learning in different ways. Everything had been fashioned to create this great experience. I had fleetingly thought about my students as individuals, and in that brief consideration I foreshadowed problems they would have in managing the work of the first part of the course. "I'm not sure I'll have enough time to build a proper foundation without losing my students by overwhelming them with this amount of reading" [J #1, p.2, 9-'92].

I was beginning to feel disappointed and sensed I was losing ground already. The magnitude of the task before us was beginning to sink in. I also realized that I had not had time or inclination to look at the course as a whole. I was teaching the course I had designed before I felt ready to teach it. All of this uncertainty is apparent in my first journal entry:

> My first meeting with my methods course begins in twenty minutes. I am feeling anxious about how my decisions about the course will be received by these students. I am unsure about some of the readings I have chosen, whether they will provide the appropriate connections to the major questions of the course. It is very necessary that these first weeks are spent creating a shared foundation about teaching and learning in schools. These students are coming to me with only a foundations course of 80 hours of observation . . . more apprenticeship . . . they need to begin to move further from their student selves. . . [j #1, p.6, 9 '92]

Student Silence

As I moved into the first meeting and the course overview and looking at the syllabus, I encountered the first episode of complete silence from my students. I was excited about this unveiling of the course so I was held up a bit by this silence. Perhaps the anxiety I suffered on the first day was a symptom of my own insecurity about how well I had planned the course. There were pieces of the course that I had not yet completely conceptualized. I was not sure about the texts I had chosen, the related tasks, and I was not sure about my ability to keep this very complex course at a manageable level for myself and my students.

> This process of course design (thus far) has felt humbling and yet exciting. Humbling because it feels like I don't know enough to do this yet, exciting because of the possibilities. The readings were particularly difficult [to select] and I'm sure I will be changing some and adding new ones. I am attempting to use some elementary based articles to build a foundation of knowledge about teaching and learning-Jackson and Hawkins seem appropriate to me because the concepts they discuss impact teaching and learning at any level. Someone here suggested that "these students" were not ready to look at an elementary based essay and apply it to a secondary setting. I disagree and will continue on my original course of thinking. [j #1, 8-'92, p.1]

I was sure, as I thought about this after class, that their silence flowed from their vision of the whole picture of the course outlined by the syllabus and annotated by my discussion. They were looking at the whole picture while I had dealt closely with the parts. I was committed to the design of my course. My students were not. They were looking at the amount of work they would be required to do and it was pretty staggering when viewed all together, and as it would turn out, taken in increments throughout the semester as well.

As I moved through the texts and tasks with my students, I found that silence often indicated anxiety on their part. They didn't know what I wanted, or they did not understand how to discuss an article or write a journal response, or they were not sure what they needed to do in their content group. Silence also indicated reflection, thought, and worry about issues discussed in articles.

Content Groups and Content Journals

I was interested and excited about the idea of organizing the methods course around content groups. I only imagined positive outcomes with the groups and their content journals, where they would write collaborative thoughts about the group process down.

When two of the groups had problems and angrily confronted me, the experience greatly affected my working at that point and caused me to question myself. I knew I was handling a lot. Perhaps I had inadvertently caused a deeper problem when trying to help the troubled groups.

I spoke to two of my committee members, Dr. Helen Featherstone and Dr. Tom Bird, about my concerns. I suggested that some of the problems and anxiety might be occurring because of the collective grades that I was giving to certain collaborative efforts by the groups (mini-teaching projects, content group journals and unit plans).

Dr. Featherstone suggested that I check with the groups about their feelings about the evaluations they would receive, perhaps through individual writing. Perhaps they could come up with some ideas about what was happening and we could think about the situation together. She also suggested that I could collect data on this.

Dr. Bird introduced the idea of a "deviant teacher," intriguing to think about. His take on the hostility that certain group members had approached me with, was that they felt they could because I had somehow joined the group in an accessible manner. Because of my accessible posture within my methods course, students could tell me anything about the workings of the course and display their displeasure without a perception of instructor retaliation. [j#3, 10'92, pp. 32-33]

I had great difficulty in getting my students to understand what I wanted from their content journals. I had a number of talks with Drs. Featherstone and Bird about the group journals, as I tried to figure out why I was not getting what I had envisioned. Dr. Featherstone suggested that what I wanted might be quite difficult and perhaps even impossible for some to imagine themselves

doing in a group arrangement, or in any format, especially if they felt uncomfortable with writing. She also spoke to representing the group authentically.

> ". . . I think it may be really hard for them to write down anything interesting as a group, you know, even though they might have interesting conversations. I think they have the sense that I might have an idea but it's not the group's idea . . . often enough people aren't very comfortable as writers , but that's sort of the goal we have for them . . . and if they're doing the writing separately, like afterwards . . . one person is going to write it up, then I can see that it might come out as a bunch of things just written down from the discussion . . . it is a sense of, if you go beyond that, it's not the group. . . . (Helen: j #3, 10 '92, p. 8, taped and transcribed conversation)

Dr. Bird clarified for me what I was getting from my students in their content journals and possibly what their thinking might be. He also pushed me to think more clearly about what it was that I really wanted from the content journals and how I might go about getting it.

> "What you have is references to the reading. Descriptions of what she [Jeannie Oakes] said as distinct from their reaction to what she said . . . they're doing what they know how to do. . . . It seems like you're asking for more than a record on the conversation, which is a difficult path . . .
>
> You're more after a description of "our reaction to what they said and some kind of a reflection/that last one's pretty big. I don't know what you're asking them to do. You want them to have a discussion about teaching a particular subject and you want them to leave a record of that conversation . . . you want them to do more . . . then the student that takes it home . . . a separate task . . . review the record of the conversation and note anything that strikes [you] about it. . . . You see agreement or disagreement . . . that would be a separate task though a new task and a new record. . . . [Tom: j #3, 10 '92, p. 14, taped and transcribed conversation]

My committee members both suggested that I model what I thought I wanted in the content journals by sharing with students what I was reading and how the journal response might take a different form.

I did try to model what I intended for the content journals with two members of the science group as we discussed the major points of the chapter by Kahle (1990), "Real Students Take Chemistry and Physics: Gender Issues in the Classroom." After our role play discussion, I wrote an outline of what I could write about on the board, based on comments we had made; 1. Women's issue; 2. Peter's ignorance to his problem; 3. Sandra is treating boys in a sexist manner.

Still, I missed the mark with this assignment. We never achieved a shared understanding of what the content journals should be about. Our interpretations of the task were different. They thought the journals should include what others in the group thought about what they wrote, whether it honestly portrayed what they had discussed. I wanted to know what kind of conclusions, conjectures, questions they had come up with. Attaching group points to the journal probably added to their difficulty.

My Role as Facilitator

In order to help my students surface and identify beliefs they had about teaching and learning, I knew I needed to be skillful in listening and restating what they said so they could hear it and reflect on it. I also needed to question my students to push them to clarify what they meant by what they said. I found that this was

difficult for me to do. I was not confident in my approach and I did not have a clear command of all of the readings, so I was limited in my ability to question and probe.

I could think of probes that pushed to a point but not beyond. I think that initially I was afraid that this might be interpreted as "coming on too strong" and might shut students' thinking down. I also know that I did not think of many good questions until after the fact. I was not knowledgeable enough in many content areas and not quick enough in my listening and thinking abilities, as I approached diverse content groups, to attempt to challenge their thinking.

It was as though I approached these groups thinking that I had to have ready knowledge and questions that spoke to their discussions. I knew that I did not have all of the answers, nor should I, but I found myself replaying some old teacher "shoulds" that caused inappropriate teacher actions. "Teachers should lead the discussion and provide answers when students do not come up with them." "Teachers should be experts."

Texts

The texts that I selected for the first part of the course provided a dilemma that I did not anticipate. They were particularly good texts from my frame of reference. I thought they would develop a knowledge base about large diverse urban and suburban schools for my students. I had attended a large suburban high school in the sixties and I had taught in large urban high

schools in the seventies and early eighties. I had supervised student teachers in large urban secondary and middle schools in the late eighties. I thought my own experience should enable me to help my students understand these settings.

I soon realized that most of my students had a different frame of reference because they had attended small rural schools, small private schools, and small colleges. It didn't occur to me that even with my facilitation and group discussion, they could never really connect with the texts, Chapter 1 of Shopping Mall High School and "Brookline High School," in any realistic manner. My students found "Brookline High School" lengthy and mythical. Such a place could not exist. They either thought the idea of high school compared to a shopping mall was wonderful and the teachers were meeting all student needs, or they hated it because of the size. I didn't understand why they thought this idea was wonderful until they told me about their high schools. They talked about their small rural schools where there was no choice, many times not even a choice to take a course from a different teacher. They laughed about their graduating classes of twenty, thirty and sometimes less. The high school that Powell, Farrar, and Cohen described seemed appealing to my students.

As I read the student responses to the readings and my probes, and as I engaged students in conversations in class based on those readings, I realized that the problem I thought I was addressing was not being explored at all. Existing beliefs were too powerful for a few readings and some conversation to affect. I knew that I needed

to change my approach, but I was at a loss to do anything other than what I had planned. I did not have enough formal background information about how to teach about multicultural issues and how to interact with students about it to do anything differently. I also did not have the time to increase my formal knowledge. This was an important issue in the first part of the course and it did not go well.

I began to question my choices of texts. My students were openly resistant to many because they were not ready to hear that they would be required to look at multiethnic issues and personal biases as teachers. Some students declared in class that they would not teach in an urban setting so there was no need for them to read about or practice teach in an urban site. Diversity was not part of their apprenticeship of observation as students.

Clearly I had not really considered all that these students brought to the course. Most had not had experiences with students or people who were not like themselves and, in some cases, they had consciously made the choice not to. Their choices went further still, in that they did not intend to teach in a setting much different than the one they had been students in. Many students stated in class that they intended to return to the same schools they had attended as secondary students. Some already had coaching positions there to secure a spot when the time came.

I made the mistake of thinking that if I introduced these very powerful and thought provoking texts, my students would be captured by them and become uncomfortable with their beliefs and begin to

move toward change. This evoked memories of my beliefs as a novice teacher years ago when I thought my students would love the romantic poets as much as I did once they read their poems.

I also battled the belief that the practical view is privileged over the theoretical view. Initially, I was inundated by student views that they would really learn about teaching when they started their fieldwork component. The texts and tasks we did as content groups and whole group were informative and "required," but the real information would be gathered from the field. I knew from my previous experience teaching the methods course that preservice students felt this way, but I was continually surprised as they came up with new ways to say the same thing. I did not anticipate such great resistance to new ideas.

I thought my students were skeptical of me because of my belief in the importance of sound educational ideas/methods grown from knowledge of students, content, and learning. They were puzzled because I kept saying that I was studying my teaching. They found elements of theory in our classroom and wondered why they were [many were] having an interesting experience if theory was involved. Some started to listen and think about Hawkins and Jackson. Some students would refer orally or in writing to the "Hawkins triangle" being evident in the classrooms they were observing in, or to being part of a "Hawkins triangle" in a tutoring experience. Many others added little to the conversation and I wondered about them as I thought about the impact of the course. Did I have a right to categorize students? I could read the signs of resistance through

the impatience, the skimming over or not reading the articles, the discounting of what was discussed by labeling it as "right-wing," "liberal," "feminist." Most likely they would teach as they had been taught.

> Teaching, in a conventional sense, for those who decide to become teachers, elementary and secondary, is learning to retell a familiar story [sometimes] in greater detail. We listen and interact with the story of math, English, science, in ways that have also been experienced by our own content teachers. It is a story that goes on and on through generations with little deviation from the original story line . . . [j#2, 10-'92 p. 27]

Theory and Practice

I am well aware of an attitude which negates new ideas in the "study" of teaching that methods students carry. Still I am continually surprised by the force of the beliefs that define this attitude, and I am often derailed by it:

> I'm losing them . . . the Hawkins piece did not sit well with them and some students continued throughout the class to openly voice their views that this "theory stuff" was not what they needed . . . they needed the practice [the practical] part of teaching because that was where they would really learn about teaching. [j#1, 9-'92, p.18]

> I am surprised by the verbal expression of distaste for theory, even though I know this is fairly common in TE students . . . I am having trouble dealing with the [anti-intellectualism] of a few, but I try to think about it as student history . . . " [j#1, 9-'92, p.17]

The attitudes that surfaced, especially the attitude that "I can't understand this because it is too difficult to read," particularly when theoretical pieces such as Hawkins' were considered, brought forth considerations of the backgrounds of the students that

populate my methods courses. It is almost as though some of them believed the author wrote in such a way to purposely exclude them. The study questions that the content groups attempted to answer helped my students explore key pieces of the essay in regard to the synergistic relationship of the teacher, student and content in the classroom. It seemed, however, that there was little connection between what they studied about and what they "really" thought about teaching and learning. There was a note of unreality embedded in theory for my students and a stand against intellectual endeavor. Practicality was the guiding belief.

> There also seems to be an attitude that is hard for me to identify, but I sense it each time I meet with each section. Is it an attitude of the shop? An attitude that credentials aren't really important except for their exchange value? That they [students] know more about this "stuff" of teaching than I do? "Theory" is not important but "practical" is. Someone else dreams up and designs the car. I'm the one who makes it. I have the <u>real</u> work. It's the "doing" not the "knowledge" of how to conceive of an idea. Ideas are for dreamers not for workers . . . just train me . . . show me the methods . . . show me how to write a lesson plan and then leave me alone with the field teacher. That is where I will really learn. [j #1, 10-'92, p. 19]

Managing the Work of the Course

I knew that I spent too much time on the first question of the course, that we read too many texts. But I was still trying to "cover" all of the material I thought important. I was also still trying to manage the curriculum. Living inside of the course, I realized that I had planned far too much for my students to do and

far too much for me to do with a full work load and data to collect. My journal reflects my feelings.

> The course seems overwhelming . . . in an attempt to address the complexities of the work of teaching my course has become too complex. The course seems to be running me, I'm no longer running the course. . . . Everything has been set in motion and it seems like I am caught in a process that I do not know how to change . . . I'm sure the students are feeling the same. They are beginning to complain about the amount of work . . . although the quality of their journals [dialogic] and narratives is exciting. This course takes so much time, energy, and knowledge. I'm easily spending 30-35 hours per week on journals, narratives, and study questions. I am finding that I am having trouble preparing for class because of the amount of paper work. It does seem that the responses/questions are valued and reflected on by the students so I am reluctant to change anything but I'm not sure how much longer I can do this. . . . [j#1, 10-'92, p. 21]

At the time I was torn between giving up some of the texts and tasks I had planned, and forging on especially in the beginning, when everything was set in motion. Many of the early dialogic journal responses to the texts and tasks were powerful and honest. My students were talking about how they really felt and they were answering the questions I wrote in the journals. The discussions about the texts were good. The narratives were developing and the content groups were planning mini-teaching lessons. I continually felt discouraged and then encouraged. I felt insecure about my course and its outcomes. These feelings persisted throughout the remainder of the semester without respite. I constantly questioned the value of what I was doing.

I worried that I would be depriving my students of a proper preparation for field work. The notion that I was changing the rules in a way that might be detrimental to my students in the short

term became a clear roadblock in my thinking and planning as we progressed in the course. Deep inside of the worry, however, the belief that the course design and implementation was helping students look at teaching in a different way, persisted. I believed that my students had a more realistic sense of the secondary setting as we moved into the second course question, **What does it mean to know one's content.**

What I Think Now about This Part of the Course

Looking back I realize that something in the presentation was missing. I was not able to ask the right questions early in the course. I did not think about my students' experiences as I tried to construct a common vision of a secondary setting. I thought about my vision and then expected them to adopt it without question. I knew the world of teaching to be a certain way and they knew it to be another way. Even though I knew that I needed to incorporate student prior experience/knowledge, I did not do this in the planning stages of the course. I was concerned with the "course." I think this had something to do with the fact that it was not just a course but an embodiment of my changed identity, as well as a "study." It became very complicated. I felt as though I had to stop and purposively view my course as a researcher might, even though I wasn't sure at times what was important. This sounds like the stance of a novice researcher. I felt more responsible for the course because of the students involved, yet I had a responsibility to myself as well. It was all very difficult to reconcile.

I knew that preservice students needed to be informed teachers and that they needed to grow beyond the parameters of their comfortable existence and take a sober look at the institution of school and the world of the students they would eventually be teaching. I am convinced now, because of the final course evaluation and my observations of my students in their fieldwork, that this initial section of the course was valuable and did provide a foundation for my students to build on for the remainder of the course and sent many of them into field as thoughtful, questioning individuals. In so many ways it was far more powerful than training students to act like a teacher and implement flawless lesson plans.

I remember now thinking during the course, when the work was so overwhelming and endless, that it really was much easier to lecture as I had in the past--easier for me and for the students. I had the "answers" on the overheads and all the students had to do was copy the "answers" down. When those answers did not work when they tried a strategy in the field component, it wasn't the answers that were called into question, but the student's performance. Initially, the students looked good in the field because they knew how to act like teachers. I wondered whether I made the field work more difficult in the new course by rejecting the "training" model my students really seemed to want. I wondered also what this would mean as they moved on to other methods courses and field experiences. Thoughts of "easier" were simply weak moments of fatigue. I knew that "easier" meant taking a direction that I had rejected. I knew

that "easier" would allow my students to go only so far, to follow in the footsteps of the conventional content teacher learning to retell the same story.

CHAPTER VII

WHAT DOES IT MEAN TO KNOW ONE'S CONTENT?

Overview

The second course question positions continued student inquiry toward closely held beliefs about teaching and learning. In this chapter students direct their thinking toward their content knowledge. Most of my students, at this point in their university preparation, have completed their content courses and are concentrating wholly on their education courses. They have a notion that they "know enough" content to teach, because they remember what they learned in high school and they know quite a bit more now. The second course question was designed to challenge this student assumption about "knowing enough." I selected the question, "What does it mean to know one's content?" to prod students to examine their content knowledge base to figure out how they really knew it. Did they conceive of content knowledge as fixed and outside of themselves, or did they see it as dynamic and interwoven with who they were and what they believed? Could they make connections to the world outside of their content to help their students understand it? Did they recognize that their personal understanding of the coursework in their discipline and coursework related to it was not

enough to teach it? I hoped that the exploration of this course question would cause my students to face themselves honestly and begin to figure out that most of them knew their content only in ways to transfer it exactly as they had learned it.

I wanted my students to approach this second course question as individuals who did not have all of the answers. I expected them to begin questioning what they knew and how they knew it. My intent was that they turn their content knowledge inside out and examine it, in light of the texts and tasks we would work with in this part of the course. As they became aware of what they didn't know, texts and discussion in content groups and whole group would provide suggestions about how to gain more knowledge as a learner.

In this chapter I describe how students examined what they knew about their subject matter and how they knew it through common texts, became acquainted with the categories of teacher knowledge as explained in Pam Grossman's (1990, p.5) model, and confronted problematic issues in relation to moving into fieldwork settings. I highlight two texts read during this section of the course and explore student responses to them.

Students work on three learning tasks is also described in this chapter; (mini-teaching #1, dialogic journals and content journals). I report student responses to their preparation and implementation of the learning tasks. As in chapter six, I discuss my thinking about the work of the course at the time. In addition, I describe how increasingly difficult it became to manage the work of the course. As I conclude the chapter I discuss my thoughts

about the course from my current vantage point, three semesters later.

Texts

I decided to use the article "Pitfalls of Experience" (Feiman-Nemser and Buchmann, 1985) as students moved into their fieldwork requirement. I felt that this article raised issues students would deal with in their field experience. I wanted my students to realize that they had a long and powerful history in school, and that history would define much of what they did and how they perceived their role in the setting of the secondary school. I wanted them also to recognize that the new ideas and information discussed in our university classroom needed to be used to interpret what went on in the classrooms they would teach their field lessons in.

I also used Wilson, Shulman and Richert's (1989) "'150 Different Ways' Of Knowing: Representations of Knowledge in Teaching" to help students understand the concept of knowing one's content in ways that allow for transformation of content knowledge in support of student understanding. Students needed to think and discuss how they knew their content and whether they could help a learner understand what they knew. They had to think about how their content was connected to the world instead of seeing it as isolated and fixed.

I supplied the groups with study questions to help them understand "'150 Different Ways' of Knowing. . . ." They discussed

these questions in their content groups before we talked about them as a whole group. The discussion questions follow:

1. What would it mean to think about teaching generically? What might be problematic about this approach?

2. Why do the authors argue that "practical" or "commonsense" knowledge does not present a clear picture of teacher knowledge? What are your opinions?

3. The authors talk about "representations" of concepts. What do they mean? Discuss the authors' comparisons of the representations of those teachers who were knowledgeable about their subject matter with teachers who were not.

4. Explain what Dewey means when he says one has to "psychologize the subject matter?" Can you connect this to the second course question?

5. What is pedagogical content knowledge? Explain in your own words (group effort).

6. Why did the authors entitle this article"'150 Different Ways of Knowing? Why did they also refer to . . . representations of knowledge in teaching?"

I used the pedagogical reasoning model discussed in the article to walk students through the process of planning a lesson and then had them begin working with the model to develop a lesson. One student stated in her dialogic journal " . . . it never hit me how well I will have to know my subject in order to teach. I must have been living in a fantasy world or something . . . I guess I thought that if I can prepare a lesson for my students, that's all I have to know about it . . . my knowledge does not have to go beyond what I tell them."

Before I introduced my students to Pamela Grossman's model of teacher knowledge (1990, p. 5) I thought it would help students see

the complexities of teacher knowledge as they thought about what it meant to know their content. I also felt it might add a broader understanding of the concepts discussed in the article "'150 Different Ways' of Knowing..." as well as providing a "picture" of the kinds of knowledge an effective teacher draws on to plan and implement curriculum. My initial run through Grossman's model was to simply "tell" about it. My students were so distant; it was obvious they had little idea what I was talking about when I said "substantive structures are various frameworks that exist in a discipline that affect how it[discipline] is organized and directs the focus of questions that might guide further study of the field." My quick preparation and limited understanding did not allow me to bring students closer to the idea. What seemed like a good idea was a disaster and I left my students confused. I did some reteaching the next class meeting that was a bit clearer, but still not my ideas. I had not yet had time to think about this model in depth and transform my understanding to represent it to my students.

I enlisted a colleague to help me understand substantive and syntactic knowledge and get clearer about the meaning with an example. She led me through the discipline of science and the various content areas of biology, chemistry and physics using water as an example of a compound to be explored through each, in the substantive realm of subject matter knowledge. Different questions/concerns about water were addressed in each content. For example, in biology H20 is a need of all cells. How does an organism use water, what is electrolyte balance and why is it

important? In chemistry, water is the universal solvent. It possesses bi-polar molecules. What are the chemical properties? In physics, how do we measure and define the force that water moves with? What are its magnetic properties? conduction properties? This certainly had meaning for the science group but not for other groups. What seemed clear when my colleague and I spoke became fuzzy when I had to talk about it. I didn't know the concepts beyond what my colleague had explained to me. I'm sure that my students were left with misconceptions and confusion about my example, as I was.

How Students Responded to Texts

Student response to "Pitfalls" text. "Pitfalls of Experience" (Feiman-Nemser, Buchmann, 1985) gave students a lot to think about. They thought about the "familiarity" pitfall and the difficulty in viewing a well known setting with new eyes, the "two worlds" pitfall and the tension of theory and practice, and the "cross purposes" pitfall questioning how students are prepared through student teaching for the realities of the novice years. My students were surprisingly strong in their beliefs about the value of experience and what the article had to say. It also surfaced their beliefs about knowing content and the real value of a secondary methods course, or most courses relative to the actual field experience.

As I traveled from content group to content group student conversations about the three pitfalls was lively and in some cases

surprising and thought provoking for me. A few of my students, English, drama and art majors did not think they would be ensnared by the familiarity pitfall because they had not found that high school offered them anything. In essence they had "dropped out" by finding what they needed outside of school in local performing arts groups and community college fine arts programs. They did not think that they would teach as they had been taught in high school because their energies had been tapped and expanded by teachers outside of school, who moved to a different timepiece in relation to teaching and student learning.

Other students were able to see how easy and sensible it was that new teachers fell into the familiarity pitfall. They talked about the comfort and safety of returning to something known while under stress, as well as wanting to emulate a favorite teacher who may have had an influence on their decision to become a teacher. They also talked about how they were coming to see the complexities of teaching and they could comprehend how it would be easy to put their time in with a familiar regimen of correct the homework, read a new section, assign more homework, give time to work. A few other students defended Karen, the student in the article ensnared by the familiarity pitfall, and stated that she did not have a problem with authority; she was simply being a "student."

> We are in classrooms to learn. As far as the familiarity pitfall, we have nothing else to help us in the classroom except our preconceptions of the classroom based on our early years of education. It is those preconceptions that we build on or alter as we get new information from our methods classes. [cgj#2 music, p. 15]

Content groups sympathized with Tom's two-worlds pitfall and used some very strong language to bring their points home. I felt somewhat defensive as I listened to my students and later when I read their content journals.

> Tom's plight is one that is familiar to many education students. Very often the teachings of the college classroom conflict with what is being taught in the elementary and secondary schools. The education student must decide for him/herself which is more important, the college grade or learning from the field observation. . . . the college classroom cannot possibly address the many types of teaching techniques and learning styles that are out there. [cgj#2 Eng., p. 12]

One of the groups in their content journal had a final thought for pitfalls: ". . . At least an awareness of these potential problems now exists" [science group# 2. p. 23].

Students connecting with "150 Ways. . . ." My students felt that Wilson, Shulman and Richert's piece was one of the most important articles they read in the course. Above all other texts it helped them think about what it meant to know their content in ways to teach it.

> It [article] has made me think about what I really know right now, what I still need to know, and how I'm going to represent all that stuff in my head to my students. [cj, music group #1, p. 15]

> When we were talking about the model of pedagogical reasoning in class I was thinking about the teachers who use the same lesson plans year after year . . . they have left out reflection and new comprehension. [cj, English group# 2, p.15]

> In the Model of Pedagogical reasoning, one major step to the teaching process is reflection. We give serious consideration to what we have accomplished in the lesson. We think about it during and after so that

> we can figure out how to make it better . . . develop new ways to teach the lesson. [cj, English group# 4, p. 18]
>
> Pedagogy should not be a set of generic principles that can be applied to any discipline. It should be subject specific. We feel it will not just appear in our mind after taking a methods course, rather it is a set of principles we will gather over time. [cj, French group#1, p. 17]

This article seemed to draw a number of things together, causing students to think about what they knew about their content and how crucial that knowledge was to their teaching. An English student thought about herself as a learner in relation to this article; "I really learned a lot from the '150 Ways . . .' article. It made so much sense in light of my personal narrative, how I learn, and what makes a class 'click' for me. It's not always easy to represent an idea or concept in more than one way . . . but it is so critical to effective teaching" [#9]. A foreign language student stated, "'150 Ways of Knowing" seemed to follow and reinforce the ideas in "I, Thou, It" This article got me to think differently about my subject and how it could be enhanced by other content areas" [#11]. A math student shared "The most powerful text in this course was '150 Ways of Knowing. . . .' This text brought to light all of the personalities my students will bring and how many learning styles I will encounter. This helped me to begin thinking about how I will represent math for all students." [#37][final course evaluations, #'s 9, 11, 37] Most of my students valued this article above all others [see course evaluation, question #1, Appendix]

Tasks

The main tasks in the second part of the course were designed to help students begin to think about what it meant to know their content as they examined the second course question. They also challenged students to prepare and "try out" lessons they would teach in our university classroom and present as a tutor in the local public schools. Reflective writing in dialogic journals and discussing study questions in content groups and whole group extended student thinking about what it meant to "know content" as they dealt with the texts and their "teaching" experiences at the university and in the field.

Mini-teaching #1 Using the Moon as a Context

The first mini-teaching lesson was scheduled to take place during the first course question but the format of the course took more time than I imagined. So, students taught their mini-lessons just as we moved into course question two. As it happened, designing and implementing their mini-lessons using the moon as a context to teach a content concept created a valuable "context" through which they could view the second course question and the selected texts, especially "'150 Different Ways' of Knowing: Representations of Knowledge in Teaching" (Wilson, Shulman, Richert, 1987). They had just finished grappling with crafting a lesson about a content concept that they would teach to their peers, using an unfamiliar planning approach which required a learning phase (research outside of a text book and for most groups, their

discipline) before the teaching phase, based on an unfamiliar context. This created a lot of discomfort for my students as they worked through the task. Students started to think about what they knew as well as what they did not know. They also had to adjust their thinking about how they might teach it because thinking about teaching in a "context" took them away from the familiar text book dependent lecture model.

I asked my students to observe the moon for several weeks and, in their content groups, figure out how to use their moon observations in teaching a concept from their content area. They were required to plan and teach the lesson as a group to their classmates. As groups met and discussed their moon observations, I asked students to answer some prepared questions about how they had approached learning about the moon and what they had discovered about the moon that might add an interesting context for their content lesson. Most students knew that the moon orbited around the earth and gave off light reflected from the sun but they did not know why. Students also wrote that their ideas about the moon had come from prior knowledge from elementary school, encyclopedias, and an undergraduate astronomy course. One student wrote that during his observations he noticed that the pattern on the moon (the face) was always the same. This confirmed for him his prior knowledge that the same side of the moon was always toward the earth. Another student wrote that one night he took a walk in the moonlight and "felt the power of the moon" and this helped him understand how the moon might have inspired writers, poets and

musical composers. Some students had taken astronomy and checked their course notes as they observed the movement of the moon and the phases. They found that what they observed corresponded with what they had written in their notes one to two years before. A few students had obvious misconceptions. Two students believed that the moon was a star. They were able to reverse this misconception through their interaction with their content group members and through their reading. Another student believed the stars rotated around the planets [j#3, 9-10 '92, p. 26].

Finally I asked each group to combine their discoveries to begin to think about a content concept they might teach using something about the moon as a context. I saw this as an entry into getting students to think about how they approach learning about a new concept, and how their approach informs the connections they make when they think about how to present it.

The moon groups met and planned for a total of three hours in class over a period of three weeks. I entered their groups frequently, occasionally posing questions about what they were saying, but mostly listening. I did not want students to use a lesson plan format provided by the teacher. I wanted them to figure out how to teach a lesson by identifying, as a group, a content concept they wanted to teach, and then examining their content knowledge base. This task required students to get in touch with the ideas their content area was organized around and how connections might be made outside of the discipline as well. Some were able to move in the intended direction, others could not. One

student wrote, in response to the question, "Did ideas about the moon that connected to your content area come to mind easily?" as he reflected on his learning before preparing to plan a lesson to teach with his group.

> Yes, right away I thought of Beethoven's "Moonlight Sonata" and the possibility of integrating that into an English lesson. Then I got thinking about how the moon inspires so many types of emotions . . . so I thought why not look at the different works in which the moon has inspired different emotions? This could be a good way to introduce the concept of tone. You would have different authors writing about the same topic in different ways . . . I also thought about how the experience of seeing the moon is shared by so many . . . I realized it might be interesting to examine works about the moon from different countries to emphasize the universality of the moon and human emotion. [cj#4, Eng., 10'92, p. 24]

While another wrote, including her other group members thinking in her response, "No, not at all. My group and I were having a hard time trying to decide what fell under history (our content) and what was scientific. Since our content is history we didn't want to intermingle it with science [cj#3, 10'92, p. 12]. This group saw disciplines isolated with distinct boundaries. The mathematics group answered the same question, "Did ideas about the moon that connected to your content area come to mind easily?," in a manner that suggested they did not get much beyond the shape of the moon and its distance from the earth. They stated that many mathematical concepts could be taught in a short mini-lesson, intimating that they would teach as they probably had been taught, presenting algorithms for their students to work problems with without understanding what they were solving for. They answered, "Yes, they did (ideas came easily). They (ideas) mostly were about the

shape of the moon and its size," "Yes, at first we thought we could find the area, circumference, distance from the earth, mass, volume, and radius of the moon . . . then we thought about the phases of the moon and how they pertain to fractions" [cj#7, math., 10'92, p. 19]. More students reflected the kind of thinking found in the second series of responses.

I wanted students to let their knowledge of content guide them toward a plan for teaching a content concept and in the process begin to discover what ideas, facts and models make up their content knowledge and further, to explore connections outside of their discipline.

Dialogic Journals

Students were continuing to write responses to the texts that were assigned as part of the work of the course. They were expected to read the texts and explain their understandings of the concept[s] the authors explored. They were asked to use and examine their own beliefs and experiences in relation to the articles and essays they explored. If they made assertions about what something meant in a particular reading, they were supposed to justify their assertion not quote the author's words. Students were also beginning to write about connections they were making from the ideas explored in the texts to their field observation and tutoring (e.g., Hawkins' triangle in the classroom, how teachers and students handled Jackson's hidden curriculum, how teachers were "representing" their content to their students). Students were writing about teachers

they were observing, using techniques they had experienced as students--lecture, check the homework problems, learn a new algorithm, begin the homework for tomorrow.

Content Journals

Students continued to report on the work of their content groups in a rigid manner. The writing was a description of what group members had done in relation to the tasks completed or texts discussed. Much of the writing concerned their preparation for teaching their mini-lesson, what they had decided to do, who was doing what, and finally a description of the implementation of the lesson and their impressions of the experience. Students also reported on discussion questions for "150 Different Ways of Knowing: Representations of Knowledge in Teaching" by writing group responses for each question. I thought students would discuss and write about what they had discovered about what they knew and did not know about their content and advance some ideas together about the second course question "What does it mean to know one's content?" after their mini-teaching presentation and reading the Wilson, Shulman, Richert (1989) article. I found little, if any, analysis in the content journals.

How Students Responded to Tasks for Question #2

Preparing for miniteaching #1. Many of my students thought that I should tell them how to prepare for this task and provide them with a lesson plan model. During the planning phase, they

constantly questioned me about the fact that they did not have a formal plan to use. I explained that I did not want to give them a plan. I wanted them to figure out how to teach a lesson by looking at the content concept they wanted to teach and then examining their content knowledge base. I wanted them to try to let their knowledge of content guide them toward a plan for teaching their content concept for their first mini-lesson. I knew that I would present and discuss the pedagogical reasoning model (Wilson, Shulman, Richert 1989) for their second mini-lesson and for their field lessons. I wanted them to have the experience of trying to figure out how to teach a lesson from what they thought they knew about teaching and their content.

All of my students took up the task of teaching a content concept using the context of the moon. Even though they considered the task to be confusing at first, they all worked hard at it and developed some interesting lessons. They also were amazed at how much they learned through the process.

Many students did not systematically observe the moon and record what they saw as I had requested. Instead they rather haphazardly observed and brought what they saw, read or heard to their group. From that frail point of entry they started to share "ideas" about what they could teach. They seemed to talk about "hitting on an idea" a lot.

> Physical education group Section 2: "What we have observed about the moon: rose in the east, set in the west . . . had a ring around it, why? Full most of the week . . . sky seemed darker further from the moon. . .

> What we might teach about . . . biorhythms and how they relate to athletic performance . . . read scientific literature on biorhythms and performance. [p. 7]

This content group seemed to have a very interesting slice on how we might be affected by the moon but they never pursued this line of thought. Later in their journal, as they wrote about their lesson in a personal critique they said the following: "Once we hit on the idea of basic motor skills on earth and moon (with heavy equipment on), it just suddenly came together" [P.E. cj#2, p. 11]. Other groups echoed this same pattern of talking about ideas until they had the "right" one.

> English Group-section 2: "Our idea is to use two poems and contrast . . . pass out sheets w/ poems and use a transparency . . . draw a Venn diagram and ask the class similarities and differences. Night Clouds vs. Nocturne in a Deserted Brickyard. [p. 9]

> History groups 1&2-section 2: "Our ideas ranged from moon worship, theories of moon formation, eclipses, to the role of the moon in historical battles. Group 1 . . . decided to research moon myths and legends and Group 2 decided to work on the effects of the first moon landing. [p.7]

> French group-section 1: "We finally came up with a great idea for our mini-teaching project using vocabulary about the moon, incorporating the {u} sound and colors, blue, yellow, gold, green. . . ." [p. 6-7]

One group decided that they were specialists in certain aspects of the moon because of their work experiences.

> Science group-section 2: "We decided that each person would teach a part of the lesson that they were specialists in . . . Bob, moon formation/geology . . . Belinda and I will teach about the orbits engineering/math. . . ." [p. 7]

The math group talked about beginning their thinking about teaching with a mathematical concept and determining the level they needed to be teaching at:

> Math group-section 1: "Some of the challenges of teaching math surfaced as our group met to prepare for the first mini-teaching project using the moon. It took us a while to decide on a concept, but once we decided that our level needed to be algebra or pre-algebra, for our classmates, this narrowed our choices down." [p. 16]

Once most groups had "hit on an idea," they proceeded to research the idea and formulate a plan to teach about it. Many of the lessons were interesting in their content, but many groups tried to teach too many concepts. For example, the science group tried to teach the following concepts; formation of the moon [four theories], orbit and position of the moon relative to the earth and sun, demonstration of a lunar and solar eclipse, effects the moon has upon the earth. In essence they had each member of the group teach a separate lesson and mostly they lectured, and all was accomplished in twenty five minutes! This particular group felt their lack of content knowledge and spoke about it in their content journal as they talked about their lesson:

> . . . helped us in recognizing that there are particular areas in which we should study because of our own lack of knowledge. For example . . . mentioned that she didn't know the difference between a solar and lunar eclipse. And it put us in the place of students, questioning our core of knowledge. We all agreed that in order to teach well one must know the subject matter." This goes back to Hawkins' discussion of "I, Thou, It." By knowing the subject matter a teacher can develop different strategies and techniques in order to involve a student in meaningful learning of the subject. We felt that lack of knowledge on the part of

> the teacher will result in rote learning by the student because the teaching style will reflect that lack of knowledge. [cj., sci., p. 11-12]

These group members have had the experience of using the text book wholly as a resource for learning and teaching. The text along with the quizzes and tests that are partly based on obscure facts and decontextualized concepts contained within the pages of that text book form the knowledge base housed within the walls of a content area classroom. Dewey's metaphor comes to mind with its image of boxes on shelves in a warehouse. The student's allusion to Hawkins shows a clear understanding of the essay because it really is certainly knowing subject matter; however, it is knowing subject matter in a particular way that allows teachers to teach in meaningful ways.

The science group arrived at an understanding that they indeed needed to know more about their content to represent it for students to understand. Doing this meant that they needed to identify what they themselves did not know about what they were teaching, so they then became learners as well.

The Physical Education group who originally thought about researching and teaching a lesson on biorhythms and athletic performance decided to teach a lesson on basic motor skills for a sixth grade middle school class. They used the concept of gravity to enhance and extend these skills for their students. They had to do some teaching about gravity in the beginning and did so with a helium filled beach ball and a beach ball filled partially with water. The other preservice students and I stood in a circle and

tossed the beach ball to get the feel of gravity-little gravity. Then we practiced hopping, skipping, jumping and galloping as we were led by one of the leaders. We practiced first as though we were simply performing these skills as we had all of our lives. Of course we were middle schoolers and the leaders watched to see that we were involving our entire bodies and that we were distributing our weight properly. Some of us had difficulty remembering how to skip.

After practicing in an atmosphere of gravity we were instructed to perform the same skills as though we were on the moon where there is little gravity. One of the leaders told us that we would have to imagine putting on eighty pound backpacks and heavy weighted boots in order to perform these skills on the moon. He told us that if we did not have the weights we would bounce high into space and come down far from where we started. Even with the weights we would still weigh much less than on the earth. We watched him demonstrate and then repeated the imaginary preparation.

We then practiced the same skills with our interpretations of light-weight bodies, as though we were on the moon, following the exaggerated lead of our leaders, through hopping, jumping, and skipping (even harder to do in slow near weightless motion). Once we had practiced, we had a relay using the same skills. The leaders would call out the skill and designate whether we were on the earth or the moon and they could change any time they wished. They watched and taught as we performed our skills. They moved among the learners demonstrating the movement when needed. When we were done

they asked us to tell them what we thought we had learned in class about gravity and motor skills on the earth and the moon.

This lesson was interesting in that the students had gone outside of their own content knowledge base in their limited inquiry about gravity, yet they had stayed with a concept/idea they had some understanding of and felt they could represent to their students. This is not so easy in all contents and with all concepts.

Some other groups had great difficulty trying to teach a content concept using the context of the moon. As a result their lessons were poorly planned and implemented. Perhaps it is misleading to say "poorly planned" because each group spent a lot of time in class and outside of class pulling together what they knew about their content and what they didn't know, connecting it to what they had learned about the moon and finally planning their lessons. Each group seemed to teach as they might have been taught in high school and more recently in college, although many made the attempt to "show" the concept they were teaching through overhead diagrams, models to represent distance from the earth to the moon, or light reflection from the sun. These attempts to show the concept only augmented their telling about the concept. I'm not sure that the assignment was appropriate. One needs to have a pretty sophisticated understanding of subject matter inside and outside of one's content to make interdisciplinary connections. I was asking them to teach across content and that is difficult even for experienced teachers.

The mini-teaching tasks were considered to be extremely valuable and informative for many students. Their learning was documented in their written responses to questions asked in the final course evaluation. One student echoed others' statements in the evaluation when she wrote, "Not only did I learn about planning and different perspectives from my own group, I experienced approaches taken by other groups that I could adapt and learn from." An art student wrote, "The moon assignment helped me to see my subject from several different perspectives, not just my own . . . when I went into the classroom to do my teaching, I tried to think about incorporating math, science and architecture into my lessons. Another student wrote, "The mini-teaching . . . required me to plan, prepare, organize, practice, implement, evaluate, and reflect upon my performance of a lesson plan." In the final course evaluation twenty-six students out of forty-seven total stated that the miniteaching tasks were helpful to them in planning as well as thinking about teaching and learning in their content [see final course evaluation, question #2, Appendix].

Dialogic journals. Students used their dialogic journals as an arena to compare what they thought about teaching when they entered this course and what they were thinking. The mini-lesson #1 and Wilson, Shulman and Richert's (1989) article taken together have caused students to begin questioning what they know and how they need to think about their connecting their knowledge and teaching. Students used this journal to converse with me about how they were

thinking and feeling, affording me the opportunity to push their thinking or help them analyze what they are thinking or feeling. For example one student wrote, "Mrs. Wolfe . . . after reading 150 Different Ways and teaching the moon lesson I really changed my whole attitude and thinking about teaching. I guess I always thought I would be able to be a good teacher just by getting up in front of the class and giving the students good notes and being really nice so that everyone would like me. Well my eyes have been opened to what teaching really is and I don't know how to get there . . ." [dj#51, 10'92]. Another talked about getting inside of her "intuitive knowing" revealed to her by George, the English teacher, in "'150 Different Ways' of Knowing...." "He talked about knowing something "intuitively," but coming up with a precise definition for what he wanted was difficult. If I were learning to teach something new I might be more aware of the building blocks as a student because I know how much I don't know . . . I love almost every facet connected with teaching English. It's always been easy for me. Now I need to take apart something that doesn't need fixing so I know how to do it (teach) for someone else . . . I continue to try to reconcile this methods class with my content area . . ." [dj#53, 10-19 '92].

These are fairly typical of the dialogic responses I received from my students. My responses dealt, in the first response, with getting my student to articulate what she meant by "what teaching was really like." My hunch was that she had left subject matter knowledge out of her original vision. In the second dialogic

journal response, I questioned my student about her resistance to knowing about the building blocks of her own discipline and what the idea of "fixing" really meant to her. I suspected that this was similarly a question of subject matter knowledge understood in ways to teach it not simply to "love" and hold it personally.

Students were using the dialogic journals to attempt to understand the articles, tasks, and discussions they were involved in through the course. They also examined the second course question through the dialogic journal as they dealt with the texts and tasks chosen to develop it.

Content Journals. Students were writing entries for the group journal but the entries were short and sparse on analysis. Sometimes the entries would simply say something like we didn't have anything important to say or we answered the discussion questions and here is what we said.... Students were responding negatively to the content journal task.

My Thinking at the Time

Miniteaching

The physical education content group taught an interesting and informative lesson using gravity to teach particular motor skills for middle school students. Their lesson was probably the most successful of any that day. They decided to use a concept that they understood and could in turn represent for their students to understand as well. They also taught one lesson, using only the

idea of gravity, something that we had a basic understanding of anyway, as would middle schoolers. They also had a number of ways to represent gravity-little gravity for student understanding, not the complex scientific representation, but certainly every day scientific representation at a more concrete level. When I asked this group whether they had had to research anything, they said that they had to find out the "basics" of gravity and for that they had used an astronomy book and they had asked one of their science instructors for some help. They had gotten the idea of the beach balls from this instructor. I thought they had used creativity in their approach and that their own content concept of large motor skill development had been understood.

Many of these mini-lessons were not well organized and the concepts explored were not totally understood by the individuals who were teaching them. This came out in our whole group discussion as groups who taught readily admitted their inability to teach their content for understanding because they did not understand the content concepts they were teaching and in some cases the moon context connection. One group in particular had gross misconceptions about the arrangement of the solar system. They had the belief that the stars orbited around the moon. It was obvious that they had not researched their everyday conceptions; they had accepted them as correct. When this was pointed out to them by some of their peers, they blamed the environment they had to work in for the confusion of the game they had created. They had not studied

the phenomenon to which they were to relate the concept from their subject matter.

There was a feeling that this lesson would have been easier for the math group to conceptualize if they had "understood" the concept of proportion or ratio. They knew it in ways to "tell" it as teachers. They typified other groups in that they gave the definition to their peer learners and then provided the algorithm to solve for it. They walked around and directed students in their work with the problems. Once the learners had solved the problems the lesson was considered a success. They used overheads to solve problems with the learners and the chalk board for students to write their work on reflecting the methods they were familiar with as learners in secondary and university based courses. Because they had learned about mathematics at many levels in conventional ways, they were limited in their teaching methods, as the science group stated in their content journal. The assignment limited them even more because they were trying to develop a context using new information about the moon while connecting it to a mathematics concept they felt comfortable teaching.

Most of my students learned something about the complexity and difficulty of conceptualizing a lesson about a concept in their content. They also learned what it meant to have a limited knowledge of content and how that affected their teaching.

The first mini-lesson was, for all but one of them, a first teaching experience. I suspect I confused the experience by asking

students to use the context of the moon to teach a concept from their content.

> This first mini-teaching task was very important to me and to the students. It was their first opportunity to work together as a content group from beginning to end on a subject matter project. They learned a lot about what they knew about their content and what they did not know. They realized, in some cases, that their knowledge limited their ability to teach about a concept. The math group in section 1 was particularly upset with their performance. Because they were not understood by the [larger] group, they felt they needed to simplify what they had done-I almost think they were talking about their own understanding of the concepts/they could tell us about ratio/ proportion and do problems but they could not answer student questions. There was also a belief with this group that they could not do it [teach effectively] because their only experience in the field classroom was observation thus far-promoting the belief that once they got into the classroom[field] all of the "secrets" of teaching math would be revealed to them. [j#3 , p. 27]

While it made sense for students to search for an answer outside of themselves, it did not make sense that they would find it in classrooms similar to ones they had learned in as high school students. These mathematics students (as well as other content students) needed content specific methods courses that helped them understand their content in ways to teach it, something they could not accomplish in a general methods course.

Entry of Math content group:

> Math content group 1: "We all feel math needs to be explained in as many different ways as possible, as simply as possible. This is the challenge for us as our studies take us away from simplicity and require[us] to consider complex concepts and abstract ideas. It changes our view of what is simple any more. Probably the most frustrating part of this assignment

> was directing the lesson with little more than observation of teachers to use as the source of information." [p.1]

The students in this math group, as in other content groups, talk about their belief that math should be "explained" in a multiplicity of ways, highlighting their "teaching is telling" stance.

I felt limited in my ability to help these groups look at their concept after their teaching and in some cases during the planning stages of their lessons, especially the math group and the music group. My lack of content knowledge prevented me from helping these groups in particular content specific ways. It was difficult to think about asking questions to move students further in their understanding of teaching content when I did not know the questions to ask. Further, it was difficult to ask questions about a lesson when I did not begin with a basic understanding of the concept being taught in order to judge the soundness of the concept taught. I could ask questions that led students to think more deeply about their lesson in a lot of contents, but I was limited in others and I shared this with my students.

I also had a difficult time dealing with the physical education groups because of their attitude that I considered them incompetent. After all, every other professor or instructor they had ever taken had treated them like they were incapable of learning, except for those in their own department [paraphrasing their words]. Both of my physical education groups visited in my office during the semester where they conveyed their concerns to me.

I did not share this view. My view is and was that they are not just teachers of physical education, but they are teachers of the health sciences, math, science, and others, because of their minors. They need to begin to think about teaching in ways that allow their students access to effective ways to think about subject matter and learn it. They will, in some cases, go to a rural setting and teach physical education and math or science. They may be the only science teacher. This means that they must know their content in the same ways that other content teachers know theirs. Time needs to be spent with these individuals who believe that they will only be teachers of physical education and coaches.

Students took the task very seriously and once they got past the idea that "this is what the instructor wants, " they really had a rich experience and learned from one another within and across content groups. One of my committee members suggested that they found a parallel between this task and what they imagined would happen in a methods class. I am inclined to agree with her because in the final course evaluations, students valued the tasks that put them into a teaching experience far above other tasks that I considered more important [see final course evaluation, question 2].

Fieldwork Concerns

Things were escalating in this second part of the course because of fieldwork and the need to prepare my students for the classrooms they would be teaching three lessons in. They needed information on planning and instruction and I was not ready to do

that just yet. I kept thinking throughout this portion of the course that more time and a different field schedule would help the process of looking at personal beliefs about teaching and learning to teach. I was really feeling pressured because we were approaching the half way mark in the semester and my students would be entering their field classrooms to teach in a few weeks. Thus far I had not worked with them in traditional ways to prepare them for the field--teaching them how to write instructional objectives, use the Madeline Hunter lesson plan format (modified at this university), as well as strategies of discussion, questioning, demonstration, lecture (approved format for beginning secondary methods at this university). I had concentrated on looking at the secondary context and what it meant to know content. I wanted more time to develop the "knowing" concept, how does one know a content and what does that have to do with teaching it. We could spend the entire semester on this! I was angry about having to stop and think about preparing students for field in the conventional way. What we were doing made so much more sense to me as preparation for field. I even thought about moving field to the very end of the course, but I did not have time to think about and plan a clear approach. I thought about what might work as the course evolved in my journal.

> Field should really be the last thing we do in methods . . . maybe an end with field, with a period of reflection and discussion after that. Perhaps in that reflective space, looking back on all of what we had talked about, wrote about--looking then at how field might have crystallized some things for them or spawned new questions. [rj #3 p. 29]

I conferred with two of my committee members and from our conversations decided to share my thinking with my students, letting them know that I did not think this was the best approach, however because of time and policy, it was the only approach. I took two three hour blocks and worked with my students as they learned to craft instructional objectives and lesson plans, and I lectured about the required strategies to be covered in their field lessons (above).

"150 Ways . . ." Catches On

Wilson, Shulman, and Richert's (1989) "150 Different Ways. . ." was very positively received by my students. They found it accessible and they also thought about it in "practical" terms even though it is theory based. I was surprised at the effect of this article on my students. Perhaps it came at the right time for them to hear what it had to say and, in some way, Grossman's model of teacher knowledge highlighted what the article had to say as well.

With the specter of the lessons to be taught in the field looming before them, the article seemed to provide students with ways to think about teaching a lesson that made sense. Maybe that was the change here, that they were thinking about making sense to their students.

As I reflected on a student's statement where she described her thinking in relation to teaching and learning being in "fantasy land" when she thought about teaching traditionally, I realized that

some of my students were rethinking their views and this particular article may have been the catalyst.

Grossman's Model of Teacher Knowledge

I thought teaching Grossman's (1990) model was a good idea because I wanted students to see and think about the categories of knowledge that effective teachers draw on to plan and teach. Unfortunately, I used Grossman's model before I had taken time to understand it well enough to teach it, especially the substantive and syntactic components of subject matter knowledge. I needed a way to talk about these components so that my students could begin to think about them and how they helped form subject matter knowledge. I also realized that this is a difficult concept, perhaps not an appropriate one for a beginning methods course. Perhaps a different approach on my part would have helped more students begin to see the usefulness of the model as they try to determine what they need to know about their content to teach effectively in the secondary classroom.

Managing the Course

The course was at a stage where many things had been set in motion. The dialogic journals were coming in on a rotating basis as were the content group journals. Many students, however, were unhappy with having their dialogic journals read every four weeks so they started handing them in more frequently. I was reluctant to refuse because I sensed that their journals were a vehicle where I

could enter their thoughts and help them clarify and extend their thinking. They were also beginning to ask questions of me in their dialogic journal. Questions seemed to be about texts and the need for further clarification, especially Hawkins' "I, Thou, It" and Wilson, Shulman and Richert's (1989) "'150 Different Ways....," teachers they were observing in the field who did not fit the models we were reading about and thinking about, and questions about whether they could know enough to teach effectively. I tried to respond to those questions because I had set these journals up as a conversation about the texts and as a discussion between student and instructor. Students began to answer the questions that I posed for them in their journals so the reading took longer and longer.

First revisions of personal narratives came in as well. Field placements had been set and students were planning to go into their field assignments to teach in a few short weeks. Classes were spent discussing the texts and planning and implementing tasks that I planned in conjunction with those texts. I knew that I needed to spend time outside of class reflecting about what happened in the course and why it happened. I needed to be thinking about what I might do to facilitate learning in a different way or to work on further extensions of the same learning. The time I spent reading the first drafts and then first revisions of their personal narratives was incredible, hours and hours. The next revision did not require as much time because they had an idea of where they were going with their narratives at this point because of my feedback. At the time I felt inundated by this course but I did not feel like

I could change anything because all of the pieces still seemed somehow important to the whole.

During this time I had a number of conversations with my committee members and my peers about certain parts of the course. I'm not sure I ever let anyone on my committee know exactly how I was feeling about the whole picture. I guess I thought I was supposed to figure this out on my own. I'm not sure where this idea came from, but it's an interesting thought for someone who had planned an entire methods course around a concept that included intense collaboration. As a result of some of the conversations, I did drop the content group journal because it really was not accomplishing what I wanted it to anyway. It probably would have been much more effective if it had been the only journal for students to respond in.

One conversation in particular with a peer and colleague left me believing that I had created an ineffective course. At the time, however, I really did not chose to "hear" what he said.

> Talked to R tonight about the difficulties I am having in this methods course. We talked for a long time as I explained all that I was doing and still hoping to accomplish. R told me my expectations were unrealistic . . . what I wanted to accomplish was a definite impossibility in one semester with one course. She also said that I really wasn't just teaching one course, I was trying to teach three courses, a content knowledge methods course, a foundations of ed. course, and a school in society course. As I tried to explain why I felt all of this needed to be in place for these students . . . R remained adamant that a course, to be effective, can only contain so much/beyond a certain point nothing is reflected on or connected with. [reflection j#2, 10-'92, p. 18-19]

I was frustrated and puzzled when I hung up the phone. I thought initially, as I reflected on the phone call, that I had been teaching an ineffective course. At one level what my colleague said made a great deal of sense. At another level I was observing my students do a great deal of thoughtful reflection on many texts and tasks in the course. I was watching my students realize that teaching was a complex endeavor and that they needed to move a lot further in their understanding before they could become effective teachers. They were also discovering, in many cases, that the teachers they had thought of as "good" teachers were not, according to our readings and related discussions in class. Some very powerful realizations were happening in students' personal narratives and in their dialogic journals. The work of the course was overwhelming and mistakes and adjustments were made often, but I believed the course was effective in many ways.

What I Think Now

Miniteaching and the Moon

As I think about the mini-teaching task using the moon as a context to teach a content concept, I am wondering about cross disciplinary teaching at this point in the course. Cross disciplinary teaching is a difficult concept for experienced teachers and it requires knowledge of connections between disciplines. This seems like a difficult venture for preservice students who are learning to teach. I am also thinking that using the moon as a context to teach a content concept from was initially

confusing to my students. They think of their content areas as isolated and become confused when they are asked to make connections to other disciplines when they perceive no connections. One group, highlighted earlier, tried to figure out what defined history and did not want to mix it up with science. It is clear to me from this group's struggle and others that I observed and interacted with that they did engage in thinking about what made up their discipline, and I suspect this was the first time for many of them to involve themselves in this kind of thinking. Their views were myopic and did not include the bigger dimensions of their content area. They thought of their content as encapsulated fragments to be learned and once mastered they would "know" their content.

This task pushed them to think about knowing and teaching content in a different way. They had to depend on what they could observe, research and on prior knowledge of their content. They had to look inside of what they knew, to figure it out so that they could represent it for learners who did not know it. They also had to depend on themselves and content group members in the learning phase and that was very different for them. One student summed up well what many others wrote in their course evaluations about the mini-teaching lesson; "I would have to say that as the learner in this project I felt very different because I could not ask questions or expect my teacher to tell me what I needed to know in order to do the project. I needed to depend on me. That made it very different from the usual situation of learning that I am used to" [question #2, final course evaluations, Appendix]. I have watched many

different groups experience difficulty with the assignment and while I need to be clearer in my directions and perhaps in my guidance, maybe the difficulty also occurs because students want to or are challenged to act differently than they are.

Group Teaching

I am also wondering about group teaching at this level as well, even though my students valued their mini-teaching experience above any other task in their evaluations. Team teaching is also another difficult practice for preservice teachers. I have seen some very good lessons, however, and the focus of collaboration is definitely an important part of this course. I have had students complain about the difficulty they have meeting outside of class which is a definite concern on a commuter campus. When I think about handing over time in class to work on these lessons, I am bothered by what readings we won't cover and how many discussions will be cut short.

I am also aware through conversations with group members who have valued the group experience, especially the teaching, that members report that they would never have spent the time on a lesson if they had done it alone. They refer to spending hours, developing a lesson because of the different perspectives of the group members in relation to the same content area. One group reported that they spent twenty hours developing a lesson to be team taught. They worked hard developing their lesson initially and conferred with me about their lesson. I asked a few questions and made a statement or two--What is the concept you want to teach? It doesn't seem clear

as I read the lesson. What will the students learn from playing a game like jeopardy? What will your students walk away from your lesson knowing? I'm still not clear what it is you're trying to teach. Can you clarify it for me? [j#3, 10'92, p. 24] After their session with me they rethought and reconstructed their lesson, spending more hours thinking about how to translate what they know into what and how to teach. Without the team teaching approach this in depth work would not have been done.

Students also talk about the support they feel from other members of the group as they plan and teach. They also feel this is good preparation for their independent teaching in the field [course evaluation, #2, Appendix]. Perhaps handing over time in class for the groups to think and plan is just as important as whole group discussions. Concentrating on five or six texts instead of twenty would help redefine the time available.

Managing the Work of the Course

I have struggled with the work of this course for three semesters and I am well into the fourth as I write this. Because of the time devoted to finishing my dissertation this semester and last, I have drastically reduced the number of readings and tasks. Even though students are not writing in a dialogic journal, writing a unit plan, or reading a great number of articles, I am still seeing and hearing thoughtful reflection in personal narratives, class discussions, and content group discussions. I do not feel as involved in managing the course, yet students are making the same

connections. It is becoming clear to me that I do not have to put everything into the course each semester. A few powerful readings, identified through final course evaluations, meaningful tasks that cause students to use what they have learned from readings and discussions, and content groups as a way of managing the work of the course make the course manageable and powerful for one teacher.

Fieldwork Again

Again I am faced with the prominent belief that the real goods of teaching are in the field. In a particularly powerful journal response, the realization that students decide at some point whether they will play the game of the college classroom and get the grade or listen to the "expert" in the field and learn to teach, presents itself once again. I find it difficult to confront these preservice student beliefs and do not know exactly how to do it. I know that what I say and do because of the field component can reach teachers in the field and can be the source of lost placements if these teachers interpret that I have criticized them in any way.

I am convinced that I need to rethink this course with the field component in a different place. To do that I need to decide what I want field experience to do for the students and for me in this course. Perhaps the power of field for my students is enhanced because of its placement in the course and the emphasis on preparation for field instead of an evolving course that field fits naturally into at some point in the semester. I will need time to

think this through as I adhere to the fieldwork guidelines of this NCATE approved university program.

I can see the value of structured observation in secondary settings and I tried to set that up to happen during the first part of the course because I was concerned that students needed to be familiar with the secondary setting in a manner that was different that their personal school experience. It seems as though the tutoring of special needs students could be continued during the "knowing" exploration. Perhaps the "what does knowing have to do with teaching" question could be the last course question and the field lessons could be taught during this time.

I would run into problems however, because I would be competing for placements with the other methods courses. One solution I have considered is to open another urban school and work exclusively with two schools while I do the placements and the supervision. Perhaps students could team teach in these particular schools as well since they have adopted the middle school concept.

I am aware that we do not spend enough time thinking and learning about content knowledge and how to teach it for student understanding. This has to be the most important concern. This is a dilemma and one I need to explore further. The field program will stay so I need to find a way to work with the field program to allow the components to enhance our thinking about content knowledge and how it informs the effectiveness of what we do as teachers of secondary students.

My intent that student assumptions of "knowing enough" to teach would be challenged by the second course question was realized at different levels. Some students were greatly concerned that they did not know their content after believing through assessments in their content courses that they did. They also recognized as they read course texts, planned and taught a lesson, that they needed to know their content differently to teach it. Through these experiences they were forced to examine their content knowledge base. Most students faced themselves honestly and admitted that they didn't understand many parts of the subject matter they would be expected to teach, and could only transfer it as they had learned it. With this knowledge students prepared to deepen their exploration of what it means to teach subject matter as they moved into a study of the last course question, What does knowing one's content have to do with teaching it?

CHAPTER VIII

WHAT DOES KNOWING ONE'S CONTENT HAVE TO DO WITH TEACHING IT?

Overview

As my students and I moved into our exploration of the third course question, it was a particularly busy and rich part of the course. My students were preparing to enter the field to teach three lessons which they were working on with the field teacher's input. They were also preparing, within their content area groups, to teach a second mini-teaching lesson in which they were supposed to represent a concept in more than one way to increase learner understanding. In addition students were preparing to hand in the final drafts of their personal narratives for any final comments or questions about their development, and they were beginning to read and respond to content specific articles chosen for their groups.

We were focusing on looking at how one's knowledge of content can limit the teaching of it as we examined the third course question. In content groups and in whole group, students thought hard about how to transform what they thought they knew into ways to teach it to students who did not have the same knowledge. Pressing my students to look back at their first mini-teaching lessons and reflect on how difficult it was to teach some of the

concepts, helped students think about how they were unable to change their knowledge into representations that learners could connect with. Students repeated what they had stated during their personal lesson critiques, that they really did not understand their concept clearly enough to transfer it in ways for others to learn. I wanted my students to continue exploring ideas of transforming and representing knowledge to support learning. I wanted them to see a strong connection between their knowing and teaching, and the limitations that exist if a teacher only knows content in a personal way or thinks of it as a fixed body of information.

In this chapter students continued to reflect on and read "150 Different Ways of Knowing: Representations of Knowledge in Teaching" and they worked with content specific texts in science, mathematics, history and English. All students read the science and mathematics texts as a basis for discussion about student misconceptions.

Students were involved in five learning tasks described in this chapter: mini-teaching #2, content journals, fieldwork teaching, final drafts of personal narratives and field reflection papers [See course schematic, figure one, part 3, Appendix]. Student responses to the above tasks are reported. I hightlight two students' fieldwork lessons and two students' personal narratives. Finally, I discuss my thinking at the time of the course work and my thinking about the work of the course now.

Texts

"'150 Ways Different Ways' of Knowing: Representation of Knowledge in Teaching" (1989) was introduced in connection with the second question, yet it had great implications for this chapter as well. I asked my students to revisit this article often as they thought about preparing their mini-lessons and their field lessons. I particularly used the "pedagogical reasoning model" described in the article to help students think about lesson planning. Content groups used the model to "walk through" planning a lesson.

We had reached a point in the course where we had some shared understandings about the secondary context, especially the students, and what teachers needed to know about their content. So it seemed the right time for students to read some texts that related to their individual content areas. They could ponder over these together, and discuss how the issues we had explored together looked in a particular content classroom . . . theirs.

I selected these texts because of the teachers portrayed in them and because of the theoretical concerns--conceptual change teaching, teaching as perspective, and teaching with transformative aims. These texts were "Teaching Science" (Anderson and Smith, 1987), "Peering at History Through Different Lenses: The Role of Disciplinary Perspectives in Teaching History" (Wilson and Wineburg, 1989), "The Teacher as Respondent to the High School Writer" (Dunn, Florio-Ruane, Clark, 1989) and "A Pedagogical Autobiography: Mathematics Teaching" (Rickard, 1991).

These articles offered something for all students, independent of their content. Each text looked at content teachers at different levels of knowing. Content specific articles also gave students ideas about how content teachers interpreted their work with subject specific aims in relation to their knowing.

Mr. Jameson connected his outside interest in photography to the writing classroom in "Teacher as Respondent to the High School Writer" (1989). Students in Mr. Jameson's course were portrayed as learning in different ways as they wrote about something they had a particular interest in. The boundaries in this classroom were not rigidly defined.

Wilson's and Wineburg's (1989) piece, "Peering At History Through Different Lenses," allowed history students to think about their interest emphasis, sociological, political, historical, and how that affects their content knowledge and how they might teach it. This article was subject specific but had implications for other contents.

With "Teaching Science" (1987) I wanted to give students something more to think about, uncovering and attempting to correct scientific misconceptions. Once again this requires teaching that is not conventional. All of these articles prod students to think about knowing their content in order to teach it for student understanding. All of the boundaries may look different but the foci seem similar.

The individual content groups were responsible for leading the discussion for their particular article. The others were asked to

read all of the articles to respond to the group's questions and to take advantage of the information that might apply across content for them. Unfortunately, many students only read the articles they were responsible for, while some students requested and read all of the articles.

I required all of the students to read Anderson and Smith's article "Teaching Science" (1987) because of the emphasis on conceptual change teaching. I thought this text would be relevant for all students because they would be teaching students who carried misconceptions in their content area. I coupled the discussion of this reading with the viewing of "Private Universe," a video of researchers looking at students' private conceptions/ misconceptions in relation to scientific understandings. I decided to show the video because I wanted to impress my students with the knowledge that intervention into private beliefs or misconceptions is difficult. It requires that teachers know their students and their content well enough to be familiar with the common misconceptions that exist within disciplines. I also wanted them to be aware of the prevalence of misconceptions and what an intervention looked like.

All students were also required to read Tony Rickard's , "Pedagogical Autobiography; A Mathematical Journey" (1991). Rickard surfaces every novice teacher's nightmare: What if a student asks you something you can't explain because you don't know? Rickard's search for "knowing" is on and students can connect to that feeling at this point in the course very clearly. Tony's moment of facing

what he did not understand is a shared experience among many beginning teachers. What is not shared occurs after he faces his limitations, his quest to understand.

Student Responses to Texts

Students continued to work with and value "'150 Different Ways' of Knowing: Representations in teaching." This particular article seemed to help students understand where they were in their preparation for teaching. One student stated that she thought she could ."..just go in and explain math to students like I would to one of my friends-but I can't, they don't understand in the way that someone in college would." This same student thought she would be a good teacher simply because she could explain the math procedures well, " . . . Now I know there's a lot more to it than I thought. I will need to know math in every way possible, not just the way I learned it" [#50]. The article allowed one student to think about how he might teach and how much more he needs to know. "I know why some teachers are ineffective, because although they know their subject matter, they lack different ways to present it . . . it has made me think about what I really know right now, what I still need to know, and how I'm going to represent all that stuff in my head to my students [#48] [final course evaluations, #'s 50, 48].

Students already had faced the reality that knowing what a textbook says and relying on personal knowledge is not the same as knowing one's content. They now realized that they needed to

understand their own knowledge well enough to transform it into new examples for their students to explore and access.

My students found the article, "Teaching Science," by Anderson and Smith (1987) to be surprising and powerful as they thought about possible misconceptions that might exist in their own content area. They would need to find ways to discover these in order to teach their students effectively. They also were surprised at the misconceptions highly educated adults had in relation to scientific understandings. They admitted to some of these same misunderstanding concerning seasons and lunar eclipses, depicted in the video, as well as some of the examples in the reading, i.e. light and vision.

> We had to laugh after reading this article, because we obviously have lots of misconceptions, including the light and vision example. We thought about what some people's misconceptions about music might be.... [cj, music group #1, p. 21]

> We in this methods course are working for "conceptual change" . . . you as a teacher question and get to know your students . . . then you are able to move a student from their old conceptions to new ones [cj, English group #1, p. 23]

An English student connected with the idea of the "scientific mindset."

> The article by the science teacher who commented on helping his students develop a scientific mindset when conducting an experiment sticks in my mind. I think the mindset for students has a lot to do with their learning and success. I am a different person when I think of myself as a writer. It makes my mind prepared to do the things that my "mental model" of a writer would do. [final course evaluation, #9]

Many students connected with Rickard's story (1991), "A Pedagogical Autobiography; A Mathematical Journey," whether they were mathematics majors or not. They related his struggles to their own in some cases.

> I enjoyed his account of how he formed concepts questioned them, and repeatedly adjusted for new knowledge. It mimics what's happening to me here . . ." [cj, science group #2]

> This paper is the perfect note to end on. It takes us full cycle through teaching for conceptual change-from shielded misconceptions to confrontation and new information. It shows a man wrestling to assimilate and make his own, ideas which are alien to him. Much the way I've had to deal with some of the concepts in methods to come to a clearer understanding . . . [cj, art group# 1]

> Rickard became a teacher who is also a learner . . . he grew by having his assumptions and perspectives about teaching challenged . . . by the why questions [cj, English group #1]

Other students identified with Rickard's decisions about teaching and choosing a major because they had "always been good at it." His article caused the math students in one of the sections to rethink what they knew about adding zeros and actually question some of their math professors about this.

Many students seemed to be making important discoveries at this point in time about themselves, primarily, and what they knew or did not know about their content. Somehow they had never thought about how they were going to teach their content except to think about a district curriculum guide and a textbook. The pervasiveness of this attitude surprised me.

Tasks

Mini-teaching project #2. This learning experience was based on the idea of "representation" discussed in Wilson and Shulman, Richert's (1987) "150 Different Ways of Knowing: Representations of Knowledge in Teaching." The idea of representing their knowledge in more than one way was also a requirement for one of their field lessons. Their preparation in the content group was also preparation for the field.

Students were preparing to teach their second and final mini-teaching lesson. While their first lesson, using the moon as a context to teach a content concept, had been less structured, I required this second lesson to be more structured. This lesson would be focused toward one of their three required lessons, to be taught in the field for secondary students. For this assignment students were to teach a lesson on a content concept, transforming their knowledge of that concept into more than one "representation" to support student understanding. They also taught this as a mini-lesson to their methods classmates.

To help my students begin to see what transforming content knowledge into instructional representations involves, I presented a series of representations of the concept of "setting" in relation to the study or writing of a short story. I brought in a print of Robert Bateman's "Vantage Point," a painting of a bald eagle standing on a large cedar stump, overgrown with moss and sea grass, firmly anchored to a stretch of rocky beach on the Pacific ocean. I asked students what Bateman needed to know in order to paint this

bird in this particular habitat. For example, would he need to know about seasonal behaviors, such as migration, nesting, eating habits? I asked my students if they thought it was important to situate a bird or other species of wildlife in their natural setting. I queried whether authenticity of setting was important to a premier wildlife painter.

I then passed out the lyrics to a song written about the Vietnam conflict, "Goodnight Saigon," written by Billy Joel. I gave my students time to read and discuss the lyrics in their content groups and tell me what Billy Joel needed to know about war in order to write this song. I asked if Joel had created a setting through his lyrics. I asked them to describe it to me and they used words like depressing, dark, hopeless, and fearful. I asked them whether they thought the setting was authentic and they responded that it was because they could "feel" it and see it. I asked them if a setting should evoke a feeling and they thought it probably should to pull the listener in.

Finally I talked about Shirley Jackson's short story "The Lottery" and asked my students what the author would need to know to "situate" the story and characters, for example would she need to know about the historical context of the time the story took place? Human nature? I asked them if the setting gave them a feeling and they said that it did. They used words like "helpless," "anxious," "unreal." [annotated lesson plans, p. 10]

I also focused on the "pedagogical reasoning model" in Wilson, Shulman and Richert's (1987) "'150 Different Ways' of

Knowing. . . ." (p. 119), after presenting my "representation" to my students. I told my students that I had an understanding (comprehension) of the importance of "setting" to an author and I also realized that there were many kinds of authors who utilized "setting" in their works. I "reviewed" works from different arenas that I thought would illustrate the power of setting (alternative representations). I thought about the students I would be introducing the concept of "setting" to and I tried to include student backgrounds in art, science, music, English, history. Background in mathematics and physical education were not included except through possible outside interests or interest in learning about the concept of "representation." As I presented the lesson I was "instructing" in a thoughtful effective manner using questioning, discussion, pacing and group activity (later). I evaluated my students' understanding of "setting" through questioning during the lesson, and of planning an effective lesson with representations through their "walk through" the pedagogical reasoning model in their content groups. I also evaluated the effectiveness of my own teaching about "representation" using the concept of setting, as I observed my students working through the model. I explained to my students during my direct instruction that as a teacher educator I would reflect on the lesson I had prepared for them thinking about their responses individually and as a group. Through this (reflection) I would reach a (new comprehension) and I would teach the lesson differently in the future because of what I learned from the process and from them.

Each content group then selected a concept and used the pedagogical reasoning model to work through planning a lesson they would teach in their second mini-teaching lesson.

Content group journals. Groups were recording their discussions and preparations for their mini-lessons in their content group journals. The entries dwindled and they lacked substance in relation to the group's thinking and discoveries, as a whole. During this part of the course I decided, after discussion with two of my committee members to discontinue the content journal.

Fieldwork. The department requires students to do twenty seven hours of fieldwork. I changed a few things in the original fieldwork guidelines. The observation hours, which encompassed visits to urban, suburban and rural secondary schools, were relatively unstructured. I wanted students to look for particular things inside and outside of the classroom. I asked students to pay attention to and describe, in field notes, the communities the schools were situated in, the physical appearance of the school and the classrooms, the lesson that was being taught, what the learners were like and what they seemed to be learning, whether there was interaction between student and teacher and what it looked and sounded like. I did this because I wanted students to recognize that the outside of the school many times defines the inside of the school, and I wanted them to be aware of what was going on in the classroom. I wanted them to begin connecting what we were reading

about and discussing to their observations inside and outside of the classroom.

I also had my students write a Field Reflection Paper on their field experiences using a narrative format. They were to utilize their field notes and describe what happened and then write an analysis of what they saw, connecting it to readings and or concepts explored in our general methods course. I required this paper instead of the traditional field log because it encouraged students to think in greater detail about what they were seeing and doing.

Personal narratives. My students were also immersed their personal narratives which encompassed the semester, the personal narrative. This task provided another window through which my students and I could view their beliefs about teaching and learning, as they intensively examined their own learning. It was also another place where I mediated and directed their thinking toward certain concepts explored through the organizing questions, texts and tasks of the course. As I intervened with questions and comments students revised and expanded their stories as they reflected on my comments in relation to their memory of the learning episode.

Student Responses to Tasks

Trying to figure out "representation." Many students had difficulty understanding the idea of "representation" of their knowledge relative to teaching a content concept. Students do not naturally think about the "transformation" step detailed in Wilson et al. (1987). Students have a sense that they teach as they were taught, because after all they "understand" it. Their idea of teaching, drawn from the components of the pedagogical reasoning model might encompass only "comprehension," "direct instruction," and "evaluation." Some simply came up with many different ways to "tell" students the same thing, a kind of repetitive exercise that hammered in the same idea.

For example, the math group's representations included "telling" the students the rule, "writing" the rule on the board, "doing" a problem, "writing" the rule on an overhead and "working" a problem on the overhead. They were teaching the concept of converting fractions to decimals as a rule.

One of the science groups followed the same pattern as they detailed what they would do in their mini-teaching lesson, as detailed in their content group journal: ". . . discuss formula and how and why it affects our lives on a daily basis. . . . Introduce the formula and explain how it works and why. . . . Explain as well as show graphically. . . ." [cgj sci. #1, p. 24].

In both cases these groups started with the formula, (beginning with the abstraction of the concept) instead of starting at a concrete level and allowing learners to work to the abstract

with inquiry and questioning. Students were comfortable with the abstract because that is what they had memorized and believed they understood. They were uncomfortable with the concrete because they did not understand where to begin.

Because of student difficulty with the idea of representation, we revisited often Wilson, Shulman, and Richert's article, "150 Different Ways of Knowing . . ." and especially the "pedagogical reasoning model." My students found this model to be an effective way to think about what they needed to know and do to plan a lesson as we worked through it in class and then in their individual content groups as they planned mini-teaching #2. This article and discussion also caused some of my students to reflect on what they had learned in other courses about teaching and what they already knew that helped them understand knowledge transformation and "representation." Many students wrote about this in their dialogic journals and in their field reflection papers.

Of all of the groups, art and drama, in particular, appeared to have grabbed the essence of knowledge transformation and "representation." I would like to concentrate on this group, the comments in their content journal and their mini-teaching, to illustrate the impact of "'150 Different Ways of Knowing: Representations of Knowledge in Teaching" and the pedagogical reasoning model discussed in Wilson et al. (1987).

The journal entries below reveal the value that these students have placed on this particular article and the concepts of effective teaching it presents. They also reveal these students' thinking

about this article and what they have learned in relation to the educational images presented in other education courses. Finally, there is a realization of what pedagogical content knowledge is, an "aha" of sorts. These journal entries were made before their mini-teaching lesson #2. All comments written below are taken from the art and drama group's context journal and are written by each student as they report for the week.

Art group-1 #6

-- I think this article helped me in learning how to plan classes. I made notes to myself throughout the reading of this article.

Notes:

-- in planning lessons teachers need to evaluate their own understanding of subject matter

-- I should develop a biography of what I know about other content areas that I can relate to my own

-- I should pool all of my knowledge sources together and decide what exactly I want my students to learn and accomplish

-- I must give my students alternative ways to see the subject matter [cj#6, 10-'92, p. 30]

This reporter-student was moved by the article to write unsolicited notes to help him as he advanced through the education sequence. He is also moving inside of himself to try to assess and understand what he knows because of the article.

> Art group-1 #6: In my Communication in the Classroom class we learned that superstar teachers have these things in common; routinization, eye contact with all, organization, establishing rules and regulations, following through consistently and fairly. It left out truly understanding your subject and knowing yours and your students' possibilities and limitations. Pedagogical content knowledge is a combination of

> looking at the whole picture and transforming it-that simple statement encapsulates the essence of teaching. The questions of why am I teaching this? What can the student learn? What are the purposes? are essential to the formation, development and foundation of pedagogical content knowledge . . . [cj #6, 10-'92 p. 39]

The article helped this student reporter recognize that the "technical" aspects of teaching are secondary to understanding what you are doing as a teacher and how to approach becoming an effective teacher using a plan that includes knowledge of student, content, and connections between the two.

> Art group-1 #6: Figure 4.2 from 150 Ways of Knowing is a model of the process a teacher goes through in preparing and teaching information. This process appears overwhelming when looked at in theory. However, it has been my experience that answers often come from a natural course of events rather than striving to reach a solution . . . example of this . . . last year my dancers were working on leaps for an upcoming competition. I was trying to have them move with the accent on the up beat. I broke down the leaps technically, showing them how the plie' gave them their spring. I also told them to work through the entire length of the body, from the toe up for strength. All this helped but did not produce the effect I wanted. It wasn't until a couple of days later that the solution came to me. I was driving out in the country to visit a friend and I was enjoying the changing of the colors. Suddenly, from out of the blue a herd of deer appeared, running and leaping across the field. As I watched, I realized that the deer used the exact air-born quality in their leaps that my dancers needed. I relayed the story to them and it made a difference in the quality of their leaps. They still needed to train their muscles to acquire the strength needed, but they now understood better what they were working toward [cj#6, 10-'92, p. 32-33]

This student-reporter actually describes her own involvement with the pedagogical reasoning model as a teacher of dance before she realized the model existed. This student was very excited when she

read the article because she felt as though she now had a "language" to think about her teaching with [cj. #6, p. 33].

As my art and drama students prepared to teach their mini-teaching lesson and their field lesson using the concept of "representation" they decided to teach a lesson about the concept of "expression" in art, representing the concept in more than one way. They believed that exploring this concept would help their art, dance and drama students understand that when individuals reveal their inner self it can take many forms and there is not a correctness or incorrectness to the concept of expression. This would be a foundation lesson for their students.

They started their lesson with two of the content group artists drawing patterns on the blackboard, with chalk, to the music of a new age artist, Yanni. A third member of the group, also an artist, gave the group a running commentary on what they were seeing each artist do and how the patterns that were developing before our eyes might have been inspired. She spoke of mood displayed in artistic pattern and individual interpretation. Once the piece of music ended, she interviewed each of the artists and they gave the group their story about how their pattern had developed.

One artist had closed his eyes and let the music lead his hand into a pattern of intricate scrolls. He had interpreted the music through a baroque-like pattern, ornate, intricate, yet not totally predictable. The other artist had let her body move with the music as she drew wave like patterns and overlapping circles in large free

strokes. She had interpreted the sound in an open, free, and simplistic form.

The commentator changed the context of interpretation from music to a still life of fruit and wine. The same two artists had painted the still life and the paintings were very different in their visual effect. As the commentator interviewed each of them, one admitted to seeing patterns and texture when he looked at the still life, while the other artist stated that she saw the immediacy of color. While one painting was intricate and true to the exactness of the model, the other was free, with splashes of color that one could imagine as the fruit modeled.

They then invited the class to interpret another piece of music with a pen and paper, The class drew as the music played and then the content group teachers pointed out the diversity of interpretation and the lack of correctness or incorrectness. These were simply personal interpretations and individual expression.

The drama and dance major in this group spoke of the importance of interpretation in acting, especially in comedy. She spoke about the use of exaggeration in comedy, and modeled the players in the game of baseball. She asked us to think about what we saw baseball [batters] do. We came up with spitting in their hands, rubbing dirt on their hands and practice swings. She demonstrated each action using exaggeration. She did the same thing with the baseball pitcher and catcher.

She then called for volunteers to "play" a game of baseball. The result was wonderful and funny. The other students participated

with intensity and humor and those who remained in the audience began nagging the batter . . . hey batter, hey batter....

The content group attempted to impress upon the class that there was much to know and think about here when one thinks about interpretation and how to help students understand the concept [J#3, p. 51, 11'92].

Content Group Journals

While my students reacted favorably, in the early part of the course, to the idea of content journals, their attitude changed as the weeks wore on. They were not willing to reflect on and write about the attitudes and beliefs of their content group. They were afraid that they would somehow betray their peers. They were afraid that they might write something that was not true, a misinterpretation, if you will. They treated the content journals as a place to report what happened, a log of description with little if any reflective analysis. It became a chore for many of them and unpleasant as many groups wrote about it, after I decided to discontinue the content journal:

> [Science group] We all agreed that the biggest negative, however, was this group journal. None of us ever felt certain that the reporting we did was a true depiction of the group sentiments. We were all concerned with how we worded our entries. Would someone's feelings be hurt by what was written? The group journal is the one item we would suggest a future change on. Would the concept of a group log be more effective? We could briefly recap our group work in an item by item format. You could still follow the groups' progression through the semester without a lot of sidestepping and bullshitting [cgj, 12-'92, p. 49]

> [English group] We didn't think the group journal was very helpful. The journal was more of a duty than a choice that helped us. What we put in the group journal could have been handled in the dialogic journals. That way you could've had several perspectives on the experience. We felt the group journal was just a rehash of what we discussed in class. [cgj. p. 29]

> [Math group] There was a lot of apprehension about the grade we would receive as a group. Today's author can relate to this because as he is writing this summary he is having a difficult time finding words to express the group's thoughts. I don't know if these fears of 'letting the group down' are anything for us to worry about, but they do exist and were reported in our discussion. [cgj, p. 28].

Group members wanted to take care of one another and protect each other's right to interpretation. They were also dealing with a group grade for the content journal and they did not want to do anything to affect the group grade. They did not want to speak for one another in the content journal, and they were relieved when the content journal was discontinued.

Fieldwork Lessons

My students were quite nervous about actually teaching. They had received their placements and made contact with their cooperating teachers. Initially they observed in the cooperating teacher's classroom and met with them to talk about the content they would teach before teaching three different lessons to two groups of students. My students would fit into the content being taught so that the students and the classroom teacher would not have to contend with a curriculum change being brought in from the outside. Most of my students had what they referred to as productive

experiences. I observed and evaluated many of them. I thought that most of the students learned something more about their own content knowledge, engaging students, the kind of relationship they need to develop in the classroom with their students and their content, managing to get a lesson taught, and the things that may happen because of limited preparation and personal beliefs brought into the classroom.

Because this was their first "teaching" experience in the field many of them thought that they had done a better job of implementing their lesson than they actually had. The math major who had students do homework for fifteen minutes while she assisted, working problems on students' papers for them thought she had done a good job. Judging by the questions students had during the homework session, I wondered, as we spoke later, whether they had understood changing fractions to decimals, and decimals to fractions.

Some had fared better than others in asking questions that would invite students to respond. Many held their place in front of the class and lectured, using the chalkboard or the overhead to emphasize many of their points. I also heard some of them tell their students that the information they were talking about would be on a quiz.

Some students commented that they had experienced an adrenaline rush that carried them for hours after their teaching, and convinced them that they had experienced what it felt like to really teach. Finally, they were where the "real" learning about teaching took place and they had done some "real" teaching. The

power of being in charge of a classroom was intoxicating for many of them and they talked about how they had managed with the students [j #1, field notes, 11-'92 p. 37].

The two students, whose lessons follow, stood out in my observations because of their preparation, attempted interaction with students, and their attempts to transform their knowledge for students to understand. The earth science student developed some interesting representations, but maintained a traditional format. In both of these lessons I could identify issues we had discussed in our methods course.

Adam's lesson-physical education. Adam taught a lesson on weight training as part of a larger unit for junior high school males. He had a highly motivated group, and he was also personally committed to weight training.

Adam introduced his lesson by talking about the history of weight training and then discussed his own experiences in weight training, as a football player and beyond. He elicited responses to questions he posed about the benefits of weight training and also some costs. "What are some positive benefits of lifting weights? What age levels are appropriate for lifting weights? What are some things that might happen if you lift without a spotter? Can anyone be a spotter? and so on. Adam asked two of his aides who were football players from this high school to demonstrate proper lifting and machine techniques, as he described what they were doing to the group. He also had his models do improper techniques and discussed

xthe possible painful outcomes using his demonstrators to point out the possible muscle groups and tendon sites that might be injured. Adam emphasized learning to do weight training correctly.

After this demonstration and modeling, he had the young men break up into four groups. Each group was monitored by the instructors and demonstrators. Adam was careful to move from group to group as he exchanged places so that all students had access to him during the lesson.

Adam drew all of the students back together during the last five to ten minutes of class to review what they had discussed and practiced. He invited questions from his students as well. He also invited them to utilize the after school hours offered by the high school and the youth weight program at the local YMCA.

Adam demonstrated a tremendous amount of respect for the young men he interacted with, referring to them as "gentlemen" and listening to, valuing and "hearing" their questions in whole group discussion and one on one. He responded to all questions asked, repeating some for class emphasis. He praised students for their participation and attention in his class. When students spoke or asked questions Adam moved slightly toward them as he listened to what they were saying.

Adam appeared to have researched the history of weight training and nautilus equipment because he had a lot of knowledge about the mechanics of the machines, and his knowledge of physiology and kinesiology was also apparent as he connected the motion and the

notion of resistance to the marriage of the human body and the work performed on the machines [j #1, p. 36-37].

Abby's lesson-earth science. Abby was a non-traditional student. She had worked for Dow Chemical in the oil fields for fifteen years as a geologist. She was returning to obtain certification for teaching in the secondary schools. Abby was completing majors in physics and mathematics and already had a major in chemistry.

Abby's lessons in the field were very much lecture oriented or "presentation" oriented. She tended to want to do all of the work and "tell" students all of the information she knew. Abby was exceptionally prepared for her lessons but her students were not often invited to take an active role in the learning process.

Abby began her lesson by talking a bit about her experiences in her role as a geologist. She told them they would be looking at rocks and the rock cycle during her stay with them. Abby explained how rocks and their particular characteristics formed the context for all that she did in her work. She talked particularly about rock patterns, and the types that one needed to identify to make an educated guess that oil would be near by.

She talked about the types of rocks and formations as "maps to the treasure" they were seeking and how the rocks needed to be "read" carefully. Students found this information very interesting and listened intently. They did not talk to one another during this time and they had some questions about Abby's experiences when her

introduction was completed. Abby's introduction illustrated how having rich content knowledge is critical to student engagement with subject matter.

Abby then introduced the subject matter of rocks and the rock cycle by earlier asking three students to portray Iggy (igneous), Sed (sedimentary), and Meta (metamorphic). She then explained the general characteristics of the three rock types in humanistic terms as she introduced the students to the class. "Iggy has a fiery temper and a low boiling point, molten, simmering like a volcano inside, but when cooled down is solid and dependable . . . Sed is rather loose and tends to fall apart if pushed too far-loves to hang out around the river . . . Meta is a very complex person made up of a lot of different qualities-solid under pressure."

Abby lectured for the next twenty five minutes, using an overhead. Students were frantically taking notes and missed opportunities to ask questions and reflect on the information as they raced to get it all down. They knew a quiz was coming at the end of class. There were nine new terms to know.

After the lecture, Abby asked students to examine each type of rock and identify the defining characteristics. Information was given to them in a hand out as they did this, they had examined and identified these same rocks in an earlier lesson. This was a bit of a review before the quiz. Students were given a quiz at the end of the class. Abby corrected and returned the quiz the following day.

Abby was extremely open and discovery oriented in our methods class and delighted in the "new" concepts we explored as we worked

toward defining good teaching. She was particularly interested in the article "'150 Different Ways' of Knowing: Representations of Knowledge in Teaching" and stated that her approach to connect human characteristics with rock types had its inception with this article as she thought of the example of connecting Captain Kirk and Julius Caesar in the article. Abby's representation had enabled students to access the defining characteristics of rock types by connecting them to human characteristics.

Abby displayed an open disposition toward the more student centered, inquiry oriented learning and she used the traditional lecture format. While she appeared to "buy" all that we discussed in class, the concepts were not "real" to her at this point--she did not believe them and did not act on them. She provided her pupils with important information through lecture, and the length and intensity of her lecture seemed uncomfortable for these ninth graders [j #1, pp. 28-30].

Field Reflection Papers

I was puzzled as I read my students field reflection papers. Students who I thought would go into field and teach as they had been taught or praise conventional teaching methods were making connections to course concepts and course texts. They still hung onto some old ways, as my science student did, in part, in her earth science lesson, but they, like Abby, were making small attempts to understand and integrate some of the concepts we had explored in class.

There appeared to be some patterns as I read my students' papers. Students found themselves teaching as they had been taught, and realizing that they did not want to do this. Students were also trying to figure out their role and how much information to give students and how much to let students discover. Many did not feel as though they were properly prepared.

As they were planning their lessons in their content groups and with their cooperating teachers and talking about them with me, they were particularly concerned about whether students would understand the concept. Others, particularly the history, math and science groups, even though they were concerned with their students' understanding as well, seemed to want to depend on lecture and the text book.

Field reflection papers were rich with statements about the course and how students were seeing the work of the course in a different light. Some students had come to look at teaching differently as they examined teachers they had viewed as "good" in their narratives and discovered they were not as they examined what they had taken away as learners. Armed with this information some students found their field work changed their already faltering view of how easy teaching would be. A math student reflected:

> "I was not properly prepared. I expected teaching to be as "easy as it looks." I even suspect that Mrs. C had to reteach my lesson. I just showed the students how to do the problems and assigned in class problems to check their understanding. I was everything I hated in the math teachers that taught me." [Field reflection paper #4, p. 9, Fall-Winter '92]

Another student was still thinking about and figuring out the Hawkins' triangle as he talked about being part of one in his tutoring of a special needs student. Scott said that the high point of his field experience came when he realized he had been part of the triangle, as he worked with a special needs student who had to write a story for an English assignment. Scott reported that he was careful not to give the student a story, but questioned him about his interests and what he might like to write about. Scott tried not to "tell" the student anything but tried to respond to his student's questions with more questions and observations of his own. Scott thought he had provided a way for his students to check his understanding and move on, looking at his observations and giving them back to the student with new information, allowing the student to come to his own conclusions. Scott's statement was, "He came up with his own story and I had taught without teaching!" He appeared to understand that the teacher in Hawkins' essay provided information to move a student to another point of discovery. By imagining the "feedback loop" that Hawkins describes, Scott saw his student giving him information which he then utilized to provide questions and further clarifying statements to assist the student's thinking. Scott saw his roll as a facilitator of learning not a "dispenser of knowledge" [j #3, p. 59].

Personal Narratives

In this part of the course the personal narratives, in some cases were changing. Some students were looking at their learning

experience in a new light. They were handing in their third revision at this juncture of the course. I did find the personal narrative process to be powerful for some of my students.

Two cases in particular, written by a music major and a mathematics major, illustrated the power of the narrative. The realization that something was changing did not come until the third revision of the narrative for these two students. Their narratives were initially very traditional, perfunctory kinds of responses to an assignment.

Megan's narrative. Megan was a traditional undergraduate student and she did not have a particularly difficult time recalling and writing about the most wonderful mathematics teacher she had ever had. She spent a lot of time talking about how he always had time for students' questions even if they "didn't get it" even after they had met with the instructor. She felt that she had learned so much from this teacher and that she wanted to be just like him.

In my first intervention, through written questioning, I asked Megan to describe what she learned in the particular episode she wrote about because her approach had been vague. She had written that they had just been working problems in algebra. She could not remember any specific concept. I also asked her to think about the Hawkin's triangle in "I, Thou, It" and to try identify what the parts were in her episode, according to Hawkins. How would he talk about the interactional triangle in her math classroom. She

responded that Hawkins would see her teacher (I) using the concept (it) in the text book and teaching it to the students (thou).

The teacher would use the board to work problems on and they would work problems that were part of their homework. Hawkins, she felt, would see interaction as the teacher came around the room and spent time with all of them as they worked their problems, telling them where they were having problems.

Megan still had the notion that her teacher was an effective teacher assisting students in "understanding mathematics." It seemed that she was trying to fit the relationship that Hawkins talked about between the teacher, the student, and the content into her learning episode. She was having difficulty fashioning the fit. Hawkins had not talked about a dependence on the teacher and the teacher's resources, rather he had promoted a vision of equality of commitment to learning and teaching content. She did not see him at this point as a "teller" of knowledge and herself as the "receiver." She knew him as a teacher who "spent time" with his students showing them how to "do" math.

I asked Megan how her teacher had transformed his knowledge to teach it to them so they could understand it in multiple ways after our class read Wilson et al. (1987). I asked her what he needed to know about mathematics to teach in the manner that he did. Finally, I asked Megan how many different ways he taught one concept so that students could access information to complete partial learnings they might have for a mathematical concept being taught.

These were the major questions asked although others occurred along in the paper. Megan's paper, revision number three, came in late and I allowed it because she appeared to be having a problem revising. The paper I received was so very powerful I will never forget the feeling as I read it, exuberance, sadness, excitement and a validation of the personal feeling that the narrative was powerful as an agent of change.

> This week [M's narrative} came to me in an entirely different form. The whole thing was changed. The whole thing was different. The narrative's beginning explained the change. M began by saying, "I don't know what I've been thinking, I don't know why I've been saying that this teacher . . . was a good teacher, because with everything that I've learned and with everything that I now know and the kinds of things that I'm beginning to question in myself in looking at my own beliefs, I understand that this person was not a good teacher and I feel cheated." [j#3, Fall semester '92, p. 39]

Megan went on to explain that her mathematics teacher did not attempt to transform his knowledge; he had text book knowledge and never deviated from the examples in the text. She also said that he did not respond to all of his students in the same manner, some were not responded to at all. She was one of the lucky ones. She also said he never really asked for student responses, and never really taught for understanding in the way that Wilson, Shulman, and Richert talked about it. Megan was very sobered by the whole experience of the narrative and her realizations. I counted this as a major growth experience for her in relation to understanding teaching and learning.

Kate's narrative. The second particularly compelling student narrative was written by a non-traditional student. She was returning to school for certification after working as a music therapist for seven years. She had also worked as a music teacher giving private lessons. Kate wanted to write about an episode of teaching and learning in which she was the private tutor. I wasn't quite sure where this would go but I thought that the experiences needed to have meaning to the author, so Kate went with it and we proceeded to look at her episode after the same readings that I had identified for Megan. Kate had also chosen to read Rickard's (1991) "Pedagogical Autobiography: Mathematics Teaching" because she felt that there was a connection between music and mathematics.

Kate wrote about a student that she was unable to reach. The experience, each time her student came for a lesson, was unbearable for both of them. The student was moody and unresponsive to practice or suggestions for practice. At one point the student refused to do anything except sit and stare at the wall and finally the student vandalized a possession of my student's.

In my responses to Kate's narrative draft, I asked her whether she had any knowledge of her student's history and how that might be contributing to his attitude. I asked her also whether she saw a Hawkin's triangle working in the teaching situation and what part she played. I also asked her if she had attempted to appeal to her student in relevant ways, offering to let him suggest a selection he was interested in while learning the new concepts she felt he needed to progress.

Kate had a hard time responding and extending in her narrative until, again, the third revision. When her third revision came in a great change had taken place:

> I don't know why I thought this assignment was something different than what I just did, but the entire semester I just haven't gotten it. Now all of a sudden I sat down to write my third draft and it just started pouring out. I started talking about my beliefs . . . what I thought and how my beliefs either fit or didn't fit with what I now knew I needed to do as a teacher. . . . [j #3, Fall '92, p. 39]

Kate's narrative at this stage speaks about her beliefs about herself as a teacher and what she needs to know to teach difficult students. She talked about a belief that she had that the teacher should be respected for her knowledge and competence and she also talked about her deep love for her music. She speaks about the need for a relationship between student and teacher and "caring about the content together" [j #3, p. 39]. Kate's recognition that she needed to provide an entry for her student into her content in a way that respected what the student knew and valued about music was a powerful step toward becoming an effective teacher of music.

What I Thought about How Things Were Going at the Time

Modeling Representations of Knowledge: A Dilemma

As I modeled different ways to look at the concept of "setting," I was uncertain about my efforts because I did not believe that all students would be able to translate my representations to their content areas. I thought the idea of transforming my knowledge for student understanding would become

apparent as I worked through my examples and connected them to the pedagogical reasoning model in Wilson et al. (1987).

I had the idea that everyone would understand "setting" and begin to carry these examples into their own content and come up with effective representations for their mini-teaching projects. However, I could not build bridges to all content areas from my examples of "setting," and I did not point out all of the different questions I could ask, as a teacher, in relation to each notion of setting I talked about. I did not take the time to think deeply about what my examples might teach; they were hurried and ineffective for some content areas because of my limited effort and limited knowledge in multiple subject areas.

Once again because of my lack of knowledge my math, science, music and language majors were left without clear "representations" from me. A dilemma exists for me because I cannot help students think about representation across many subject matters. One representation, no matter how perfect, will not provide a clear model for all content areas to work from. In order for my students to understand "representation" a collection of clear models need to be taught from the vantage point of each content, emphasizing the incontrovertible fact that teaching is subject specific.

Limited Feedback for my Students

I was particularly bothered by the fact that I did not have enough content knowledge to judge whether or not many students had developed correct representations to teach their lessons. I was

wondering at this point in the course whether I was helping my students or furthering misconceptions they had. It was at this time that I thought about my original idea of enlisting professors of content, at this university, to observe and critique student representations. I had not managed to get this part of my conception past the planning stage. Time was the issue here, my time to approach individuals with this new idea, and their time to respond. I would not give up on this idea. Other semesters stretched before me when I would have time to pursue my initial idea.

This was a very important piece of the course for me. It was here I hoped my students would make the connection between content knowledge and pedagogical decision making. I hoped that they would realize that they could not just pick a "method" from a list and use it. The method really must grow from one's own understanding and students' understanding of their content. I initially thought in my reflection that I did not have a powerful way to help my students toward this realization. But of course I did, Wilson et al.'s (1987) article provided the power, and the voices of these authors did what I only started to do. They provided clear information and examples, a "representation" if you will, of way to plan to teach effectively.

Content Specific Texts

It was difficult to find content specific texts for all of the contents represented in my study. Many of the texts I did select

for my students were appreciated and valued because they spoke to students about their content and ways to manage it and interpret it. One article that was considered as a content specific article by many was "150 Different Ways of Knowing: Representations of Knowledge in the Classroom," (Wilson, Shulman, Richert, 1987), because of its application across content areas.

Content Group Journals

I had been struggling with what I wanted from the content group journals from the beginning of the course. I thought they would be a place for students to talk about the group process in relation to decision making, conflict resolution, diverse connections to and understanding of content, and dilemmas. I was perhaps unrealistic in my expectations, but I never realized how much tension and personal struggle students experienced while writing this group journal. I suspect that ascribing a group assessment to the journal provoked anxiety about the quality of the entries. I also believe that this journal did not take on the importance of other reflective writing; because students were not able to write honestly because other group members would be reading it. It was also one more responsibility added to the already great number in the course!

Field Lessons

The field lessons seemed to me at one level to take the students' focus from the texts and discussion of the course to giving their "all" to teaching their lessons. The field lessons

became the most important issue in their lives for a time as they devoted their waking hours to observing and meeting with their field teachers and developing their lesson plans.

Later I found through their dialogic journals, field reflection papers, and final evaluations that many were making connections to issues discussed in the course. One student talked about making connections in her final evaluation.

> The actual teaching was probably the most helpful part of this course. It allowed me to tie together the concepts we talked about and read about in a way that made them real. I could see how difficult planning a lesson could be. I could understand how students would respond to different techniques I was using, and I could really see how hard it was to teach history for understanding. I could see how much I didn't know. [See final course evaluation, question #4, Appendix]

Another student made some connections as he talked about teaching his math lessons.

> "In my third lesson I tried to use representations effectively and consciously involve female students. This lesson was a revelation for me even though I think my representations were superficial they did cover the basic concept. I need to know more so I'm able to answer some misconceptions students have. I think that the interest and involvement of representations used by teachers are directly proportional to the teacher's knowledge of the subject being taught." (field reflection paper #4]

Personal Narratives

The power for me, as I read the various drafts of the narrative, was watching the story unfold, the real story, the one that is uncovered with time, new knowledge and realizations, reflection, and honesty.

I was quite moved by my students' narratives, in many cases. At one point in the course I was not sure I would use narratives again because they did not seem helpful to my students in their thinking about their beliefs about teaching and learning. During this third part of the course, I became convinced that they played an important role in helping students think about teaching and learning from their own context as a learner.

> It's kind of like they're at the point where they're making connections. They're making statements about their beliefs. It's almost as though they have worked through all of the layers they have built up over the years in dealing with ineffective teachers. Through the editing, revisions, questions I've been asking them in these personal narratives, I've attempted to kind of get underneath the layers. It's almost as though we finally got down to bedrock on the third draft and they're opening up in a personal way. I think of my music major. She's touched by what she is finding out about herself. She's in many ways saying, "yes, this is the real me, this is what I have to work with, these are my resources and now I have to figure out how to combine them with this new knowledge to become an effective teacher. [j#3, Fall '92 semester, p. 39]

I was not clear why some students reached a point in the process of writing their personal narratives where they experienced a turn around in their thinking. I was also not clear about what caused the turn around for some.

What I Think Now about This Part of the Course:

I guess that I have mixed feelings about this part of the course. On one hand I look at the kinds of things that were happening for many of my students and I am pleased and excited by the possibilities of this course as I think about reshaping it to

make it more manageable. Many of the things happened that I hoped would happen. Students were making connections from the course to the field and the field to the course. They were connecting the kind of knowledge they had to limitations in teaching, and recognizing that the kind of understanding informed the type of representations they could develop. They were aware of a special relationship between the teacher, the student, and the content. They were becoming aware of who they were and who their students were and how that informed teaching. Finally the content groups were well received and valued for their collaborative aim. There seems to be much to celebrate here. Why did I initially concentrate only on the deficits of the course? Perhaps because I see the power that this kind of course might have for students given the resources and time.

I was concerned that I handled this part of the course badly. I knew that I did not have the content knowledge to address student concerns in the field and even in our classroom, as I tried to help them think about representations of knowledge, teaching in the field, their personal narratives, and their second mini-teaching lesson. I think I forgot that I never intended to teach a content methods course. I knew that I could not do that. Somehow, in the process though, that was what I started to concentrate on.

When I think about the question that this section of the course is developed around, I wonder about my own "knowing" in relation to the content of the course I designed and taught. My thoughts were too grand. It was impossible to teach such a course as I had

conceptualized it. I did not have the knowledge to do it. I was learning about the limitations of my original vision and rethinking the warnings of "doing too much" shared by my graduate colleagues.

If I had the resources, what might this course look like? Content teachers to teach representations? Developing a repertoire of representations that other content people could teach me? I must deal with the realities of where I teach when I think about what this course might look like. It is possible that I could master a representation for each content group represented in my course. One of my committee members, Dr. Wilcox, has helped me think about this and whether it is feasible. She taught me a representation to use with my mathematics groups, examining the concepts of perimeter and area. I have worked with this representation once and I am preparing to do it again. I want to confer with her this summer about my findings.

I am confident that my students have some level of understanding of the third course question after this section of the course. I believe that their understanding does not come only from the texts and tasks of this section of the course. This course section was a place where all of the strands of the course merged and students realized connections to the other two course questions they had explored. They understood that they did not know their content in ways to teach it, but they now had a way to think about doing that. The texts and tasks had helped define where they were and how far they had to go. Some students were moving more quickly than others, but all students had questioned their beliefs about

teaching content to secondary students in some manner, indicating movement.

CHAPTER IX

REVISITING THE OLD VISION AND LOOKING TOWARD THE NEW

Introduction

In this chapter I look back at my research question "How does a beginning teacher educator conceptualize, design, and implement a general secondary methods course grounded in considerations of subject matter?" and reflect on the study that emerged and what I have to say about that now. This chapter is a personal commentary on teaching a new course while studying it and the subsequent effects on students, the course, and me as a beginning teacher educator. Finally, this chapter is a look forward at the course that has grown out of this study and some possible implications for teacher education.

Revisiting My Main Dissertation Question

The research question that drove my study identified three equally important phases in teaching--conceptualizing, designing and implementing. As I consider the question now, I am struck by the realization that I thought about these phases as separate instead of interrelated. In practice, one phase informed the other, and I

could not be involved in one without thinking about the other two. Yet I did not consciously reflect on or report how one phase connected to another in my journals. In retrospect, I would now use the history of my conception and design of the new course to try to help me understand the implementation.

I spent the majority of my time thinking about the implementation phase, especially three of the subsidiary questions (1) To what extent am I, as the teacher, able to implement this course as I intended? (2) What shapes my ability to do so? (3) What difficulties do I encounter in implementing this curriculum? Driven by my beliefs about what a secondary methods course should be, my own thinking became a constraint because of my stubborn views about what this course needed to be and my reluctance to alter it in any way. I attempted to craft a course that included all that I had learned in graduate school, substantiating my own change and new identity. Even when I had evidence that a piece of the course was problematic, such as the content group journal, the time involved in responding to dialogic journals, or the teacher educator-student relationship I resisted changing my original plans.

Looking at my study, I am taken aback by the magnitude of the whole enterprise and how my students and I managed to stay afloat. I had never really "looked" at the course as a whole until I developed a schematic of it in the summer of 1993 as part of my data analysis (Figure 1, Appendix). As the diagram developed, I began to understand what I had done. I had designed my study around key components of my graduate training that had affected my personal

change. Clearly, the number of required readings and projects emanating from the syllabus and my unwillingness to be flexible with the curriculum displayed an incongruity of belief and practice. These issues were principal constraints in the implementation phase. I saw things in the curriculum that I knew needed changing, but I was resolute in my stance that all things needed to act together to work toward student change, as they had for me in my graduate training.

After three more semesters of teaching a modified version of this secondary methods course, my thinking and decision making are directed toward my students' learning to teach their content areas. I am thinking more clearly about what students bring to the course not just about what I think they need. I am no longer apprehensive about adjusting elements of the course when they become problematic. Understanding the dimensions of the course I initially conceived of comes more freely with distance. My conceptualization of this course continues to evolve with added experience and reflection, informing anew the nature of the design and implementation.

Teaching a General Secondary Methods Course in This Manner: What I Learned

Content Groups

I determined that content groups are an effective way to organize a general secondary methods course grounded in subject specific concerns. They focus students on their content as they work on various texts and tasks. I found that students did use their content groups to consider theory and practice especially when

they planned lessons based around the concept of "representation of knowledge for teaching" Wilson et al. (1987). Their discussions, presentations and journal writing all reflected their thinking about theory and practice, as they talked and wrote about the teacher-student-content relationship (Hawkins, 1974) that effective teachers like Ms. Fish (Powell, Farrar, Cohen, 1985) have in their classrooms, and how they, as high school students, were affected by the hidden curriculum (Jackson, 1968). Content groups created a subject specific context for students to think about more general issues of teaching.

I learned that collaborative groups need intense direction and practice at the beginning of their formation. I assumed, because my students are older, that they would participate on a fairly equal basis and let their voices be heard. Older does not mean more confident and less competitive. I have learned that I need to spend more time talking about my expectations as well as the expectations they should have for group interaction. Through this last semester I have learned that it helps to have a volunteer group rehearse and model group behavior that I suggest. I can direct them in behaviors that I have identified as problematic and positive as they interact around the first set of study questions--problems such as dominating voice, content expert, quiet listener, over achiever, questioner, peacemaker, resister. After they rehearse, they model these behaviors for the larger group while I provide a commentary about what I think is happening. The whole group then offers suggestions to solve problematic behavior, confronting the behavior

in a number of ways, such as through content group discussion, free-writes about the problem, each member speaking privately with the person who exhibits the behavior, instructor intervention etc., while the "model" group plays each suggestion out. This appears to be working. As I check with the groups, most of them are handling any problems that occur.

The content groups formed in the new methods course provided my students with a support system outside of our classroom. They were able to carry their experiences and relationship into their content classrooms as well. They also found that they had a common knowledge base and common experiences to share with one another and this forged a cohesiveness between my students that I did not envision when I first thought of content groups as the social organization of the course. They became a social group outside of our classroom as well.

My role definition. I have also learned something about my role. Originally I viewed my role as facilitator and inquirer-researcher. These role descriptors carry a certain sense of separateness, an operating "at arm's length" while conducting my class and my study. While I believe that I did assist my students' learning, as I investigated and recorded their responses to the elements of the course design as well as my responses to their ideas and actions, there was no separateness. Because of my openness about my study and an invitation to students to provide ongoing feedback about the course, I made myself accessible to students in ways that became

problematic for me at times personally and as a researcher. I felt vulnerable in this situation even though I had given permission for this to happen. My decisions and beliefs about teaching and learning to teach were being challenged as some students rejected or resisted the texts or tasks I had crafted for a new take at a conventional methods course. I learned something about myself and how I deal with confrontation. In the case of the disgruntled content groups, students who openly (sometimes hostilely) resisted reading course texts or the ideas discussed in texts, or groups who resisted journal tasks, I found that I tried to avoid these problems because they were so unexpected. Each of these problems required time to figure out how to move toward understanding and resolution of the problem, a rare resource in this study. The bigger issue for me became a personal one. The new methods course I developed to address the problems of the old methods course was an extension of my personal beliefs about teaching and learning. As a result, I was unable to separate myself from the course.

As I reflect on what I learned about my role, I cannot separate my learning from my students. The dialogic journals brought us closer as we wrote responses to one another about the texts examined and discussed in the content groups and in whole group. My joining each content group in order to listen, assess and probe also brought us closer through the intimacy of a smaller conversation. I came to know my students because I lived with them throughout the week as I recorded information about my actions and their reactions in class, and as I read and responded in their dialogic journals and in their

personal narratives. They valued my responses in their journals and started to respond, in kind, and ask questions about my comments.

I also noticed many parallels between my students' learning and my own as we grappled with important issues in learning about learning to teach. Clearly the parallel I think about most as I consider the study concerns our struggles with limited knowledge of content and how that limitation affected how we attempted to represent our content (Shulman et al., 1987).

Because of the growing connection between my students and me, I began to feel a deep sense of responsibility for making the course "work." As a result, when things did not go smoothly (e.g., when I could not understand concepts my math and physics majors were discussing, when content groups disagreed, when students resisted certain texts or tasks) I took it very personally. I wanted students to grow in their understanding of their pupils and the connectedness of content and pedagogy. I cared so passionately that I placed unrealistic expectations on myself and my students. The complexity of the course overwhelmed everyone. At the same time, recognizing evidence of students' growth through journal entries, conversations, personal narratives and field reflection papers provided me with the energy to finish the semester.

I attribute my inability to maintain a separateness to my novice status. While I had learned to think about teaching in a different way, I'm not sure I learned to think about myself in a different way. I was still a novice in my personal connection to my students and this new content.

This way of teaching in an accessible manner, in contrast to more conventional ways, did not naturally create a distance between teacher and students. I also think that the content draws instructor and student together. Because the students believe they know the content, there may be no "expert" status connected to the education instructor, whereas there appears to be clear "expert" status granted to content professors. Expert status creates a distance. I went too far in managing the teaching-learning situation. Even though I do not any longer believe in an educator being the central figure in teaching and learning, I believe that I occupied that position while teaching this course. Perhaps this sense of centrality came from being the creator, teacher and researcher of the course. I had a difficult time maintaining a separateness that allowed all individuals to benefit from the learning situation. I felt my presence too much in the various components of the course. I added an extra measure of responsibility to my role, and it pervaded the facilitator role and the inquirer-researcher role. I sometimes forgot to document important student learning as I wrapped myself in a mantle of responsibility. This was a role that I was familiar with from life, I do not usually carry out business "at arm's length." I learned from my study that I need to keep a clearer separation to be defined apart from my students and the course I teach to enhance my effectiveness. With separateness, I am able to see trouble coming and address it from a more neutral stance. I am not so apt to read disastrous meanings or resistance into student responses. With

some distance, I am beginning to question, listen and observe in a more objective manner in my interactions with my students and the course.

How students were affected. Students' responses to the new methods course varied. Some were delighted that an instructor wanted them to think. Some were interested and intrigued by the ideas they read about, discussed, and carried into the field. Others were interested only in the practical and did not want to spend their time reading, discussing and writing about theoretical aspects of teaching promoted by "idealists." I dealt with this tension throughout the course. As I looked at the final course evaluations, it appeared that "practice" was still valued above theory, but as I reviewed the course evaluations, (See Appendix), I realized that my students had valued the tasks of the course that had required the least work from me and the most work from them. Still they valued the practical experiences above all, their mini-teaching lessons in content groups and their fieldwork experiences. I also see from the evaluations and from my interactions with my students through their journals, personal narratives, and field reflection papers, that my students valued two highly theoretical articles: Hawkins's "I, Thou, It," and Wilson, Shulman and Richert's "150 Different Ways of Knowing: Representations of Knowledge in Teaching."

This valuing of practice and theory puzzled me. Students recognized connections between theory and practice as they worked

with particular articles in their content groups, but I had not identified an appreciation of the connections and a carry over outside of their content groups. In their field reflection papers and final fast-writes, some students were clearly writing about both theory and practice. They "saw" the Hawkins triangle working in classrooms or believed they were part of one. Some connected with and practiced the idea of transforming what they knew in order to teach for student understanding. One student even claimed in his reflection paper that he was able to "put theory into practice" and he was excited about it.

My students and I bumped up against the "theory versus practice" issue often during my study and I continue to face it with each new group of students I encounter. Lately, I have started to talk about how professions have their own theoretical framework and language, and that is partially what defines them as a profession. When students spurn the term "pedagogy" I am reminded of my own encounter with it in my first course in the doctoral program. This is more than preferring to learn from practice over theory, for many it is a rail against elitism, a stance against academics, a push for anti-intellectualism. This stance finds its taproot in my students' personal histories and in the everyday experiences they have in the fieldwork component. I have learned

that any progress we might make in thinking about theory in the methods classroom is quickly "undone" by a few of the classroom teachers my students spend time with in the field. One student, only last week, talked about how his cooperating teacher had told him to forget anything he heard in his methods courses, that theory was a lot of "crap" and would not help him at all in teaching in the classroom (Eric, J#4, 11-10'93, p. 6).

I am fortunate because my students allow me a measure of credibility. I have been a secondary teacher so I have a chance to counter this kind of "advice" by reflecting openly on my secondary experiences and my fairly new realization that I need theory to help me understand how to operate effectively in the content classroom, and to review and study my practice critically .

I learned that some of the course texts , especially "I, Thou, It," (Hawkins, 1975), and "150 Different Ways of Knowing: Representations of Knowledge in Teaching" (Wilson, Shuman, Richert, 1987), allowed me to question my students and gently remind them that they had seen Hawkins' triangle in some classrooms and not others, and they had observed a few classrooms where they thought the teachers transformed their knowledge and "represented" it in multiple ways for students to access. And I nudge them to remember that they know from personal experience what happens when knowledge is represented in only one way. As I listen to them connecting these texts to their observations, tutoring, and formal teaching, I also remind them that they have been valuing theory informing practice. Further, I ask them how far "commonsense and practical

knowledge" (Wilson, Shulman, Richert, 1987) will allow them to progress in their quest to teach effectively, and some are caught up by my probing. I see many of them thinking about the comfortable stance they had envisioned as a content teacher, evidenced by the long silences, furrowed brows, and pensive entries in their dialogic journals prefaced by "I just never realized what there was to teaching."

Through this study I realized that secondary teacher education students can study and analyze how to think about teaching their content from a theoretical base presented through important texts, with the assistance of an external voice of conscience reminding them of what they already suspect from what they have seen and experienced. Working through tasks based on theory; having to plan a lesson that requires them to examine their learning, researching an unfamiliar topic to teach, transforming their knowledge into a representation to help students understand a concept, helps students become more involved with theory informing practice. Many content voices collaborating to figure out how to connect theory to practice sometime encounter dead ends and often their own limitations, but this seems like an appropriate path toward possible change.

How the course changed. My students are still in content groups and they still read powerful texts and write sometimes in dialogic journals. I have learned that I can have the same (or more powerful) impact with five or six articles instead of twelve. I have also learned that journals are key for many students' learning

and processing because many of them have returned and told me so. They did not realize this until they left the course.

The course changed as I started slowly to let go of my responsibility to make things work for students and turned more of the responsibility over to them. The changes were small the first time through the course--deletion of the content journal, omission of discussion of some readings, changing the guidelines of two major papers because of time constraints. After the experience of responding to all of the dialogic journals during the study, I had students respond only to selected readings the following semester and for the last two semesters students have not had journals at all due to my personal time constraint. Readings were cut significantly in the second semester as were assignments. I eliminated the unit plan completely. Beginning methods seemed the place to plan and write thoughtful lessons based on ideas promoted in the readings. Unit planning made more sense in an advanced methods course. I cut field observation time down since students were coming from an introductory course that required eighty hour of observation and asked that students focus on the ideas we were discussing from the readings they were assigned. Group grades dropped to thirty points second semester from one hundred and ten the semester of the study.

What Does the Future Course Look Like?

The future course takes its form from the initial conceptualization and design. The social organization of content groups will remain. Journal writing will continue for selected

articles. Discussion questions will continue to help students explore articles in more depth.

Students will begin the course by trying to understand the secondary setting they were once apart of through texts, discussion and questioning. They will provide autobiographical sketches of an instance of content teaching and learning from their high school days in which they were the learner. During this time student beliefs will be examined in more detail through discussion and more focused questions in their autobiographical learner-sketches.

Fieldwork will consist of teaching two or three lessons in the field, only after students have completed two mini-teaching lessons in the university classroom. One of those mini-lesson will be taped and critiqued by the group who teaches the lesson. I have done this taping for two semesters now and students find it helpful as they listen to the things they say as they try to teach a concept. Students will still teach a content concept using the moon as context. This will explore the learning and teaching phase of teaching a lesson.

Formal field lessons will be taught only in urban settings. I have worked closely with one urban middle school through the last two semesters and I am preparing to attempt to open another to my methods students. If this attempt becomes a reality, one class will be working with teachers in one school while the other group will encounter similar experiences in another. Students will no longer be scattered among seven different secondary schools, and they will be able to think about their common experiences and

support one another as they work in a multicultural setting, most for the first time. Observation will be eliminated and special needs work will also be focused in the urban schools.

Content groups will begin to wrestle with the idea of the student-teacher-content- relationship and how they need to know their students and their contents. When they move into planning lessons they will read and discuss Shulman et al., (1987) and use the pedagogical reasoning model to help them understand what they need to do with each lesson they teach. As a class and in content groups students will spend time figuring out the idea of representation. I am working on developing a repertoire with one clear representation for each content area that I will present to the class. Students from urban high schools will visit my students as they plan their lessons and give them feedback on the clarity of their representations. These high school students will give my students different perspectives on what works and what does not. My students will develop a paper based on this experience and what they learned from their content group interaction and their interaction with the high school students. Near the end of the semester each group will read and present a content specific article to the larger group and connect it to the ideas they have been examining.

The course is not totally clear at this point but, it will become clearer when I have time to put it on paper.

Living Inside the Course While Studying It: Implications For Teacher Research

This was the most difficult thing I have ever done and I know that I am forever changed by the experience. Because I studied myself and my ideas and actions, I experienced myriad emotions throughout my inquiry. I felt as though I had been on an extended roller coaster ride when the semester ended. Wilson, Miller, and Yerkes talk about the courage involved in such a venture, "Courage plays a role in such work in several ways. First, it takes courage to take chances: to try new things, to veer from the familiar, to examine one's practice. Examining one's own teaching can be difficult, for it calls into question choices one makes daily, as well as choices made in the past" (Wilson, Miller, and Yerkes, 1993, p. 110). I'm sure that I did not experience a feeling of courage, but perhaps that comes later when I can view my study from a different time and place.

My first misconception was that I tried to give equal time to my teacher role and researcher role. Because of the complexity of the course and the fact that it was designed with teacher-student interaction and assisted learning in the foreground, an inordinate amount of time was required to manage the course. Because of this I found myself making choices that privileged teaching over research. I was not able to develop a comfortable union between teacher and researcher during this study. I was very conscious of myself as teacher and myself as researcher. I started thinking about my dual role during the summer of 1992 with the help of Dr. Wilcox. She drew a simple diagram that represented the teacher educator and the

researcher and we briefly described what each did in the study I was proposing. I have continued to try to think about this with more elaborate diagrams throughout the study. I've not yet found that I have a clear understanding.

Collecting, and writing up data was difficult. The intensity of each class meeting left me mentally spent. When I returned to my office to record the day's events many times the thoughts would not come, so I would wait a bit and try to write later. This worked for a few weeks until all of my out of class time was spent responding to individual and group journals. I didn't have any time for reflection. I only had time for retelling what happened in class, almost with a deliberate notetaking mentality. I found that I had to force myself to record my thoughts after a while because of my management of the methods course. Because of my inability to analyze critically what I was doing, I placed myself in an impossible situation as a teacher and a researcher.

I also found it hard to study my actions as I implemented a course that I had designed. It was difficult to move myself to a place where I could look at the problems of the course as simply that. There were many times when I could not discern where the boundaries of the course ended and mine began. I attribute this partially to my novice status as a researcher and teacher educator. I also think about teaching and curriculum planning as ultimately a personal venture. They are statements of self in many ways. Researching one's practice requires that one constantly examine motives, knowledge, and actions. I am reminded of my colleague's

caution that I was trying to do too much in my study, that I was trying to teach more than one course and because of this my students would learn very little. I remember my anger, but he was looking at the issue from outside the course and I was "living" my course at the time.

I also invited my students to provide me with information about the course and they did not hesitate to let me know what seemed problematic about it. I was also always consciously concerned with trying to look at all sides of an issue in my inquiry. I wanted to bring a measure of objectivity to my study, but I see that my reflections are my interpretations of what I saw and my actions were informed by that interpretation as well.

Significance of the Study

I believe my study will give teacher educators an opportunity to view the uncertainties of a novice teacher educator working hard to change what happens inside of a general secondary methods classroom. Clearly it is possible to craft a general secondary methods course that helps students think about teaching and learning in less conventional ways. It is also possible to consider content areas in thoughtful ways as preservice secondary teachers, organized into content groups, think about how they will need to know their content in order to teach it. This course that I designed and studied is a reasonable and meaningful response to the economic and philosophic dilemma of few content methods courses on small campuses.

Teacher educators and classroom teachers can learn about what it means to study one's teaching from my research. The natural time constraints that occur because of assessment, planning and managing unexpected student responses, coupled with outside university responsibilities, prevent opportunities for consistent documentation, reflection and analysis. I also believe that it is difficult to separate oneself from the course being taught in order to study a process that you define. It is a difficult and personal venture. I discovered some things about myself that I was uncomfortable with, but I count these personal discoveries as movement forward in my development as an effective teacher educator. I am learning how to co-exist with my students without becoming overly accessible to them and I am spending more time thinking about curriculum and what students bring. I am approaching my planning in a more organized manner, remembering that "less is more" when teaching is inquiry based. I am looking deeply into my own "knowing" about what I teach.

I will continue to research the course I conceptualized in this study as I consider the changes that continue to occur as I learn more about teaching in a way that fosters student reflection, discovery and change. There are many areas of the course that I want to spend time thinking about as I weigh and measure their total effect in moving secondary methods students toward awareness and change as they study teaching and learning to teach through the lens of their content area.

APPENDIX

TEACHER EDUCATION 204
GENERAL METHODS OF TEACHING IN SECONDARY AND MIDDLE SCHOOLS
FALL 1992

Instructor:	Carol S. Wolfe
Office:	Reeves Hall, Room 133
Office Hours:	Tuesday, 10:30-11:30 and 3:30-5:30
	Thursday, 10:30-11:30 and 3:30-5:30
Phone:	(517) 790-7045 (O); (517) 790-1531 (H)
Class Time:	Section 1, Tuesday, 12:30-3:20 A/Arts Rm. 105
and Place:	Section 2, Thursday, 12:30-3:20 A/Arts Rm. 105

Course Prerequisites:
*In order to remain enrolled in this course, you must be admitted to Saginaw Valley State University and the College of Education, and have been issued a permit. Your permit to register for 200 level education classes will be examined on the first day of class.

Course Description:
This course is designed to help you begin thinking about secondary teaching in new ways. All of you are entering this course with certain beliefs about what it means to teach in your content area, and what it means to be a "good teacher" in a secondary setting. TE 204 is organized around classroom and field experiences that challenge you to examine your beliefs about subject matter knowledge and what it means to teach for student understanding in the context of a secondary school. You will be asked to consider how what you know and how you know it informs your choice of what to teach and how to teach it. The design of TE 204 will also provide opportunities for extensive peer collaboration, as you wrestle with the work involved in planning for instruction in your particular content, as well as personal and group reflection on educational issues that arise from course texts, individual writings, small group tasks, experiences in the field and course conversations.

Overview of the Course:
The course is organized around four major questions:

(1) What does it mean to teach in a secondary setting?
(2) What does it mean to "know" one's content?
(3) What does "knowing" one's content have to do with teaching it?
(4) What does it mean to teach for student understanding?

The first question focuses on the setting of teaching. What are the secondary schools for? What do students really learn about content there? What does good teaching look like in a secondary setting? What does the student bring to the setting? What does the teacher bring to the setting? Where does subject matter fit n the student-teacher relationship?

The second question focuses on preservice secondary education students' beliefs about "knowing" in relation to their content. What sorts of disciplinary concepts do secondary preservice teachers think they need to know in order to plan for instruction? How does a preservice student "know" their content? What does a preservice student need to do in order to develop a more extensive knowledge base in their content area?

The third question focuses on the critical connection between "knowing" content and recognizing how to transform or "represent" that knowledge for a diverse population of learners. How do teachers' personal professional understandings, or a content area, inform the kind of decision making used to select a particular method to illustrate important concepts? What do teachers need to know about their students in order to make decisions about how to teach their content for student understanding?

The fourth question focuses on the student coming to "know" concepts within a content or discipline. Students, for example, can "do" math without really understanding it. This is the received view of knowledge in which the teacher, as knower, gives knowledge to the student and understanding naturally follows. How does teacher knowledge of content (how they understand their discipline) help define student understanding? What does a teacher need to understand in order to help students understand subject matter?

Course Requirements and Grading:

Attendance and Participation:
Your success in this course depends largely on your attendance and active participation in the course tasks. It is particularly important that you complete readings, journal responses, and other assignments on time, because class and group preparedness will count in your final course grade.

Dialogic Journals:
Much of the material we will encounter together will be difficult and not easily integrated into any existing framework of knowledge about teaching and learning you may already possess. We will be exploring and, perhaps, building new frameworks together, and adjusting some existing ones. Writing about the issues and concepts we encounter in the texts, class conversations, and content group interactions will help to expand and clarify your understanding. Dialogic journal writing will initiate a conversation with the authors of course texts and your TE 204 instructor that will

continue throughout the semester. This conversation will be focused on assigned readings, class discussion, group work, field experience and related questions posed in response in your journal entries. In order to receive full credit for your journal in TE 204 you must respond thoughtfully to all course readings and focused questions posed by your instructor in your journals. Journals will be collected weekly.

Content Area Groups:
It is important that we not separate teaching strategies and the work of secondary teachers from the content areas they have chosen to work within. Forming content area groups will provide opportunities for individuals to think about planning for instruction through the lenses of their subject matter. Together, math majors, biology majors etc., can help each other to become smarter about why certain methods work, or do not work, in teaching their particular content. The work of content area groups in TE 204 will take on the form of group inquiry as they read, write, question, plan, and initiate discourse from the focus of their content areas. Working within content area groups will also foster a collaborative spirit which is extremely necessary in the profession of teaching. Your content area groups will be formed during the second week of classes and will remain in tact for the tenure of the semester.

Projects:

Personal Narrative:
You will be required to write a personal narrative about teaching and learning in your content area. Your narrative will concentrate on an episode of teaching and learning in your secondary content area, in which you were the learner. From this initial point your instructor will "enter the narrative," so to speak, and direct your thinking about teaching and learning through questions posed for you. These questions will help you reflect on and analyze your "story" as you acquire new information through course texts and discourse. The narrative, it is hoped, will chronicle your personal thinking about teaching and learning as we move through the course. You will begin writing your narrative on the first day of class and you will continue to revise and extent it as the semester continues. Your narrative will look somewhat different as you expand your knowledge base about teaching and learning through your experiences in TE 204. You will do two revisions and a final analysis of your narrative. You will be given a grade on your final analysis.

Mini-teaching Lessons:
Some examples of teaching that we will examine will be your own. In the context of your content group, you will be expected to plan and implement two lessons based on a content group inquiry. You will present the lessons, materials, and the process that you went through to develop these lessons to the whole group. For the second

lesson you teach the whole group, you will develop the lesson plan to present some concept from your content area. In your final presentation you will justify why the lesson plan you developed seemed appropriate for your particular content.

Dialogic Journals:
These were explained earlier and will be an ongoing protect throughout the semester.

Content Journals:
Each content group will be expected to keep a group journal. You will be given time in class to write about the activities, discoveries, conversations, new ways of thinking about the work of teaching, etc. of the group. Each week a different member will be responsible for recording in the journal, however, all members are asked to contribute ideas and information to the recorder. Journals will be collected on a rotating basis by the instructor.

Lesson Plans:
You will be required to develop three complete lesson plans with the help of your instructor and your content area group members that will be used to teach actual lessons in the field.

Unit Plan:
You will be required to develop a unit plan as a content group. You will hand in the group unit plan as well as individual reflection papers on the process of researching and developing the unit.

Field Reflection Paper:
Upon completion of all of the field components you will be required to write a description and analysis of the process utilizing course concepts and issues. Further explanation will be given at a later date.

Fastwrites:
At times throughout the course you will be asked to focus your thinking about concepts, readings, etc., with a quick written response. These fastwrites will help me know what you are thinking.

Final Exam:
There will be an essay final exam during finals week. A study guide will be distributed a week ahead of time. You are encouraged to form study groups to work your way through the study guide.

Required Texts:
*Course packet available in the bookstore for TE 204 Methods of Teaching in Middle and Secondary Schools.

Calahan and Clark. (1992). Methods of Teaching in Middle School and High School. 4th edition, New York, N.Y.: Longman, Inc.

Posner, G.J. (1989). Field experience: methods of reflective teaching. Third Ed., New York, N.Y.: Longman, Inc.

*Other required readings will be supplied to you by the instructor as listed in the course calendar.

COURSE REQUIREMENTS AND GRADING
TE 204

1.	Class attendance and participation	35 points (5 per absence)
2.	Micro-teaching	35 points (15 points each)
3.	Group unit plan and group journal	80 points (60 and 20)
4.	Personal narrative	40 points
5.	Field reflection paper	30 points
6.	Dialogic journals	30 points
7.	Final Exam	25 points

Total points possible: 325

The final course grade will be computed by comparing the student's total number of points to the highest earned by a student in the course. The scale used to determine the final grade will be:

95% to 100% of the top point total = A
87% to 94% of the top point total = B
75% to 86% of the top point total = C
66% to 74% of the top point total = D
Below 66% of the top point total = F

Assignments will be evaluated according to: a) thoroughness and evidence of thoughtful consideration of readings chosen for the course, b) adherence to the assignment's intent as we define it together in class, and c) organization, clarity, and mechanics.

**Note: there will be a 10% reduction from the total possible points for each day the written assignment is late.

TE 204 METHODS OF TEACHING IN SECONDARY AND MIDDLE SCHOOLS
FALL 1992
COURSE CALENDAR

Part 1: What does it mean to teach in a secondary setting?

Class

9/1-9/3 Introduction to course: introductions; preview of course content, activities and policies; "fastwrite" on "Teaching in (insert content area) is..." and group assignments; fieldwork information sheets and discussion; written assignment: Personal narrative... dialogic journal response and content journals due. "Goodlad's Goals for Schools..."

Readings: Powell, Arthur G., Farrar E., and Cohen, David K. (1985). The Shopping Mall High School: Winners and Losers in the Educational Marketplace. pp. 8-39. Boston: Houghton Mifflin Co.

Lightfoot, (1983) Brookline High School, pp. 150-220. In The Good High School.

Melnick, Carol R., (1992). "The Out of School Curriculum: An Invitation, Not an Inventory." In Teacher Lore: Learning from Our Own Experience. Schubert, W.H., and Ryers, W.C., (Ed.). Longman, New York., pp. 81-105.

9/8-9/10 Discuss and analyze readings...group task; introduce content group mini-teaching task. Hand back written assignments...peer discussion. Discuss group process. Introduce Hawkins' essay. Dialogic journals and content journals due.

Readings: Hawkins, D. (1974). "I, Thou, It." In The Informed Vision: Essays on Learning and Human Nature. N.Y.: Agathon Press.

9/15-9/17 Discuss "I, Thou, It" in relation to student, teacher, subject matter, relationship in the secondary setting...content area group synthesis. Time given for content groups to begin discussing and planning mini-teaching task. Introduction to field work and field supervisors. Dialogic and Content Journals due.

Readings: Jackson, P. (1968). "The Daily Grind." In Life in Classrooms. New York: Holt., pp.3-37.

9/22-9/24 Discuss the sources and characteristics of the hidden curriculum. What is it? Where does it come from? How does it shape students' experiences in a secondary setting? How does it connect tot he explicit curriculum? Fastwrite on hidden curriculum. Time given for planning and discussion of mini-teaching project. Dialogic journals and content journals due.

Readings: Oakes, J. (1986). "Keeping Track" (part 1).

Lightfoot, (1983), Brookline High School, pp. 150-220. In The Good High School.

Kahle, J.B. (1990). "Real Students Take Chemistry and Physics: Gender Issues" pp. 92-133. In Windows into Science Classrooms.

Suina, Joe. (1985). "...And Then I Went to School..." New Mexican Journal of Reading. Vol. 2.

Peshkin, Alan., White, Carolyn. (1990). "Four Black American Students: Coming of Age in a Multiethnic High School," Teachers College Record. Vol. 92, No. 1: pp. 21-38.

9/29-10/1 Discuss the legacy of tracking; pros and cons...discuss student diversity issues-groups take responsibility for discussion-role play. Wrap-up mini-teaching preparation. First revision of personal narrative due. Dialogic journals and content journals due.

Part 2. What does it mean to "know" one's content?

Readings: Wilson, S.M., Shulman, L., Richert, A.E. (1987). "'150 Different Ways' of Knowing: Representations of Knowledge in Teaching." In Calderhead, J. (ed.), Exploring Teachers' Thinking. Sussex: Holt, Reinhardt, Winston.

10/6-10/8 Mini-teaching presentations. Dialogic journals and content journals due.

10/13-10/15 Discussion of Wilson, Shulman, Richert article...discussion of teacher knowledge...content group representations.

Readings: Callahan, J.F., Clark, L.H. (1992). Teaching in the Middle and Secondary Schools: Planning for Competence. Macmillan, N.Y. Modules 2 & 3, pp. 19-66.

Feiman-Nemser, S., Buchmann, M. (1985). "Pitfalls of Experience in Teacher Preparation." NCRTE:MSU Vol. 87, #1, Fall 1985.

Rosenshine, B., Stevens, R. (1990). "Teaching Functions." pp. 376-391.

10/20-10/22 Discussion of planning for instruction. Content group development of lesson plan appropriate for content area. Sharing of plan and justification. Objectives and domains. Content and dialogic journals due.

10/27-10/29 Continued planning for instruction. Continued sharing of lesson plans from "pedagogical reasoning model." Wrap up of course question 1. Content and dialogical journals due.

Part 3. What does "knowing one's content" have to do with teaching it?

Readings: Callahan, J., Clark, L.H., (1992). Teaching in the Middle and Secondary Schools: Planning for Competence. Macmillan, N.Y. Read Modules 5 through 9 pp. 101-233.

11/3-11/5 Continued discussion of planning for instruction...Introduction of second mini-teaching task...time given to work on content group task. Dialogic journals and content journals due.

Readings: Anderson, C.W., Smith, E.L. (1987). "Teaching Science" In Richardson-Koehler, V. Educator's Handbook: A Research Perspective. White Plains, N.Y. Longman.

11/10-11/12 Wilson, Suzanne M., Wineburg, Samuel, (1989). "Peering at History through Different Lenses: The role of Disciplinary Perspectives in Teaching History." pp. 525-539.

"Private Universe" video...discussion of articles by content area groups. Time given for mini-teaching planning. Introduction of guidelines for field reflection paper. Dialogic and content journals due.

Readings: Rickard, Anthony. (1991) "A Pedagogical Autobiography Mathematics Teaching," Michigan State University. (Unpublished paper)

Part 4. What does it mean to teach for student understanding?

Readings: Nickerson, Raymond. (1985) "Understanding Understanding." American Journal of Education. 93 (2) pp.201-239.

11/10-11/12 Discussion of part 4 question. Discussion of Nickerson article. Unit planning as group with consideration of previous discussion. Dialogic journals - group 4 due. Field reflection papers due. Mini-teaching presentations..second draft of personal narrative due.

Readings: Dunn, S., Florio-Ruane, S., Clark, C.M. (1989) "The Teacher as Respondent tot he High School Writer." Sponsored by the Institute for Research on Teaching College of Education, Michigan State University.

11/17-11/19 Discussion of assigned article. Unit planning continued. Discuss reflection papers on unit planning as a collaborative process. Dialogic journals-group 5 due.

11/24-11/26 Work session for unit plan, reflection papers for field and for unit group process. Dialogic journals-group 1. Henson, Kenneth T. Methods and Strategies for Teaching in Secondary and Middle Schools. Chapters 7, 8, 9. Discussion of articles by content area groups...Group task of tying reading of part 3 together and posing possible answers to questions that have developed for them through their work in part 3.

12/1-12/3 Discussion of readings. Group unit plans and group journals due. Individual reflection papers due. Dialogic journals--group 2 and 3.

12/8-12/10 Wrapping up...Whole group oral reflection...personal narratives due. Dialogic journals-group 4 and 5. Introduce study guides for final exams and discuss.

12/15-12/17 Final Exam.

FIGURE 1 — TE 204 "The Grand Plan" — Carol S. Wolfe-Fall '92

Organizing Questions:

1. What does it mean to teach in a secondary setting?
2. What does it mean to know one's content?
3. What does knowing one's content have to do with teaching it?
4. What does it mean to teach (one's content) for student understanding?

(Semester - 16 Weeks)

• Content Groups • (Social Organization of the Course)
Vehicles for managing work in the course

1	2	3	4
TEXTS • Goodlad's Goals for Schools • Shopping Mall High School - Cohen, Powell, Farrar • Out of School Curriculum- Melnick • I, Thou, It:- Hawkins • Life in Classrooms - Jackson • Keeping Track - Oakes • Brookline High School - Lightfoot • Real Students take Chem. & Physics - Kahle • Four Black Students Coming of Age - Peshkin & White • And Then I Went to School - Suina	**TEXTS** • Pitfalls of Experience - Feiman-Nemser, Buchmann • Teaching Functions - Rosenshine & Stevens • 150 Ways of Knowing - Wilson, Shulman, Richert • Pam Grossman's Model of Teacher Knowledge	**TEXTS** • Teaching Science - Anderson & Smith • If Earthworms Could Talk - P. Vellom • Teacher as Respondent to High School Writer - Florio-Ruane & Clark • Peering at History through Different Lenses - Wilson • Pedagogical Autobiography: Mathematics Teaching - T. Rickard	**TEXTS** • Understanding Understanding - Nickerson
TASKS • Fastwrite: Teaching Content is.. • Content Journals • Dialogic Journals • Mini Teaching #1 (using context of moon) • Personal Narrative (begin) • Study Questions • Field Observation	**TASKS** • Content Journals • Dialogic Journals • Personal Narrative #1 • Field Tutoring • Study Questions	**TASKS** • Content Journals • Dialogic Journals • Mini Teaching #2 (representations of content concept) • Personal Narrative #2 • Teaching Lessons in the Field • Study Questions	**TASKS** • Content Journals • Dialogic Journals • Personal Narrative (final) • Field Reflection Paper • Unit Plan • Fastwrite • Teaching Content Is... • Course Evaluation
•Content Groups•	•Content Groups•	•Content Groups•	•Content Groups•

FINAL STUDENT COURSE EVALUATION OF TE 204

Five questions were developed by the instructor-more than one response from each student was possible for each question.

1. What texts in the course seemed most powerful for you? Why? What did they help you to do or to think about in relation to teaching and learning in your content?

TEXTS: Total students	47
"I, Thou, It" David Hawkins	27
'150 Ways" Shulman, Wilson, Richert	31
"Teaching Science" Anderson, Smith	8 five majors
"Out of School Curriculum" Melnick	10
"Peering Through Lenses of Hist." Wilson	7 all majors
"English Teacher as Respondent..." Florio-Ruane, Dunn, Clark	4 three majors
"Pitfalls of Experience" Feiman-Nemser, Buchmann	3
"Real Students Take Chemistry..." Kahle	5
"Shopping Mall High School" Powell et al.	4
"Tracking" Oakes	3
"Four Black Students..."Peshkin, White	2
"Brookline High School" Lightfoot	2
"Daily Grind" Jackson	3
"Teaching Functions" Roshenshine, Stevens	2
"Multicultural Art Classroom" Stuhr et al.	2 all majors
Teaching in the Middle and Sec... Henson	7
"Pedagogical Auto..." Rickard	5
"And Then I went to School" Suina	1

2. What tasks in the course seemed most helpful for you in relation to planning and thinking about teaching and learning in your content area? In general?

TASKS:	
Readings	4
Dialogue Journals	9
Personal narratives	8
Fastwrites	1
miniteachings (2)	26
Fieldwork (observ., teaching, tutoring) (See Julianna's-connection to course)	23
Content Group Journals	0
Unit Plans	7
Concept Maps	1
Content group discussions	2

3. **Comment on the <u>idea</u> of working through the texts and tasks of the course within content groups...was it helpful...not helpful?**

Helpful	43
Not Helpful	4

***Reasons for "not helpful"**

group grades - 1
wanted cross content groups - 1
members' experiences same - 1
felt pushed aside by members because of lower knowledge level - 1

4. **Write about what helped or did not help you access your subject matter in the course?**

<u>Helped</u>	
Whole group discussions	6
Mini-teaching	7
Content Groups	12
Class format (relaxed)	1
Unit planning	6
Instructor comments in journals	2
Fieldwork (structured observation)	4
Fieldwork (actual teaching)	10
ERC	2
Accessibility of instructor	1
Readings	10
Whole course	2
<u>Did not help</u>	
Articles needed to be given ahead	1
More articles on P.E., Art, Music, Lang.	4
Worked in minor area/only major	2
Articles were "too technical"	2

5. A course is more than texts and tasks. Write about another aspect of the course.

Cooperative climate	11
Application of concepts in group and miniteaching	2
Friendships	3
People-mix of contents	4
Respect gained for others' contents	2
Sense of mutual accomplishment	1
Positive hard work	1
Learning from peers	1
Instructor-accessibility, caring, open, flexible, sharing experiences	7
Mutual respect communication (I-S, S-I)	1
Whole group discussions	14
Reflective format of course	1
Fieldwork	2
More lecture-visuals needed to impact learning-discussion alone difficult	1
Needed "...guest speakers to show us (tell us) how it <u>is</u>."	1

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