This is to certify that the

dissertation entitled

LEARNING TO TEACH FOR UNDERSTANDING
IN A TECHNOLOGY-MEDIATED PROFESSIONAL
DEVELOPMENT PROGRAM

presented by

RODNEY WILLIAMS

has been accepted towards fulfillment
of the requirements for

Ph.D. degree in Teacher Education

Linda M. Anderson
Major professor

Date August 20, 2002

# LEARNING TO TEACH FOR UNDERSTANDING IN A TECHNOLOGY-MEDIATED PROFESSIONAL DEVELOPMENT PROGRAM

BY

RODNEY WILLIAMS

A DISSERTATION
Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

Department of Teacher Education

2002

ABSTRACT

LEARNING TO TEACH FOR UNDERSTANDING IN A
TECHNOLOGY-MEDIATED PROFESSIONAL DEVELOPMENT PROGRAM

By

Rodney Williams

The purpose of this study, a design experiment, was to examine whether three first-year teachers' ideas about teaching complex subject matter changed as they learned about a new approach to teaching during a six-week technology-mediated professional development program. This was a qualitative study that analyzed the teachers' ideas about how to teach core democratic values, one theme of a US state's social studies' standards. The teachers created a unit, using the *Teaching for Understanding* framework developed at Harvard, and taught it to one of their classes. They also conducted an inquiry into students' thinking about core democratic values and discussed the results of this inquiry with each other after the program concluded. Many of the program activities were conducted in a technology-mediated environment.

Findings suggest that although the teachers developed new insights into their practice, their ideas did not change in substantive ways. Instead, they responded to the program according to their initial ideas about teaching, subject matter, and student learning. Significant shortcomings of the program and the *Teaching for Understanding* framework did not provide support for addressing the teachers' lack of subject matter knowledge or their novice status. Despite problems they encountered, the teachers suggested that, with modification, technology-mediated professional development is promising. Implications for future professional development programs are discussed.

ACKNOWLEDGEMENTS

I would like to thank my family and friends, especially my sister, Sandra Williams, and my friends, Jeanne D'Haem and Matthew Locricchio, for their unwavering support and encouragement as I worked on this dissertation.

To the teachers who participated in the study, I extend my thanks and appreciation for allowing me into your classrooms and for sharing your insights about teaching. I would also like to thank Jere Brophy, Douglas Collar, Cheryl Rosaen, and Rand Spiro for serving on my committee.

I extend special thanks to my advisor and dissertation committee chair, Linda Anderson, who generously shared her time and scholarly expertise, as well as her kindness and good humor throughout this process.

This dissertation is dedicated to all of those in my family who have been teachers, especially my mother, Bess Williams, and my aunt, Vivian Wright.

TABLE OF CONTENTS

# CHAPTER 1

# INTRODUCTION

Research on teachers' practice indicates that most teachers teach as they were taught rather than how they were taught to teach (Feiman-Nemser & Remillard, 1996). Misconceptions about how to teach, acquired early in life, tend to persist in the face of formal education (Lanier & Little, 1986). This may be due, in part, to the fact that pre-service teachers do not, and perhaps cannot, learn new teaching methods in environments that are not situated in practice. Therefore, educating teachers to teach in ways that standards call for is problematic given the manner in which teacher education programs are structured. Once in the classroom, it is difficult for teachers to change their practice because of the relative isolation in which they work, and the social and political culture in which policy makers and administrators determine the content and methods of teachers' professional development.

Research also suggests that the abilities to think and act flexibly, that are explicitly and implicitly entailed in standards-based teaching and learning, may not have been fostered in some teachers' learning experiences (Lanier & Little, 1986). Moreover, research on case-based learning asserts that these are just the sorts of abilities needed for engagement in successful problem solving activities in poorly structured domains, such as teaching (Spiro, Coulson, Feltovitch, & Anderson, 1988). Teachers may be reluctant to change their practice, even when benefits for doing so have been demonstrated, if they lack the knowledge and skills to incorporate approaches designed to facilitate these sorts of understanding skills among their students. Further, meaningful opportunities to

develop critical understandings about subject matter and how to teach it are largely absent from most teachers' education.

In this study, I examined the hypothesis that teachers might learn to use a new approach to teaching if the approach is introduced in the context of their classroom practice, and if they have the opportunity to study the approach from multiple perspectives. As a result of this experience, teachers might develop more flexibility in their thinking about how to teach. I examined this hypothesis in the context of a technology-mediated, collaborative teacher research, and case-based professional development program, where three first-year secondary social studies teachers teach four "core democratic values:" liberty, justice, equality, and the common good.

First, they designed and taught units, and then, after teaching these units, assessed their own and each others' practice. As a framework for these activities, teachers used an approach to teaching and learning detailed in *Teaching for Understanding* (Wiske, 1998). Questions were focused on whether there was evidence that teachers were using principles of *Teaching for Understanding*, and how their ideas about teaching changed, if at all, during the course of the study.

## Learning to Teach Social Studies and History

New standards designed to facilitate improvement in teaching and learning social studies and history figure prominently in the current reform movement in K-12 education. The standards call for new approaches to teaching that result in more significant learning outcomes for students. However, until recently, little research has focused on how teachers can learn to teach in ways that standards documents and other

reform initiatives claim they should (Putnam & Borko, 2000). There has been almost no research focused on how teachers can learn to teach social studies in new ways (Seixas, 2001).

In an effort to understand this process, this study examined teachers' learning as they used one theme addressed in civic education standards in their teaching. This theme (core democratic values or ideals of democracy) is addressed directly or indirectly in various standards documents (Expect excellence: Curriculum standards for social studies, 1998; Michigan curriculum framework, 1996; National standards for civics and government, 1995; National standards for United States history, 1998; Social studies-history standards, 1998). An innovative, professional development program situated both in teachers' classrooms and in a technology-mediated professional development environment served as the site for this study.

## An Integrated Approach to Professional Development

At a professional development program where I served as one of the facilitators, I gave a presentation about integrating technology in reform-based social studies teaching. A veteran teacher commented that he was interested in using primary sources and standards-based approaches in social studies teaching, but didn't know how to and inquired about how he would go about learning to teach using these approaches. However, since he lives in a remote area, he would have limited opportunities to participate in reform-minded programs where he could learn about new approaches to teaching. My interests in the use of technology to enhance teaching and learning led me to think about how technologies might play an important part in teacher education,

especially for teachers who have limited access to professional development. However, reform-based professional development programs are relatively scarce, and those that use technology are even scarcer, so the program that served as the site for this study embarked on relatively uncharted waters.

This program integrated several approaches to teachers' professional development that research suggests holds promise for helping teachers learn to teach for understanding in social studies:

1. *Teaching for Understanding* (Wiske, 1998).
2. Situating learning to teach in teachers' practice.
3. Classroom research about one's own practice.
4. Case-based learning.
5. Collaboration.

*Teaching for Understanding* is a reform-based conceptual framework for teaching and learning developed at Harvard University (Wiske, 1998) and contains principles that appear to be necessary for new standards-based approaches to teaching. A second approach, based on research on learning in general and on teachers' learning in particular, suggests that learning to teach ought to be situated in teachers' practice (Brown, Collins, & Duguid, 1989; Lave & Wenger, 1991; Putnam, 2000; Wilson & Berne, 1999). Two approaches to professional development that create occasions and environments in which to situate learning to teach are classroom research about one's own practice, and case-based learning. Case-based learning based on Cognitive Flexibility Theory (Spiro et al., 1988) is especially promising. Other models of professional development suggest the importance of collaboration among teachers, usually characterized as some sort of

community (Lave & Wenger, 1991; Little, 1993; Putnam, 2000; Wilson & Berne, 1999). Within this integrated model of professional development teachers investigated and talked about teaching and learning social studies.

## Using Technology to Facilitate an Integrated Approach

New technologies designed to facilitate teachers' professional development and technologies that teachers used to study classroom practice, were interwoven in the technology-mediated learning environment where collaborative program activities were situated. For several reasons, using technology to accomplish the aims of this program offered advantages over conventional approaches to professional development. The construction of hypermedia cases that included video, examples of student work, plans, notes, and reflective assessments of practice allowed for the preservation of data that could be analyzed and shared at a later time. This is a crucial factor for teachers who have tremendous time constraints that prevent them from engaging in reflective activities. It was hoped that the use of collaboration and communication technologies would allow teachers to share in planning and implementation at times that were more convenient for them. It was also expected that distance, as a factor that interferes with professional development goals, would be minimized though the use of these technologies.

The technology-mediated program allowed teachers, who would otherwise be unable to participate in these kinds of activates, to do so. I also hoped to demonstrate that teacher educators, who might find commuting long distances to offer programs such as this one, difficult if not impossible, could participate with fewer constraints on their time

and resources. Using technology might also alleviate some of the problems of scalability involved in classroom-based research.

A secondary benefit that I hoped would be an outcome of the program, was that teachers, who now are under tremendous pressure to use technology in their teaching but find it difficult, could learn about technology in authentic ways that might suggest ways for integrating technology into their practice.

## Rationale

The rationale for the development of this hypermedia-learning environment grew from my experiences as a classroom teacher, a teacher educator (in both teacher education and professional development programs), an instructional designer, and from my interest in studying cognition and learning. These experiences and interests helped me develop an understanding of the problematic nature of teacher learning, especially the weak effect that most teacher education programs have on teacher learning (Feiman-Nemser & Remillard, 1996), the difficulty of integrating new ideas about learning and teaching with teacher's practice, and the need for more research that contributes to our understanding of how teachers learn to teach.

This situation has prompted me to think about how these problems might be addressed, including how new approaches to professional development programs can contribute to improving teacher education. In *Democracy and Education*, Dewey wrote, "History and geography . . . are the information studies par excellence of the schools" (Dewey, 1916, p.213). If Dewey is right (and I believe he is), then, as a former social studies teacher, and as a teacher educator, I am concerned that presently this important

subject area has a very low status. I am also concerned that it is taught in ways that discourage rather than promote active student engagement, either in its formal study or in ways that relate to their lives. How teachers learn how to teach social studies may be central to understanding this problematic and unsettling situation, and addressing its solution.

## Research Questions

This research sought to examine whether and how teachers who participated in this study developed increased insight and shared understanding of standards-based practice in teaching and learning social studies. Research questions were as follows:

### *Overarching Question*

How do teachers' ideas about how to teach about four "core democratic values" - liberty, justice, equality, and the common good - change, if at all, as they collaborate in an online teacher-research and case-based professional development program based on the *Teaching for Understanding* framework?

### *Guiding Questions*

1. What are teachers' ideas about how to teach "core democratic values" before they begin the collaboration?
2. What are teachers' ideas about how to teach "core democratic values" after they have planned the unit?
3. What are teachers' ideas about how to teach "core democratic values" after teaching the unit?

4. What are teachers' ideas about how to teach about "core democratic values" after examining their own and others' feedback on their research?
5. How do teachers react to, and evaluate key components of the professional development?

Findings may contribute to a better understanding of how professional development programs should be designed to improve practice, particularly programs that use new technologies.

# CHAPTER 2

## REVIEW OF LITERATURE

Along with other subject areas in K-12 education, social studies and history[1] are the focus of various reform initiatives. Prominent among these initiatives are new standards designed to facilitate improvement in teaching and learning social studies. (Expect excellence: Curriculum standards for social studies, 1998; Michigan curriculum framework, 1996; National standards for civics and government, 1995; National standards for social studies teachers, 1997; National standards for United States history, 1998; National standards for world history, 1998; Social studies-history standards, 1998). These standards call for new approaches to teaching that result in more significant learning outcomes for students than what has been previously expected.

Until recently, little research has focused on how teachers can learn to teach in ways that standards documents and other reform initiatives claim they should (Putnam & Borko, 2000). In social studies, research about how teachers can learn to facilitate thoughtful classroom discussions (Newmann, 1990; Parker & Hess, 2001), or to teach for understanding, for instance, is limited and fragmented (Brophy, Alleman, & O'Mahony, 2000; Lybarger, 1991; Seixas, 2001; Wilson, 2001b). However, new ideas about improving professional development for teachers have recently been proposed that may help teachers learn to teach social studies using methods that are congruent with approaches to teaching suggested by standards. (Putnam & Borko, 2000; Wilson &

[1] Distinctions between social studies and history as separate subjects are now common in the scholarly literature although this is not always the case. Among practitioners the distinction is unclear and history is often categorized as one of the social studies. Here the term "social studies" follows practioners' usage except where noted.

Berne, 1999). Several of these ideas informed the design of the program in which this study was situated and included: (1) using social studies standards (Michigan curriculum framework, 1996) and the *Teaching for Understanding* framework (Wiske, 1998) to design and teach units; (2) situating teachers' learning about *Teaching for Understanding* in their practice (Greeno, Collins, & Resnick, 1996; Lave & Wenger, 1991); and (3) developing and studying cases about teachers' teaching (J. H. Shulman, 1992; L. S. Shulman, 1992; Sykes & Bird, 1992) – all in the context of a technology-mediated, collaborative learning environment that bridged local school and community boundaries.

Therefore, literature reviewed in this chapter is relevant to: (1) reform of social studies teaching through standards that emphasize *Teaching for Understanding*, (2) professional development designed to help teachers learn about *Teaching for Understanding* that is situated in their practice, and (3) particular features of professional development that may facilitate teachers' learning, such as cases, teacher research, collaboration, and technology-mediated learning.

## Reform in Social Studies Teaching

As an educator, I have always been curious about what students like and dislike about school. Whenever the opportunity presents itself I ask students about this issue. One question I ask is what subjects they like and dislike. Much to my dismay, students frequently select social studies and history as their least favorite subject. This is not surprising since research often portrays history and social studies classrooms as places where students do not learn much that either touches their lives or contributes in significant ways to their intellectual development (Evans, 1990; Newmann, 1990;

Wilson, 2001b). Indeed, the most salient characteristic of social studies classrooms to emerge from research conducted by Newmann (1990) was the profound absence of "thoughtfulness" in those classrooms (p. 42). Other researchers have characterized teaching and learning in typical social studies classrooms as places where teachers deliver dry lectures or tell stories and students try to memorize and regurgitate a parade of disconnected facts and dates (Wilson, 2001b; Wilson, 1991).

In the case of history, another problem is how that subject is represented to students. Recent research identifies the dominant use of historical narrative as a cultural teaching tool in the United States that limits students' opportunities to make sense of important aspects of their own past (Barton, 2001). Barton illustrates this through the example of the Rosa Parks story, which he labels as "an increasingly canonical element of primary history" (p. 906). By only learning the story of an African American woman who refused to give up her seat on a bus, students' understanding of the broader contexts in which this event took place (segregation, the Civil Rights movement, economic pressures, etc.) is significantly limited. The Parks story is a "narrative of progress," a cultural tool, the use of which, Barton argues, can give students a sense of shared identity and a belief that we can learn from our mistakes. However, it may be that by limiting students' access to other cultural tools that allow them to explore the complexities that surround this simple story, teachers fail to help students gain a more balanced and complete understanding of history (Barton, 2001; Wertsch, 1994).

Although there is not much research about what students learn in social studies classrooms (Brophy et al., 2000), what there is suggests that there is little meaningful learning occurring there (Seixas, 2001). This state of affairs is of continuing interest to

the popular press and among political observers. A recent report in the *New York Times* characterized U.S. students as being "woefully ignorant" of history (Rothstein, 2002). Another report combines research and editorial comment that highlights the alleged "moral decay" and "declining political understanding and commitment" among Americans, with blame for this state of affairs focused on schools that fail to "create citizens of character" (Salamone, 2000). Participation and interest in political processes, along with faith in democratic institutions, are outcomes traditionally expected of students as a result of their experiences in civic education, a major purpose of social studies in the 20th Century (Expect excellence: Curriculum standards for social studies, 1998; Seixas, 2001). As is the case in history, however, it appears that students fail to either gain much knowledge or understanding of the principles of United States constitutional democracy or to develop a sense of civic efficacy during their years of social studies instruction (Cotton, 1997; Lutkus, 1999). Although this situation has been recognized for some time, social studies teaching remains in the doldrums, dominated by traditional methods, including the use of lecture, textbooks, and curriculum that emphasizes content coverage (Cotton, 1997).

Recently, I did extensive observations in secondary social studies classrooms over the course of a year as a field instructor for five social studies teacher interns. The interns mostly emulated their mentor's teaching, which in most cases conformed to characterizations cited above. In short, it was teaching that was both uninformed and uninspired with an emphasis on learning facts and dates. Students in these classrooms appeared to be bored, listless, unengaged, or restless. Rarely were there moments when students appeared to be either interested or challenged. The only times these classrooms

were even slightly animated was when teachers had students engage in activities outside of the normal patterns of pedantic lecturing, meaningless recitation, or answering textbook questions. Activities included, for instance, playing trivia games linked to textbook content and lecture notes, making posters, participating in simulations, or discussing current events. These activities appeared to be designed for fun rather than for promoting goals linked to learning important content. Many students took advantage of these situations when the teachers' attention was focused elsewhere to share gossip or tell jokes, polish fingernails or apply makeup, engage in physical or verbal banter, or simply sleep or stare out of classroom windows.

During one observation where the teacher intern delivered a particularly uninspired and uninformed lecture that included stopping frequently to ask students to complete his sentences, a female student sitting next to me in the back of the room sighed in exasperation and exclaimed under her breath, "This is so boring!" However, when a recent test students had taken was passed back this student immediately became attentive. She beamed with satisfaction after receiving her test, and told her neighbor that she had received an "A". I asked her why she had studied so hard to get a good grade if she was so bored with this class. She replied, "I want to go to college and I need good grades to do that."

This teacher intern's mentor told me her department's goal was for students to attain "mastery" of history by correctly selecting at least 80% of the multiple-choice, true-false, and fill-in-the blank items on tests designed to assess knowledge of history. She told me that this strategy was designed to prepare students for the state-standardized social studies test. This kind of teaching, with its goals oriented toward teaching for

recall, does not complement goals for social studies teaching in standards documents that emphasize inquiry oriented or *Teaching for Understanding* approaches (Michigan curriculum framework, 1996; National standards for social studies teachers, 1997).

Although the kind of teaching outlined above is not characteristic of all social studies teaching, unfortunately, it appears to be characteristic of much of it. Thus, current reform initiatives, research, and my own experiences support the notion that new approaches to teaching social studies are called for.

Innovative approaches to teaching have often been proposed over the past one hundred years (Cuban, 1993; Dewey, 1916; Dow, 1992); however, none have taken hold in the vast majority of U.S. classrooms (Cuban, 1993). Recent proposals for addressing this problematic situation include using content standards and standards about *Teaching for Understanding* rather than teaching for transmission.

*Standards for Improving Social Studies Teaching and Learning*

Standards are documents that outline what both teachers and students should know and understand within specific subject areas such as social studies and history. Standards designed to improve both teaching and learning in social studies are an outgrowth of a broader educational standards and reform movement that began in the 1980s. Some researchers in social studies cast a negative light on the standards movement claiming that they "aim to create a national education system with uniform content and goals" that contradicts the nature of the disciplines from which they are derived where there is no broad based consensus on how history and the social sciences are constituted (Ross, 1996). Others see merit in standards claiming, for instance, in the case of those for world history (National standards for world history, 1998) that

"standards are a valuable resource that teachers and districts can use to develop authentic world-scale, analytical history courses (Bain, 1995). Despite the controversies generated by the standards movement, and despite their wide adoption at national and state levels, skepticism about standards abounds (Hill, 1997), and, at least in social studies, there is little evidence to indicate that they have made any significant impact on students' learning or teachers' teaching (Murray, 1998; Ross, 1996).

An example of a standard is one created by the National Council for the Social Studies: "Social studies programs should include experiences that provide for the study of the ideals, principles, and practices of citizenship in a democratic republic" (*Expect excellence: Curriculum standards for social studies*, 1998). Details outlined in this standard suggest what students should know and understand at different grade levels. For instance, high school students:

> ... (are) able to see themselves taking civic roles in their communities ... increasingly recognize the rights and responsibilities of citizens in identifying societal needs, setting directions for public policies, and working to support both individual dignity and the common good ... and ... learn by experience how to participate in community service and political activities and how to use democratic process to influence public policy (Expect excellence: Curriculum standards for social studies, 1998).

My interest in the standard used by teachers in this study was initially piqued in the course of teaching a social studies methods course where my students quite often used acronyms I had not heard before, such as "HOT" (higher order thinking) and "CDVs" (core democratic values). When I questioned my students about core democratic values

and higher order thinking, none seemed to have much of an idea about what either entailed. This was a curious situation, since "core democratic values" is the center piece of the state social studies standards, and the development of higher order thinking in students is mentioned in the state standards as a goal towards which teachers should aim their instruction (Michigan curriculum framework, 1996).

Later, when I was designing the professional development program described in this study, I was also involved with a project where I developed and produced web-based hypermedia cases that documented teachers' lessons about core democratic values (Civics online, 2000). The four participating teachers, mostly highly regarded professionals, found that after designing and teaching lessons about core democratic values that went beyond having students simply defining and citing examples of the values, their students' understanding of these values remained problematic. For instance, no students linked their ideas to core democratic values in ways suggested by the state standard, e.g., to the *Constitution*, *Declaration of Independence*, or other relevant foundational documents. Other students made connections to core democratic values in ways that didn't make sense, such as linking the concept of liberty to an automobile exhibit at a museum.

One of the students in a fifth grade class who made this connection, could not explain why she had done so when questioned by her teacher. Another student, in a high school American History advanced placement class, had a hard time making any connections between core democratic values and examples that might illustrate his definitions. Two students, in an eighth grade American History class, linked their ideas about justice to situations that diverged considerably from the territory outlined in the

state standard while providing no evidence that linked to lessons they had studied to substantiate their arguments. Only two students, interviewed in a second grade class, had somewhat reasonable explanations in which they connected their ideas to real-life examples and to what they learned in the lessons their teacher had designed.

Their ideas, however, were not free from misconceptions. For instance, one of these students asserted that diversity was the opposite of equality. None of the students recognized that these values often conflict with each other or that the political philosophies and theories from which these values are derived represent many different ideas about how society and government should be constituted. After completing this project it became apparent to me that even teachers who were recognized as skilled and knowledgeable by peers, administrators, and members of the community could not easily design lessons that led students from learning rote definitions to a more in-depth understanding of these difficult concepts. This led me to believe that teachers, who are more typical, may find it especially daunting to teach these concepts, especially using new approaches to teaching that call for inquiry-oriented instruction outlined in the same document (Michigan curriculum framework, 1996).

Much has been reported about the lack of knowledge and understanding about civic ideals as well as the lack of civic efficacy among U.S. students (NAEP 1998 Civics report card for the nation, 1998; Schwille & Amadeo, Draft, 2000) that is coincident with corresponding accounts of the loss of a sense of community in the United States (Putnam, 1995). Teaching about citizenship education and, more specifically, ideals of democracy or core democratic values, was chosen as a subject on which to focus a study of teachers' learning not only because of its particularly challenging nature, but also because it seems

to lie at the heart of what has been, and remains, one of the primary purposes of education in the United States - educating students for democratic citizenship. This is apparently a high priority for policy makers and educators, but there is little consensus about how this ought to be accomplished in classrooms and schools (Finkelstein, 1988; Parker, Ninomiya, & Cogan, 1999). Thus, the state standard addressing core democratic values appears to be not only a formidable one for focusing on issues related to teachers' learning, but also a timely and important one as well. The challenge, of course, is how teachers can learn to teach about core democratic values using methods that go beyond approaches that encourage rote memorization to approaches that help students develop in-depth understanding of democratic ideals.

### *Teaching for Understanding Framework*

Standards also exist for teaching, and though different from content standards in some perspectives, are similar in that they call for teachers to teach in ways that foster students' understanding in social studies (Michigan curriculum framework, 1996; National standards for social studies teachers, 1997; Social studies-history standards, 1998). ("Understanding" is defined somewhat differently by various researchers, who have investigated epistemology). The authors of the *Teaching for Understanding* framework assert that in order for students to develop understanding they must use "old knowledge in new situations to solve novel problems" (Blythe, 1998, p. 13). In the introduction to a section called "Civic Perspective" in the document that contains the content standard used by teachers in this program, the authors use language that indicates that students should be able to use the knowledge gained from their learning experiences in social studies classrooms to solve novel problems, specifically to "make informed

decisions about governing their communities." The authors also use language to describe desired student learning outcomes from civic education that suggest the development of understanding, such as "compare... builds understanding... evaluate... construct" (Michigan curriculum framework, 1996). The word "explain" in the content standard for core democratic values, quoted below, also suggests that students do something that goes beyond merely reciting definitions of core democratic values.

> **Content Standard 2:** All students will explain the meaning and origin of the ideas, including the core democratic values expressed in the Declaration of Independence, the Constitution, and other foundational documents of the United States (Michigan curriculum framework, 1996).

What students should be able to do is also outlined in the standard at various grade levels. Language used at these performance levels includes terms such as "identify" and "describe" which are not usually associated with understanding but which may be necessary precursors for the development of understanding (Wiske, 1998). Terms that are associated with the development of understanding are also used, however, and include "explain, interpret, and evaluate." Although different in tone and specifics about what students ought to be able to do as a result of their learning experiences, other standards developed by national organizations also call for students to develop an understanding of civic ideals and practices (Expect excellence: Curriculum standards for social studies, 1998; National standards for civics and government, 1995).

The document from which the standard used in this program was taken, a state curriculum framework, does not have specific standards for teaching civic education that explain what teachers should know and be able to do. Instead, a very brief explanation of

"Standards of Authentic Instruction" is provided that applies to all subject areas, including social studies (Michigan curriculum framework, 1996; Newmann, Secada, & Wehlage, 1995). The four standards, "higher order thinking, deep knowledge, substantive conversation, and connections to the world beyond the classroom," are intended to provide "a structure for instructional design." The authors of the framework explain that these standards are integral to teaching the curriculum. However, there is nothing in the document that explains to teachers how they would implement this kind of instruction. Instead, "vignettes" of teaching in five subject areas are presented as models of instruction. The example for social studies is one that details a kindergarten teacher's teaching. Since the publication of the standards, materials for instruction on teaching standards-based social studies have subsequently been developed (Harris & Yokum, 2000). These materials include videotapes of teaching in various social studies classrooms and are intended to be examined critically by teachers as a professional development activity. They form, basically, a broad framework for *Teaching for Understanding*, without providing much information about *how* to teach for understanding. Instead, these standards simply call for teachers to teach in ways that promote the principles of authentic instruction mentioned above (Harris & Yokum, 2000; Newmann et al., 1995).

There are also national standards that explain the knowledge and dispositions social studies teachers should possess in order to practice standards-based teaching in civic education (National standards for social studies teachers, 1997; Social studies-history standards, 1998). These standards provide more detail about what teachers should know and be able to do. For instance, one of the ten expectations for teachers in the

section titled "Civic Ideals and Practices" in the *National Standards for Social Studies Teachers* (1997) pertains to the topic of core democratic values, and asserts that teachers should "assist learners to understand the origins and interpret the continuing influence of key ideals of the democratic republican form of government, such as individual human dignity, liberty, justice, equality, and the rule of law." (National standards for social studies teachers, 1997)

The knowledge, skills, and dispositions that teachers need to possess in order to meet these expectations are considerable. Standards outlined in another set of teaching standards for social studies teachers differ in tone and substance to a certain degree, but also detail substantial knowledge, skills and dispositions that are expected of teachers (Social studies-history standards, 1998). Both documents contain expectations that clearly require teachers to know how to teach for understanding. Interestingly, none of the standards documents, state or national, explain how teachers can learn to teach for understanding, except in very broad terms. These outlines are not likely to be of much help to teachers considering what we know about learning in general, teachers' learning in particular, and the *Teaching for Understanding* framework. Thus, the design of this study was influenced by the gap between what is expected of teachers and the absence of opportunities to learn about teaching in ways that would help them meet those expectations; that is, learning how to teach for understanding.

Some of the difficulties and problems associated with both preservice teachers' and beginning teachers' beliefs and understandings about teaching are embedded in some of the more problematic and difficult to learn aspects of teaching, such as learning to teach for understanding or conceptual change. Some researchers suggest that these more

difficult to learn aspects of learning to teach might best be accomplished during a teachers' practice rather than in college or university education courses (Scardamalia & Bereiter, 1989). For instance, Scardamalia and Bereiter (1989) define four conceptions of teaching that a teacher needs to acquire and practice well: teaching for cultural transmission, teaching for nurturance, teaching for basic skill, and teaching for conceptual change. Teachers may learn to use these conceptions of teaching with varying degrees of effectiveness that range from basic or novice, to problem solving or expert levels. Teaching for conceptual change seems to be the most difficult kind of teaching to learn, and not one that is typically practiced with a high level of proficiency by the majority of either beginning or experienced teachers.

Researchers have described cases of teaching for conceptual change that were implemented in social studies classrooms (Kobrin, 1996; Levstik & Barton, 1997). These cases detail a complex pedagogy that is unlikely to be mastered by teacher education students during the four or five years of their college and university preparation. In short, teaching for conceptual change seems to be hard to learn, and as some researchers have suggested might best be learned in the context of teachers' actual practice (Feiman-Nemser & Remillard, 1996; Scardamalia & Bereiter, 1989). So it may be more reasonable to concentrate college and university teacher education programs on the development of "problem solving" levels of expertise across the first three conceptions of teaching, and then focus on the development of teaching for conceptual change during a teacher's actual practice (Scardamalia & Bereiter, 1989). The *Teaching for Understanding* approach developed at Harvard attempts to do just that (Wiske, 1998).

It is a research-based framework for the development of learning environments for teaching and learning for understanding (or conceptual change). The framework defines understanding as " . . . the ability to think and act flexibly with what one knows," or " . . . a flexible performance capability . . ." (Wiske, 1998, p. 40). The *Teaching for Understanding* framework requires that teachers address four principles of teaching and learning in their plans and instruction that include (1) generative topics, (2) understanding goals, (3) performances of understanding, and (4) ongoing assessment (Wiske, 1998). This framework complements ideas found in reform-based standards for teaching and learning, including those for social studies and history. Researchers have found that teachers who are committed to learning about the framework have found it to be valuable in learning how to teach in new ways that are congruent with standards that emphasize understanding (Wiske, 1998).

Researchers, who designed this model for engaging teachers in activities for learning about *Teaching for Understanding,* caution that it may require a level of commitment on the part of teachers that some may find daunting. As they experimented with the use of this model in professional development, they found that *requiring* teachers to participate was not productive; instead, they recommend that teachers only participate on a *voluntary* basis (Blythe, 1998). A further limitation of this model is that learning to teach for understanding is not an easy or simple process. It may take a long time for teachers to become knowledgeable about the framework and skillful in its use (Cohen, McLaughlin, & Talbert, 1993; Wiske, 1998). In light of this, long-term, rather than short-term, professional development programs make sense. Other issues, particularly policy issues, may further limit the implementation of these sorts of learning

environments for teachers. The establishment and implementation of professional development environments such as those mentioned above may be slow since educational policies "have only occasionally and weakly promoted the sorts of teaching that reformers now propose" (Cohen & Barnes, 1993, p. 245).

Ball and Cohen (1999) suggest how some of these impediments might be overcome and identify three components of a plan for designing professional development programs that they identify as essential. First, there needs to be a broader discussion of what it might mean to ground professional development in teachers' practice. Second, a few learning opportunities in practice-based professional development should be designed and studied. Third, different kinds of curricula for professional development should be explored such as embedding teachers' learning in the materials of practice – unit designs, student work, and videotapes of teachers' classrooms (Ball & Cohen, 1999). These components all informed the rationale and design of the program discussed in this study. I considered what others have said about grounding teachers' learning in their practice, designed and studied a few learning opportunities, and embedded these in materials of teachers' practice.

## Situating Teachers' Learning in Their Practice

If social studies teachers are to help students learn in ways that new standards say they should learn, then teachers need to learn how to teach in ways that facilitate that goal. In other words, teachers need to learn to teach for understanding. There is evidence that it is hard to teach this way and hard to learn to teach this way. Thus, a pressing problem in professional development now is how to help teachers learn to teach in new

ways, in line with new standards that emphasize understanding. We know something about how teachers learn new ways of teaching, but not enough. In particular, we don't know much about learning to teach social studies for understanding.

Current standards-based reforms call for a deep understanding of subject matter by teachers along with new approaches to teaching and learning that include an increased awareness and attention to diverse student populations. These approaches call for distinctly different kinds of learning opportunities and environments for preservice, beginning, and experienced teachers. Proposals for reforming learning environments for teachers range from using a framework such as *Teaching for Understanding* (Wiske, 1998) in professional development programs, to specific research methods that fall under the category of teacher research (Dinkleman, 1997; Rosaen & Schram, 1997; Rosaen & Wilson, 1995), and case-based learning (L. S. Shulman, 1992; Sykes & Bird, 1992) to comprehensive proposals for change such as those suggested by The Holmes Group and researchers such as Goodlad and Little (Goodlad, 1990; Little, 1993; *Tomorrow's schools of education*, 1995).

There is some research to contribute to our understanding of how history and social studies teachers teach (Brophy & VanSledright, 1997; Wilson, 2001). There is also some research to contribute to our understanding of how teachers learn (Anderson & Bird, 1995; Anderson, Smith, & Peasley, 2000; Bransford, Brown, & Cocking, 2000; Putnam & Borko, 2000). Research has also begun to inform our understanding of different approaches to teaching history, teachers' beliefs about history, and how both may affect students' conceptions and misconceptions of history (Brophy & VanSledright,

1997; Evans, 1990; Wilson, 2001b; Wineburg, 1999), but the picture is far from complete.

Wilson & Berne (1999), in a review of research on professional development, highlight a need for more research on teacher learning. Their review focuses on three broad areas of research on teachers' professional development: subject area or content learning, student learning, and opportunities for talking about teaching. Core questions that should guide research focus on finding out exactly what teachers learn, how their learning takes place, and what knowledge they acquire. Research needs to understand how teachers' knowledge improves their practice, and most importantly how it affects their students' learning (Wilson & Berne, 1999).

### *Situated Learning*

Recent research on learning in general, and on teachers' learning in particular, suggests that learning to teach ought to be situated in teachers' practice (Brown, Collins, & Duguid, 1989; Lave & Wenger, 1991; Putnam, 2000; Wilson & Berne, 1999). Researchers have also suggested the potential usefulness of situative theories for analyzing teachers' learning in the environments where learning occurs (Feiman-Nemser & Remillard, 1996; Putnam & Borko, 2000); however, exactly how it could be useful has not been demonstrated. The professional development program discussed in this study is based on situated learning theories and is a design experiment in which teachers' learning can be analyzed in the context of their practice. Situated learning theory emphasizes the central role of learning embedded in authentic activities, i.e., everyday activities of a domain such as teaching, social interaction, and collaborative learning (Brown, Collins, & Duguid, 1989). Putnam and Borko (2000) distinguish between two versions of this

theory, one that sees learning in the context of classroom practices derived from the role of formal education (Brown, 1992) and one that sees learning occurring in the context of what practitioners do (Brown et al., 1989). Both notions of situated learning were seen as useful in this design experiment. Teachers' learning was viewed as the possible outcome of a complex interplay of teachers' practice, analytic discussions about practice, and construction and debriefing of hypermedia cases about that practice. Authentic learning activities in this perspective are defined as "ordinary practices of a culture" (Brown et al., 1989, p.34); those that are similar to what practitioners actually do. In addition, the notion of a cognitive apprenticeship or learning supported by a coach or mentor (in my case the facilitator) who makes his/her knowledge and expertise visible (Brown et al., 1989) also derives from situated learning theory (Brown et al., 1989; Lave & Wenger, 1991).

Recent research on teachers' learning through professional development does suggest some models and approaches that may facilitate goals of learning to teach social studies for understanding (Hawley & Valli, 1999; Putnam & Borko, 2000; Wilson & Berne, 1999). Most of these approaches call for ongoing professional development that would transform teaching into what Ball and Cohen (1999) call "the learning profession." Ball and Cohen argue that professional development must be transformed from the present fragmented approach to a more systematized approach where teachers become engaged in ongoing disciplined inquiry about teaching by analyzing instances of practice with other teachers in communities of learners.

Hawley and Valli (1999) outline new models of professional development that emphasize an inquiry approach to practice that complement Ball and Cohen's vision. In their view, current models of professional development programs are designed around

eight principles: (1) they are driven by differences between standards, goals, and student learning; (2) they involve teachers in identifying learning needs and methods of learning; (3) they are primarily school based; (4) most learning activities are designed around collaborative problem solving, and (5) are continuous and ongoing; (6) they incorporate multiple sources of information on outcomes for teacher learning and processes involved in implementing learning through professional development; (7) they provide opportunities for the development of theoretical understandings of knowledge and skills to be learned and (8) they are integrated with comprehensive change processes that deal with a full range of impediments to and facilitators of learning (Hawley & Valli, 1999).

Whether approaches to professional development that situate teachers' learning in a variety of contexts are successful in changing teachers' thinking and practice has yet to be demonstrated; more research is clearly needed to help inform understanding of the many factors that may impact this kind of learning. Still, some researchers have suggested that the situative perspective on learning holds promise both as a lens for understanding teachers' learning (Feiman-Nemser & Remillard, 1996; Greeno et al., 1996; Putnam & Borko, 2000) and for designing learning environments that foster learning.

In a recent review of research on teacher learning, Putnam and Borko (2000) outline several different current approaches to professional development along with benefits of each approach. One approach is for teachers to have learning experiences at their own schools, particularly in teachers' own classrooms. Teachers in one project reported that these activities helped them design and implement classroom-based performance assessments. Another approach is to have teachers bring classroom

experiences to ongoing professional development programs, for example, experiences that focus on instructional practices. One especially effective application of this approach saw teachers introducing materials and activities in a workshop session, trying these ideas out in their classrooms, and then discussing them at a subsequent workshop session. Another example, Richardson and Anders's (1994, in Putnam & Borko, 2000) practical argument approach saw researchers structuring discussions so that teachers examined "the rationales, empirical support, and situational contexts that served as the basis for their instructional actions – often using videotapes of the teachers' classrooms as springboards for discussion" (Putnam & Borko, 2000, p. 6).

Putnam and Borko (2000), while pointing to the strengths of these approaches, also caution that there are problems, including having researchers spend large amounts of time with teachers as they work in classrooms. In addition to classroom-based study, it may also be important for teachers to learn in different settings, such as summer workshops or institutes. They discuss a promising model that combines elements of different approaches where teachers are introduced to theoretical and research-based ideas in summer institutes and then are provided with ongoing support as they attempt to integrate these ideas into their teaching during the school year (Schifter & Fosnot, 1993; Carpenter, Fennema, Peterson, Chiang, & Loef, 1989, in Putnam & Borko, 2000). This approach complements Ball and Cohen's (1999) expanded definition of practice that includes learning experiences that are distributed across sites from schools and teachers' classrooms to professional development sites in university and other settings.

## Features of Professional Development that May Help Facilitate Reforms

Current standards-based reforms that call for a deep understanding of subject matter by teachers, along with new approaches to teaching and learning that include an increased awareness and attention to diverse student populations, call for distinctly different kinds of learning opportunities and environments for preservice, beginning, and experienced teachers. Proposals for reforming these learning environments range from using a framework such as *Teaching for Understanding* (Wiske, 1998) for professional development programs, to specific research methods that fall under the category of teacher research (Dinkleman, 1997; Rosaen & Schram, 1997; Rosaen & Wilson, 1995), and case-based learning (L. S. Shulman, 1992; Sykes & Bird, 1992) to comprehensive proposals for change such as those suggested by The Holmes Group and researchers such Goodlad and Little (Goodlad, 1990; Little, 1993; Tomorrow's schools of education, 1995). Two approaches to professional development that create occasions and environments in which to situate learning to teach are classroom research about one's own practice, and case-based learning. In this program these two models of inquiry were integrated into one comprehensive approach which was framed by principles of *Teaching for Understanding* (Wiske, 1998).

### *Classroom Research on One's Own Practice*

There is a great deal of literature on different kinds of inquiry-oriented practices designed to foster teachers' learning in the context of their practice. Sometimes called action research or teacher research, its purposes and methods are diverse (Cochran-Smith & Lytle, 1999). Ball and Cohen (1999) argue that learning to teach ought not be thought of as research in the traditional sense, or even teacher research, but rather the

development of a "stance of inquiry" that they argue is central to the role of the teacher. Lampert and Ball's hypermedia-based and inquiry oriented learning environment was the model on which much the program discussed here was designed (Lampert & Ball, 1998). In this environment, which was constructed using various artifacts from Ball's teaching in an elementary mathematics classroom, teacher education students are encouraged to develop such an inquiry oriented stance (Lampert & Ball, 1998). This program is discussed in more detail in the next section on case-based learning.

Magdalene Lampert recently published an account of her teaching over the course of a year in which she provides analyses of some of the problems and complexities of teaching (Lampert, 2001). She taught a mathematics class for fifth graders at a school located near the Michigan State University campus several years ago. Lampert and her colleagues at Michigan State documented her practice with videotape, transcripts, her journals, and artifacts of students' learning. With these materials, Lampert constructed what is, in essence, a very large case study. Her primary focus in the analyses of this case is on the relationships between the teacher, her students, and the content around which they interact. Her methodology is a problem-based approach, itself a *Teaching for Understanding* approach to learning how to teach for understanding.

One example of her approach is to investigate students' thinking about mathematics – the conceptions (and misconceptions) they have of that subject when they come into her classroom, and how they are attempting to make sense of it as she teaches new content to them. The results of these investigations are used to inform her decision making about curricular design and other matters of importance as they relate to instruction.

This investigation, in its sheer scale, of course, goes beyond what teachers can do without funding and support. However, Lampert's account provides an in-depth look both at what teachers might pay attention to in their classrooms, as well as how they might go about making sense of what is happening in their classrooms so that it contributes in some systematic way to their learning.

Duckworth (1996), in her chapter, *Teaching as Research*, cites an example of a social studies teacher (who was a graduate student at the time), who used a methodology similar to Lampert's to investigate students' ideas about the presidency. Delaney explored two students' ideas about four aspects of the presidency: the powers of the office, restrictions on those powers, the relationship between the presidency and other governmental institutions, and the relationship between the president and the electorate (Duckworth, 1996).

She conducted several interviews with these students and also had them keep journals about their thinking on the topic over a period of time. In her findings, Delaney discussed two factors that characterized the two students' ideas about how government works. One factor involved the students' use of "single-group nouns:" "majority," "public," and also "White House" to "communicate a single entity and obscure the diversity inherent in them (Delaney, 1986, in Duckworth, 1996, p. 166). The other factor was the students' tendency to view the presidency in "'bipolar terms' – characterized by making right and wrong decisions" (Delaney, 1986, in Duckworth, 1996, p. 166). Delaney's investigation was intended to primarily inform her own practice as a teacher, but as Duckworth points out, also contributed in a small way to our knowledge of "what is involved in an understanding of how American government works, and how such

understanding can evolve" (Duckworth, 1996, p. 166). This kind of inquiry about one's own practice can be organized and studied as a case study as teachers in this program did.

*Case-Based Learning Based on Cognitive Flexibility Theory*

Some researchers in teacher education have suggested that one methodology that holds promise for engendering the sorts of habits needed for teaching in reform minded ways is case-based learning (Merseth, 1996; Sykes & Bird, 1992). Case-based learning in teacher education has captured the attention of a number of teacher educators during the past fifteen years or so (Anderson & Bird, 1995; Shulman, 1992a; Sykes & Bird, 1992). In an extensive review of the literature on case-based learning in teacher education, Sykes & Bird (1992) document a number of different approaches to its use by teacher educators.

Many advocates of case-based learning have suggested advantages over other kinds of learning that are typical in teacher education and professional development programs. Firstly, they say that it allows teachers to examine instances of actual classroom practice in all its complexity. Secondly, it can provide shared experiences for teachers to examine as a group, using multiple perspectives and frameworks (Putnam & Borko, 2000; Spiro et al., 1988). Thirdly, it allows teachers and learners more control over issues to be analyzed, as well as the opportunity to prepare in advance for discussions about case materials (Sykes & Bird, 1992).

Hypermedia environments, such as the program described here, offer an opportunity to add layers of complexity to cases that can provide even richer arrays of primary source material for studying issues of teaching and learning embedded in actual practice, than narrative or video cases can alone. The nonlinear nature of a hypermedia environment, the ability to access information quickly and easily and provide multiple

links among that information, allows teachers to analyze multiple perspectives on an event in the classroom simultaneously (Putnam & Borko, 2000; Spiro et al.1988).

Although case-based learning has been used in diverse ways, and for diverse purposes in teacher education, research has not convincingly demonstrated benefits for using this approach (Merseth, 1996). Except for some initial findings that reflect positively on the method (Pellegrino & Altman, 1997), and conjecture about what future studies may reveal, research conducted so far has not clearly demonstrated how case-based learning environments might be designed and developed to impact teacher learning in more significant ways than current practices do. In addition, most development and research on case-based learning has been conducted in university teacher education programs; little has been conducted in professional development environments for in-service teachers.

The research conducted by Lampert and Ball on their hypermedia environment suggests the need for further investigations in other domains of teaching such as social studies. Research on professional development for learning about standards and reform-based teaching indicates a need for substantial new learning on the part of teachers (Little, 1999). This same research demonstrates that teachers hold diverse and often contradictory views about reform-based teaching and how it should be implemented. The ambiguities and uncertainties inherent in standards-based teaching describe the kind of complex terrain in hypermedia programs, such as the one described here, that would allow teachers to revisit their cases many times and in many different ways. According to Cognitive Flexibility Theory, these case environments are well suited to learning in

poorly structured domains like reform-based teaching. However, no such innovative programs had previously been constructed for social studies teachers.

The hypermedia cases constructed and studied by teachers could form the basis for the development of a case literature (L. S. Shulman, 1992) or digital databases of cases (Pea, 1999). Cognitive Flexibility Theory (Spiro, 1988) and the *Teaching for Understanding* (Wiske, 1998) framework have great potential to inform the design of cases of teaching constructed by teachers themselves, as well as to describe the complex landscape in which teachers' learning through cases occurs.

As Ball & Cohen (1999) suggest, "Situating professional development in materials, teaching, and incidents that may stimulate some productive disequillibrium offers useful territory for teachers' learning" (p.17). As Sykes and Bird (1992) comment in their discussion of case use in teacher education, " . . . cases serve as a natural site for collaboration among researchers, teacher educators, and teachers, and case development may serve as a crucial activity in the formation of new communities" (p. 514). It has been suggested that a critical element in the design of these sorts of communities is the development of case study environments that incorporate principles of Cognitive Flexibility Theory (Spiro et al., 1988). These environments may provide the complexity needed to enhance advanced knowledge acquisition in complex domains of learning such as those suggested in this project for teachers' study that may help teachers improve their teaching around topics such as Core Democratic Values. In addition, situating these discourse communities in teachers' practice with the help of new technologies may foster and sustain communities' growth where that was not possible before because of a variety of constraints, including time, distance, and resources (Lave & Wenger, 1991).

Case-based learning based on Cognitive Flexibility Theory (Spiro et al., 1988) is especially promising. Rand Spiro and colleagues (Spiro, Coulson, Feltovitch, & Anderson, 1988; Spiro, J., Jacobson, & Coulson, 1992; Spiro & Jehng, 1990) have demonstrated that cases designed with Cognitive Flexibility Theory are effective for advanced knowledge acquisition in poorly structured domains. Spiro et al. claim that all but a few domains of learning are poorly structured. There is little in teaching and in most subject matter domains of teaching that is not poorly structured.

Spiro uses Wiggenstein's metaphor of traversing a landscape to describe complex learning: a terrain that must be explored through multiple journeys, none of which captures the terrain in its entirety. Teaching is just the sort of complicated landscape which needs revisiting repeatedly using multiple paths and which requires the development of multiple perspectives in order to attain advanced knowledge so that it transfers flexibly to new situations where its use is required.

Apparently few designers of teacher education learning environments have used Cognitive Flexibility Theory (CFT) as the basis for design work, despite enthusiastic speculation about its possible uses (Sykes & Bird, 1992). However, a review of research did reveal a few instances of its use in the design of learning environments across different domains associated with teachers' learning. Lampert & Ball (1998) have used an approach to case-based learning that integrates the conceptual frameworks of Cognitive Flexibility Theory in the design of a hypermedia-learning environment constructed with new technologies described above. Similar to Lampert and Balls' environment, the case environments discussed here were intended to provide a reasonably close approximation to teachers' actual classrooms.

The design of this case environment reflects Lampert and Ball's claim that learning to teach entails learning how to construct and use knowledge in practice. They assert that teachers need to reason wisely, and then respond and develop a course of action in response to the particulars of classroom life. To orient teachers toward structured pedagogical inquiry, among other activities that Lampert and Ball suggest is one where teachers focus on understanding one student's learning.

*Collaboration*

Other models of professional development suggest the importance of collaboration among teachers, usually characterized as some sort of community (Lave & Wenger, 1991; Little, 1993; Putnam, 2000; Wilson & Berne, 1999). Using an integrated model of professional development, teachers will collaboratively plan, enact, and study teaching and learning in civic education as they investigate and think about teaching social studies in new ways.

Some research on professional development cites the benefits of collaboration among teachers. Other research suggests that establishing communities of practice for learning may result in learning that is deeper, and therefore more useful for practitioners (Lave & Wenger, 1991). Research on teachers' professional development in the past two decades has pointed to the need for a shift to professional development that allows teachers to engage in learning activities designed to help them continuously update their knowledge about teaching and learning (Lanier & Little, 1986; Little, 1993). This paradigm shift has seen the development of some long-term collaborative efforts among teachers, such as the Bay Area Writers' Workshop (Little, 1993). The shift to this new paradigm has witnessed the creation of various groups of teachers who study teaching in

the context of the disciplines that they teach over extended periods. This is in sharp contrast to traditional models of professional development that can be described as one-shot approaches where instruction is delivered to teachers in much the same didactic manner that characterizes traditional teaching of subject matter to students. Research on teacher learning and teachers' professional development also highlights the need for a collaborative environment in the context of the current reform environment (Little, 1993).

Teacher education programs have been shown to have little or no effect on how teachers will actually teach (Feiman-Nemser & Remillard, 1996). Some research has indicated that, under the right conditions, teacher education programs can achieve at least some modicum of success in orienting teachers toward program goals (Anderson et al., 2000; Graber, 1996; Grossman, 1990). However, these studies did not follow students into their careers as teachers to assess whether they incorporated program goals into their teaching over time. What we do know is that once teachers begin teaching, they often have little or no chance for serious collaborative activities with their peers. Some professional development programs have already demonstrated what the research literature asserts, that teachers need long-term professional relationships with colleagues who are interested in exploring and improving their practice in order to develop the deeper understandings of teaching that will enable them to institute reform and standards-based teaching into their practice (Little, 1993, 1999).

Some professional development programs have already demonstrated what the research literature asserts, that teachers need long-term professional relationships with colleagues who are interested in exploring and improving their practice in order to develop a deeper understanding of teaching that will enable them to institute reform and

standards-based teaching into their practice. The program described here could, in theory, be a first step toward the development of a long-term collaboration among teachers who teach social studies.

*Technology-Mediated Learning*

New technologies designed to facilitate teachers' professional development, and technologies that teachers use to study classroom practice, can be interwoven in a hypermedia-learning environment where many collaborative activities are situated. This learning environment may offer advantages over conventional approaches to professional development, including the ability to record instances of practice for later analysis and sharing; the use of electronic communication and collaboration to accommodate teachers' busy schedules, and; limiting constraints of distance from learning centers and problems of scalability.

A great deal of rhetoric has accompanied the appearance of computer technologies on the educational scene. Much of this rhetoric has been concerned with the potential applications of computer technologies to teacher education and professional development. However, up to this point, there has been little or no research to back up claims that these technologies can be used to design innovative professional development programs that foster teachers' learning in ways that improve on what more traditional methods have achieved.

Research supports the notion that there ought to be continued efforts toward developing these designs. For instance, research at Peabody College at Vanderbilt University suggests that students saw clear benefits to their learning through the use of various interactive technologies that were incorporated into preservice courses

(Pellegrino & Altman, 1997). Pellegrino and Altman (1997) report that students at Peabody liked the learning-centered approach incorporated into the design of technology that allowed them to be in control of their own learning. Students also found that technology applications significantly enhanced their learning of content (p. 113).

While these somewhat tentative findings are encouraging, their transferability to professional development environments for practicing teachers has yet to be demonstrated. And, although many papers at conferences on the use of technology in education extol the virtues of technology-enhanced learning environments clear benefits have not been identified. One typical example of this is the use of discussion groups for professional development. Almost all proposals for technology-enhanced professional development activities include some version of this electronic discussion (Pea, 1999). However, little research has been conducted on how teachers are using such online forums and even suggests that benefits of "virtual" communities designed for educators are exaggerated (Selwyn, 2000). In a study of such a forum in Great Britain, Selwyn (2000) found that the use of one such online community was limited. Most of the 900 or so members made contributions to the forum infrequently, leaving the discussions to a few regular 'hard core' participants. Selwyn asserts that these online communities should more accurately be characterized as "transcendent" or "pseudo" educational communities (p.773).

In another study of an online professional development program, researchers found that although time and distance constraints were bridged there was much that was problematic about the program (Williams, 2002). In discussing their practice, teachers were dependent on other teachers' descriptions of their classrooms. As a result, teachers

did not engage in extended and substantive conversations about their practice including discussing students' learning. This was perhaps also the result of not being familiar enough with the reforms issues that were the subject of the program. Williams concludes with the observation, "However, online professional development rooted in own teachers' practice requires some means of sharing what is happening in the classroom with those online' (p. 325).

Other research has focused on the use of specific tools for teachers' professional development (Marx, Blumenfeld, Krajcik, & Soloway, 1998). These studies suggest a more promising future for technologies developed with specific purposes in mind, such as planning tools and video cases that illustrate how new approaches to teaching are being used in actual classrooms (Marx et al., 1998). These researchers point out that there is little in the literature to illustrate the effective uses of technology for inservice teachers' professional development.

In conclusion, the literature on teacher learning and learning environments that facilitate learning is incomplete. There is some evidence to indicate that teachers can learn what they need to learn in order to teach for understanding in the context of their practice and in communities of practice, using case-based learning methods and technology-mediated learning environments, but this evidence is insufficient.

# CHAPTER 3

# METHODOLOGY

This study was a design experiment (Brown, 1992; Collins, 1992; Edelson, 2002) which examined teachers' learning in the context of a six-week, inquiry-oriented, and case-based, technology-mediated school/university professional development program. According to Brown (1992), design experiments are complex interventions that "encourage reflective practice among students, teachers, and researchers" (p. 174). The intervention in this design experiment was the *Teaching for Understanding* framework developed by teachers and researchers at Harvard (Wiske, 1998). The central idea in design experiments is to "capture" the design process, including systematically creating and testing the design, so that future designs can benefit from these experiences (Hsi, 1998) or as Edelson (2002) puts it "developing and defining new theories" (p.105). A central feature of design experiments that distinguishes them from traditional psychological experiments is the number of variables introduced into the experiment, as well as in the nature of control over those variables by the researchers. Experimentalists attempt to maintain control over variables introducing them one at a time, while design scientists study the interaction of variables, which may or may not be anticipated, all the while engaging in an ongoing iterative design process.

Proponents of design research argue that the complexity of classroom life makes it difficult to study one aspect of such an environment without also considering many other aspects (Brown, 1992; Collins, 1992; Edelson, 2002). This argument complements an argument made by some researchers who study teacher learning: that an ecological

perspective, that examines systems, e.g., classrooms, schools, districts, and policy environments, is needed in order to better understand how teachers make sense of teaching (Grossman, Smagorinsky, & Valencia, 1999; Wideen, Mayer-Smith, & Moon, 1998).

## Contexts and Participants

This professional development program was a collaborative endeavor involving three first-year secondary social studies teachers and myself, a university-based teacher educator and researcher. It was situated in urban and suburban areas of a large Midwestern state. The teachers, who were interested in advancing their knowledge and understanding about how to teach "core democratic values," participated in the program on a voluntary basis. I facilitated the program and also participated as a co-researcher with the teachers.

These teachers and their teaching contexts were different from what I had originally planned for this program. That plan had involved a group of elementary teachers in a remote area of the same state in which the study was to be conducted, and arose from conversations I had had with a teacher at a professional development program I had helped design and facilitate during the summer of 1999.

During this "summer institute," participants learned about technology in the context of learning about the *Teaching for Understanding* framework and "core democratic values". The teacher I spoke with was an elementary school teacher who was intrigued by the *Teaching for Understanding* framework and the idea of a technology-mediated professional development program in which she and her colleagues at her

school might participate. We corresponded by email and by phone several times during the following year about the program. Finally, with her principal's consent, a decision was made to proceed. However, there were problems with the site that did not become apparent until I paid a visit to the teacher's school, which included a lack of adequate technology resources. These problems were insurmountable in the short run, and so the plan for a program at this site was aborted just a few weeks prior to the time I had planned to begin.

To find new participants and sites for the program, I emailed former students who had been enrolled in a social studies methods class that I had taught at the university the year before, most of whom were now first-year secondary school teachers. I copied the message to Brad Nelson (all names used in this study are pseudonyms), a teacher who sat on an advisory board for a project I was currently working on. Brad had also been a student at the university at the same time as my former students, but was enrolled in a different section of the same methods course taught by another instructor. Within a short period of time, Brad, two of my former students, Kathy Miller and Lisa Stuart, and a fourth teacher, Greg Holden, a veteran who taught at the same school as Kathy (who recruited him) agreed to participate in the program.

Early in the program, Greg withdrew from the program because he felt that he had too many other commitments. After he dropped out, I realized that the study, which now included only first-year teachers, might provide me with some unique, interesting, and common findings that would, perhaps, not exist in a veteran teacher's experience.

This arrangement also worked out well for several other reasons: My own background, both academically and as a teacher, was mostly in secondary social studies.

This provided me with a greater familiarity of the contexts in which the teachers were operating than I would have had in the case of the elementary teachers. The first-year teachers also taught at three high schools that were separated from each other by distance (although all were within a one-hour's driving distance from the university). An arrangement, where teachers were located at different schools, allowed for testing the idea that teachers, who are separated from each other by distance (the elementary teachers all taught at the same school) and from university programs, can, with the aid of new technologies, collaboratively study their classroom practice as an ongoing professional development activity which would formally have not been possible.

Each school's demographics were also different: *Kathy Miller* taught at West High School (pseudonym), which is located in a wealthy suburb of a large metropolitan area. West, which is one of the top-rated public schools in the state, is situated in a 60s-style building whose large parking lot was filled with many expensive cars, most of which appeared to be driven to school by students. The student body at West is fairly diverse, both ethnically and culturally, with almost twenty-five of its students representing minority populations (Common core of data: Information on public school districts in the United States, 1999-2000).

*Lisa Stuart* taught at Powell High School (pseudonym), which is located in an affluent suburb in the same metropolitan area. Powell, which is also one of the top-rated schools in the state, is situated in a large new gleaming structure that is filled with 'state of the art' classrooms and facilities. Expensive cars driven by students also fill this school's parking lot. The district in which it is located has an enviable technology infrastructure, which is touted as among the best in the state. Powell has a mostly

homogeneous white mid to upper middle class student body with little ethnic or cultural diversity – only about six percent of its students represent minority populations, mostly Asian (Common core of data: Information on public school districts in the United States, 1999-2000).

*Brad Nelson* taught at Northeast Middle School (pseudonym), which is located in a working-class section of a mid-sized urban community some distance from the other two schools. Northeast is situated in an older building with few of the modern amenities found in the other schools. It is quite ethically and culturally diverse with over fifty percent of its students representing minority populations (Common core of data: Information on public school districts in the United States, 1999-2000). As an indicator of students' economic status, only a very small percentage of students attending the two suburban high schools were eligible for free lunch, while almost sixty percent of students attending the urban middle school were eligible (Common core of data: Information on public school districts in the United States, 1999-2000).

Descriptions of the schools' demographic contexts are included to provide the reader with some understanding of each teacher's teaching situation. However, implications derived from this data are not explored in this study.

## Data Collection

The professional development program was designed around the use of case study as a method of inquiry. Teachers studied and discussed their own and other cases of teaching. The purpose of the professional development program was to introduce teachers to a teaching framework that would help them teach in ways suggested by standards

about social studies teaching and learning. Thus, in keeping with the principles of *Teaching for Understanding* (Wiske, 1998), the program hoped to facilitate the development of understanding about the framework itself.

### *Data Collection Plan*

Data collected for this study was used to investigate the overarching research question: How do teachers' ideas about how to teach four "core democratic values" - liberty, justice, equality, and the common good - change, if at all, as they collaborate in a teacher-research and case-based, technology-mediated professional development program based on the *Teaching for Understanding* framework?

The following questions were planned as guides to ongoing analysis of data as it was gathered during four critical periods.

1. What are teachers' ideas about how to teach "core democratic values" before they begin the collaboration?
2. What are teachers' ideas about how to teach "core democratic values" after they have planned the unit?
3. What are teachers' ideas about how to teach "core democratic values" after teaching the unit?
4. What are teachers' ideas about how to teach "core democratic values" after examining their own and others' feedback on their research?
5. How do teachers react to and evaluate key components of the professional development model?

This strategy was designed to complement principles of design research (Brown, 1992), as well as qualitative research data management and analysis methods that

emphasize iterative and ongoing processes of "data reduction, data display, and conclusion drawing/verification" (Huberman & Miles, 1994, p. 256). The research matrix that follows summarizes these data collection and analytic strategies. Where the words "omitted" and "modified" have been inserted indicate how and where this plan changed, either where plans did not work out at all, or where circumstances required modification of plans in some way. Following the chart is an index that includes descriptions of data sources in which these changes are explained.

The chart was developed before the study began as a sort of map to guide data collection. This guide was connected to specific questions that I was investigating and strategies for collecting data, including a general timeline. The events, activities, and strategies for collecting data outlined in the far right and far left columns generally went as planned. However, those in the two middle columns changed. The rapid pace of the program, the considerable task of getting the program off the ground and keeping it going, and the unexpected delays in teachers' planning and implementation of units limited the scope of the research. I found myself in somewhat the same position as teachers did. I was busy facilitating a learning program, while at the same time conducting research. The frenetic pace required to conduct the professional development program limited opportunities for engagement in reflective activities, at least while the program was in progress. I have noted changes made in the program in the chart.

**Guiding Questions, Primary Data Sources, Collection Intervals, & Analytic Strategies for a Qualitative Case Study: Learning to teach for Understanding in a technology-Mediated Professional Development Program**

Research Question: How do teachers' ideas about how to teach about four "core democratic values" – liberty, justice, equality, and the common good – change, if at all, as they collaborate in a teacher-research, cased-based, and technology-mediated professional development program based on the *Teaching for Understanding* (TfU) framework?

| **Initial Intervals?** | **Ongoing?** | **Interim Intervals?** | **Ongoing?** | **Concluding Intervals?** |
|---|---|---|---|---|
| 1. What are teachers' ideas about how to teach about "core democratic values" before they begin the collaboration? ? | 2. What are teachers' ideas about how to teach about "core democratic values" after they plan the unit? ? | 3. What are teachers' ideas about how to teach about "core democratic values" after they teach the unit? ? | | 4. What are teachers' ideas about how to teach about "core democratic values" after investigating teaching cases? ? |
| 1.1 Online survey (software): *Professional background information and prompts for thinking about approaches to teaching to be discussed in initial interview (1.1a[2]).?* | 2.1 Notes about and semi-formal evaluations of units with TfU Checklist - teachers' and my own (software): *Approach to teaching and knowledge of subject matter & technology (2.1a).* ? **Modified.** | 3.1 Classroom observation (TfU Checklist, & videotape followed with field notes): *Approach to teaching, knowledge of subject matter, and understanding of TfU framework (3.1a, 2.1a).?* **Modified.** | | 4.1 Teachers' and my study and assessment of cases using TfU Checklist (software). *Approach to teaching, knowledge of subject matter, technology, and understanding of TfU framework (2.1a).?* |
| 1.2 Classroom observation (audiotape and field notes: *General teaching and professional contexts (1.2a).?* | 2.2 Online guided group discussion (software) and evaluation of unit planning process and units. *Approach to teaching & knowledge of subject matter, understanding of TfU framework and technology (2.2a).* ? **Modified.** | 3.2 Teachers' reflective notes & self-assessment of their teaching after observing videotape of lesson (software, & TfU Checklist). *Approach to teaching and knowledge of subject matter (2.1a).* ? **Modified.** | | 4.2 Online guided case presentations & debriefings (software). *Approach to teaching & knowledge of subject matter, understanding of TfU framework and technology (3.3a, 2.1a)?* |
| 1.3 Semi-structured interviews and online case response: *Approach to teaching and knowledge of subject matter and technology, professional background and contexts (1.3a, 1.3b, 1.3c).?* | 2.3 Online guided and informal group discussion(s) (software) about teaching units and constructing case studies. *Approach to teaching and knowledge of subject matter & technology (2.2a).* ? **Modified.** | 3.3 Online guided group discussion(s) (software) about teaching units and constructing case studies. *Approach to teaching & knowledge of subject matter & technology (3.3a, 2.2a).* ? **Omitted.** | | 4.3 Online structured case response & semi-structured follow-up interview (software and field notes): *Approach to teaching, knowledge of subject matter, TfU, and technology, and program evaluation. (4.3a, 4.3b)?* |
| 1.4 Ongoing observations and teachers' comments and notes during initial program activities (audio and video tape, software, and field notes): *Approach to teaching and knowledge of subject mater and technology (1.4a, 1.4b).?* | 2.4 Teachers' communications with each other & me as they teach units (software): *Approach to teaching and knowledge of subject matter & technology (2.1a).* ? **Modified.** | 3.4 Teachers' communications with each other & me as they construct cases using case rubric & TfU Checklist (software): *Approach to teaching, knowledge of subject matter, TfU, and technology (2.1a).* ? **Modified.** | | 4.4 Teachers' *possible* follow-up communications with each other & me. *Approach to teaching, knowledge of subject matter, TfU, & technology, program evaluation.?* **Omitted** |
| 5. How do teachers react to, and evaluate key components of the professional development model (*TfU, teacher-research, case-based learning, & technology-mediated environment)? Data sources include all of the above, and an online evaluation (5.1a).?* | | | | |

[2] Numbers and letters in parentheses refer to descriptions of data sources in index that follows. Software, video, audio, etc. refers to methods used to record data.

*Data Sources*

This study was an attempt to gauge the degree to which teachers' ideas about teaching social studies changed. In particular, I tried to assess the degree to which they learned about *Teaching for Understanding* (Wiske, 1998) as they taught "core democratic values". Overall, I tried to use the same kind of assessment suggested in the *Teaching for Understanding* framework (Blythe, 1998; Wiske, 1998) to assess or "measure" teachers' learning. To do this I planned to collect various kinds of data at different intervals as the program progressed.

Firstly, I planned to determine teachers' initial understanding, thinking, or ideas about teaching with a survey, two preliminary interviews, an online case assessment, a classroom observation, and interactions with teachers during the orientation to the program. I planned to use the *Teaching for Understanding Reflective Checklist* (Blythe, 1998) (Appendix A) both as a rubric, and as a means for guiding my note-taking in order to gauge the degree to which teachers were utilizing *Teaching for Understanding* throughout the program, and especially during four critical periods.

Secondly, I planned to determine changes in their ideas about teaching through an ongoing assessment of their understanding of the framework that included: (1) analyzing comments, questions, and actions as they used the online planning tool, (2) evaluating plans with a rubric that assessed the degree to which they successfully planned a unit in accordance with the framework, and thus with standards for teaching and learning, (3) conducting classroom observations as units were implemented where I tried to assess the degree to which they taught a unit in accordance with the framework, and thus with standards for teaching and learning, and (4) an analysis of ongoing regularly scheduled

synchronous discussions with teachers in an online conferencing environment, asynchronous communications, such as email and their online reflections to assess how they understood and used the framework.

Finally, as the program concluded, I planned to determine the degree to which the teachers demonstrated changes in their thinking about how to teach in accordance with the *Teaching for Understanding* framework by examining and assessing teachers' culminating performances of understanding – their hypermedia cases that focused on students' thinking about "core democratic values." I planned to use (1) an online rubric used by teachers and me, that was designed to evaluate cases with the primary focus on assessing the degree to which they demonstrated the use of the framework in their teaching, (2) online synchronous evaluative discussions about cases with the primary focus on what teachers said they learned about using this new approach to teaching, and (3) follow-up interviews. I planned to evaluate how teachers responded to key components of the professional development model: *Teaching for Understanding*, teacher research, case-based learning, and the technology-mediated environment.

An outline follows that specifies how data was to be gathered with indications about where this plan was modified as the program progressed. Rationales for collecting this data and asking these questions, are grounded in theory and research on professional development (Putnam & Borko, 2000; Wilson & Berne, 1999), teacher learning (Feiman-Nemser & Remillard, 1996; Putnam & Borko, 2000), situated learning (Feiman-Nemser & Remillard, 1996; Greeno et al., 1996; Putnam & Borko, 2000), *Teaching for Understanding* (Blythe, 1998; Wiske, 1998), and Cognitive Flexibility Theory (Spiro et al., 1988; Spiro, Feltovich, Jacobson, & Coulson, 1992), as well as in my own previous

experiences working with teachers in professional development programs. Strategies for analyzing and collecting data were tentative, keeping in mind that they could change as the program unfolded, as events required, and as new questions arose. The chart above summarizes questions, data sources, collection strategies, and analytic strategies.

Following is an outline that corresponds to questions, data sources, collection strategies, and analytic strategies in the chart with explanations about how they were modified as the program progressed.

*Index to Data Sources Cited in Research Matrix (above) and Outline (below):*

1.1a: Online questionnaire and survey

1.2a: 1st classroom observation

1.3a: 1st semi-structured interview

1.3b: 2nd online semi-structured interview

1.3c: Online case response

1.4a: Ongoing observation

1.4b: Teachers' ongoing comments, and notes

2.1a: Unit assessments: *Teaching for Understanding Reflective Checklist*

2.2a: Online semi-structured discussion

2.3a: Online semi-structured discussion

3.1a: 2nd classroom observation

3.3a: Case study development

4.3a: 1st online case response

4.3b: 3rd online semi-structured follow-up interview protocol

5.1a: Online program evaluation

Guiding Question: What are teachers' ideas about how to teach "core democratic values" before they begin the collaboration?

1.1. Teacher's professional background & general approach to teaching

*Data Source 1.1a: Online survey and questionnaire (Appendix B)*

Information about teachers' backgrounds, including experience in teaching and academic and subject matter preparation, was gathered in an online survey and questionnaire. Gathering this data provided me with some familiarity with teachers' backgrounds and helped me describe program participants. General information about their professional preparation helped me draft follow-up questions for interviews that were intended to provide insight about the degree of flexibility in teachers' thinking. Interview prompts were provided to give teachers time to think about some more of the more complex topics in advance of the interviews.

1.2. Initial impressions of teachers' subject matter knowledge, and approach to teaching social studies.

*Data Source 1.2a: First classroom observation*

I conducted an initial classroom observation during a social studies lesson in the class where teachers chose to conduct inquiry on their practice, the central activity in the program. This observation was designed to acquaint me with teachers' classroom contexts, and to formulate general impressions about their subject matter knowledge and how they taught. I recorded the session with audiotape, sketched a chronology of events occurring during the lesson along with anecdotal notes, and wrote expanded field notes afterwards. I planned to use the *Teaching for Understanding Reflective Checklist* (Blythe, 1998) as a reflective tool, but at this point not as an assessment tool, to help me make sense of my initial impressions of the teachers' social studies practice. However, the

checklist wasn't very useful as an ongoing tool. I did briefly refer to it later when teachers taught units and as I began exploring the data. It served as a sort of mental heuristic that helped me locate evidence that confirmed or did not confirm my assertions. Notes recorded during the observation were helpful as I chose questions to probe teachers' responses to general questions about approaches to teaching and subject matter knowledge in interviews that followed the observation. I thought the data might also be useful as I observed subsequent activities and as I tried to assess the degree to which their ideas about teaching changed. However, owing to the relatively short period of time in which teachers were actually involved in the program, this proved to be an unrealistic expectation.

1.3. Teachers' social studies subject matter knowledge and approach to teaching social studies, particularly citizenship education.

*Data Source 1.3a: First preliminary semi-structured interview (Appendix C)*

Responses were compared and contrasted to what teachers did and said throughout the program to determine if there were changes in their thinking about how to teach "core democratic values".

Teachers' responses to the prompts in the online survey were designed to help them think about ideas in advance so that I could probe more deeply into their responses to questions in interviews. There was no evidence, however, that teachers had actually thought about the questions prior to the interviews. I anticipated that responses might, for instance, indicate that teachers' conceptions of teaching focused on transmitting knowledge, teaching skills, fostering natural development, or teaching for conceptual change (Scardamalia & Bereiter, 1989). How they contended with core problems within

these four conceptions of teaching would indicate where they fell on a continuum from novice to expert teaching. This might be determined by responses that indicated the adoption of "problem minimizing" rather than "progressive problem solving" approaches within each conception of teaching. I also thought that responses might help determine whether teachers currently used a *Teaching for Understanding* approach, and particularly on whether they focused on students' thinking. However, I knew that, given what we know about teachers, it would be surprising to find that these teachers were currently utilizing *Teaching for Understanding*, or that they focused much attention on students' thinking, a key criterion for determining the use of "progressive problem solving" approaches within this conception of teaching.

*Data Source 1.3b: Second preliminary semi-structured interview (Appendix D)*

This interview was designed to find out more about teachers' subject matter knowledge of civics, their conceptions of "core democratic values," in particular - liberty, justice, equality, and the common good - and ideas about how to teach about those values. In advance, teachers were asked to prepare for the interview, and were provided with directions. (Appendix E)

*Data Source 1.3c: A preliminary semi-structured assessment of teachers' thinking about teaching "core democratic values": case response and case writing. (Appendix F)*

These assessments of teachers' thinking were conducted with online resources and were designed to probe teachers' thinking about teaching "core democratic values." They were asked to provide responses to questions given them in advance about an online case study that detailed one social studies' teacher's teaching about the *Bill of Rights*.

Teachers were also asked to write a case using an online lesson plan about the *Universal Declaration of Human Rights* in which they included their own ideas about teaching the lesson. They emailed their responses to me. The assessments were designed to find out more about the teachers' subject matter knowledge of civics, their conceptions of "core democratic values", and their ideas about how to teach "core democratic values".

I expected that the teachers' responses would provide some additional data that may not have been revealed in the initial interviews and thus would provide more material for online discussions. I had also planned to use responses to construct probes that might help me better understand their' ideas about teaching "core democratic values" that would be useful during subsequent activities, such as the unit design activity. While both activities provided additional understanding of teachers' thinking, time constraints and technology constraints limited their usefulness. Similar to teachers' difficulties doing all that the program asked of them were my own difficulties associated with simultaneously facilitating the program, collecting data, and incorporating that information into both the program and the research design. For instance, had I realized that teachers' knowledge and understanding of subject matter was as limited as it turned out to be, I would have incorporated some learning activities for them about that topic in the program design. Also, because online discussion proved to be so problematic I didn't have a chance to probe their thinking much about the cases during those discussions.

*Data Sources 1.4a, 1.4b: My ongoing observations and notes, teachers' comments, messages, and notes during planning activities and throughout the program.*

I planned to take field notes using the *Teaching for Understanding Reflective Checklist* (Blythe, 1998) as both a reflective tool and as an assessment tool throughout the program, but during the program my use of this tool was sporadic. Although I had the checklist with me when I observed, I mostly referred to it when I had a chance to review my notes, and when I expanded those notes after an observation. During most observations, I recorded anecdotal notes related to program activities that I thought might reveal something about teachers' ideas about their practice, standards-based teaching and learning, the *Teaching for Understanding* framework, or "core democratic values". But, this was not always possible.

Several times, when I intended to observe the classroom, I wound up being an active participant in class activities. I facilitated a group discussion on one occasion, and actually led the instruction on another occasion, so my plan to take notes was thwarted on these occasions. Other plans for data collection also fell by the wayside as the realties of the program unfolded. For instance, I thought that as teachers used the online planning tool they might make comments, keep notes, or send messages to each other or to me related to teaching and planning the unit using the communications tools embedded in the software. None did, however.

2. Guiding question: What are teachers' ideas about how to teach about "core democratic values" after they have planned the unit?

2.1 <u>Teachers' ideas about how to teach "core democratic values" as they plan unit.</u>

*Data Source 2.1.a: Artifacts from online unit planning tool.*

My plan was for teachers to use the Collaborative Curriculum Design Tool on Harvard's Education with New Technologies (ENT) web site to construct a collaborative unit that would then be individualized according to each teacher's ideas and classroom contexts. The online tool allows users to generate plans and notes and then save or email them to other users. This part of the plan did not work out as teachers only used the planning tool to plan their own units and they completed the plans with just barely enough time to begin teaching the units. Problems encountered as teachers used these technologies, including a lack of experience using the software, stalled this part of the plan early on. Again, and in fact throughout the middle part of the program plan (columns two and three in the matrix), time constraints bore down heavily. There was no time to examine each other's units, much less critique them after they were completed, as teachers were already teaching the units by that time.

2.2 Teachers' ideas about how to teach about "core democratic values" after planning unit.

*Data Sources2.1a, 2.2a: Completed Units, online discussions, email communications, and online reflections.*

I evaluated units using the *Teaching for Understanding Reflective Checklist*, and shared my evaluation with the teachers individually. After receiving these evaluations, some made changes in their plans. However, because time was a major factor, their changes were mostly of a superficial nature and did not necessarily reflect a better understanding of the framework, which is what I had hoped for. I had also anticipated that teachers would submit brief online reflections on the planning process, but those that were submitted were of a desperate nature indicating general befuddlement about the

framework rather than inquiries about specific aspects of the framework. I had also planned that teachers would have their first online discussion after planning the units, but because they requested that we not hold any more online meetings with more than two participants, this part of the plan was not implemented.

*Data Sources: 2.1a, 2.2.a: Online guided discussions about planning and teaching units, and teachers' research, including planning and constructing case studies.*

This phase of the data collection plan was also modified. No online discussions were held during this period of the program; communications were mostly through email and phone conversations. These communications were mostly of a procedural nature about how hypermedia cases would be constructed and what artifacts would be included.

3. Guiding question: What are teachers' ideas about how to teach about "core democratic values" as they taught and after teaching the unit?

3.1 Teachers' subject matter knowledge and approach to teaching social studies, particularly citizenship education.

*Data Source 3.1a, 2.1a: Second classroom observation*

I conducted a second classroom observation during a social studies lesson which occurred as teachers began teaching the core democratic values unit. This observation was designed to help me learn more about teachers' classroom contexts, and to formulate more specific impressions about their subject matter knowledge, and about how they teach. I recorded the session using audiotape, sketched a chronology of events occurring during the lesson along with anecdotal notes, and wrote expanded field notes afterwards. This data was helpful as I chose questions to probe teachers' responses to general

questions about approaches to teaching and subject matter knowledge in the final interview. However, since I had little time to examine data as the program progressed owing both to the rapid unfolding of events, and the necessity of dealing with unanticipated problems, technology and otherwise, this data was not as useful as I had hoped it would be as I observed subsequent activities and tried to assess the degree to which teachers' ideas about teaching changed.

3.2 Teachers' self assessment

*Data Source: 2.1a, 1.4b Teachers' reflective notes*

My plans included having teachers view and comment on the lesson they chose to videotape and on the videotape of the student they chose to study. I asked them to use the *Teaching for Understanding Reflective Checklist* as rubric for assessing their teaching. Teachers did send reflections by email, but there was no indication that they had used the checklist to evaluate their teaching. I also asked them to read a chapter from an unpublished dissertation written by a teacher, who was a graduate student at the time, about students' thinking on a topic in social studies (Delaney, 1986). I hoped this would help them think about their own student's thinking. Apparently none of them read the chapter, which, in retrospect, is not surprising given all the other demands on their time.

3.3 Case study guidelines (Appendix F)

At the beginning of the program I provided teachers with a brief description of the inquiry activity they would be asked to complete. Later, I sent directions with suggestions about what to include in the case study which they were going to construct in hypermedia format. When it became apparent that teachers were under a lot of stress and pressure as

they finished teaching their units and dealt with end of school year issues, I decided to collect their case artifacts and assemble them on CD-ROMs myself.

3.4 Teachers' communications

Throughout the program, I communicated with teachers and they with me, through a variety of media, including email, telephone, and online conferencing, as well as in person. Although many of these communications were about mundane procedural details, such as scheduling observations, others were about issues in their practice and the program and provided insight into their thinking.

*Data source: 1.4b Teacher's reflective notes*

4. Guiding question: What are teachers' ideas about how to teach about "core democratic values" after examining their own and others' feedback on their research?

4.1 Case study and evaluations

*Data Sources 2.1a, 3.3a*

Teachers studied each other's cases after they were constructed and recorded on CD-ROM. They were asked to assess cases with the *Teaching for Understanding Checklist*. However, none appeared to have used this checklist to assess other teachers' cases. This was probably due to their lack of understanding of the framework as well as the short amount of time that had to actually study the cases.

4.2 Online debriefings and discussion

*Data Sources 2.1a, 2.2a*

Teachers debriefed their cases in an online discussion at the end of the program. I planned to have more than one online meeting, but time did not permit that. The final

discussion focused on the degree to which the cases reflected the *Teaching for Understanding* framework.

4.3 Structured assessment (case response) and online semi-structured interview

*Data Sources 4.3a (see 1.3c c), 4.3b (see 1.3a & b) (Appendix G)*

4.3a: The structured assessment (case response) asked teachers to respond to similar questions that were asked when teachers examined the cases at the beginning of the program. Again, they were asked to provide explanations for their responses, but this time, using the principles of *Teaching for Understanding* as a rubric. I had planned to have them use other standards aligned with the state framework as another assessment rubric, but this proved impossible given time constraints and my own observation that they were having trouble enough understanding and using the *Teaching for Understanding* framework. I planned to use these responses to design individualized questions for an online semi-structured interview.

4.3b: The semi-structured follow-up interview followed the same sort of pattern as the first interview. The questions were generally the same but were modified to reflect teachers' individual participation and experiences in the program. I asked them questions that might reveal whether their ideas about approaches to teaching "core democratic values" had changed because of their participation in the program. However, because online conferences had proved so problematic I decided to conduct the final interviews in person.

5. Guiding question: How do teachers react to, and evaluate key components of the professional development model?

5.1 *Data Source 5.1a: Online questionnaire*

I planned to ask teachers to respond to questions about teacher-research, case-based learning, the *Teaching for Understanding* Framework, standards-based teaching and learning, and elements of the technology used in the program, including hypermedia cases, and the technology-mediated environment used to make the collaboration possible in an online questionnaire. However, because teachers were ready to be finished with the program, I decided to incorporate questions about components of the professional development program into the final interview.

*Implementation of Data Collection Plan*

The professional development program took place during the spring of 2000, starting during the first week of May and ending during the second week of June. Although I had intended that many activities would occur regularly, such as a weekly online conferences where participants would meet and discuss their problems and progress as they designed and taught their units, this changed almost as soon as the program began. It quickly became apparent that teachers' busy schedules, both in and out of school, would not permit them to attend regular online meetings. Two teachers also suggested that one-on-one online meetings with me would be more desirable than meetings where all participants were present.

Unexpectedly, technology also proved to be problematic with both hardware and software issues interfering with teachers' ability to attend or to participate in program activities. One example was the online conferencing environment, *Tapped In*. Learning how to use *Tapped In* so that discussions made some coherent sense was far more trouble than it was worth. One reason I chose this environment was that it provided me with an easy way to obtain a transcript of discussions since the program automatically emails

each participant a transcript after logging off. This benefit did not outweigh the drawbacks, however. In retrospect, using telephone conferencing would probably have been more beneficial and productive.

Thus, my plans for a program schedule, that in some ways resembled an online course with carefully sequenced activities, was changed to accommodate the reality of teachers' schedules, technology needs, and their opinions about how the program ought to be conducted. Only one online meeting was arranged in which all three teachers were able to participate. That was at the end of the program, and one of the participants slept through the first part of the meeting!

Teachers chose their own paths as they negotiated their way through the program activities. This meant, for instance, that some did not submit reflective notes after viewing a videotape of one lesson taught during their unit. Only one teacher submitted the *Teaching for Understanding Reflective Checklist* (Blythe, 1998) that I provided as an evaluation and monitoring instrument to gauge their learning as they used the *Teaching for Understanding* framework. They also completed program activities such as planning units at different times and chose different ways to accomplish that planning. Teachers' school schedules also differed with students at one site taking state standardized tests during the period when units were taught, students at another site going on field trips that were not explicitly connected to teaching the unit, and students at another site listening to district-mandated speakers.

Despite these differences, all three teachers taught a unit that lasted about two weeks and that ended almost at the same time. These unexpected events and their outcomes seem to be in keeping with the spirit of a design experiment where teachers and

researchers engage in ongoing evaluation that informs new theories about the design of learning environments (Edelson, 2002).

Despite the changes noted above, a great deal of the professional development program and teachers' classroom practice was documented as planned through interviews, observations, online discussions, and reflective field notes, mine and teachers,' and artifacts of students' learning. This data was variously recorded on video and audiotape or computer software, including that which recorded online conversations and automatically emailed transcripts to each participant. Much of the interaction between teachers and me was via email, but some was by telephone and in person. Reflective field notes were recorded after each of these interactions. I did the audio-taping, but teachers shot all of the video, except for one interview that I recorded both on audio and videotape. Some discussions and some professional development activities took place in "real" settings, while others took place in synchronous and asynchronous technology-mediated settings designed for collaboration and communication.

Hypermedia case studies, which documented teachers' inquiries into their practice, were constructed with artifacts collected by teachers – their unit designs, reflections, students' work, clips from video tapes shot in classrooms, field sites, and during interviews conducted by teachers with students, transcripts of online interviews recorded with software, and students' notes, concept maps, reflections, web pages, digital images, class presentations, and other work. I recorded these cases on CD-ROMs and distributed copies of each of the cases to all of the teachers.

Teachers participated in two preliminary interviews and one follow-up interview that I conducted. The first and last interviews were conducted in person, the second in an

online conferencing environment recorded with computer software. The purpose of the first interview was to establish some rapport with teachers and to begin to develop a sense of who they were as teachers and learners. These interviews were conducted following my first observation in their classrooms. I asked them about their ideas about teaching, teacher education, citizenship education and standards designed for civic education. During the second interview, I asked teachers questions designed to elicit their ideas about "core democratic values" and about the state standard associated with those concepts. One way I sought to do this was through case analysis.

Teachers had been asked to examine two cases of teaching that in ways represented a *Teaching for Understanding* approach. These cases were online – one was an actual case study about a teacher's experiences with a unit about the *Bill of Rights*, the other "case" was actually an extensive lesson plan about the *Universal Declaration of Human Rights*. For the latter, teachers were asked to construct a case using their own ideas about teaching. They emailed me their responses and we talked about them during the online interview.

I conducted three observations in each teacher's classroom where I took field notes and audiotaped classroom interactions. Teachers also videotaped lessons from their units and gave me the tapes. The first observation was conducted to develop a preliminary understanding of teachers' classrooms including the physical environment, their students, and their practice. The second and third observations took place while teachers were teaching the units they had designed using the *Teaching for Understanding* online Collaborative Curriculum Design Tool. This online design tool allowed teachers to plan and save their units on the web site. The tool also allowed me and other teachers to

examine and comment on their units and post those comments on the web site. None of the teachers did this. In response to some of my comments, teachers did make some changes in their designs. Except for the collaboration with me, which could have been accomplished with conventional email, this site did not appear to encourage collaboration among teachers.

After using the *Teaching for Understanding* online planning tools, I asked teachers to complete an assessment of their current practice using the *Teaching for Understanding Reflective Checklist* (Blythe, 1998). Teachers were asked to use the checklist throughout the program as a self-regulation and self-assessment tool, as well as to prepare for the presentation and debriefing of their hypermedia case studies during the final meeting in the online conferencing environment. I also used this checklist during some observations in teachers' classrooms. The purpose of the checklist was to assess the degree to which teachers' practice was perceived to have moved in the direction of the *Teaching for Understanding* (Wiske, 1998) conceptual framework.

Only one teacher completed the checklist on one occasion. It was unclear why this happened although since teachers' understanding of the *Teaching for Understanding* approach remained murky throughout the program, that lack of understanding was probably the reason why they did not use it, although there may have been other reasons.

## Data Analysis

Data analysis involved the description of emergent themes and patterns from observations, interviews, discussions, and communications, comparative and contrastive analysis of approaches to teaching and teachers' learning, and analysis of teachers'

hypermedia case studies. In order to limit the scope of the study and to provide for clarity in the analysis of the program, teachers were asked to focus their units on four "core democratic values" with an intermediate degree of intermingling: liberty, justice, equality, and the common good. As I first started becoming familiar with the data I collected during the study, I used a qualitative software program to code data using the following conceptual frameworks as a guide to the development of coding. Major coding categories included the following:

1. Principles of *Teaching for Understanding* (Blythe, 1998; Wiske, 1998)
2. Ideas about "core democratic values": (a) what to teach, (b) how to teach.
3. Conceptions of teaching: (a) four conceptions of teaching (Scardamalia & Bereiter, 1989), (b) National Council for the Social Studies Standards for Teaching (National standards for social studies teachers, 1997), and (c) Michigan Framework Standards for Teaching (Michigan curriculum framework, 1996).
4. Conceptions of flexible thinking: (Spiro, Feltovitch, & Coulson, 1996), (Wiske, 1998).
5. Conceptions of professional communities: (Wilson, 1996).
6. Conceptions of classroom thoughtfulness and authentic instruction and assessment: (Newmann, 1990; Newmann et al., 1995).
7. Conceptions of technology-mediated environments: (Wilson, 1996).

Each of these major categories contained subcategories that were used to code particular aspects of teachers' thinking and actions derived from data. For example, for *Teaching for Understanding*, I coded what teachers said and their actions in the

classroom according to how their words and actions appeared to correspond to specific principles of the framework by answering questions posed in the *Teaching for Understanding Checklist* (Blythe, 1998), such as those listed under "ongoing assessment." Since there was little in what teachers said and even less in what they did in classrooms that actually reflected the approach, this became a somewhat futile exercise. During observations, it was also difficult to assess one particular aspect of teachers' teaching with the checklist because so many things were going on.

After an extensive review and coding of data, I abandoned that approach because it had become far too complex an exercise for the purposes of this study. Instead, I adopted a holistic approach to data analysis while still keeping in mind the several conceptual frameworks, including, of course, ideas about "core democratic values" and *Teaching for Understanding*. Coding was not a useless exercise, however, as I learned a great deal about the data as a result of engaging in this activity. While I quit coding, I continued to think about teachers' "world views" (Spiro et al., 1996) and how they were related to the degree to which they possessed flexible thinking.

To gauge the degree to which teachers possessed flexible thinking, their responses were analyzed using a holistic approach in which I attempted to ascertain their "world-view" as a way to gain an initial, as well as an ongoing, understanding about them as learners. Theoretical assumptions of Cognitive Flexibility Theory (Spiro et al., 1988) as contained in the Cognitive Flexibility Inventory (Spiro et al., 1996) underlie this approach to understanding differences among learners. Teachers' responses were subjectively assessed according to whether their responses to questions fell more closely into "a reductive world view" or "an expansive and flexible world-view," or somewhere

along a continuum between both extremes. I planned to use a checklist that contained descriptive categories outlined in the Cognitive Flexibility Inventory (Spiro et al., 1996). I also abandoned this effort because I could not develop a satisfactory qualitative instrument in time to use it during the program. However, I still attempted to determine where teachers' epistemic beliefs and preferences were located. What I was able to discern about their world-view, particularly as it related to teaching about "core democratic values," and whether it changed in any perceptible way was one way of determining whether teachers' thinking about teaching changed.

After reviewing the data for all three teachers, I constructed individual case studies for each (Creswell, 1994). To accomplish this, I used the guiding questions, where I more or less combined the second and third questions, to develop assertions about teachers' thinking and actions. I reviewed the data keeping those assertions in mind as I compiled evidence that supported my assertions, or found evidence that would counter those assertions. This was an iterative process where I identified a pattern or theme and then tried to verify it by confirming or not confirming the finding, a process similar to the "grounded theory" approach (Glaser & Strauss, 1967). I then attempted to offer an account of what was going on in each case as well as explaining why things were proceeding as they were (Huberman & Miles, 1994).

In formulating conclusions and implications from these individual cases I attempted to do some cross-case analysis that focused on common characteristics among cases that lent some credence to tentative generalizations (Huberman & Miles, 1994) about teachers' thinking and about the design process, i.e., the structure and flow of the professional development program. Edelson (2002) asserts that the process of

generalization is the final element of design research; its purpose being to inform the development of future "domain theories, design frameworks, and design methodologies" (p.117).

# CHAPTER 4

# RESULTS

In this chapter I describe three first-year secondary social studies teachers' ideas about core democratic values and their responses to the professional development program which was designed to introduce them to the *Teaching for Understanding* (Wiske, 1998) framework for teaching and learning. For each teacher, I describe their ideas about teaching core democratic values before the professional development program began. Next, I examine their responses to the professional development program. Finally, changes that were apparent in their thinking about how to teach core democratic values at the end of the program are presented.

## Kathy Miller

Kathy Miller was a first-year teacher at West High, a mid-sized school located in a wealthy suburb on the urban fringe of a large metropolitan area. She majored in American history in college, and taught courses in western civilization to ninth-graders and American history to tenth-graders. Data collected before the program began revealed that Kathy's approach to teaching resembled the *Teaching for Understanding* approach in some superficial ways. However, neither her ideas, nor her practice reflected a comprehensive and well-articulated approach to teaching, and she had difficulty articulating ideas about core democratic values and how she would teach them,

During the professional development program, Kathy experimented with new ideas about how to teach core democratic values with a limited degree of success.

Although she was somewhat confused about the program, her unit (which attempted to connect Enlightenment Thinkers' ideas, core democratic values, and current issues) demonstrated a commitment to thoughtful engagement with the program content. However, during the unit, most of her students appeared to be confused about what they were supposed to learn and do. Kathy expected students to "get it," but, in the end, only a few demonstrated understanding as it is defined in the framework, and their learning may have been attributable to their own background knowledge and/or an interaction I had with their group when I assumed the role of facilitator.

After the program concluded, Kathy was more aware of two aspects of her teaching that could improve: clarifying expectations for students, and changing the way she structured inquiry activities to help students make connections among issues, content, and their lives. At the end of the program, Kathy's teaching was still far from being congruent with the *Teaching for Understanding* framework. In part, this was revealed by her continuing misconceptions about the *Teaching for Understanding* framework as she compared her own practice to this approach. However, her participation in the program appeared to spark an enthusiasm for the *Teaching for Understanding* model and helped her develop new insights into her teaching.

*Kathy's Ideas Before the Program Began Compared to Teaching for Understanding*

In order to explain whether and how any changes in Kathy's ideas might be due to the professional development program, I gathered baseline data to see how Kathy's approach to teaching compared to the *Teaching for Understanding* approach. Data consisted of an observation and audio recording of a lesson she taught, two interviews, an online meeting, her responses to two online case studies about teaching core democratic

values, her interpretation of the state standard about core democratic values, and communications between the two of us.

In the following section, Kathy's' ideas at the beginning of the program about how to teach core democratic values are analyzed using the *Teaching for Understanding* framework and its four main principles: generative topics, understanding goals, performances of understanding, and ongoing assessment. The purpose for using the framework is to gauge changes in Kathy's thinking in response to the professional development program where learning about and using the framework to teach about core democratic values was the primary goal.

*Generative Topics*

Generative topics are "central to one or more disciplines," "interesting to students and teachers," "accessible to students," and "there are multiple connections between them and students' experiences both in an out of school" (Blythe, 1998). At times, Kathy chose topics for her students to study that were generative in nature, but at other times, she did not. Her knowledge and understanding of core democratic values and what she would teach about them was weak, so it is not surprising that she had not identified generative topics related to core democratic values.

*Contrasting attributes of topics in two lessons.* At times, Kathy's ideas about topics were loosely compatible with attributes of generative topics, as for instance, in a lesson she taught during the initial period of the program. The authors of the framework describe one attribute of generative topics as central to the discipline. They also assert that in many instances generative topics are of continuing interest to professionals in the

discipline. Kathy taught a lesson about the Holocaust during my first observation in her classroom; this topic would seem to meet both conditions.

In the interview that followed this class session, Kathy told me why she chose to study and teach about the Holocaust. This was in response to a question about what kind of professional development she benefited from. "Like I said, I do stuff on my own. I choose like what I'm interested in. Like my, my thing this year was the Holocaust." She also told me she chose to engage in an in-depth personal study of this topic because earlier in the year, students had asked questions about the Holocaust for which she hadn't known the answers. This indicated that she paid attention to what their interests were, and reflected another attribute of generative topics: they are personally significant to teachers and students.

Another attribute of generative topics is that they are accessible to students – meaning that a variety of age-appropriate materials are available to study the topic and that the topic can be addressed through a variety of strategies and activities. Kathy chose to study the Holocaust outside of her textbook's chronological organization, which appeared to determine what she usually taught, because an opportunity to visit a local Holocaust museum had arisen and she wanted to prepare students for the visit. Kathy began the Holocaust lesson by accessing students' prior knowledge about the topic through an interactive lecture-discussion format. After this introduction, Kathy showed students compelling primary source material about the topic (film footage documenting the liberation of concentration camps). Finally, as a homework assignment, she asked them to write questions to ask the Holocaust survivors who would serve as their docents at the museum. She told me later, in the interview that followed this observation, that she

had purposely held back on the amount of information she presented during this lecture-discussion so that many questions remained unanswered and students could generate questions to obtain answers from docents. She called this strategy "cliff hanging."

After the lesson concluded, Kathy gave students five minutes to talk and move around the room. During this period, I overheard several students talking about local synagogues in their area – a bit of evidence that this topic connected to their own experiences, another attribute of generative topics. All of the attributes of generative topics were apparent in this lesson, though they were not systematically incorporated into the design. Rather, they appeared to be related to her knowledge, understanding, and interest in the topic, as well as her ability to select appropriate materials, activities, and strategies through which students could access a topic that they were also interested in.

In contrast, I observed another lesson on feudalism, in which attributes of generative topics were missing. During the lessons about feudalism, students were restless; some laughed at a mysterious noise coming from a heater, others looked bored; there was a fair amount of joking around and speaking out at will, and only a few participated in the discussion about their homework assignment. Kathy also appeared to be uninspired by the topic, and told me so in the interview that followed this observation. The differences between the lessons on the Holocaust and feudalism may suggest that Kathy's personal knowledge and interest affected how she was able to identify and pursue generative topics. If so, this helps explain some of the difficulties she had in teaching core democratic values as generative topics. Therefore, I now examine her knowledge of core democratic values at the beginning of the study.

*Uncertain ideas about core democratic values.* Some of Kathy's ideas about how to teach core democratic values were tentative and disconnected suggesting that her knowledge and understanding of this broad topic and its place in the curriculum, was limited. For instance, in the first interview, I asked Kathy to describe what a good citizen was and how students learned to be good citizens. She described good citizens as being "informed," and "responsible," and thought that good formal education led to good citizenship. However, when she elaborated on this, her response indicated that she did not necessarily connect students' knowledge and understanding of core democratic values with being well informed.

> ... I know that like the core democratic values and the citizenship thing are so important but I don't even know if that is as important as just having a good schooling in that they are respectful, that they are informed ...

Later in the interview, when I asked Kathy how citizenship education could be improved, her response suggested the centrality of core democratic values in citizenship education, but did not reveal much depth of understanding:

> I think that teachers should know what the core democratic values look like. Yup, I have a poster, you know, I'm sure that they're in every classroom. ...What does it mean, like to have, to be dignified? You know, just stuff like that I think would be important as to, just to explain it to the teachers and talk to them about it.

In her response to an online case study that I asked Kathy and other teachers to examine, she linked the *Bill of Rights* to the study of core democratic values in a way that also suggested limited knowledge and understanding.

> They are the core democratic values!! Equality, Liberty, Common Good,

Diversity, Truth, Sovereignty, Justice. Life, Patriotism, and Truth are all sort of implied. (Did I hit them all??)

Kathy's response was problematic in that not all of the core democratic values she lists can be reasonably connected to the *Bill of Rights* since those amendments to the Constitution mostly address individual liberties, rather than the laundry list she suggests. Her response here (and elsewhere in early data) does not suggest subtle complexities and contradictions among these ideas, nor does it suggest connections to various other foundational documents, such as the *Declaration of Independence*; the *Constitution* in its entirety; and works such as the *Federalist Papers* or works of the Enlightenment Thinkers from which many of these ideas can be traced.

In our second interview, conducted online, I asked Kathy specific questions about core democratic values and how she would teach them. Her answers again suggested limited and uncertain knowledge and understanding. For instance, I asked Kathy to explain each of the four core democratic values – liberty, equality, justice, and the common good – which participants in the professional development program would focus on in their units. Her response to "justice" was vague and she admitted that she was uncertain:

> Ok...justice...justice would be seeing everyone in a situation as equal. No prejudging. Every citizen is entitled to the same rights and for example with courts; everyone is entitled to the same fairness of trial. The Founding Fathers saw this as important and I think students need to understand what they are entitled to under the law as well as what they are able to do. Does that make sense? I am having a hard time articulating this.

Similarly, her ideas about "liberty" were vague.

> Liberty is by far the hardest...because people do not know liberty. Does it mean freedom? Does it mean the right to pursue your dreams? Does it have something to do with patriotism? Personally, I lean toward freedom.

In contrast to her vague responses when asked about core democratic values in isolation and as abstract concepts, when she was asked to suggest an example to show their relationship, Kathy revealed glimmers of ideas that might be turned into generative topics.

> Microsoft...the justice system and the process is an example of the equality everyone has and the fact that no one is exempt. Also, the common good. The fact that by them taking on a monopolistic part of the market, it takes away some of the options of other people. The choice to choose if you will. So, this gets at liberty and/or equality.

While still conveying a somewhat vague sense of the four core democratic values and their relationships, her answer suggests attributes of generative topics in ways that her answers to specific questions about these ideas did not. Her choice suggests her interest in the topic, one that could be reasonably assumed to be of interest to students, connected to students' experiences, accessible to students, and of interest to professionals in various disciplines. Thus, when responding to a specific case, Kathy's ideas seemed more confident (and perhaps even more coherent) than her ideas about core democratic values in isolation, though not much knowledge and understanding of core democratic values was evident in either instance.

Kathy's conception of core democratic values, which included some tentative knowledge of their roots in the history of American democracy, along with her assertion that citizens should use that knowledge in an everyday practical way to help negotiate their place in a democratic community, was evidence that she had some understanding of these values, but not enough to help her students understand them. She appeared to recognize the relationship of the values to the structure and workings of government in the United States as well as their relationship to how people might be expected to behave toward each other in a civil society.

This was a bit of evidence that Kathy's understanding might have had some grounding in her subject matter preparation. However, Kathy was only in the beginning stages of developing a schema that incorporated these ideas and their relationship to life in a democratic society. Her inability to articulate how we could assess whether these values were incorporated into a citizen's understanding of, and participation in, democratic life as well as her inability to connect particular values to specific documents, historical figures, or philosophers was evidence that she had only begun to understand the ideas.

I concluded that Kathy had an incomplete and uncertain understanding of core democratic values when these values were considered alone, potentially limiting her ability to construct generative topics about these ideas. She struggled with explanations of these values, and even revealed some misconceptions about them as suggested by her ideas about which values were linked to the *Bill of Rights*. However, her understanding seemed somewhat clearer when juxtaposed with topics she was interested in, such as the Microsoft antitrust case. She also demonstrated a beginning sense of the use of generative

topics in her teaching as exemplified by her lesson about the Holocaust. Thus, while Kathy's apparent lack of knowledge and understanding of core democratic values appeared to limit her ability to construct generative topics about these ideas, she seemed to have developed some of the dispositions and skills that would have made it easier for her to construct such topics if she had better knowledge and understanding of the ideas.

*Understanding Goals*

In order to explore the "territory" of generative topics, teachers should make sure students visit sites they might miss without guidance. Teachers need to map out this landscape so that students can be left to some independent exploration, while at the same time making sure they visit certain destinations that they determine as most important (Blythe, 1998). In the *Teaching for Understanding* framework these destinations are called "understanding goals." These are statements or questions that communicate to students what is most important for them to understand in a unit or course (Blythe, 1998). The purpose of formulating understanding goals is to "lend focus to the ensuing instruction" (Blythe, 1998). What makes understanding goals a powerful tool is that they are communicated to students clearly and frequently, and often posted publicly so that both students and their parents are made aware of what it is that teachers want students to understand over the course of a year (overarching understanding goals or "throughlines" perform this function), on a lesson or unit. Thus, they are explicit and public, nested (overarching and subsidiary understanding goals), and central to the subject matter (Wiske, 1998).

Kathy's ideas about learning goals fell pretty far short of the framework's vision of "understanding goals," except insofar as she wanted students to "make connections,"

and even here she did not communicate her goal in ways that helped focus students. Thus, I concluded that Kathy was not setting goals in ways that were congruent with the *Teaching for Understanding* framework.

*Kathy's ideas about what students should understand.* Kathy told me her foremost goal as a history teacher was to help her students make connections between history and their lives. This theme was woven into much of what Kathy told me she wanted students to learn and understand about history and about core democratic values. In the first interview, in response to a question about what she wanted students to learn from her teaching, Kathy replied,

> ...and then with American history, as we move through, I like to always make connections...this is the Holocaust, so now you know, you can understand current events a little bit better. I guess it's... my goal is that they'll be able to make those connections without being told ... just understand the past so as to take their place in the future.

Perhaps the goal of helping students make connections to their lives could be generally understood as an overarching, understanding goal, but it does not address more specific learning goals in ways that guide students' learning, which is the function of understanding goals. Kathy's goal, to help students understand "something" (she never said exactly what) about the Holocaust is vague and would not communicate to students what it was she wanted them to understand. However, at other times, Kathy's ideas did suggest congruence with understanding goals. For example, in her interpretation of the state standard about core democratic values, she outlined goals for students'

understanding that were more specific than the example cited above, and would perhaps communicate to students better what it was that she wanted them to understand.

> I interpret this standard to express the importance of students having an understanding of the important aspects of our nation: the "values" that have sustained us as a democratic nation for centuries. The importance lies in students not just recognizing these values but understanding them in their historical context (why did our founding fathers deem these characteristics most important). In addition to that, students need to understand what these values mean to them today. What will they have to do as citizens of the US to honor, respect, and sustain this democratic nation... [sic]

The question, "why did our founding fathers deem these characteristics most important?" could actually serve as a more specific understanding goal. In the second interview, when I asked her to explain her interpretation of the standard, she articulated her ideas about what she wanted students to understand somewhat more clearly:

> Well to be a responsible citizen (which seems to be a big goal of social studies educators), I think that students need to see their place as a citizen. And this means understanding the values (or characteristics) of the democracy in which they live. I also think that they need to know how to take their place in society. What they are entitled to and the responsibilities they must assume.

*Kathy did not communicate understanding goals to students.* Even when she could articulate goals for students' learning, Kathy did not consistently communicate these goals to her students as the *Teaching for Understanding* framework suggests is necessary. In her introduction to the lesson about the Holocaust, she told students that, as

a class, they would find out what they already knew about the Holocaust, learn some new terms, and watch a video in preparation for a field trip. Rather than an understanding goal that would guide students' learning, what she told students was more like an advance organizer that outlined what they would be doing. What Kathy communicated to students conveyed little or nothing of what she expected students to understand from this lesson and unit, except indicating, in very broad terms, that they would learn something about the Holocaust.

Though perhaps some questions Kathy asked students could have been cast as understanding goals, it was not at all clear from what she told me or from what I observed that they were. In the first interview, she explained her approach to teaching:

> I do lots of "why" stuff. I do lots of writing, the questions are, 'okay, we've studied this...what does it mean in the context of everything else we've studied? Where does this fit in and what do you think that it's gonna tell us about this time period?'

If one "reads between the lines" of this statement, one might envision specific understanding goals, but that would be conjecture. Kathy's line of questioning during the Holocaust lesson did not convince me that she had particular "sites" or understanding goals in mind as she was leading students through this preliminary exploration about the topic. This may have been due to her own lack of knowledge and understanding of this subject, since she told me she had only recently begun to explore this subject in depth herself – or perhaps it was simply due to her lack of understanding about how to guide and focus students' inquiries as they investigated particular questions or topics.

During this initial period, Kathy frequently talked about how she involved her students in inquiry learning. In response to a question about whether she would teach a unit that was similar to the unit about the Bill of Rights in one of the online cases, Kathy wrote,

> I do a lot of this type of (what I call) "inquiry" learning, where the students are out among the information inquiring as to the answer of the question or topic.

However, Kathy did not explain how students went about inquiring "among the information." As suggested above, the *Teaching for Understanding* approach would require that students know what learning goals they were pursuing to make sure they visited important sites that were predetermined by the teacher and framed as understanding goals. There was no substantive evidence to indicate that she did this.

Thus, the data gathered during this period of the program suggest that, although broadly construed, Kathy's goals for students' learning were complementary to understanding goals in the *Teaching for Understanding* framework. She was not practiced in articulating them as such and had not incorporated the use of understanding goals into her planning and teaching.

*Performances of Understanding*

The *Teaching for Understanding* framework describes performances of understanding as "activities that both develop and demonstrate students' understanding ... by requiring them to use what they know in new ways" (Blythe, 1998). These performances require students to show their understanding in an observable way. For instance, discussion becomes a performance of understanding for those students who are participating. Applying concepts, exploring problems, and debating alternatives are examples of "guided inquiry" types of understanding performances. Performances of

understanding require the teacher to provide explicit criteria for performances that are ongoing throughout a unit, though there are usually culminating performances at the end of units that require students to exhibit complex performances of understanding.

During the initial period of the professional development program, some of what Kathy wrote and said suggested that she valued some attributes of performances of understanding. However, Kathy's ideas about how students should demonstrate their learning were either vague or incomplete. In her teaching, performance criteria were vaguely defined, if at all, and formulas and strategies for eliciting and guiding students' performances were unpolished or absent. In the discussion I observed on my first visit to her classroom, only a few students participated regularly, and of those who did, few demonstrated performances of understanding. Kathy lacked strategies for providing feedback to students on their performances during discussion. In fact, the strategies she employed for conducting class discussions were contrary to suggestions within the framework.

*Indicators that Kathy valued performances of understanding.* In my first observation in her classroom, Kathy asked a student to read her response to an assignment about feudalism, a topic in students' textbook. This student's response demonstrated her understanding in a novel way, and fit the criteria for a performance of understanding. Kathy held this response up to the class as exemplary and pointed out what made it so. In the interview that followed the observation, I asked her to comment on this student's response.

> She took a few facts . . . that she had written a story about ... and I just wanted her to read that to the class because just as an example of how you can take a little piece of knowledge and make it into something a little more interesting.

She said none of the other students had done this.

In one of the case responses she submitted before the second interview, Kathy suggested how she would teach a lesson about the *Universal Declaration of Human Rights* and the *Bill of Rights*.

> I would have the students read the two documents and compare them. I suppose I would want to guide their reading perhaps with some questions...In my mind right now I see this being a discussion or debate format where they would need to bring a lot of knowledge both previous and new together to make decisions...I think I would want to stress them developing their own ideas. I would assess them either written or oral. Can they take what they've learned and, given a situation, not just recognize but formulate and support their own opinion on the subject. [sic]

This statement clearly suggests attributes of performances of understanding as well as appropriate strategies for developing and demonstrating them. According to the authors of the framework, guiding students' inquiry is the key to helping students "work up" performances of understanding. If Kathy constructed appropriate questions to guide students' reading, then students could conceivably demonstrate understanding in their answers or performances. However, it was not clear whether questions Kathy would have given her students to guide their reading would be designed to support students' understanding or designed for some other reason. Despite this, both examples cited above suggest that Kathy appreciated and valued students' ability to demonstrate understanding

through some sort of performance such as debating, discussion, and perhaps writing.

*Indicators that Kathy did not know how to support performances.* Other data suggested more clearly that Kathy's ideas about what students should do to demonstrate understanding were incomplete when compared to the framework. For instance, she said nothing in any of our conversations to indicate that she formulated criteria to guide and assess students' developing understanding. Her only allusion to the use of criteria to guide students' learning was quite vague. In our first interview, describing what she had students sometimes do after engaging in a discussion, she told me,

> And then I have them write. I have them do writing. I have them do reflective writing. Sometimes I have them write before, like prewrites before, what do you know about this? What do you think this means? What could... then afterwards, what could've been better?

The only time I observed her provide criteria to students against which their performances were judged was after the fact when she held up one students' writing assignment about a feudal lord as exemplary and explained to students what made it so.

Kathy's attempts to facilitate discussions did not match ideas in the framework about guiding students' performances and providing feedback that helps them improve future performances. For instance, when I asked Kathy to describe some of her current teaching strategies, she told me she had students "do lots of reading," She used "articles and essays and journals and stuff that I can get in magazines or online sometimes..." She then described what she and her students would do after they completed their reading.

> We come in; we talk about it for an extended period of time. Pretty much, I let them talk until they can't talk any more. Very, very seldom do I cut them off,

a discussion they're having about a reading or a topic. The only reason I would do that is if I wanted to cliff hang for another purpose, something that I knew was gonna come up but usually I just... push them through that.

My observation of the Holocaust lesson illustrated her approach. She started the discussion by asking students about the meaning of the word "Holocaust." While students did appear to be interested in discussing this topic, their responses to Kathy's questions were free-ranging. Students both raised their hands and spoke at will, and at times, several students were talking at once. A few students appeared to have good prior knowledge about factors that historians claim led to the Holocaust, including Germany's defeat in World War I. However, some students appeared to be taking a stab in the dark when they offered their contributions to the discussion. Other students offered unsubstantiated opinions about causes leading to the Holocaust, while others told stories that were irrelevant. Kathy provided little or no substantive feedback to students no matter what they said except to occasionally say "interesting." The net effect was that it was hard to tell what was, or what was not appropriate information for students to note. She provided little direction and guidance during the discussion and did little to deter inappropriate behavior that more than likely interfered with some students' construction of knowledge about the topic.

*Uncertain ideas about performances of understanding and core democratic values.* In the first interview, I asked Kathy how we would know if students were learning about core democratic values. Her answers suggested that it would be hard, if not impossible, to understand what students had learned.

I think that, I think... that's tough. That's tough. I don't know how you would know if they're gonna be... My gut answer is like something in how they act within a structured place and also how they act when they are with their peers. Learning about respect and their role in society but I don't know how in the world I could assess that.

Later, in the same interview, when I asked her specifically about justice and equality, Kathy again appeared to be stumped.

Yeah. I don't know. I said before, I think it's really difficult to assess ... I can't think of a way to assess, it's almost a behavior, you know. It's almost like a way of thinking rather than anything concrete. It's like you almost have to, somebody almost has to... it's almost like a behavior, a mindset. And I can't think of a way that you could assess that, other than by monitoring that. I don't know.

In the second interview, I asked Kathy how she would know when students understood the meaning of liberty, justice, equality, and the common good. Again she said she had "not figured that one out...and assessing that is impossible."

Thus, while Kathy found the idea of performances that would demonstrate students' understanding of a topic appealing, her ideas were incomplete when compared to performances of understanding as defined in the *Teaching for Understanding* framework. In her teaching, she did not provide criteria with which students could both improve their performances of understanding and which would provide her and them with the means for assessment. Some of these criteria are, of course, contained in understanding goals, which Kathy did not articulate to her students. She did not facilitate guided discussion in her classroom where students could develop these understandings.

In addition, she did not know how students could demonstrate their understanding of core democratic values or how their understanding could be assessed.

*Ongoing Assessment*

In the *Teaching for Understanding* framework, ongoing assessment is the process by which teachers can tell what students understand. It is most powerful when it is frequent, based on public criteria, conducted by both students and teachers, generates constructive recommendations for improving performances, and informs planning and measuring of students' understanding (Wiske, 1998). In contrast, Kathy's assessments did not provide continual feedback intended to improve students' understanding.

Kathy's' ideas about how to assess students' learning were vague and inconsistent. Some data that provide evidence of her assessment practices were presented above in the section on understanding performances: Kathy did not provide students with specific criteria about what she wanted them to understand or and ongoing feedback designed to help them develop their understanding.

When asked several questions about how students' understanding of core democratic values and citizenship skills could be assessed, she said she didn't know, and expressed frustration:

> Not right now. My brain is blocked by the fact that I couldn't answer that question so ... I just, I want to think of a way that you could assess citizenship but... I think that you'd be sitting here with a silent mic for a while.

Kathy also had difficulty formulating consistent ideas about assessment in two online cases she examined for the second interview. For the first case, I asked teachers, "What evidence is there in the case that provides an understanding about what students

learned or understood from the lesson? Please explain." The teacher in the case, *Technology Meets Social Studies: Reflections of a First-year Teacher*, had provided students with detailed directions and a rubric of expectations for the assignment about the *Bill of Rights*. Artifacts of students' learning about the *Bill of Rights* were included with the case. However, in her response, Kathy focused first on what students learned about technology. "They learned a lot about technology...how to evaluate websites...how to bookmark." Kathy commented only secondarily about what students learned about the amendment they researched and then connected to a current controversy. She vaguely asserted, "I think they probably learned it in a way that can be applied beyond the classroom but I do not remember any specific evidence." That Kathy failed to find specific evidence is surprising since part of the students' projects and the teachers' reflections about her lesson are included as case artifacts and do provide some evidence about what students learned and understood.

The second case, *With Liberty and Justice for All* was actually a detailed plan for teaching about the *Bill of Rights* in which students were asked to examine and compare that document with the *Universal Declaration of Human Rights*. I asked teachers to write a response explaining how they might teach the lesson, including how they would assess students' learning. After judging the lesson "useless" for having students "retain or apply" what they learned, Kathy suggested having students apply what they learned to "current events that relate" to violations of human rights using a "discussion or debate" format." Kathy wrote,

> I think I would want to stress them developing their own ideas. I would assess them either written or oral. Can they take what they've learned and, given a

situation, not just recognize but formulate and support their own opinion on the subject.

In this response, Kathy suggests a type of assessment that could help students both develop and demonstrate understanding although it is not clear that Kathy meant to imply ongoing assessment as the *Teaching for Understanding* framework would require. Both responses point to a lack of consistency in Kathy's approach to assessment.

*Summary*

Some of Kathy's' ideas at the beginning of the program seemed congruent with a *Teaching for Understanding* approach, at least on a superficial level, (e.g., her ideas about inquiry learning and using discussion and writing as a means to assess students' learning). In her response to both online cases, she suggested, in very general ways, what seemed like worthwhile activities for developing students' understanding about the *Bill of Rights* and the *Universal Declaration of Human Rights*. However, in many other important respects, Kathy's ideas about how to teach core democratic values were vague and incomplete, both in terms of what students should understand and how she could assess what they understood.

*Interim Period: Kathy's Response to the Professional Development Program*

Data collected during the interim period – the actual professional development program – included observations and audio recordings of two lessons, two videotapes of lessons that Kathy recorded in my absence, artifacts of students' work, and transcripts of email messages, online meetings, and my field notes. Data also included two iterations of Kathy's unit plan, her reflections, and the hypermedia case about her focus students Terrie and Marsha.

*Planning the Unit*

Kathy developed some new insights about the *Teaching for Understanding* framework and core democratic values as she planned the unit. However, her practice contradicted principles of the framework in puzzling ways. As she planned and taught her unit, Kathy expressed considerable confusion, frustration, and anxiety with the professional development program and the framework. The next several sections present data about Kathy's response to the program first through her planning, then through her enactment of the unit.

*Initial planning: deciding on a topic.* Kathy's ideas about her unit developed over a period of about two weeks. She was the only teacher present on May 9 for an online orientation meeting, since technical problems prevented the others from attending. After my brief introduction to the *Teaching for Understanding* framework, Kathy declared that *Teaching for Understanding* was "right up my alley." A bit later, she suggested her first idea for a unit topic, "... the Human Rights thing which will tie into my upcoming lessons." "Human rights" was the topic of an online lesson that I had asked the teachers to examine before the professional development program began.

At one point, during our meeting, Kathy exclaimed, "I am getting frustrated!!" Her frustration appeared to have resulted from a combination of factors: problems with her computer, problems navigating and using the *Teaching for Understanding* site that we were exploring together, as well as problems arising from my somewhat loose planning for and clumsy facilitation of the meeting. A few days after our online meeting, Kathy expressed anxiety about participating in the program. I received an email message from her that began, "I am having some SERIOUS problems with this project." She went

on to say that other professional obligations were demanding her attention, and that she was "slipping!"

> I want to help with this and I think I will put together something valuable but under the circumstances I am afraid it will not be very thoughtful work. There simply are not enough minutes in the day or days left this semester to do what you need.

After an exchange of several emails about her concerns in which I offered her my full support, Kathy decided not to withdraw but told me,

> .... there is no way I can stretch it to 4 weeks. I could do several different things in that time but not all around human rights, etc.

After a discussion in an online meeting later that evening, Kathy's anxieties appeared to have abated further. Kathy and Greg (a colleague of Kathy's who was participating in the program at this stage) were the only teachers attending the meeting due to technical problems. During this meeting, Kathy developed the ideas for a unit about core democratic values, drawing ideas and support from Greg.

After some preliminary talk about the program and *Teaching for Understanding*, Kathy said she was thinking about a unit to "compare the Declaration of Human Rights with our Core Democratic Values," or comparing Enlightenment ideas with core democratic values. However, she said she had a "breadth issue." She needed to introduce Enlightenment, WWI, and WWII before the end of the year. Greg and I encouraged her not to cover all of those topics and instead focus on one. Greg told Kathy,

> Can't teach it all. The kids will get WW stuff in US I & II anyway. I say blow it off and go for some CDV philosophy. Shoudl serve 'em better

next year contextually... [sic].

I suggested that Kathy design an inquiry project using any one of the topics she had suggested. She responded, "I think I could do that with WWI and WWII. I would sort of like to go a bit more teacher led with Enlightenment." This was a bit of evidence that Kathy was not attending to ideas about generative topics while deciding on her focus since she seem to be deciding on the basis of their inclusion in the textbook, rather than whether they were interesting to her or to students. Throughout this discussion, Greg often clarified Kathy's suggestions. For instance, after Kathy suggested teaching a unit about the Enlightenment, Greg added, "Montesque? Locke?" "...Enlightenment thinkers as the framers of CDVs." I suggested that Kathy pick a current world issue from which her students could investigate Enlightenment Thinker's ideas and their influence on the development of core democratic values.

Interestingly, Kathy did not incorporate her original idea about using the *Universal Declaration of Human Rights*, into her plans despite its apparent "fit" with the other unit she had taught about the Holocaust. This would have enabled her to "cover" at least part of World War II. Her reasons were not clear. Perhaps they were because the Enlightenment was a required topic in her school's curriculum guidelines and Greg supported her idea, or for both reasons.

This episode demonstrated something that Kathy das said earlier, that she valued and appreciated feedback from other teachers.

*Developing the plan.* As she planned her unit, Kathy developed and articulated new ideas about core democratic values and the *Teaching for Understanding* framework as she engaged in intentional planning using the online planning tool. However, this

phase of her planning also reflected continuing anxieties about participating in the program.

After the online meeting on May 15, I didn't hear from Kathy again until I received an email message on May 21 (the day before she started teaching her unit) saying, "I need some clarification on this unit. I am at a loss right now." She went on to tell me that the framework was very confusing and because of time constraints and continuing problems with technology, she had been unable to examine the *Teaching for Understanding* web site closely. She asked me to call her.

In our conversation that evening, we talked about Kathy's struggle with her unit about the "Enlightenment" philosophers and their connection to core democratic values. I reiterated my suggestion that her students study the Thinker's ideas and the core democratic values from the perspective of a current interesting issue. Kathy told me she was still worried about covering World War I and World War II, and worried that her department head might not approve of the *Teaching for Understanding* framework. I advised her to go ahead with her plan and not worry about him, but to do what she did diplomatically. I also advised Kathy to work with Greg, her next-door colleague. She agreed that that would be a good idea. After our conversation, I sensed that Kathy had mostly wanted reassurance about going ahead with her plan, rather than having specific questions about the framework. She seemed confident after we finished talking.

Shortly after our conversation, Kathy developed her unit plan using the online planning tool. In the first iteration of her online plan, Kathy did not write anything in the fields provided for "Ongoing Assessment" or "Standards." When I asked Kathy to revise her plan, she included both, but also included "Throughlines," something I had not asked

her or the other teachers to do. Although Kathy's final plan was framed by the *Teaching for Understanding* model, it appeared to be mostly framed by her own ideas about inquiry-based learning, and ideas about content and strategy that Greg and I had suggested to her.

As she engaged in planning, Kathy developed new ideas about core democratic values and about the framework. She demonstrated more understanding of some principles than others. Her generative topic: "...enlightenment thinkers (Locke, Rousseau, Montesque and Voltaire." [sic] and her understanding goals (below) were reasonable:

> Students will come to understand the roots of the ideas that guide their role in this democracy. They will see that even issues today (such as gun control, Elian Gonzalez, and censorship) have evlolved from these 17th century thinkers. [sic]

However, when I asked her to go back and include "Ongoing Assessment" in her plan, she wrote the following answer to the question posed in the online planning tool: "How will you and your students know what they understand?"

> When they are asked to apply their knowledge into a presentation. The presentation is based on a current issue. So, if they are able to use the researched information on the Enlightenment thinkers and apply it to a present day problem, they have learned!

Although this was a reasonable general direction, it only addressed students' understandings at the end of the unit and not how students' understandings would be assessed throughout the unit. In addition, of course, it was still unclear exactly how Kathy would assess students' learning. The omission of this part of the framework in both her

original and her final plan suggests that Kathy did not understand the principle of ongoing assessment. Though I had not asked her to, Kathy included "throughlines" in her updated plan. She wrote the following entry in response to the statement, "The things I most want my students to understand after this course or year are:"

1. Ideas from history (considered old) are still visible in our lives today.
2. CDVs have evolved over the past 500 years to fit our changing society.

These were goals that demonstrated that she understood throughlines. However, they were never communicated to the students. Communicating to students' goals of both types (understanding goals and throughlines) is an integral part of the theory underlying the principles of *Teaching for Understanding* and is addressed in the online planning tool.

The throughlines that Kathy added to her revised plan also demonstrated a change in her ideas about core democratic values. Her throughlines are clearly derived from ideas she had included under generative topics. At the beginning of the program, Kathy said that core democratic values were ideas that were seen as "unchanging" by the Founding Fathers. However, in her plan, she asserted that they had evolved over hundreds of years. What prompted this change in her thinking in the period between the beginning of the program and the point where she planned her unit is not clear. She may have discovered these ideas while researching the topic, something she told me she did when confronted with new topics of interest to her and her students. Another plausible possibility is that the ideas were found in the section on Enlightenment Thinkers in her textbook. Nevertheless, engaging in intentional planning apparently had helped Kathy develop new ideas about the framework and about core democratic values. Her plan, though incomplete, was also in the "ball park" for some elements of the *Teaching for*

*Understanding* framework. However, in her implementation of these plans, most of these ideas either were not evident or were overshadowed by other teaching problems.

*Unit Enactment*

During the two-week period in which Kathy taught her unit, she failed to incorporate important elements of the framework into her teaching, although some of her teaching was superficially congruent with the framework. Her students seemed confused about what she wanted them to do, and Kathy's perception of her practice was at odds with what occurred from my perspective. Below, I summarize some of the lessons in order to illustrate these patterns.

*May 22: introducing core democratic values in a discussion.* Kathy taught her first lesson the day after our telephone conversation regarding her confusion about the *Teaching for Understanding* framework. The lesson was a teacher-led discussion where students' background knowledge and ideas about core democratic values were elicited and displayed in a graphic organizer on the chalkboard. Although Kathy had written a generative topic in her plan, students were not made aware of it during this lesson; she simply told them they were going to look at core democratic values. The topic seemed to be of interest to many of the students in the class. A few students displayed remarkable background knowledge about core democratic values and about their inclusion in our country's founding documents.

Many students participated in the discussion. However, a few students dominated the discussion, and some students did not participate at all. At times, the most vocal students simply interjected their comments without raising their hands. Kathy displayed what might be called deference toward these few students by allowing them to dominate

the discussion for extended periods. At one point, she declined to intervene when one of these students interrupted another student; the student who was interrupted, who up to that point had been quite active in the discussion, withdrew from then on. Classroom management issues were quite apparent during the discussion, such as constant talking among students.

This was a loosely structured discussion where understanding goals were not communicated to students, a requirement in the framework. Kathy also did not provide students with ongoing feedback about their responses – a requirement of the principles of "Ongoing Assessment." For instance, she missed several opportunities to point out instances where students made excellent points about core democratic values. One student raised the issue about how values frequently conflict. Kathy did not follow up on this comment, except with the same perfunctory acknowledgement with which she followed many comments during this discussion. Another student asserted that in America we don't have guidelines that dictate all aspects of moral life. Kathy did not follow this with probing questions that could have elicited more responses about this assertion from other students.

In her summary at the end of the discussion, Kathy was unclear about what she wanted students to understand from the discussion. She told students she would put them into groups so they could discuss how they would get the job done, but she did not explain to them what "job" they would do. This lesson was not enacted according to criteria in the *Teaching for Understanding* framework. Kathy did not explain to students the topic that they would be studying, she did not communicate goals to them, she did not

provide criteria for their performances of understanding (their participation in the discussion), and she did not have an ongoing assessment plan in place.

*May 24: research on Enlightenment Thinkers' ideas.* I did not observe Kathy's lesson on this day. Data reported about this lesson are drawn from Kathy's plans and reflections, reflections written by her two focus students, an interview she conducted with them later in which they made reference to this lesson, and email messages from Kathy.

Kathy's students conducted research in the library on this day, using books as well as the Internet to find information about Enlightenment Thinkers. Kathy's plan was rather vague about exactly what information students should look for. On the one hand, her plan called for students to find as "much information as they can . . . ," but then limited that to primary documents and only those in which Thinkers focused on core democratic values, and then limited those even more by excluding "pictures, background, bios of their life." Apparently, she did not make clear to students exactly what it was that she wanted them to find, indicated by Marsha, one of her focus students, in a reflection she wrote about this phase of the unit.

> It was all right with the way that we went in search of the information. It would have been better if I had known what to tell people to look for. It was a rather broad directive. People in my group just found anything on Voltaire and gave it to me like I had any clue what we were doing.

Kathy's own reflection about this phase of her unit was brief and inconclusive:

> Gathering correct info for the most part. Got mostly secondary sources. Found out later needed primary sources to find what they were looking for. Focus on political ideas of CDV.

In her plan, Kathy wrote "students will engage in an inquiry process to make the connections I describe in my goals." Kathy's notion of inquiry was that students were "out among the information" seeking answers to questions. In this unit, Kathy did not communicate her goals to students, making it difficult, if not impossible, for students to conduct purposeful inquiry.

*May 25: further reading, researching, and discussion.* I observed and talked with one group of students in Kathy's class on this day. Kathy started the day's lesson by telling students to look for four democratic values in readings they had found in their research. Students were organized in groups according to which thinker they were assigned to study: Voltaire, Montesque, Locke, or Rousseau. Kathy told them not to examine the philosophers' biographies; instead, they were to examine their "political views, moral views, values views... however students want to think about those things." She asked students if that "kind of made sense?" A few responded in the affirmative.

I asked Kathy if I could sit with the group of six students that was studying Voltaire. She agreed. I told students that I was a little unclear about what they were doing. They laughed and said they were as well. Marsha and another student explained to me how they were reading and trying to relate core democratic values that they had learned about earlier in the year to the Enlightenment Thinkers' ideas. One student asked Marsha to clarify what the readings were and she told them they were primary sources, the actual writings of the philosophers. She then clarified the assignment again, telling this student not to look for details about the philosopher's life, but to look for his ideas. Following this, she startled me by saying to this student, "So, why don't you just shut your mouth."

Some students immediately were engaged in the assignment, but a few remained totally disengaged throughout the duration of this group's session. They chatted with neighbors, and looked around the room. Other group members continued to ask for direction from Marsha still indicating they didn't know what they should be doing. Students continued to discuss and ask questions, but Marsha expressed impatience with their questions and told them to "Just do it, OK?" She repeated her admonition to group members, "I don't care, just do it," slamming her fist on the desk. Kathy overheard her this time and called out her name in a mild admonishing tone. Marsha responded saying, "You have no idea how hard this is for me." Later, Marsha explained to me that she was the only one in the group working, and that she didn't like group work because she didn't work well with others.

Kathy stopped by the group several times to ask if they had made any progress, to help students make sense of their reading, and to help them get organized. At one point, Kathy told students that they were getting a little too loud. Later, Kathy stopped to look over at another group when they became too loud again. One student in the group commented to me, "Confusing, uh?" Two boys in another group were horsing around and Kathy stopped them abruptly and told them, "That's enough! After class, understand?"

Overall, all of the groups were "off task" frequently, with the exception of one group that seemed to stay relatively engaged throughout this class period. It was quite noisy during the end of the class period, and because of the noise level I couldn't make out what Kathy said as the class period ended.

Kathy sent me two short reflections on this lesson, one written shortly afterwards during her preparation period, and another that was included with reflections on all of her

lessons up to that point (May 31). In both messages, Kathy suggested that the material was on an "extremely high level," and that she should consider finding more suitable readings. In her first reflection she wrote,

> Group dynamics is key. There was some frustration on the part of higher level students. The lower level students tended to dump it on those that could grasp these hard concepts. Might want to teach students how to read philosophical ideas.

Kathy showed little evidence that she possessed the kinds of skills necessary to plan and execute a lesson of this type. As she herself acknowledged, the students who were able to understand the readings and relate them to core democratic values were the "higher level" students. It was clear from my observation that these students would have understood the readings regardless of the context, although they were as confused as the rest of the students seemed to be about what is was they were supposed to be doing.

*May 30: concept maps and jigsaw "issue" groups.* I did not observe this lesson, but Kathy videotaped it. Data used to describe this lesson are Kathy's plan and reflection and her focus students' reflections, as well as student work produced by each "Thinker" group. During this lesson, students constructed concept maps that connected the Thinkers' ideas with core democratic values. The data suggest that Kathy still did not give students explicit directions about what they were to do, nor did she monitor and assess their work as they completed it.

Marsha, one of Kathy's focus students, wrote at the end of her reflection about this lesson, "I still don't know what we're supposed to be doing with this information." In

the interview she conducted with her two focus students later in the week, Kathy told Marsha,

> I am hoping the groups will look at the issues in the context of the conflict they cause with the core democratic values and FROM THERE decide how the thinkers might have looked at the issue.

This is the clearest statement Kathy made about how she wanted students to make the connections she talked about, but there is no evidence that she ever communicated this to al of her students.

Each group completed the assignment somewhat differently. Although Kathy had indicated she wanted the ideas organized graphically, one of the groups organized their map to look more like the one Kathy had constructed on the first day of the unit when the class discussed core democratic values and she put their ideas on the board. Her "map" was essentially four lists with lines drawn between items on the lists to indicate connections among the values, not a graphic "map" such as a concept web. Another group used a similar approach, but added some drawings on another page, whose purpose is not clear, and a third page with two side-by-side lists, one labeled "Voltaire's ideas," and another labeled "France at that Time." Listed under the latter category were several items about the historical contexts surrounding Voltaire's ideas. This was something Kathy told students not to do, but at least one group had done it anyway. This was Marsha's group - she later told Kathy in their interview that that was what interested her.

Neither of the two groups that used the list format drew lines to indicate any connections between the ideas – something that Kathy had said she wanted them to do. The other two groups drew concept maps as a web-like graphic. Both drew connections

and links among Thinker's ideas and core democratic values. On the basis of these two concept maps it appeared the two groups who used the web-like graphic also achieved the clearest and at the same time most complex understanding of the connections between the Thinker's ideas and the core democratic values. However, Kathy had not provided all groups with clear directions about how to complete the assignment nor did she assess their understanding of the assignment by monitoring what they were doing in ways that would have allowed them to develop similar understandings about the ideas.

*June 1: issue groups research and discussion.* On this day, I sat with a group researching South Carolina's refusal to remove the Confederate flag from its Statehouse, presumably to connect it to Enlightenment Thinkers and core democratic values. I asked group members what they were doing. The group, as a whole, seemed unclear about what they were supposed to do with the information they were gathering. I told them I was puzzled about what it was they were doing, and they told me they were too.

Those group members who participated in the discussion struggled to find a way to connect their issue with core democratic values and Enlightenment Thinker's ideas in a coherent way that could be presented to the whole class in their group's presentation. Several times, a student suggested constructing lists that reflected "pro" and "con" sides of the issue, but a few students resisted this. Terrie, one of Kathy's focus students and who was in the group, was exceptional in this sense since much of what she said reflected her consideration of multiple viewpoints. By directing questions aimed at eliciting information from students that would show how the issue was more complex than simply "pro" or "con," I tried to lead them in indirect ways to this realization. However, they still didn't seem to understand how this issue could be seen from many perspectives so I told

them how I viewed the issue as a way of explaining this. Since they seemed to feel all Southerners felt the same about the issue, I related some of my personal experiences to illustrate how some Southerners had different perspectives than the one they assumed all Southerners had, and how one could view the Confederate flag in different ways depending on the context.

My decision to ask these students if I could participate in their discussion had been aimed at helping them focus their discussion and think about how to structure their presentation, but I was unsure how effective my help had been after the discussion concluded. I thought my actions had been in accord with the principle of ongoing assessment in the *Teaching for Understanding* framework. I was attempting to provide students with feedback on their performances of understanding in order that they could improve their future performances. In the online interview conducted by Kathy later that day, Marsha told Kathy, "I think our group tried to see from all sides." This was an interesting comment because Marsha had been one of those students suggesting a "pro-con list – why people feel the flag should be flown, why people feel it shouldn't."

What students said during this discussion indicated that Kathy was not actively using the *Teaching for Understanding* approach as a model for her instruction in this unit. Students' continued expressions of confusion about what it was they were to do was the most salient evidence that Kathy was not effectively using the framework as she taught this unit. She had not at any time made it clear to them what she wanted them to come to understand through their performances of understanding.

*June 8: presentations.* The data discussed in this section about students' final presentations is based on videotapes that Kathy provided to me. The first group to present

chose "abortion" as the current issue they studied. They presented some pros and cons for and against abortion and then tried to make connections to each of the Enlightenment Thinkers' ideas and to the four core democratic values. Overall, their presentation seemed disconnected; the connections they made to the four values were tentative and not convincingly supported.

The second group to present was the group I observed and interacted with on June 1. They posted visual aids that they had created with construction paper to help illustrate the points they would make during their presentation. Each of the Thinkers' names was written in a "cloud" cutout that represented the Thinkers' ideas. Below these were small posters with the four core democratic values, liberty, equality, justice, and the common good written on them. In addition, at the bottom of this display was a small poster with the groups' issue, the controversy about displaying the Confederate flag on the South Carolina Statehouse, written on it.

This group's presentation was well organized, presented in a self-assured manner, and coherent across the variables they were connecting. They used lightening bolts to connect the Thinkers' ideas to the four core democratic values telling the class something about what each Thinker had to say about each value as they stapled the bolts to the board. Four other bolts had already been positioned in place that pointed to the poster with their issue written on it. They started their presentation by telling the class that they had chosen to represent these connections not as "pro or con," or "black and white." Rather, they wanted to show how the ideas and their connections to the values and the issue were connected in complicated ways; they wanted to show multiple perspectives on the Thinkers' ideas and their connections to the issue they studied. This had been the idea

I raised with them in their group's discussion, also an idea that Terrie had raised during the first lesson when they discussed core democratic values.

Each group member took turns telling how each Thinker's ideas were connected to each of the four values. They then told how each Thinker might view the controversy surrounding the Confederate flag. Their ideas and conclusions were reasonable, but still contestable. This was an outstanding presentation. While it was clear that the "higher level" students were demonstrating "performances of understanding," in this presentation, how the other students in the group understood what they were presenting is not clear. They took part in the presentation, but usually assumed a minor role, such as stapling the "connectors" to the wall.

*Kathy's Ideas as the Professional Development Program Concluded*

To explain whether and how Kathy's ideas about how to teach core democratic values at the end of the program had changed, I gathered data after Kathy finished teaching her unit. This data consisted of responses to the same online cases presented at the beginning of the program, this time using the *Teaching for Understanding* framework to guide the responses; her case study about two of her students' ideas about core democratic values; an online meeting with other program participants; and a final interview.

Kathy's ideas about how to teach core democratic values were still tentative, uncertain, and even contradictory as the program concluded. Some of the ideas were about how to help students make connections, a process that Kathy had talked about at the beginning of the program. Other ideas were about how the *Teaching for Understanding* framework made her think about coherency in her teaching. Although

there was some evidence that Kathy had gained an appreciation of the *Teaching for Understanding* framework, her practice was far from being successful.

*Connections Theme Evident in her Commentaries on Each Teacher's Unit*

As the program concluded, Kathy had expanded her ideas about students "making connections," although she still did not seem to have clear ideas about what "connections" were or what "making connections" entailed, although this concept seemed to be at the center of her thinking about teaching history. In our first interview, Kathy implied that "making connections" was the outcome of a process that resulted in students thinking "about things much deeper," by "making connections to the real world."

In the final interview, I asked her about her approach to teaching, something I asked in the first interview.

> I guess the only thing that, the major thing ... I may not have considered before is making the core democratic values applicable to ... students' lives in a very obvious way. And, but also, applicable to the content. Some of the other cases that I've read, I didn't get the feeling that the core democratic values were as obvious, was an obvious connection between the content ... Like do this and this, not, not there wasn't like a common coherent connection that I was aware of ... I had a lot of trouble with the kids removing their own personal views and looking in the context of the core democratic values and that's something that I think is really important that they understand what they are alone and maybe even frame their views around them, rather than the other way, trying to fit their view into it. Does that make sense?

As this response suggests, much of what Kathy said in this interview and in other interactions about "connections" was still unclear at the end of the program. Kathy made suggestions and comments about other teachers' teaching as well as her own that emphasized "connections" but in very vague ways. For example, in the final online meeting with other teachers and me, Kathy talked to Lisa about Lisa's case study regarding her student's learning. Referring to Lisa's use of a monopoly as a vehicle for helping students understand core democratic values, Kathy told her,

> I think the monopoly aspect of choice was a real good connection. When I first looked at it (goals, etc) I was not sure how you were going to make the connection.

Just after making this statement, Kathy lost her Internet connection causing her to miss Lisa's comment in response to Kathy's statement that she was still trying to "figure out a better way to teach CDV's in Econ-" After reconnecting, Kathy continued,

> I think the freedom of choice is the obvious answer and I think you did a good job with that. I was just thinking about something Rod said to me when I was planning my unit...he suggested that instead of starting with the thinkers I could start with the issues of today and work backward. I am wondering if starting with the value of choice and the freedom to not have government intervene might be a starting point to put the ideas in context.

This was a surprising response in several respects. Firstly, the value that Kathy suggested for study, freedom of choice, seems vaguely connected, if at all, to students' lives through the study of monopoly. Secondly, Kathy had not designed her unit in the way I had suggested. She had started with core democratic values and Enlightenment

Thinkers ideas and then asked students to connect what they had learned to an issue. Finally, it was not clear how the strategy she suggested would help Lisa's students make connections since Kathy had already said that the "majority" of her students had not understood the "connections."

In the second interview I asked Kathy to elaborate on the suggestions she made to Lisa by explaining what issue Lisa's students might study. Kathy's first response to my question was hesitant and vague, "just talking, maybe about prices and why prices, you know, explain, talking about like the price of gas even now. Why is it going up?" I tried to elicit more about what issue students would be studying. Kathy responded, "Monopolies." I added, "Rising price of gasoline." She responded, "Right, and the monopolies, too." When I asked Kathy to explain how students would make connections to core democratic values by studying this issue, her answer was vague but did provide some evidence about what she may have meant by connection.

> Well, okay, in Lisa's reflection, she talked about the Sherman Anti-Trust act, right. I think that was the one example that she used that they had, I think it said like it had such a hard time with the thing... and I don't know. She said something about the Sherman anti-trust act. Like I would explain, maybe look at Microsoft today. Why are they being... brought under this, why are they being called a monopoly? And through that, you would explain a monopoly. You'd hit the term, you'd hit the concept that she said that her students were having such a hard time getting and then from that, you could say, well, what... what core democratic values are between this concept and the issue that we have today. What did it go through? You get into the freedom of choice. Well, you're not

giving people the freedom of choice so why is the government involved? You know.

I inferred from this that Kathy's sense of "connections" concerned what was "between" the concept and the issue of what it went "through," (in this case freedom of choice). Her conception of the content seemed concrete; she seemed to think of each element of the content - concept, core democratic value, issue - as a discrete element that needed to be connected, rather than content which already possessed complex interrelationships that needed to be revealed.

Similarly, when Kathy appraised Brad's teaching, she raised some concerns about whether his students were making "connections," which she referred to as "getting to the middle." Brad's students had researched their families' histories and then attempted to connect them to core democratic values. Kathy reviewed Brad's hypermedia case and offered this appraisal.

> ... he said well, what core democratic value do you see in your family and I just didn't get the... I wasn't sure that there was, I felt like there should've been something in the middle, to get to that point.... I didn't feel like the connection was being obvious. I felt like there was a step missing. It went from this to this.

She also said that she thought Brad had done (with core democratic values) what "... a lot of teachers might do... just stick it where they think they can stick it." However, Kathy seemed to suggest that she would do the same thing when I asked her to explain more about what she meant by connection.

> ... there needs to be a direct relationship, an apparent connection, something the students can see why they're learning this, in whatever timeframe they're looking

> at. So for example, if I'm teaching about the 1920s, I might wanta throw something in, address one of the core democratic values in the context of prohibition or the 19th amendment or something like that.

It was not clear how throwing "something in" would help students see "why they're learning this" when "just sticking it in" wouldn't help them either.

Her statement also contains more evidence as to what she apparently meant by connection; "something" that informs students about why they are learning content. A bit later, she added, "And it needs to go both ways, to the past, this is why it's important to study it in the past, and this is why it's important for me to study it today." She thought that her students not understanding this middle "something" was the biggest problem in teaching her own unit, especially with one group whose issue was a new school rule that banned backpacks. Kathy's own frustration that this group did not understand what she wanted them to do was a dominant theme in the final interview. For instance, she told me how they didn't understand how Rousseau would view banning backpacks through the lens of core democratic values, which in the following statement appears to be the "middle something" referred to previously.

> Well, how are we gonna know what Rousseau thought about the banning of the backpacks? They didn't have backpacks, and it's like, you know, they weren't getting that middle. They weren't getting to the middle.

Although it is by no means clear, perhaps Kathy meant that students were not seeing the issue of backpacks in ways that an Enlightenment Thinker would in their own time. Or perhaps her own conception of history was challenged by the ideas she and her students were struggling with in this unit.

Kathy's lack of clarity about "connections" was apparent in an exchange she had with Brad during the final online meeting. Brad asked Kathy to elaborate on what she meant by connections after she said she may not have been "making the connection (to core democratic values) obvious enough to my students." She replied, "connection to their lives." When Brad asked what about the connection was difficult for students, Kathy responded surprisingly, "I do not think the connection is difficult"; rather, she said, she needed to "state the connection rather than leave it implied..." This was contrary to what she had told Lisa earlier, "That was something I did not want to do." Following up, Brad asked Kathy if students didn't "see justice in their lives," or was it that they had just never "thought about it...?" Kathy's response was contrary to what she had told Lisa earlier about the difficulty students had making connections, as well as what she told me in the first interview about her goal of helping students make connections on their own.

> I do not think they have a hard time seeing it in their lives. I am thinking more about content. I teach US History and Global STudies West. When I teach about events in history I tend to take for granted when I think of cdvs. I want to make those connections more obvious in the future. When relating it to current issues in their lives....it becomes imperative to structure instruction in such a way that will remove them from their personal biases.

In the final interview, Kathy talked about how the group that focused on the backpack issue did not understand how core democratic values were connected to the issue. Contrary to her assertion that making connections to their lives was not difficult, this group had had difficulty connecting the core democratic values to their lives. Kathy differentiated core democratic values from content as if the core democratic values were

not an integral part of the history students were learning. Kathy seemed to hold disparate and contradictory ideas about what constituted connections (was it core democratic values or some indefinable "something") as well as how the process of making connections could be facilitated (through her or through students?) Thus, it was hard to discern any coherence in her ideas about connections as the program concluded.

Kathy's ideas about what she would do in the future to improve her teaching about core democratic values were also somewhat vague and contradictory. In the final online meeting, I asked Kathy and Lisa what they would change about their units after considering their focus students' ideas about core democratic values. Kathy said that because most of her students had not developed understanding during her unit, she would "definitely change the complexity of the issue." In the final interview, I asked her a similar question. Her reply seemed straightforward.

> I think that the introduction and explanation of what was gonna happen should be changed. I think I need to be a little more explicit. ... In a way that tells them that they need to focus, like more on the... like that there is something that they're gonna do next.

This change complemented her notion that she should make connections "obvious" for students. She explained how she did this during her unit as she worked with the backpack group.

> I mean, I had to draw, like I had to stand there and explain that the only thing that's gonna connect these two things, these enlightenment thinkers and the issue that you have today is the core democratic values. You need to go through that to get to the other side. And then they said oh, I get it.

However, when I asked Kathy about how she would change her instruction after examining the other teachers' cases, her ideas were unclear, and even contradictory. First, she said that Brad's case made her think that the connection needs to be obvious and that he was "pulling two things together and not...[making the connection obvious]." She thought Lisa's instruction was similar to her own which she described as a "three-step progression."

> Taking the ideas, the core democratic values, and then an issues or a something like monopolies, you know. But then she went the other way.

It was not clear from her response exactly what Kathy meant from this because there was no evidence in Lisa's case that she had even taught about core democratic values in her unit, other than in the first iteration of her plan where she wrote that "choice" was related to core democratic values. It is also not clear how Lisa's instruction was a "three step progression." Rather, she also appeared to be "pulling two things together..." This was implicit in what Kathy later in the same interview about Lisa's teaching.

> And I think that the way that like her going from the concept through the values and then giving an example is she was doing the teaching. ... it's almost like she was telling the kids the connection... I just wanta say that like the difference, in making the connections, who's making it for who. Could be stronger if you go at it when the kids are doing more of it.

In the period of a few minutes, Kathy's thinking had come full circle. She began by saying that she had learned that she needed to make connections more obvious to students and wound up where she had been at the beginning of the program suggesting

that students should make connections themselves. Her ideas about how to accomplish this goal were unclear. It was difficult to ascertain what Kathy meant when she talked about strategies, such as using phrases like "pulling two things together," "three step progression," and "go through that to get to the other side."

Thus, the professional development appears to have kept the issue of "connections" in the forefront of Kathy's thinking even though she didn't make great strides in the developing the concept.

*Kathy's Ideas about the Teaching for Understanding Framework*

Some of Kathy's statements at the conclusion of the program suggested that she had developed a beginning understanding and appreciation of the *Teaching for Understanding* framework. For example, she had ideas about how the framework could improve her instruction in the future, in particular, how it could help students make connections and how it could help her develop coherence in her teaching. However, Kathy was still working through ideas about this new approach to teaching. Although some of her statements suggested that she had begun to understand and value the framework, other statements suggested that this understanding was contradictory and incomplete. For example, Kathy still confused different principles of the framework, and mistakenly believed that she had already incorporated most of these principles into her teaching.

*Beginning stages of understanding and appreciation of the framework.* In her responses to the two cases that I asked teachers to revisit and assess using the *Teaching for Understanding* framework as a sort of rubric, Kathy demonstrated that she was developing an appreciation and understanding for some of the principles of the

framework. For instance, she did not think the first case, *With Liberty and Justice for All*, would "satisfy the TfU framework." Her reasoning was that she did not see any "... apparent connections to the student's lives," and as it was not "real authentic" she was "afraid of the depth of knowledge that students will come away from it with." She continued:

> I think that the TFU framework ensures that students will make connections to achieve that depth. At the end when students are asked to answer the "critical thinking" questions I think the teacher is getting at the connections. I think the performance aspect of TFU, if the students were asked to do something with the conclusions they drew it would be a lot more rewarding.

In her response to the second case, *Social Studies Meets Technology*, Kathy thought the teacher in the case had designed and enacted a unit that was "... in accordance with the TfU framework." Kathy's reasoning was that the unit allowed students to "DO something" with what they had learned, it was connected to students' lives, and it allowed students to answer the question, "Why are we learning this?" "Connections to students' lives" is an attribute of generative topics, "Why we are learning this" can be answered with understanding goals and "doing something with what is learned" is a performance of understanding.

In the final interview, Kathy told me how the framework affected how and what she planned. She said the one thing that the framework made her take note of was "making your goals clear to students." Although this suggested that Kathy understood and appreciated the value of communicating goals to students, she had intentionally decided not to communicate goals to students during this unit. She explained this by

saying that students in this class were overly concerned about "points" and getting assignments completed. Kathy did not seem to really know why this was so except that these students were freshman and that "there are kids at different levels." To resolve this dilemma, she used a strategy that she knew was not compatible with the framework.

> Do this and then I'll tell you what you're gonna do next. You know, and I kept thinking back, like this is violating the framework, you know, by me doing that. But... it just, I didn't know how else to do it with the attitudes of the kids that I was working with.

This strategy was puzzling in light of Kathy's concern about students making connections. Reasons that explain Kathy's actions are unclear, but one may be that she found some of her students intimidating to the degree that she allowed them to chart the direction of the class.

> Yeah, I just, I just had such a hard time because they were putting so much pressure on me not to do what I was doing. Like not to do the thinking that I wanted them to do. But to do the actual product. You know what I mean? And I think that it was . . . it was just really hard because I kept struggling with like how should I approach it? Should I let them run what I'm doing? You know, should I let them go ahead and see if they still do it? But I just had a hard time with that.

Despite the dilemma Kathy encountered as she considered using understanding goals, she still affirmed her support for the framework. However, this support was accompanied by some confusion about particular elements of the framework as well as their attributes. In the final interview, I asked her how using the framework had affected how and what she planned. In a puzzling response, she first told me the thing she noticed

"especially with this class" was "making your goals clear to students... is that throughlines or is that?" I responded, "understanding goals." She told me she used goals "a lot" with her history students. "I mean, I lay out a whole unit and this is what we're going to do at the end." Kathy had not understood that the authors of the framework recommend communicating goals regularly throughout a unit of study, not just at the beginning. It is also not clear that what Kathy meant by "lay out a whole unit" was congruent with understanding goals. Moreover, as mentioned above, despite recognizing the importance of communicating goals to students, Kathy told me "With this class, I don't like to do that."

Later in the final interview, when I asked Kathy what most appealed to her about the framework, she told me it was "throughlines," because that's "where the connections come." However, it was not clear whether it was "throughlines," "understanding goals," or "generative topics" that Kathy was thinking about. She said this principle of the framework had made her think that "there are some things that make more obvious connections, more time periods, more eras, more issues, than others."

Despite this apparent misconception, this part of the framework had caused her to think about teaching Global Studies West differently in the future. For instance, she said that if she was "...teaching about civil disobedience and protests," ... she would "use Vietnam as ... my one thing," and "just focus on like one theme." Kathy said focusing on this theme would enable students to make connections to what they learned in past classes, and that the theme would be "interesting because they'll know people, it'll have a connection to their lives." She also said she could connect this to civil rights in a similar way. Kathy's ideas complement attributes of generative topics, but she apparently

confused generative topics with throughlines because of a conversation we had had. She reminded me that I had told her not to worry about including throughlines in her unit plan if she found this principle difficult to figure out, but she told me, "... that was the one I liked the most." However, her reasons for finding this element of the framework appealing lead me to believe that she was talking about generative topics, not throughlines. Despite her confusion, Kathy appeared to have found something about the framework that made sense to her that could possibly affect the way she taught in the future.

*Problematic case analyses and misunderstandings about the framework.* Although parts of Kathy's case responses indicate some understanding of the *Teaching for Understanding* framework, both responses were problematic because Kathy read details into each case that were not there, and ignored others that were. For instance, Kathy said the teacher in *For Liberty and Justice for All* did a good job "giving evidence of how the lessons went." However, there was no such evidence since this "case" was a lesson plan. Kathy also didn't think that the lesson required students to "do something" with what they learned.

The lesson actually required students to demonstrate what could be seen as performances of understanding; e.g., to explain an answer, to discern advantages and disadvantages of various rights, to connect contemporary issues to the *Universal Declaration of Human Rights*, and to assume a position on one of those issues. In her response to the other case, Kathy failed to note that the teacher adjusted her lesson based on her students' ideas about what was going on in the lesson. One way of interpreting this teacher's actions was that she was engaged in ongoing assessment, the principle of the

framework to which Kathy devoted little, if any, time. Kathy's short exposure to the framework was probably a factor in these uncertain analyses, but fatigue may have been another factor. Kathy sent me her case responses at 10:41 PM on the same day that her students had presented their final unit projects. She told me that she was "... so exhausted both physically and mentally I can barely stand it!"

Although Kathy's case responses suggest a beginning understanding of the framework, other data suggests that Kathy still had ill-defined or incomplete ideas about *Teaching for Understanding*. These misconceptions were particularly evident when she talked about her own practice. For instance, in the final online meeting, Lisa asked Kathy whether she found the *Teaching for Understanding* framework to be useful. Kathy responded affirmatively.

> I did find TFU useful. I think that the framework forced me to look at the coherency aspect of my teaching. Most of the other components (assessment, standards, goals, etc) I already did.

Contrary to her assertion, the data indicates that Kathy did not employ these components as she enacted her unit in ways suggested by the framework. Rather, she had written appropriate understanding goals in her plan, but withheld them from her students. She also had not practiced ongoing assessment as she taught her unit. Her use of standards was actually contrary to what the authors of the framework suggest – to use standards as guides to planning. Instead, Kathy had appended them after finishing her plan rather than using them as a guide to planning. Although Kathy sensed that coherence was missing in her teaching, it was clear that she had not understood that coherence in teaching was an

outcome resulting from the integration of all of the principles of the framework in teaching, and not a separate component.

### *Conclusions*

Rather than developing clear ideas about how to teach core democratic values using the *Teaching for Understanding* framework, Kathy's ideas were in a transitional state by the end of the program. She was more aware of two aspects of her teaching that could improve: clarifying expectations for students and changing the way she structured inquiry activities to help students make connections among issues, content, and their lives. Although this was an indication that she had developed a beginning understanding of the framework, she also had misconceptions about the framework that might or might not lead to better understanding in the future.

In addition, she had instructional problems in her teaching that prevented her from experimenting with some elements of the framework. Although some data suggested that Kathy recognized these problems, at least on one level, there was no evidence that she had formulated possible solutions. Many factors affected Kathy's response to the program: the timeframe of the program, demands of first-year teaching, and her lack of expertise in classroom management, subject matter, and teaching.

## Lisa Stuart

Lisa was a first-year teacher at Powell Senior High, a large school located in an affluent suburb on the urban fringe of the same large metropolitan area as Kathy's school. She majored in political science in college and taught a combined course in civics and

economics to tenth grade students. Before the program began, Lisa used a textbook and activity driven approach to teaching that was, for the most part, not consistent with the *Teaching for Understanding* approach. She did not express well-articulated ideas about teaching about core democratic values, and her ideas about teaching and her teaching practice were sometimes inconsistent. Lisa did not devote very much time to the primary intervention, the *Teaching for Understanding* framework, or the content, core democratic values during the professional development program. Rather than promote inquiry, or help students apply what they learned, her activities kept students occupied, somewhat interested, and cooperating. Her teaching did not change during the program, but after the program concluded, it was evident that her ideas about how to teach about core democratic values had developed somewhat, in that she decided she should learn more about core democratic values, teach them differently in the future, and use standards differently to design units.

### *Lisa's Ideas Before the Professional Development Program Began*

In order to explain whether and how any changes in Lisa's ideas about how to teach core democratic values were in response to the professional development program, I gathered baseline data before the program began (before the *Teaching for Understanding* framework was introduced) to see how Lisa's approach to teaching compared to the *Teaching for Understanding* approach. Data consisted of an audio recording of a lesson she taught and I observed, two interviews, her responses to two cases about teaching core democratic values, her interpretation of the state standard about core democratic values, and communications between us during the first week.

Due to problems with technology, I completed only part of a second interview with Lisa, and she did not respond to questions that I sent her by email. Thus, data about Lisa's initial ideas about core democratic values are limited.

In the following section, Lisa's ideas at the beginning of the program about how to teach core democratic values are presented, using the *Teaching for Understanding* framework.

*Generative Topics*

For the most part, Lisa did not construct or think about topics related to core democratic values in ways suggested by the authors of the *Teaching for Understanding* framework. In order to choose topics to teach, Lisa said she used the "main objectives" from the civics textbook and notes from her freshman year introductory political science course. These included constitutional principles, such as "federalism and the three branches of government,"[3] which she referred to as "the basic fundamentals of, of, you know, political science." She said a majority of kids had heard of these topics. She contrasted these topics with topics she had encountered in other political science courses she took in college that she characterized as philosophical in nature that "maybe three or four kids have heard . . . of things like that." Thus, it appeared that students' familiarity was an important criterion for choosing topics, despite the fact that she told me in the same interview "kids say this (civics) is boring and 'we learned this in 8th grade'." Lisa did not connect learning about potentially challenging philosophical ideas such as core democratic values to learning about how government functions in our democracy.

[3]A document distributed by the state department of education includes "constitutional principles" such as federalism and separation of powers, along with "fundamental beliefs" such as liberty and equality under the general heading of *Core Values of American Constitutional Democracy.*

Lisa's approach to teaching civics (reading the textbook, answering questions, and doing fun activities to break up the monotony) did not lend itself to generative topics. Because she perceived that students were disinterested in topics she chose, she developed "fun" activities. For instance, in one of the lessons mentioned above, Lisa asked students to first write definitions of core democratic values in their own words and then draw pictures to depict the meaning of each value. As part of their study of the *Bill of Rights*, Lisa had students write and perform jingles as a "great way for them to learn the amendments and kinda have it stick in their head," as well as remind them of their significance "ten years" from now. She said these were "phenomenal presentations where they brought in beat machines and some kids sang country music songs and they did jingles, like off commercials from television." Other topics that Lisa taught and attempted to connect to core democratic values during the period of the professional development program were taken from the textbook and included microeconomics, macroeconomics, costs and benefits, supply and demand, personal budgeting, and the "wonderful world of credit cards." As enacted, these topics appeared to be unrelated to students' experiences and concerns, an attribute of generative topics. These topics, as she taught them, also did not relate to any enduring controversies or modes of disciplined inquiry, nor did they connect to ideas within and across disciplines. Unless there was more to the lessons than she described, and that I observed, then these topics, as they were enacted, were not generative.

*Lack of subject matter knowledge limited Lisa's ability to design generative topics.* Lisa told me she had her students write definitions of core democratic values during the week just before our first interview, apparently so that they could memorize

definitions of the core democratic values for the state social studies test. However, in response to a follow-up question, when I asked about her interpretation of the state standard she told me about a class discussion regarding equality where students had pointed out that "it is difficult to have one concrete definition." Lisa said that is what makes teaching about core democratic values difficult.

Her acknowledgment that teaching about core democratic values was difficult may explain why Lisa apparently had not developed generative topics about them, and also suggests that she may not have known much about them. According to authors of the framework, teachers need to understand the structure of the subject matter in order to identify generative topics and understanding goals central to their discipline. This may be another reason Lisa was unsure about how to develop generative topics – nothing she said during this initial period led me to believe she had a good understanding of core democratic values. Instead, her ideas about the values were muddled and uncertain. For instance, she told me that students "have a really hard time with, you know, critically thinking and analyzing, you know, what is life or what is liberty," but her response to that problem did not seem to be designed to help them develop those skills. Instead, she had them "stand up and do a pledge allegiance to the flag" to portray patriotism – which she called a "common sense" way to learn about core democratic values.

That her teaching strategies were limited to using symbolic representations to portray complex abstractions in the activities she designed for her students suggests that she was struggling with the meaning and implications of core democratic values as much as were her students.

In her interpretation of the state standard about core democratic values, Lisa wrote that the values were the "fundamental" principles that our country was founded on, and that in order for students to understand historical documents, such as the *Declaration of Independence* and other foundational documents, "he/she needs to have a good understanding of how these values relate to how our country had evolved."

What she avoided or missed in her interpretation of the standard is key to understanding how to use the standard to plan a unit about core democratic values. The standard states that "All students will explain the meaning and *origin* (emphasis mine) of the ideas..." (Michigan curriculum framework, 1996) obviously suggesting that students learn about the history of the ideas, in order to explain how they connect to the foundational documents and history of our country. That Lisa omitted this most important phrase in her interpretation of the standard as it relates to students' understanding, suggests again that she may have been uncertain about the historical roots of these ideas.

Lisa mentioned another instance where she led a student discussion about equality, but only related this core democratic value to a recent historical event - the Civil Rights movement, with nothing about the historical roots of the idea. In her response to the case, *Social Studies Meets Technology: Reflections of a First-Year Teacher*, Lisa wrote that the teacher in the case, Julia, had not "explained how the *Bill of Rights* relates to the core democratic values." She suggested that Julia should "examine each core democratic value ahead of time and provide ways that the students could incorporate them in the project." Lisa's suggestion that Julia could "explain" how the core democratic values are connected to the *Bill of Rights* suggests a lack of appreciation for the

complexity of the ideas woven into the core values and a somewhat naïve notion about how students could come to understand these complexities.

In her response to a question about the second case, which was a lesson plan that had students comparing the *Bill of Rights* and the *Universal Declaration of Human Rights*, when I asked her which core democratic values she would focus on if she taught the lesson, she wrote "liberty, the pursuit of happiness, the common good, and equality. I think these values lend themselves to each document rather clearly since they are used periodically in each." However, none of these values are explicitly "used" in the *Bill of Rights*, and, although a case might be made connecting these values to the amendments, particularly "liberty and equality," attempting to connect the "common good" and "the pursuit of happiness" to the amendments might prove more difficult.

These data suggest that Lisa had only a superficial understanding of the *Bill of Rights*, that her own knowledge and understanding of the roots of ideas in the core democratic values was uncertain or incomplete, and that she was somewhat confused about what the standard regarding core democratic values required of students and her. Thus, even if Lisa had had a clear idea about what generative topics were, she probably would have found it difficult to construct topics about core democratic values since her grasp of the subject matter seemed tentative and uncertain.

Lisa saw core democratic values as moral guides to everyday living rather than abstract constructs that related to practical matters in complex ways. She asserted that students could not learn to become good citizens in school. This made the notion of learning about core democratic values in school extremely problematic. She said core democratic values were difficult to teach, but suggested that by having students engage in

concrete actions like standing and reciting the *Pledge of Allegiance*, students would come to understand them. Thus, Lisa's conception of these values seemed to be more in the realm of concrete understanding rather than abstract, analytical, or historical understanding.

*Understanding Goals*

Lisa told me that her goal for students was "to try and make it so that they can understand, you know, why they are learning social studies and how can we apply it to the real world." However, her other ideas and her practice suggested that she did not really understand what students should come to understand about core democratic values, nor did she know how to frame goals that would lead to understanding. Lisa used the word "understanding" a number of other times during this initial period to refer to students' learning, but it was not clear what she meant by "understanding." For example, when I asked her how her political science background helped her teach civics, she responded, " . . . civics, they want, you know, a good general understanding of the federal government and federalism and the three branches of government and how they, they interact and how they apply."

*Lisa's goals for students were for knowledge acquisition, not understanding.* The *Teaching for Understanding* framework asks teachers to write goals that identify what is most important for students to understand about a topic. Instead of doing this, Lisa identified what she wanted students to know by using objectives in her civics textbook to plan her lessons, and then she supplemented those with her own activities that she collected from various sources.

I asked Lisa to provide an example of her teaching that would help me understand how she made sure students understood why they were learning social studies and could apply what they learned to the real world. She told me about a lesson where students wrote "plain definitions" of core values and then, to "portray" the values, they drew pictures, for example, "for life...a newborn baby, or...a tree."

Although this activity was supposed to "enhance the students' learning," it was not clear how this would help students understand why they were learning, or how they could apply what they learned to the "real" world. Instead, the rationale for this exercise seemed to have been to help students remember definitions. This was an activity designed to enhance students' acquisition of knowledge, not understanding. The activity mentioned above about the *Bill of Right,* where students wrote jingles to help them remember each amendment, seemed to have had the same underlying rationale, and would probably not support students' understanding of the "importance" and "significance" of the amendments, as Lisa suggested they would, "ten years down the road."

When I asked Lisa what a social studies lesson looked like in her classroom, she told me she lectured, and focused on "vocabulary, you know, developing understanding and applying them in reference to like review questions." Despite her use of the phrase "developing understanding," Lisa's students apparently engaged in traditional kinds of textbook exercises that, according to the authors of the *Teaching for Understanding* framework, are not likely to develop students' understanding of complex subjects like core democratic values.

I asked Lisa about the importance of standards. She said they provided her with a way to figure out what it was she was supposed to be teaching – "you're teaching this

because of this reason." She also told me she wished she had learned how to create a basic lesson plan in her methods course that made it clear "why are you teaching this?" However, she said using standards would help her identify what students needed to know for the state social studies test, not to identify specific understanding goals connected to a generative topic, which is the purpose of using standards to develop goals in the *Teaching for Understanding* framework.

*Affective learning goals that do not necessarily support understanding.* In addition to knowledge acquisition goals, Lisa frequently emphasized affective goals such as making sure what she taught was relevant to students' interests, that they were comfortable, and that she was making "learning fun" to relieve the monotony of studying civics through lectures and the textbook. Both activities that focused on core democratic values previously described were apparently intended to relieve students' boredom. In the same context, Lisa also mentioned the long 85-minute periods called "blocks" that her school's scheduling was based on, which she said necessitated constructing activities that allowed students to "get up and get involved." She followed this by saying, "in my classroom, they sit on the floor, they you know, get in their groups and they feel really comfortable to get into it." When I asked her what kinds of learning outcomes she expected from her students, she told me that she had "high expectations," and that she solicited feedback from her students in order to "go about developing the lessons and the units, to make it so that the kids are enjoying it and are learning the material at the same time."

My first observation included an activity that seemed to be designed more to enhance students' enjoyment, than to enhance their learning or understanding of

economics. Following a brief lecture, students worked in an exercise where they told about choices they made during their spring vacation that illustrated the concept of "opportunity cost." A group of boys sitting next to me spent most of this "work" time primarily engaged in a risqué conversation about girls, while at the same time completing what appeared to be a rather undemanding exercise. Later, students sat in a circle, threw a ball to each other as a way of turn taking, and recounted their stories. I was unsure whether students' responses were appropriate or not, since I have little understanding of economics. Whether Lisa thought they were appropriate or not was not clear, but she did not question any students' response; she simply thanked them and went on to the next student.

Lisa's approach to teaching about core democratic values was somewhat simplistic and indicated that she did not possess a very good understanding of the values herself. This suggested that Lisa was unsure about why she should teach core democratic values, and because students were bored, she deferred to affective, rather than to genuinely intellectually challenging learning goals.

*Performances of Understanding*

Lisa's goals for students' learning were based on objectives gleaned from her textbook. These objectives required that students learn something, rather than requiring them to do something with what they learned. According to authors of the *Teaching for Understanding* framework, what Lisa's students were doing was not developing or leading them toward a demonstration of understanding. The authors of the framework assert that students must do something novel with what they learn in order to develop and demonstrate understanding. Lisa's students were writing and memorizing definitions

about core democratic values and presumably reading the textbook and answering questions about both core democratic values and the *Bill of Rights*, since she said she regularly used the textbook. She supplemented her lectures and textbook exercises with activities where students would "apply" what they learned. However, her students were not demonstrating understanding.

For example, in the lesson where her students had "focused on" core democratic values, they had been required to develop "plain" or "working" definitions of the values. During my first observation, Lisa distributed lists of these definitions. She told students the lists would help them prepare for the test required by the state that all students would take during the next year of school. As this class ended, a group of girls sitting next to me practiced reciting the definitions from memory. To enhance their learning, Lisa had them draw pictures representing the core democratic values. She related an example: "When you talk about popular sovereignty, they do, they drew pictures of a lot of people holding hands saying that, you know, the power of the people. That's what, you know, our democracy's all about." In effect, all that students did was designed to help them remember and regurgitate information, not to demonstrate understanding.

Although she demanded little that was challenging from her students in most of the activities she designed, a few activities might be considered "quasi-performances" of understanding. She told me about two different occasions where students discussed or debated topics that were related to core democratic values – "equality" and the Elian Gonzalez case. However, in the case of the discussion about equality, Lisa simply said students liked to "share their personal opinions." This also appeared to be the case when students discussed the Elian Gonzalez case; "...the kids went crazy with that... and a lot

of them were very adamant and they said that in no way, shape, or form should he have been here in this country as long as he was." It was not clear that in either case that students had researched these topics, or were expected to support reasoned or informed opinions - something that would be required of a performance of understanding - despite Lisa's assertion that "regardless of how old they are, they know what they're talking about." Rather, they were topics that were informally discussed on Fridays during "current events." However, this kind of activity at least suggests a performance of understanding – it demanded more of students than simply recalling information or constructing symbolic representations of complex ideas. Her description also suggests that students were interested and engaged in these discussions.

Since what her students were doing was not closely connected to important understanding goals, Lisa's students did not have the opportunity to develop and demonstrate understanding although they were engaged in performances designed for that purpose. The activities described above did not require students to "reshape, expand on, extrapolate from, and apply what they already know," nor were they likely to challenge their misconceptions, stereotypes, or tendencies toward rigid thinking, all attributes of performances of understanding (Blythe, 1998). Instead of being connected to important cognitive goals, these activities seemed more connected to affective goals for students, and even those may have also been pitched at a lower level than was appropriate for them. Lisa seemed to be unsure about exactly what was, and what was not, appropriate to require of her students.

In her response to one of the case studies I asked her to examine (*Social Studies Meets Technology*), Lisa questioned whether 8$^{th}$ grade students might find the assignment

"overwhelming." Students in the case researched one amendment in the *Bill of Rights*, and wrote an analytical paper about a controversial issue in which they had to decide what it meant to interpret their amendment strictly or broadly, and why people would disagree about interpretations. Given the amount of time and structure this teacher gave her students, and even though she was not completely satisfied with the results of her unit, the assignment appeared to be appropriately challenging, contrary to Lisa's suggestion that it might be overwhelming. In fact, the state standard used in the professional development program suggests activities that are loosely equivalent to this assignment at the middle school level. When asked if she would use the same assignment, Lisa said she might, but that she would have to "adapt it to meet the specific needs of my students and keep in mind the difference in grade levels." This statement, combined with what her students actually did, suggests that Lisa really did not have a clear idea about what was age appropriate, and what was not.

However, other data suggests that Lisa might also have wanted to design lessons where students were expected to demonstrate performances of understanding if she knew how. In the second interview that took place online, I asked her to tell me about an approach she might use to teach about core democratic values based on her interpretation of the state standard on core democratic values. Though vague, her response suggests requiring something more challenging from students than the activities she had told me about in the first interview or of what I had observed.

> The types of approaches I would use would be developing a cooperative group assignment where each group explores one of the ideals and makes coherent parallels to things that we have learned in class and possible their prior

background knowledge. I might have the student develop questions surrounding the values. i would type out those questions and ask the students to try to find the best answer by using their text, the internet, primary documents, class handouts that explains how they came up with that answer. The student answer could get a prize or an extra credit point on the next test.

One could see students both developing understanding as they engaged in this activity, as well as demonstrating understanding as part of some culminating activity.

In her response to the second case (*With Liberty and Justice for All*), and a question that asked how she might teach the lesson outlined on the web site, Lisa used the terms "compare," "contrast," "explain," "elaborate," "develop arguments," "debate," "figure out what is being stated, and why," and "role play." These terms all suggest how students can go beyond what they have learned to develop understanding. Lisa suggested that students could get pictures "off of the Internet," that depicted each right. She went on to suggest something somewhat different from what she had previously described about her own assignments. She wrote that students could write a comment that "summarized the students [sic] rationale in choosing the pictures and how they related to the ideals." While perhaps only a "mini" performance of understanding, this still suggested some differences in Lisa's thinking about what students should do to demonstrate what they had learned. This suggests that Lisa may have had a beginning sense of the need for performances of understanding, but could only express this understanding in less complicated environments than in her own teaching, such as her interpretation of the state standard, and her responses to the case.

*Ongoing Assessment*

Lisa's ideas about assessment were quite traditional and vague. When asked how we would know if students had learned about core democratic values, she suggested giving them a quiz or a test. She did not indicate that she had a system for regularly assessing students' understanding of core democratic values that cohered with her goals for students' learning and what they did to achieve those goals.

While Lisa suggested that she used rubrics to help guide students' learning, it was not clear that she had a solid conception of what a rubric was or how to use it as an assessment instrument. In the *Bill of Rights* case, she wondered if the teacher had been able to assess students' learning. The teacher had provided a rubric that outlined for students what they had to do in order to get a certain grade. Apparently, Lisa was unsure about how this instrument could be used to assess students' learning, and wondered how successful students would have been if they had been given a test "over the CDVs ?"

For an assignment in which students were required to write a paper on affirmative action, Lisa provided students with a rubric that suggested more concern with form than with content. The specific criteria in the rubric were to have a topic sentence, three paragraphs, and a conclusion. However, Lisa only suggested vague criteria for assessing the position students assumed and defended on the topic of the paper, affirmative action: "I should know by reading the paper how you feel about affirmative action . . . whether it's good thing . . . it's a bad thing . . . (and) justification as to why." Her ideas suggested that Lisa was unsure about how a rubric could not only be used as a guide for students, but also for their self assessment and teachers' assessment of their work. Lisa ideas about assessing this paper also suggested that she saw only two ways to think about affirmative

action – good or bad. This left her with no strategy for assessing students' ideas that might fall outside this dichotomy and reflect more complex perspectives on the issue.

Other means suggested by Lisa for assessing students' learning about core democratic values were ambiguous. Her response about how she would implement ideas contained in the state standard on core democratic values where she would have students "find the best answer," and "get a prize or an extra credit on the next tests," suggests that Lisa was unsure about how a teacher would assess students' learning of such complex subject matter.

Despite her assertion that she thought learning about core democratic values was important, Lisa's ideas about how we could assess whether students had learned about them were vague and simplistic, " . . .you can assess them by doing a quiz but usually when they do the activity, I have a tendency to walk around and, and talk to the kids about them." The latter part of this statement suggests assuming a role similar to that of a "floating coach," a role and strategy advocated by the authors of the *Teaching for Understanding* framework for ongoing assessment of students' learning. Nevertheless, Lisa's ideas about how to assess students' learning about core democratic values were either vague, or relied on traditional methods of assessment.

*Summary*

Lisa's ideas about how to teach core democratic values before the professional development program began were primarily textbook and activity driven. However, occasionally her ideas (e.g., her ideas about the lesson on the *Bill of Rights* and the *Universal Declaration of Human Rights*, or her ideas about engaging students in

discussions about important issues that interested them) were more congruent with a *Teaching for Understanding* approach.

*Interim Period: Lisa's Responses to the Professional Development Program*

Although her teaching did not change during the program, Lisa may have begun to think about ways to teach that differed from the approach she currently used. Data collected during the interim period – the actual professional development program – included audio recordings of two lessons that Lisa taught and that I observed, a videotape of a lesson and an interview that she recorded, artifacts of her focus student's work during a unit on economics, transcripts of online communications, including email and online meetings, and my field notes. Data also included Lisa's work, including two iterations of her unit plan, her reflections, and the hypermedia case about her focus student.

*Skimming the Teaching for Understanding Framework and Applying it Superficially in Planning but not in Teaching*

Lisa did not examine the framework closely enough, or perhaps understand it well enough, to make a serious attempt at using it as a planning and teaching tool. During the unit she taught, there was no evidence to suggest that she applied any ideas in the framework to her teaching; instead, she stuck firmly to an approach she had already established.

After the program began in earnest, I sent Lisa a program plan on May 15th that outlined in detail the activities that teachers would engage in during the program. Her response was to send me an email message that said the program plan was "a bit overwhelming," but that she had "looked over the TfU framework..." and that she would

look it over again "and see what I can do." A few minutes later, she sent me another message in which she told me she had "basic ideas (for her unit), and I know what I have to teach..." and that she would "look forward to your assistance on this one..." Lisa told me she would teach a unit about economics.

Responding to her request for assistance, and sensing that a unit about economics and core democratic values might be difficult to plan and enact, I found a number of online resources that I sent to Lisa the next day that I thought might help her think about constructing and teaching her unit. I also suggested that she contact Kathy, one of the other teachers, to get some ideas on teaching this unit since I knew that Kathy enjoyed and seemed confident about teaching economics. Lisa emailed me a couple of days later telling me she would work on an outline and that she was "thinking about figuring out a way to incorporate the cdvs' [sic] in monopolies/antitrust laws. Possible [sic] explore what recently happened to Bill Gates." She said she would "explore the sites" I sent and let me know something in the "near future."

Except for this email message, however, there is no other evidence to indicate that she examined or considered using any of these resources. Instead, when I received her plan a week later, it was evident that she was continuing to teach the same textbook based unit on economics she had already begun before the professional development program. She was already into the fourth week of a six-week plan! Instead of using the *Teaching for Understanding* online planning tool to plan her unit as I had requested, her plan appeared to be constructed with the method she told me she used in our first interview. She had used the textbook as a guide for planning and jotted down an outline that included brief reflections about what she had already taught. Lisa's "Big Theme" for her

unit was "Choices and Challenges." Under the heading "Theme:" she wrote, "I believe the concept of CHOICE lends itself very well (to) the core democratic values of liberty, justice, equality, and promoting the common good." This was the only place core democratic values were mentioned in the plan. She did not elaborate on how the connection between the four core democratic values and the concept of "choice" would be made.

*Contrasts in plans.* After receiving her plan, I emailed Lisa and asked her to try to use the Collaborative Curriculum Design Tool to plan her unit, even though I realized she had already taught most of the unit. My rationale was that she might learn something about *Teaching for Understanding* that would prompt her to at least experiment with the framework for a few days. The plan she constructed in response to my request was somewhat different from the first plan, but retained the same overall "textbook and activity" approach, but without the textbook assignment and page numbers included. Under "Throughlines," Lisa wrote behavioral objectives, although she did include one that sounded vaguely like an understanding goal – "Students will fully understand how costs and benefits relates [sic] to economics and life decisions."

The rest of the plan was designed to facilitate a mixture of affective goals and knowledge acquisition objectives, mainly through "a wide variety of different group and partner activities..." Students would "acquire knowledge," "describe and demonstrate economics concepts," "will learn how not to be afraid of economics." In one activity, students played "musical chairs" to learn about scarcity – which Lisa wrote, "...students have loved playing... It breaks up the monotony of lecture and cooperative group assignments."

There were some indications in her plan that Lisa was thinking in directions that might lead her to adopt more of a *Teaching for Understanding* approach. Under generative topics she wrote, "Students need to understand their role in the economy," and "Students need to gather a better understanding of what economics is and how it affects our society...and realize the importance of being educcated [sic] and informed." Under "Ongoing Assessment," she indicated the importance she attached to her assessments, traditional as they were, writing, "This enables students to really think about what they are learning and how he/she can convey what they have learned to the class." Finally, she wrote, "Participation is a key to determining who is learning and who might be having difficulties. I make it a point to 'travel' throughout each class to ensure students are on task and able to answer basic questions surrounding a key concept or term."

Although the latter part the second statement does not necessarily complement *Teaching for Understanding* ideas about what should be understood by students, both statements capture some of the meaning of ongoing assessment and imply teachers' careful attention to what students are saying and doing as they act as sort of a "floating coach." Whether her use of the online planning tool prompted her to phrase this statement in this way is not clear.

The plan constructed with the online planning tool cohered in ways that her original plan did not. Her original plan was a potpourri that consisted of textbook assignments and questions, guest speakers, videos, time allotted for state standardized testing, activities such as one designed to illustrate "diminishing marginal utility," where students chewed more and more gum until they couldn't take it any more, worksheets, journal topics on articles from a news magazine that seemed peripherally related to

economics, if at all – "priceline.com" and "out-of-control parents when it comes to their children's athletics," etc. There were no rationales provided in her plan that explained why students would be learning what was planned or why they would be engaged in several cooperative group activities.

Only one assignment in the original plan suggested a *Teaching for Understanding* approach. In a "student driven" activity, students engaged in a classic debate where they had to research both sides of an issue and be prepared to argue either side. Lisa called this activity a "mock hearing," "The US Vs Bill Gates." Afterwards, students had to write an essay in which they explained what they knew about monopolies, what they had learned from the activity, and "what are their views on monopolies [sic]." With more of the principles of the framework applied to the planning and enactment of this unit, it might qualify as a *Teaching for Understanding* approach. Interestingly though, there was no data to indicate that Lisa had actually used this activity in her unit after the program concluded.

In contrast, Lisa's plan constructed with the online planning tool was more straightforward and coherent in ways that her first plan was not. Though it was sort of an odd mixture of approaches, and reflected traditional notions of planning more than it did the *Teaching for Understanding* model, it communicated why Lisa intended to teach what she planned. In this plan, she also used many more words and phrases that suggested a *Teaching for Understanding* approach such as "understanding," "alleviate," "misconceptions," "learn from each other," "really think about what they are learning," "determining who is learning," and "who might be having difficulties," etc. There was a

qualitative difference in the two plans that distinguished one from the other, with the plan constructed using the online planning tool possessing more clarity and purpose.

Thus, the data suggests that Lisa paid scant attention to the program plan since she initially failed to follow the procedures outlined for using the online planning tool to plan her unit. In addition, she apparently only gave the framework a fleeting look, or did not understand it, as her plan, with the exceptions noted above, mostly resembled her original plan. Nonetheless, the exceptions may be significant in that they showed her ideas moving in a different direction than what seemed apparent in her first plan, though assessing how significant this change was is purely speculative. It may be, that because of other factors, engaging in intentional planning was one instance where Lisa could begin to think about and experiment with some of the ideas in the framework, though her plan suggested she had only begun to skim the surface, and her teaching didn't reflect much understanding of those ideas, if any at all.

*Core democratic values: avoiding the content.* Though Lisa indicated otherwise after the program ended, there was no evidence from my observations or from artifacts of her teaching or students' learning to indicate that she made any attempt to integrate core democratic values into her unit. Her original unit plan did not include standards, and though the one she planned with the online planning tool did, she neglected to include the standard on core democratic values from which teachers were to plan their units. The only exception to this omission was in data from the interview she conducted for her case study with her focus student, Ann, when asked a few questions about core democratic values. However, in the interview that Lisa videotaped, Ann seemed to be completely stymied when asked about the connection to core democratic values and economics, the

subject of the unit she had just studied. Ann looked uncertainly at some notes that she apparently used to help her think about questions that Lisa asked her about core democratic values and economics. However, these notes didn't help her answer Lisa's questions. Besides demonstrating no understanding of core democratic values, Ann's understanding of most of the economics unit also seems to have also been problematic. Thus, it appeared that Lisa was only able to address the *Teaching for Understanding* framework to plan her unit and address the content of the unit, core democratic values, in a most tentative and superficial way.

*Enacting the Unit: Repeating Patterns*

During the professional development program, I observed each teacher two or three times. This was so I could get an idea about how they implemented the ideas they developed using the *Teaching for Understanding* framework to plan their units about core democratic values. Since Lisa did not include core democratic values in the plan constructed with the online planning tool, and because there was only scant evidence to indicate that she had integrated core democratic values into her unit at all, neither my observations nor the videotape that she provided to me reveal anything about what she thought about teaching core democratic values. However, there may be some value in knowing what was going on in her classroom during this time in order to offer an explanation in Chapter 5 about why she avoided teaching about core democratic values.

The following are my accounts of those two lessons, and the lesson that Lisa videotaped. They reveal that Lisa persisted with the same approach that I observed during the initial period of the study, before the professional development program began. She continued to lecture, students used their textbooks, and were engaged in short cooperative

learning projects and large group activities designed to help them apply what they learned in the lectures and in textbook assignments. There were a couple of exceptions to this pattern: Lisa showed a video about economics, and she had a guest speaker talk to her class about women in politics.

*May 24: creating a business.* When I arrived in Lisa's classroom for an observation, her students were taking a test. The test took about forty minutes to complete. Afterwards, Lisa delivered a brief lecture on economics. She used overheads that had various types of businesses (proprietorship, partnership, etc.) and their definitions written on them. They appeared to have been copied directly from the textbook. For each term, Lisa gave an example, but when she came to "monopolistic competition," she simply read the definition and moved on quickly. This suggested to me that she didn't have an example. Lisa told students that it is a myth that companies are only in business to make a profit, and not to serve consumers. Her statement provoked no questions or discussion from students. All of Lisa's questions had right, wrong, or "fill in the blank" types of answers; none were open-ended or provoked much comment from students. As Lisa began to lecture, students seemed attentive and appeared to be taking notes. However, only eight minutes later, after apparently having copied what was on the board, students began to fidget in their seats, shuffle paper, and whisper to their neighbors.

One student asked whether, if a married couple owns a business, it is considered a proprietorship or a partnership. Lisa said she thought that would still be a partnership because "what happens if they get a divorce?" Her answer indicated that Lisa didn't know the subject matter well. The student's response to her answer was simply to say,

"oh;" no one else challenged Lisa's assertion. Her knowledge about economics apparently came from the same place as students' – the textbook.

Lisa explained the next assignment, "Creating a Business" to students and told them they would vote on who created the best business and that that person or group would "get a prize." Their goal was to "individually or in small groups (no more than 3 people), organize and describe a new business," that fit into one of the market structures she had explained in her lecture. Whether students would choose "monopolistic competition, " seemed problematic to me since the definition she provided, "a market situation in which many sellers offer products to the consumers," was unclear, and she had failed to provide an example to help clarify its meaning. Her students may have also have been puzzled, but it appeared they didn't care one way or the other since they didn't ask questions about it. Students did have to provide reasons why they chose the business they decided to create and speculate about its possibilities for success.

Lisa did not explain why it was important for students to learn this information or why they should engage in this activity, except to say that students always complained about having nothing to do in their town and that now was their chance to do something about it. This appeared to be another activity where students supposedly "applied" what they learned, but developed little or no understanding of important issues in economics. There was no mention of core democratic values during this lesson.

In order to hear what students were planning, I put a tape recorder microphone on a desk in the middle of one group, which apparently made them uncomfortable. One student said they had to "watch what they said." This led me to wonder what they would have talked about (or how they would have talked) had I not recorded their conversation.

They were not on task; they talked about the size of their school, their lockers, and very quietly talked about relationships. They indicated to me that they were having a hard time brainstorming an idea about creating a business. Students were engaged in this activity in the most superficial manner. When they were off-task, their conversation was cheerful and animated, but when they talked about the assignment, their talk was listless and unenthusiastic. Lisa stopped by their group to help them think through their task, but the bell rang and they got up to leave.

This observation suggested that Lisa's knowledge and understanding of the subject matter she was teaching students was superficial and incomplete. The activity she designed for students had little relevance to their lives or to their interests. It appeared that *Teaching for Understanding* framework had nothing to do with her planning or enactment of this lesson. In fact, it was not until later, on May 30th, that she constructed her plan using the online planning tool. She also asked me about how the case study about her student's learning should be designed, indicating that she had not read the program outline that I sent to teachers suggesting how this could be done. At this point, Lisa did not appear to be engaged in the professional development program at all.

*May 31: "creating a business" presentations, and personal budget activity.* This class session began with two groups of students presenting businesses they had created. Their presentations were perfunctory and generated no questions or discussion from other students. Lisa asked one group to add information about their business that they had neglected in their presentation, but other than this, her only comments were "interesting, or thank you." Some of the students seemed ill at ease presenting, perhaps because their presentation was being videotaped. After viewing these presentations, I could not help

but feel that students were not engaged in intellectually challenging work; rather, they seemed to be going though the motions in order to get a grade, and not because they were interested in, or enjoyed completing the assignment.

After the presentations were completed, Lisa explained the next activity, "Personal Budget Assignment." In the directions Lisa gave to students she wrote, "You are a 25 year [old] college grad with a yearly budget of $25,000 a year after 1/3 of your salary has been taken away for taxes. Your job is to plan out how you will spend your money." She then listed various items that students would have to account for in their budgets, such as a car, housing, food, insurance, etc.

In the videotape, Lisa cut to a shot that spotlighted her focus student, Ann, and her group. However, although other members of her group could be heard, Ann and a neighbor, Bill, who worked alone, were the only students who could both be seen and heard.

Ann and her group had decided to be roommates and pool their resources. They alternately stayed on task and casually chatted about other things as they engaged in this discussion. For instance, when they discussed whether they should have pets or not, they launched into an extended discussion of "dogs, cats and goldfish" stories that were completely irrelevant to the assignment. Bill, who appeared to be their friend, worked alone, but sat nearby and listened carefully to their discussion. He frequently interjected comments, suggestions, and stories of his own. What was somewhat striking about this was that he appeared to be completing at least the first phase of the assignment in an expeditious manner while staying engaged with this group, helping them keep the chit-chat going, and alternately advising them how to complete their budget. When Lisa came

by to check on their progress, they made a half-hearted attempt to appear to be on task. Lisa listened to their plans and made comments like, "interesting," and sometimes asked questions, but never inquired very deeply into what the students were doing.

This lesson revealed the same pattern that I discerned in the other two lessons I observed: Students' learning did not appear to be connected to important questions, issues, or topics. Rather, these lessons and activities appeared to be associated more with a "life-skills" curriculum, than a curriculum that challenged students to think in ways that developed real understandings about economics. The lesson mimicked genuine types of inquiry or research based learning, as did all of the other lessons I observed. Students did have something to investigate, for instance, discussing how much an apartment would cost in San Diego or London, but these investigations seemed superficial, as well as intellectually unchallenging. Students cooperated to a degree, but engaged in their own personal interests whenever they could. Their subterranean curriculum was always evident whenever Lisa was out of earshot. In fact, students paid no attention to me whatsoever as they talked about anything (and in any manner) except the assignment they were supposed to be working on. This was not a lesson where either *Teaching for Understanding* or core democratic values was evident.

*June 2: "personal budget" presentations, and "the wonderful world of credit cards."* On this day, students were to present their personal budget assignments. Most groups' presentations consisted of reporting a laundry list of budget items based on prices they found in their research on the Internet. These presentations might be considered a kind of "performance of understanding," since students had to make evaluative decisions about how much money to allocate for both necessities and luxuries. However, these

were only superficial performances of understanding, if at all. They were not tied to understanding goals that students were made aware of, other than Lisa's telling them that they might have to know how to live on $25,000 a year when they got out of college.

This seemed an unrealistic expectation for most of these students anyway. My sense was that many of these students would probably be making more than that after graduating from college. Most came from wealthy families where expectations would probably be for them to pursue the same kinds of high income generating careers that their parents had. On a previous visit, one student had casually told the class about visiting Boston over spring vacation to "check out" schools like MIT and Harvard as potential places to attend college. One group budgeted so that they would be able to buy luxury items such as "Extreme TV," motorcycles, cell phones, Palm Pilots, etc. Lisa's feedback to these students was simply to say, "OK, gentlemen, you think you're going to be able to afford all of that?" No one questioned this group's choices, nor did anyone comment about them. In fact, there seemed to be an air of disinterest among all of Lisa's students regarding this activity. While students were presenting, others were still working on posters they were preparing for their presentations.

After students had finished presenting, Lisa delivered a lecture on credit. Once again, students took notes, with the same air of polite disinterestedness that characterized their participation in the class on previous visits. As this class ended, I glanced up at a small poster on the wall I had not noticed on my previous visits. The sign read, "Teach young people how to think, not what to think." The irony of this sign impressed me after having observed a lesson that was not likely to promote that goal.

However, it also made me wonder whether Lisa wanted to teach in ways that would promote that goal, if only she knew how.

*Two other examples of Lisa's teaching.* The data I collected included Lisa's reflections and her focus student's reflections about the unit Lisa had taught. This data reveals two other instances in Lisa's teaching during this period that are noteworthy because they illustrate how Lisa was struggling to teach civics and economics. Perhaps because of an apparent lack of subject matter knowledge needed to teach these courses, Lisa "filled in" with supplementary activities when she could, and also gave students time to do homework in class in order to "fill in" time. These activities were also apparently designed to keep students at least interested enough so that they their behavior did not get "out of hand."

The first instance was a video about economics that Lisa showed to her students. Apparently, this was not a successful activity, as Ann, her focus student, wrote in her journal,

> Today we watched a rather boring Economics video. I understand that we need to learn certain terms yet a more recent video would be better. I like it when we have time in class to work on our homework so that we can ask you a question.

The second instance illustrates how Lisa's students apparently enjoyed discussing and debating issues. Ann recorded the following in her journal about a guest speaker that had visited her class,

> State Representative Jean Dubois came and spoke with us today. She was very interesting! I learned a lot about how the local and state governments work. We also had a debate. I enjoy when we have debates in class because I am able to

learn about both sides of an issue.

This lesson also prompted the only unsolicited reflection I received from Lisa during the professional development program. Lisa told me that her students really enjoyed the speaker and the opportunity to debate an issue they were interested in – whether they were for or against a state funded scholarship that was tied to results on a state achievement test. Lisa said it had been "an enjoyable Monday..." There was no evidence to indicate that Lisa's students had been required to have "informed" opinions, just that they enjoyed debating and discussing, which they apparently did on a rather frequent basis. Therefore, despite the fact that her students enjoyed these activities, there was no evidence that they were addressing understanding goals that were tied to generative topics. Instead, this is additional evidence which indicates that Lisa was doing whatever she could do to cover content that was boring for students, and at the same time keep them happy. Again, though there may have been an opportunity to discuss the four core democratic values in the context of students' debate about the state scholarship, Lisa had not addressed them.

*Classroom Management Issues*

There was considerable evidence to support the assertion that, despite appearing to be reasonably well-behaved and courteous young people, Lisa's students could also behave in inappropriate ways if they wanted to. For example, on my first visit I forgot to tell Lisa that her principal had told me that Lisa would have to have her students sign a consent form (which gave parents' consent for students to participate in my study) which I had written, instead of one that she had done and which the students had already signed. The period was almost over when I told Lisa this, so she hurried out of the room to make

copies and asked me to ask students to remain in the room when the period ended. When Lisa's request was relayed to students, one student said, "She can kiss my ass, I'm not staying." Amid the buzz that this announcement had generated among the students, a couple could be heard to say in a smart aleck way, "I'm not staying," or "I'm leaving when the bell rings." When I listened to a tape recording of this class session, I was surprised to hear a group of boys sitting right next to me engaged in a conversation about girls in which they used very coarse language that one would not expect to hear from students sitting next to an adult. At least I didn't expect it!

On two other occasions, I observed situations that led me to believe that Lisa may have had trouble with her students as well, though she never said anything about it to me. On both of these occasions, Lisa's students were either working on group activities or she had given them time at the end of the period to complete their work, and they became quite loud. When this happened, Lisa exclaimed quite empathically, "Strike one!" and then later when they became loud again, "Strike two!" I never heard her say, "Strike three!" so apparently whatever consequence followed that final warning was enough to deter her students from further rowdiness. I deduced from this that she had had problems in the past, or at least had anticipated them because she had devised a strategy to deal with them should they arise. This was also further evidence that Lisa's students were not very engaged in their study of civics and economics, at least not to the point where their enthusiasm for the subject matter overcame their desire to engage in boisterous conversations, or just to chat about relationships, pets, consumer goods, food, or "talk dirty." I believe it was one of the reasons she strove to find activities of any kind to keep them "at bay."

With the exception of planning, the data about Lisa's teaching during the professional development program reveals nothing to indicate that she addressed the *Teaching for Understanding* framework or the content, core democratic values. Instead, data from this period of the program is similar to data gathered at the beginning of the program that suggested that Lisa had a limited understanding of the subject matter she taught, and that her activities were designed, at least in part, to keep her bored students happy enough so that they did not become a problem.

*Lisa's Ideas as the Professional Development Program Concluded*

To explain the development of Lisa's ideas about how to teach core democratic values at the end of the program, I gathered data after Lisa finished teaching her unit. The data consists of her reflections on her unit, her case study about her student's ideas on core democratic values, her response to the case, *Social Studies Meets Technology: Reflections of a First-Year Teacher*, an online meeting with other teachers, and a final interview.

Lisa's ideas about how to teach core democratic values had developed in some ways by the end of the program, but they were still muddled and uncertain. That there was any change in her ideas was surprising since her responses to the professional development program appeared to have been limited. However, her ideas about how to teach core democratic values were still not congruent with a *Teaching for Understanding* approach. Despite this, she seemed to have started to develop some insights about her teaching that may be important to the development of her ideas in the future.

*Lisa's Ideas about her Unit's Effect on Students' Learning*

As the program ended, Lisa seemed to be mulling over the effects of her unit on students' learning about core democratic values. She vacillated between asserting that they had learned something about them and admitting that perhaps they had not. This uncertainty is evident in her reflection on the unit she taught about economics that she emailed me just before the program ended.

> In regards to the CDV's, I have tried to relate them to various key terms. The theme of the unit is economic choices. How does Economic Choices relate to justice, equality, liberty, and promoting the common good? The major focus of these was discussed when the class focused on the various types of businesses. The idea of a monopoly and the Sherman Antitrust Act proves how the government has regulated how certain businesses have tried to control a certain industry. When students explored the different types of markets, such as traditional, command, market, mixed, they could make the connection of liberty, equality ,a nd [sic] promoting the common good. the idea that consumers are in control of the economy by making decisions on what to purchase, when to purchase, and the role of government in the economy show that individual choices are important to the success of an economy. I hope this clarifies things for you. It has beeen [sic] extremely difficult to make a connection.

Her uncertainty about the effectiveness of her teaching increased as the program concluded. In her reflection on the case study she conducted about her student's learning core democratic values, she wrote, "The idea of incorporating core democratic values to economics became an extremely difficult task." Her ambiguous assertion that, "There

were a few aspects of my unit that could relate..." contradicted her realization that Ann, her focus student, "had a really hard time trying to tie the core democratic value to 'choice'." Ann's response made Lisa wonder, "...if any other students could makes [sic] any connections to Core Democratic Values."

She also talked about the difficulty her students had connecting the core democratic values with economics concepts in the final online meeting with me and the other teachers, Kathy and Brad, as well as in her final reflection and interview with me. In the interview she asserted, "...I've realized that a lot of kids learn what the values are but they have difficulty with trying to apply them to whatever it is that we're learning in the classroom in reference to concepts and things like that." Despite this realization, she still expressed some confidence in at least part of her approach, "...the first initial project that I do with the kids focusing on core democratic values I think is a good beginner..." This statement reveals her continuing ambivalence and uncertainty about how to teach core democratic values.

*Lisa's Ideas about Improving her Teaching about Core Democratic Values*

Lisa's ideas about how to improve her teaching included expanding on approaches that she currently used that did not reflect a *Teaching for Understanding* perspective, while at the same time thinking about alternatives and speculating about how the *Teaching for Understanding* framework might play a role in the development of future units. For instance, in the final interview, she told me that, in retrospect, she wished she had thought more about how to integrate core democratic values in a way that would help students make connections between core democratic values and what they were learning about in economics on their own, rather than taking them through the

lesson step by step. In the final online meeting, referring to how she had taught core democratic values, Lisa told Kathy, "I dislike the idea of spoon feeding my students." In the same meeting she said, "I will make some significant changes of some of my units so that I ensure that my students are really learning the CDVs [sic]."

However, Lisa's solutions to the instructional problems she identified, while revealing a need to change, did not reflect much change in her thinking about how she would teach. In her thinking, she still connected teaching about core democratic values to helping students learn "concrete" representations, instead of complex abstractions. In the final interview, in response to my question about what she would do differently in her unit, she said,

> I need to elaborate more, like during my lecture and during the different activities to make it so the kids can concretely apply them themselves, rather than me having to tell them, okay, well, this, this activity or this concept applies to the core democratic value of liberty...So I think maybe if I have some sort of... I don't know if it's gonna be like a worksheet or a framework or what...that might give them a better opportunity to learn them fully, rather than just learning them to memorize them for a quiz or a test and to, you know, not think about them again in the class.

Later, in the same interview, Lisa said examining one of the other teachers' cases made her think that she needed to "plug in" more of a variety of activities, such as having students construct a web page. She seemed to be unable to envision a different kind of teaching than the one she had already used even though she had come to a realization that her students had not learned about core democratic values using these same approaches.

Lisa wrote in her reflection in her case study that she wanted students to know the fundamentals of American government including core democratic values when they left her classroom, and also that they would "leave out with other coping skills" such as "cooperation, work ethic, social skills, critically thinking skills." Lisa's failure to make a connection between learning about core democratic values and critical thinking skills suggests that she didn't really understand the attributes of either. According to the authors of the *Teaching for Understanding* framework, learning about complex ideas like core democratic values, beyond rote memorization and simple representation, requires the use of complex thinking skills that lead to understanding. Apparently, Lisa's understanding of teaching had not developed to the point where she could incorporate the development of complex ideas into her practice. The only concrete idea that Lisa had for improving her teaching about core democratic values was to "...revisit them (core democratic values) over the summer and make sure I know them before I teach them again..."

*Lisa's Ideas about the Teaching for Understanding Framework: Developing Coherency.*

Lisa's ideas about the *Teaching for Understanding* framework after the program concluded were vague and hard to gauge. She talked positively about the framework, writing, "The TFU framework was useful," suggesting that it had helped her reflect on how she could have focused more on how to help students make connections to core democratic values on their own, rather than making the connections for them. In her reflection on her case study, she wrote, "In regard to using TFU as a framework, I believe it helped me to thing [sic] about what I was teaching and why I was teaching it." She repeated this in the online meeting with Kathy, Brad, and me, "The framework really

made me question the coherency between what I was teaching and why I was teaching it." How the framework helped her do this was not clear.

What she did not say about the framework, however, made it clear that she had not examined the framework closely enough to identify ways that specific principles in the framework did cohere. For instance, in our final interview she told me, the framework "...wasn't difficult to implement..." but on the other hand, she told me when she was using the Collaborative Curriculum Online Planning Tool, she "was kinda clueless as to what I was supposed to put into it..." In another contradictory statement, Lisa said she found that much in the *Teaching for Understanding* framework was already familiar to her since she had used the same prompt questions found on the online planning tool in her own planning. Although she may have phrased questions in ways similar to those found in the framework, it was clear from her plan and her teaching that the questions did not mean the same thing as they meant in the framework. It was also apparent that, despite her comment that the *Teaching for Understanding* framework had been "useful" and that it had made her think more about why she was teaching what she was teaching, she apparently hadn't taken the time to examine the framework very closely. Despite her vagueness and apparent unfamiliarity with the framework though, something about using the framework to teach about core democratic values had prompted Lisa to start thinking about "coherency" in her teaching. This was some tentative evidence that Lisa's ideas had begun to develop, if not actually change.

*Thinking about Using Standards Differently.*

The idea that standards could play a more important role in her teaching was an idea that Lisa talked about before the *Teaching for Understanding* Framework was

introduced. How her participation in the program influenced these ideas is not clear, since her use of the standards in her unit seemed superficial. In her reflection on her case study she wrote, "I realize how important it is to figure out which specific standards I plan on covering prior to developing a unit. In the past, I usually figure out what I believe is the most important concepts to cover and then tie in the various standards." In her plan, she appeared to have used the latter method, rather than the former. In fact, she did not include the standards themselves, only their number and titles, "1. Strand IV. Economic Perspective, 2. Standard IV.1 Individual and Household Choices, 3. Standard IV 4. Economic Systems, 4. Standard IV.5 Trade" leaving the reader puzzled as to why she used those particular standards. She did provide a hyperlink to the online version of the standards where the full text of the standards could be read. What was more puzzling was what she did not include in her plan. She omitted the standard from which all of the teachers were supposed to have planned their units, the standard about core democratic values!

Following her statement about standards, she wrote somewhat incongruously, "I realize that Core Democratic Values is something I should try to tie into each unit so that students can make connections between what they have learned from Civics and apply it to Economics." Whether and how this statement was related to her previous statements about standards was not clear. Perhaps she thought standards could help her figure out what to teach as well as providing a rationale for teaching it.

Nevertheless, after the program had concluded, she said using the *Teaching for Understanding* framework "made it so it was a little bit more specific, especially when you talk about adding in the standards..." The difference in her ideas about using

standards because of her participation in this program is conveyed in what she said after that statement,

> I think about the standards but I also think about what I wanta cover and sometimes I think about what I wanta cover before I even look into the standards which is something that I know as a result of using the teaching, the framework, that that's something that I need to work on, is focusing on the standards and then trying to see, you know, how I evolve from that in making my, what I'm teaching better and more concrete.

What Lisa was struggling to say in her statement was something we talked about informally on one occasion that was not recorded in an interview. We were talking about the *Teaching for Understanding* framework and why I asked her to include standards. In the explanatory text that accompanies the standards component of the *Teaching for Understanding* online planning tool, the authors of the framework argue that teachers should use standards to plan from, rather than simply appending them to what they already plan. The idea is that using standards in this way can help teachers identify generative topics and understanding goals. I reiterated this idea in our conversation. Lisa apparently liked this idea, and although she did not incorporate it into her planning, she indicted that she might do so in the future.

### *Conclusions*

With the exception of standards, Lisa's ideas about the *Teaching for Understanding* framework were somewhat vague and contradictory. It was apparent that the framework had not helped Lisa think about how to teach core democratic values in the context of economics. When I asked her if she might use the *Teaching for*

*Understanding* framework to think about how to teach core democratic values in the future, her response was tentative, "Possibly, possibly. Uh huh." My impression was that Lisa had just begun to understand the framework on a very superficial level as the program concluded. Still, the data also suggests that Lisa might be open to learning more about the *Teaching for Understanding* approach because she apparently sensed something was missing in her own approach.

## Brad Nelson

Brad Nelson was a first-year teacher at Northeast Middle School, a medium-sized school located in a working class area of a mid-size city. He had assumed his teaching position in November, after the first marking period. He majored in anthropology in college and taught American history to eighth grade students. Data collected before the program began suggested that Brad's teaching was a discussion and project-oriented approach, with a primary focus on fostering an open and inclusive classroom where students could express informed opinions, as well as feelings about a variety of issues. At times, it was not clear whether Brad valued cognitive learning goals, or affective goals, or both. At the beginning of the program (before the *Teaching for Understanding* framework was introduced), Brad's ideas about how to teach core democratic values were somewhat congruent with *Teaching for Understanding*. His ideas about what constituted good generative topics were well articulated, but other components of the framework, e.g. ongoing assessment, were absent, or did not complement the framework.

During the professional development program, Brad taught a unit about immigration where students studied local and family histories in which they attempted to

make connections to core democratic values. In some ways, Brad's approach to teaching the unit complemented ideas in the framework, but in other ways, did not. The unit he taught was loosely structured and did not cohere in ways suggested by the *Teaching for Understanding* model. After the program concluded, it was not clear that Brad's thinking about how to teach core democratic values had changed. However, he indicated that he thought the *Teaching for Understanding* framework would influence his ideas about how to teach them in the future.

*Brad's Ideas About Teaching Compared to the Teaching for Understanding Approach*

In order to explain whether and how any changes in Brad's ideas might be due to the professional development program, I gathered baseline data to see how Brad's approach to teaching compared to the *Teaching for Understanding* approach. Data consisted of an observation and audio recordings of lessons, two interviews, an online meeting, his responses to two online case studies about teaching core democratic values, his interpretation of the state standard about core democratic values, and communications between us. In the following section, Brad's ideas at the beginning of the program about how to teach core democratic values are analyzed using the *Teaching for Understanding* framework.

*Generative Topics*

Brad's ideas about how to teach core democratic values were closely related to ideas about generative topics in the *Teaching for Understanding* framework. The topics he talked about appeared to be interesting to him and his students. His topics were accessible to students and seemed to provide opportunities for multiple connections to students' experiences in and out of school. The topics and issues he mentioned are similar

to issues that interest professionals in the field, are central to one or more disciplines, and are related to enduring controversies in those fields.

*Issues and themes.* In response to a question that asked about his approach to teaching, Brad told me that he rarely used a textbook, and that his approach was "more project based or different themes or, you know, relevant ideas that are going on now that I can connect to a historical event or theme." As an example, he told me about a unit he taught about the Constitution earlier in the year. "I spent like probably a month...doing the Constitution and looking at the issues that the Framers were dealing with then and how those issues kind of are dealt with now, and I, that's how I really infuse the core values." He said that in this unit, his students were "just kinda dealing with these issues of rights, freedoms, and especially with things like the common good."

After this unit was concluded, Brad continued to have discussions with his students about issues related to the core democratic values, such as gun control, which he said students had discussed "just the other day." He told me about a discussion that focused on connections between the Elian Gonzalez case, the removal of Indians during Andrew Jackson's presidency, and "gun control and kind of this idea of force and the remove, the idea of removing Indians." In the discussion, he asked students to consider justifications used for the removal of Indians and the removal of Elian Gonzalez from his Miami relatives' home. Perhaps the attribute of generative topics that most complemented Brad's ideas was that they provided opportunities for students to make multiple connections to their own experiences, as well as in and across disciplines. Much of what Brad said about teaching in this interview and in the other beginning data

suggested that this attribute was one that was always in the foreground in his thinking about what topics to teach.

*Connections to students' experiences in and out of school.* I didn't have the opportunity to observe Brad teach a class during this initial period because on the day I observed he had guest speakers. With few exceptions, students appeared to be bored and uninterested during this presentation. When I asked Brad about whether he thought the lesson was a social studies lesson, he said, "...yeah, it was, I would qualify it as a social studies lesson. I might do it... I don't think it really, I would do it that much differently, but I would make it a little more connected." Instead of reading a list of rules, as the speakers did, he told me he would focus more on why these rules were important. He would do this by connecting particular issues that were presented by the speakers, such as sexual harassment, to other aspects of the topic "...why we have to worry about this (sexual harassment)...what's it like in other countries...compare the way men and women in this country relate to each other..." He went on to say, "...I would kinda work it more into a 'common good' type of framework, you know." Brad's ideas about teaching this topic suggested attributes of generative topics that the speakers' approach to teaching the topic did not.

Brad told me he discussed another topic with his students related to the core democratic values of equality and diversity - gays and lesbians. The event that prompted this discussion was "this case in California where there's this gay straight alliance...And I opened, I had opened this up to talking about homosexuality..." Brad told me that students had at first been "goofy" about discussing this issue, but that after only a few minutes "...they were very serious about it..." and "...in every class kids opened up

about it," for instance, relating personal stories about family members who were gay or lesbian. Referring to this issue, and others like it, Brad said, "They're messy issues and that's what America is as far as I'm concerned." Though not explicitly stated in the same way by the authors of the *Teaching for Understanding* framework, this idea seems to capture part of the essence of generative topics - they tend to be "messy" and require substantial exploration and investigation in order for students to develop positions or perspectives on them.

Brad's responses to the two online cases also conveyed ideas about topics that complemented the framework's perspective on what students should study. For instance, in his critique of the teacher's lesson in the case, *Social Studies Meets Technology: Reflections of a First-year Teacher*, Brad thought the teacher could have improved the lesson by "requiring students to speak specifically to a particular CDV and how it relates to a particular Amendment in our lives." In the other case, *With Liberty and Justice for All*, Brad suggested how he might fashion a topic from which to teach the lesson.

> For example, introduce the Universal Declaration and the *Bill of Rights* as two "guides" for citizens and then take and issue like equality. Look at how the two grant equality, and how in theory one person would be treated under law, and then look at life in the U.S. and if the UD would give a person more or less of a chance at "equality."

*Topics framed as questions.* The authors of the *Teaching for Understanding* framework point out that many generative topics can be framed as questions around which students conduct investigations. Brad's ideas about teaching seemed to complement this idea. For instance, toward the end of the first interview, I asked him

about his thoughts on citizenship education and his reply conveyed this attribute of generative topics.

> And I guess with that, I see the ways, I've heard the core values talked about and taught and it's more of what is patriotism but, you know, be patriotic. Be this, be that. And I think there are a lot of questions to be asked.

The data gathered at the beginning of the program support the assertion that Brad's ideas about what to teach resonated with attributes of generative topics. Although it was hard to assess Brad's subject mater knowledge related to core democratic values from this data, what he told me suggested that he had some understanding of issues surrounding these values. In his interpretation of the state standard he focused on how teachers could help students "explain 'justice' or 'equality,'" and how teachers could help students understand the "origin" of these values. Brad's ideas about the origins of these values were limited, however. He wrote, "If we consider the origins of such American ideals as 'justice' and 'equality" we realize that they were born from situations of great injustice and inequality – human slavery and extermination in our country's dealings with African and Native Americans." This assertion is problematic, however, since he did not consider the deeper historical roots of these ideas that extend back to, for instance, Greek philosophers and more recently, Enlightenment philosophers. Perhaps he just did not know much about them. As a result, it might be difficult for him to help students develop a more complete historical perspective on the ideas and issues associated with them.
In an online meeting designed to introduce teachers to the *Teaching for Understanding* framework, which only Brad attended, he said,

> first [sic] i'd [sic] like to know if topically I can stay with the civil war and industrialization and urbanization. it's [sic] hard for me to plan a unit, especially one incorporating CDVs if i [sic] don't know what ideas are central.

This statement illustrates how Brad thought about planning topics for students to study by focusing on some attributes of the generative topics components of the *Teaching for Understanding* model, although he did not use this terminology.

Brad conceived of core democratic values as abstract concepts that were connected to history, our democracy (especially social issues), and students' lives. He saw them mostly as vehicles for helping students understand historical and current social justice issues, although it was not at all clear how he used them to this end. This seemed to complement his vision of himself as a social change agent in his role as a teacher.

*Understanding Goals*

According to the authors of the *Teaching for Understanding* framework, understanding goals express what is most important for students to understand in a course or unit (Blythe, 1998). Unit-long understanding goals focus on what students should understand about generative topics, while overarching understanding goals, or throughlines, focus on what students should understand from the whole course. In general, what Brad told me about what he wanted students to understand complemented the idea of understanding goals in the *Teaching for Understanding* framework. Brad distinguished his approach to teaching from an approach where there are a "finite" number of things to learn. He did not negate the importance of learning specific knowledge, but suggested there was something beyond just knowing. For instance, in his interpretation of the state standard he wrote, "I tend to flinch when I hear social studies

educators say to their students that they 'should know the core values.' We need to know what they are, but also the different ways in 'how' they function in people's lives." Brad's ideas seemed to encompass goals for student learning that included both knowledge and understanding.

*Examples of understanding goals.* Brad's goal as a teacher was to "make democratic citizens"..."kids who can think for themselves, for the most part, who can look at, who can read a newspaper article...think twice about it," and "say well, what's going on here?" He also thought of himself as "an activist," whose job it was to help students "look at how we live and how our country lives critically." This theme of democratic citizenship was woven in one way or the other into everything that Brad told me about what he wanted students to understand. An overarching understanding goal, or "throughline" could be inferred from his description of the unit mentioned above "...doing the constitution and looking at issues that the framers [sic] were dealing with then and how those issues are kind of dealt with now..." to one such as "How are historical events connected to who we are today?" Though Brad did not articulate them quite so explicitly, overarching understanding goals were implicit in most of what he said about teaching about core democratic values.

In addition to the unit goal just cited about the Constitution, Brad suggested other understanding goals in interviews and his responses to the cases and state standard. In his interpretation of the state standard on core democratic values, he posed questions (which can serve as understanding goals) that suggested what students should understand about core democratic values.

> Sure justice is important in America, but the deeper issues for teachers and students should be 'How is justice served? Is it the same for all people? If not, why are some people treated more 'justly' than others?' The same question can be asked of other values. We can look at the actions of governments, corporations, and individuals and question whether they are for the common good.

Questions such as: "How is justice served" and statements such as, "Look at how the two (diversity and justice) grant equality, and how in theory one person would be treated under law," and "...why we have to worry about this (sexual harassment)" all suggest what Brad wanted his students to learn or understand.

*Understanding multiple perspectives.* In an online interview, I asked Brad about his interpretation of the state standard and why it was different from the actual text. He told me "while we have these values, the way they function is different for diff. [sic] people, and diff. [sic] groups of people." He added, "my anthro. exp. [sic] tends to make me look at a larger context and look at who these values are being proposed by and to whom." Later I asked about how he defined core democratic values and whether his definitions were different from the state's definitions. He replied,

> no, i still think justice means treating all people equally under the law, etc... and i use the defs the state gives us as starters. what's up in the air is where to go from there. [sic]

Brad wanted students to develop a much broader understanding of the core democratic values than what the document provided to teachers by the state department of education suggested they know.

An example that illustrates how Brad wanted students to understand multiple perspectives on issues was the lesson related to diversity and equality when students discussed gay and lesbians clubs in a school in California.

> And we, we looked at two opinions on it. Okay, and they're both kind of polar. Sometimes I don't like doing that because there's more than two sides. But we looked at two differing opinions, I guess, on should these clubs be in schools, yes or no" [sic]

Other examples of what Brad wanted students to understand included whether justice was served "when elian was removed" When I asked him about how he would teach the lesson where rules were being explained, his answer suggested an understanding goal, "That there are some things that we need, that need to happen to work together and, I don't know...but I would work it more into a common good kind of thing."

Brad described another instance where he was using maps to help students understand the relationship between cotton growing states and slavery, "where were the most slaves? In what states? What states had the most cotton or something and say, you know, what might, what's the relationship between the two?" This topic was related to the topic Brad mentioned when we discussed planning his unit in an online meeting in which he wanted to integrate the study of core democratic values into the study of larger questions that he wanted student to understand such as, "how the civil war and reoorg. of an economy happened." [sic]

In his responses to the online cases about core democratic values, Brad suggested what he understood the teachers' understanding goals to be, as well as what he would

want students to understand from the units. While not phrased as understanding goals, (i.e., students will understand or appreciate) his responses suggest understanding goals:

> ...let the students explore different insights to one particular right or value...ways that particular "right" was interpreted in reality...pick apart one value to see how fluid it is in reality, and in that way understand the others better...relevancy to a contested value, such as liberty or common good (gun control)...the *Bill of Rights* which may include any number of CDVs at one time...Universal Declaration and the *Bill of Rights* as two "guides" for citizens ...rights as "achievable" or "unachievable" within certain economic systems [sic]

Although Brad seemed to have clear ideas about what it was that he wanted students to understand about core democratic values, it was not clear that he knew how to frame them in ways that would inform his teaching as suggested by the *Teaching for Understanding* model. For instance, I did not gather classroom data that suggested that he communicated understanding goals to students. Nonetheless, Brad ideas about teaching about core democratic values went beyond lists of facts students should know rather than what they should understand.

*Performances of Understanding*

According to the authors of the *Teaching for Understanding* framework, performances of understanding require students to use what they know to construct new understandings about unit topics. These performances should "challenge students' misconceptions, stereotypes, and tendencies toward rigid thinking."(Blythe, 1998) Performances of understanding help students both develop and demonstrate understanding, and are closely tied to understanding goals. They require students to show

understanding in an observable way, e.g., comparing, discussing, figuring out, or explaining. Brad told me he used performance-based activities. When I asked him what he meant by this he said,

> ... something that's student, it's more student centered, constructivist, you know, creating...their performance...is the assessment. It's showing what they have learned. It's pulling together what they've learned into a whole nother new thing that I kinda leave up to them.

His description is, in some ways, similar to the *Teaching for Understanding* framework's definition of performances of understanding. However, instead of leaving it up to students, teachers using the framework would provide students with much more explicit guidance as to what is was they had to do to demonstrate understanding. His definition also does not convey the idea that performances of understanding should help students develop their understanding as well as demonstrate it.

*Three stages of developing and demonstrating understanding.* In the first interview, I asked Brad to describe a typical social studies lesson or unit. What he told me suggested that he more or less used the process for developing students' understanding outlined in the *Teaching for Understanding* framework. They describe this process as exploring the topic a bit (messing about), developing particular aspects or problems associated with a topic to develop understanding (guided inquiry), and synthesizing and demonstrating understanding in more complex concluding performances (culminating performances) (Blythe, 1998). In answering this question, Brad used the topics of slavery and Native Americans as the context for his explanation. However, it was clear from other things he said that he connected these topics with core democratic values.

But it kinda starts out that same way. Maybe the first three or four days will be kind of these preliminary things. What do you think about, what do you know about this? What does it have to do with you? And then looking at maybe some, maybe for two or three days a text. I've started using a lot more primary source things but as well as maybe I'll give them some excerpts out of a history book or a magazine or something like that. That gives what the topic. And then a couple more days of like a performance based activity...

This pattern had evolved as Brad moved away from the lecture and textbook approach that the teacher before him had used. "I sort of got, slipped out of the book slowly and went into some other things like with using primary ... source documents, some other things."

*Discussions.* Brad's ideas about how students should develop and demonstrate understanding about core democratic values generally complemented the *Teaching for Understanding* approach. Brad's rationale for using discussions as one of the primary strategies in his teaching (the other was projects) seemed to be summed up in this statement: "So I want them to kind of have a chance to deal with the way they feel about certain things and kind of... It's messy but just kind of have them sort out their own feelings about things." It was unclear from this response whether Brad considered it more important to give students opportunities to voice their "feelings," or whether he also considered it important for students to voice informed opinions, or both.

When he told me about the lesson where students discussed gun control, he said students read an edition of the *New York Times* designed for teenagers and that afterwards they assumed positions on issues they read about and then discussed. This

suggests that students were required to use evidence to support their opinions. Later, he told me that one of his goals in teaching was to have students "...who can think for themselves, for the most part, who can look at, who can read a newspaper article and say, you know, oh, and think twice about it. You know, say well, what's going on here?" This also suggests that Brad wanted his students to be able to voice opinions, or perhaps feelings, which had some empirical grounding. During the first interview, Brad said other things that suggest that his use of discussion as way for students to demonstrate understanding was more than just expressing feelings. Referring to the lesson he taught about gays and lesbians where his students discussed whether there should be clubs for gays and lesbians in schools he told me,

> But we looked at two differing opinions, I guess, on should these clubs be in schools, yes or no, and then we kind of talked about the evidence that each writer gave and why, you know, why they thought that. And we kinda broke down each argument. And really we weren't, it wasn't a lot of talking... like I feel this and this is that. It wasn't a lot of talk show mess. I mean, that's what a lot of these things degenerate into, I guess, if teachers let it. It was more of like what's this person saying, what's the other person saying? You take a position and you back yourself up.

Other instances related by Brad also suggested understanding performances. In various contexts, when we talked about his thinking about how to teach core democratic values, he used words and phrases that suggested what students had to do to demonstrate learning such as "discussing relevant issues, take a position or stand, lean one way or the other and describe the way they feel, compare, etc." In the case responses, Brad wrote

about what he observed students doing to demonstrate their learning, or what he would have them do instead. What he wrote suggested understanding performances.

> Julia's approach to teaching CDVs let the students explore different insights to one particular right or value...students gathered opposing sides to an issue and presented them as ways that particular "right" was interpreted in reality...boys' PPT presentation showed "pro" and "con" sides to the particular issue (the right to bear arms)...They then related these sides to real situations such as reasons for gun possession and gun control...pick apart one value to see how fluid it is in reality, and in that way understand the others better...requiring the students to speak specifically to a particular CDV and how it relates to a particular Amendment in our lives...discussion on these rights as "achievable" or "unachievable" within certain economic systems...

*Demonstrating understanding for those who are participating.* Classroom discussions become a performance of understanding for those who are participating (Wiske, 1998). Referring to the discussion about gays and lesbians, Brad told me that he had not required student to participate in the discussion if they did not want to but that, "... in every class, kids opened up about it."

However, Brad told me that students in his honors class did not enjoy this kind of participation,

> ...my honors kids... (want to) just put their head down and write all hour and, and I've had actually a hard time like getting (them into) a participatory mode... Other classes...they love it ...they give their own ideas and they go around and to

me, I mean, that's great. And then this class...they just want this knowledge and then they wanta get out of there...

This statement could also be an indication that Brad's description of his classroom discussions was not all that he claimed. However, since I did not observe his teaching during this period, I am missing data that could support or refute this assertion.

*Ongoing Assessment*

Ongoing assessment is the process of figuring out what students understand. According to the framework, in order to do this, teachers must establish public criteria, give students regular feedback, and provide for frequent reflection throughout the learning process. Ongoing assessment provides students with clear responses to their performances of understanding in ways that help them improve their next performances. Brad reported that he provided feedback to his students in the way the *Teaching for Understanding* model suggests, but it was not clear whether this was an established ongoing practice, or whether his criteria were always lucid and public. It was also not explicit whether the criteria were specific enough for students to know what was expected of them. However, Brad's account of his teaching implies that he did pay attention to what students were learning on an ongoing basis – they revisited assignments and reflected on their own learning, and he provided public, though not very specific, criteria for at least some of the performances of understanding he required of students.

*Criteria for performances of understanding.* Teachers should provide students with criteria by which they can assess their performances as they are developing them. Brad appeared to do this, but it was unclear how consistently he did it. As in his

descriptions of other aspects of his teaching, he conveyed these ideas with clarity at times and at other times somewhat vaguely.

When he told me about the discussion where students were talking about gun control, he described how students demonstrated their understanding. Except in the most general ways, it was not apparent exactly what criteria he used to assess these performances.

> We've been talking about gun control. I asked what Bill Clinton's stance on this and what are some of the things he wants to do... If the kids can say those things, that's just basic comprehension. And if they can take another step and say well, compared to this other person, how do they differ and then, then okay, list your own or describe your own stance and then I guess compare it with these other two. ...You can, just by their writing. I think writing's really important, looking at the level, I guess, of depth that they're trying to...

Making sure students clearly understand the criteria against which performances are assessed is an important part of helping them improve their next performances according to the framework. It was not definite how the criteria outlined in Brad's statement would help students accomplish that goal. He also outlined criteria for students at the beginning of units or lessons, (at least part of the time) as in what he told students to incorporate in an illustration about Native American origin myths ("use black and red," "include these characters," "give your unique perspective," "how well it fits the story," etc). However, he did not say what kinds of feedback he gave students as they were developing this performance in order to improve the final product.

Brad related another example of how he assessed student work when he told me about an assignment where students had to draw a political cartoon. The criterion was simply "are you getting your point across?" He said he didn't care how creative students were; if they got a point across, they received an "A." This very general kind of criteria seemed unlikely to help those students who were "less creative" improve their performances and develop "more creative" political cartoons as he said some students had done.

In some ways, Brad's ideas about assessment suggested ideas in the *Teaching for Understanding* framework. He said he gave students a variety of assessments, including grades for discussion. If this practice was ongoing and provided students the kind of feedback that would be helpful for improving future discussion, then it complemented the framework's ideas about providing continual feedback to students. However, it was not always definite that this was always the case. When I asked him to clarify how he knew students were learning and what he knew about their learning, he told me that he looked for them to go beyond simple "comprehension," to take another step and "describe your own stance." However, for some discussions, he told the whole class,

> ...you guys did very well today. I mean, you guys were giving a chance, everyone a chance to talk and I think that even though they don't go oh, thanks, I mean I think it kind of sinks in. Oh, yeah, we are doing better at this.

It was unclear how these very general kinds of feedback would help students improve future performances, though perhaps it may have made them feel better and therefore perhaps more likely to participate in future discussions.

Interestingly, in his response to the case, *Social Studies Meet Technology: Reflections of a First-year Teacher*, he suggested using more specific criteria: "I would have had more uniform presentations (all PowerPoint or none at all) that followed specific guidelines with the purpose of a larger discussion were students could debate different ways ... that CDV could be interpreted." In our second interview, which was online, I asked him how we would know if we was succeeding in our efforts to teach students about core democratic values. Brad's reply suggests that, in some ways, his ideas about assessment complemented the *Teaching for Understanding* approach, although it does not make clear how he would examine students "depth of explanation," and how they would know how to construct such an explanation.

> as i was saying, if students can actually start talking about these and their own lives that's the first big step. then I start looking at issues in society connected to their own lives and try to view that issue throught the lens of justice. "was justice served when elian was removed?" and have the kids lean one way and explain. i look at how their depth of explanation evolves over time and that gives me a pretty good indication. my kids have come from not knowing what democracy is to being able to write a page on an issue like gay-straight clubs in school. that to me shows that some of what i'm trying to do is succeeding.

A central feature of Brad's approach to teaching was to encourage discussion in his classes, and to pay attention to what students were saying during discussions. However, it was unclear how he might weave his perceptions of students' discussion skills and qualities into an overall assessment scheme.

Although there was some resemblance in Brad's ideas about how to assess students' ideas about core democratic values and the *Teaching for Understanding* approach, there were important differences, especially about how to provide feedback to students on their performances. Though there were suggestions, as noted above, that Brad did provide some kinds of ongoing assessments, the nature of these assessments seemed vague, rather than clear, as the framework would require. It was also unclear to what degree his assessments were connected to learning or understanding goals. He did not say that his students engaged in reflecting on their own and others' work, nor did it seem to be the case that his students shared responsibility for assessment. Sometimes Brad's assessment strategies were often casual and spontaneous, and at other times formal and planned.

Overall, although in some vague ways Brad's ideas about assessment complemented ideas about assessment in the *Teaching for Understanding* approach, in many ways his ideas were simply incomplete. His ideas about assessment were less sophisticated than his ideas about what and how students should learn and what they should do to demonstrate their learning. According to the authors of the *Teaching for Understanding* framework, ongoing assessment is one of the most difficult principles for teachers to incorporate into their practice when they are learning about the approach, so it is not surprising that Brad's ideas about assessment were still incomplete.

*Summary*

Brad's ideas at the beginning of the program about how to teach core democratic values loosely complemented a *Teaching for Understanding* approach, (e.g., his ideas about discussing interesting topics as means for developing, demonstrating, and assessing

students' understanding). However, because I lacked data from this period, it is impossible to know how these ideas played out in his teaching at that point. Therefore, I can only suggest that his ideas, not his teaching, vaguely suggested the framework's approach.

*Interim Period: Brad's Responses to the Professional Development Program*

Since I had limited data on Brad's teaching before the professional development program began, it was more difficult to ascertain change in his practice than it was with other teachers. However, the data gathered during the professional development program suggest some differences between what he told me about his practice before the program and what I observed during the program.

Data collected during the interim period – the actual professional development program – included an observation and audio recording of a lesson that Brad taught, a videotape of a lesson that he recorded, where I both observed and participated as a co-teacher. In addition, data included an assignment sheet, an agenda for field study activities (which I wrote in collaboration with Brad), transcripts of online communications, including email and meetings, and my field notes. Data also included Brad's unit plan and the hypermedia case about his focus students. Brad did not have students complete the projects they started during his unit, so he did not include students' work with other artifacts submitted for the hypermedia case.

Although Brad said he was somewhat familiar with the *Teaching for Understanding* before the program began, the unit he planned and enacted demonstrated only superficial understanding of the framework. With the exception of a topic that had the potential to be generative, his teaching did not reflect the *Teaching for Understanding*

perspective. The authors of the framework outline a process in which students are engaged in "messing about, guided inquiry, and culminating performances." Brad remained in the "messing about" stage as he taught his unit and as he learned about the *Teaching for Understanding* approach. As a result, his unit and his teaching during the professional development program did not reflect the framework.

Before the professional development program began, Brad and I were already involved in another online project, which was one reason he volunteered to participate in the current study. We had decided that he and his students would come to the university to construct some sort of online project using the technology facilities there. We had also briefly discussed what he might teach. I suggested that he try to construct a lesson that involved the local history of the area where he taught. After Brad volunteered to participate in the professional development program, we continued a kind of loose collaboration. I arranged for him to meet with a curator at the university museum to find out how Brad and his students might be able to use the museum's resources. Except for arranging to use technology labs, helping to arrange for field visits to the museum for his students, putting together an agenda and acting as a co-facilitator when he and his students visited the campus, my collaboration with Brad on this unit was otherwise limited. He made all the decisions about how the unit was constructed and enacted.

*Urbanization and Immigration: An Ambitious, but Incomplete Plan and Unit*

The unit that Brad constructed with the online Collaborative Curriculum Design Tool indicated that he did not understand the *Teaching for Understanding* framework as well as he had suggested in our initial interview. Although his topic was appropriately generative, "the urbanization of the U.S. subsequent to the Civil War (with an emphasis

on local contexts)," he did not include any understanding goals in his plan. The online planning tool asks the question, "What will students come to understand during this unit?" as a prompt for writing these goals. There is nothing in the data to suggest why Brad failed to write these goals, which are essential to implementing the *Teaching for Understanding*. Brad's unit also lacked ongoing assessment. In this part of his plan, he listed an amalgam of performances of understanding and understanding goals rather than strategies for assessing the development of students' understanding,

> Ongoing Assessment
>
> How will you and your students know what they understand?
>
> Rough ideas...
>
> Students will engage in a "fieldstudy" of local environs where they will have to describe what they see, taking pictures and taking note of historical sites and patterns of change.
>
> Answer:
>
> What do the industrial areas have to do with current settlement?
>
> Look at various buildings -- are they from the same period. If not, what might explain the development at various times?
>
> What evidence do we have of immigration (how have immigrants from the past left their mark?)?

Brad planned his unit on May 23, and began teaching it on May 24. The assignment sheet, "Our Community's History," outlined the activities students were asked to complete during the unit. It included brainstorming definitions such as "immigration," and "push and pull" forces, as well as the answers to questions about why

people immigrated to cities after the Civil War. Finally, students were to brainstorm about their families' origins. This was apparently to be completed as a class. The homework assignment that accompanied this activity asked students to find out about their families' histories and why they came to north Gladeville, the area of the city where they lived and attended school.

Brad did not include an example of one of his focus students' work on these activities, as I suggested when I told teachers what artifacts they might include in their hypermedia case studies. It was not clear why Brad failed to do this. Although Brad included the state standard about core democratic values in his online plan, there was nothing else in his plan about how he planned to help students develop their understanding of these ideas as they studied immigration in the context of local and family histories.

*May 24th: discussion about core democratic values.* Brad told me before the lesson in which he and his students had explored the local school environs the day before and had talked about issues related to immigration and urbanization in those contexts. He did not say anything to indicate that students had studied these issues in the context of post-Civil War history as he had planned. Instead, it appeared that he had omitted that part of his unit.

After some preliminary remarks about the activity they had engaged in the day before, Brad told students they were going to review the definitions of core democratic values they had written together in January. He had written on the board, "Core values and our lives" and then listed the four core values we used in the program - liberty, justice, equality, and the common good – beneath that. He led students in a discussion

where he elicited definitions from them, as well as examples they had previously discussed in class that illustrated these values. He wrote what they said on an overhead projector. Only a few students participated in this discussion. Brad told me in our first interview that this group, the honors group, only wanted to write and hand in assignments, and that they did not enjoy discussions. From those who did participate, this discussion elicited straightforward and sensible definitions of the four core democratic values. However, it highlighted a problem associated with the *Teaching for Understanding* framework that Brad did not address. Understanding can only be assessed for those who are participating in discussions. With only a few exceptions, Brad's students' "comprehension" of core democratic values was problematic, which was apparent as the lesson continued.

After defining the values and discussing some examples, Brad asked his students to draw a picture to illustrate the core values. Students groaned. At this, Brad told students they could look at different ways core democratic values play out in their lives – including the speakers who had visited their class to tell them about school rules and their visits to various locales in their community the day before. Students apparently didn't understand this assignment. Brad continued to try to explain how they could complete the assignment. He used the example of an industrial site students visited the day before to get students to talk about how some things about the site would be for the common good (jobs for people in the community) and other things would not be for the common good (air pollution). Brad's students still didn't understand the assignment so he continued the discussion. Suddenly, Brad dropped the discussion and the assignment and talked about students' personal history assignments. He also told students who were going on the trip

to the university that they should find an artifact related to their family history to bring with them.

This discussion had not elicited much interest from most of the students in Brad's class. One attribute of a generative topic is that students are interested and find it challenging. Neither attribute seemed to apply in this lesson. Although it seemed that Brad was trying to help his students understand multiple perspectives about core democratic values, at times, during this discussion, it seemed as if he was leading them toward his perspectives, instead of helping them to develop their own perspectives. In addition, this lesson did not cohere in other ways with a *Teaching for Understanding* approach. For instance, it was clear that Brad's students did not understand what the goals of the unit or lesson were. In addition, for the most part, his students were not engaged in performances of understanding that would both help them develop and demonstrate their understanding of history or of core democratic values. Overall, this lesson did not complement ideas in the *Teaching for Understanding* framework.

*May 31: an online museum about community history.* As noted above, I helped Brad arrange to bring thirty students, that he had chosen from all of his classes, to the university to engage in a field study day. Students met and heard curators from the university museum talk about how they collected artifacts and constructed exhibits. One curator had written a book about the history of baseball and the Hispanic community in the area of the city where Brad's students lived. He told them how he collected stories from people in the community to construct the book. Later in the day, students constructed an online "community history" museum using facilities in two of the university's technology labs. I helped Brad during this part of the lesson. At times, he

seemed a bit harried and overwhelmed, and seemed glad to get on the bus to go back to school after the day was over.

Brad asked students to bring an artifact that represented their family's history. They scanned and saved them as digital images. After writing a description of the artifact and telling why it was important, they were asked to write their family's history. Finally, they were asked to choose one of the four core democratic values and tell why they saw it as the most important in their family's history. It appeared that most students had only a flimsy idea of how to make that connection. Some of their stories were almost funny as they divided their ethnic identity into percentages (10% Irish, 20 % Italian, German 5%, etc). Others were straightforward – like the Hmong students who seemed to have a clear idea of where they came from and why. A few students didn't write stories about their exhibits and it wasn't clear why they had chosen their artifacts.

As students were working on their web pages, Brad shot video as he traveled around the lab and talked to students about what they were doing. This videotape was part of his hypermedia case. Brad asked students about core democratic values. They were questions that were hard for students to answer, such as "What motivates you?" "Tell me about your thinking as you're doing this..." and "How does this make you feel?" These questions sounded more like those a psychoanalyst would ask rather than a teacher trying to find out what students' ideas were about core democratic values. The type of questions he asked suggested that he didn't really know what kinds of questions to ask about core democratic values, or that perhaps he didn't know enough about them to ask good questions.

Brad's students only connected the core democratic values to their families' histories in vague ways, and in ways that didn't reflect any real historical understanding about the development of the ideas. One of Brad's focus students (after prompting by Brad) said that she connected justice to her grandfather fighting in a war. She didn't really seem to understand how core democratic values were connected to her family's history. Another student who brought a tortilla maker as her family's artifact could make no connection to core democratic values.

Brad didn't give feedback to students to correct misconceptions about the values or probe their explanations to help them clarify. For example, one student said his parents came to Gladeville to find jobs. He connected this to the value of freedom (liberty). Brad did not follow up to understand why he made that connection. A glaring example of not providing feedback to correct misconceptions was when one student told Brad that he and the friend he was working with were looking for an American flag on the Internet as an artifact to represent the friend's family because his family was from Michigan. He told Brad that they were Native Americans – but this did not seem to be the case. He thought that because his family was from Michigan that they were Native Americans. Brad did not probe the student's meaning, but simply went on to the next student.

In the interview with his focus students, Brad often filled in the blanks or made leading suggestions to them when they didn't seem to be able to answer his questions. At times, the interview seemed more of a "stream of consciousness" kind of psychoanalysis, rather than an interview designed to get specific ideas about the values. However, his two focus students did arrive at some interesting insights about core democratic values. For instance one said, "By the law, we're equal, but not in everybody's mind." The other one

said that core democratic values play a role in everyday life, like in the law. Both seemed to be smart students who may have been able to make the connections without Brad's help (even though he prompted them a lot) – what his other students said suggested they couldn't have made the same kinds of connections.

None of Brad's students said anything to indicate that they had learned about the origin of these ideas. They provided no historical contexts or background against which to think about how the values were connected to their families' lives. Much like Lisa's students did, they connected the values in vague, representational ways. To underscore the somewhat "scattered" and incomplete approach Brad used as he attempted to utilize the framework, his students never finished their online museum. Therefore, there was no culminating performance of understanding on which students' understanding could be assessed.

Despite his assertion that he was familiar with the *Teaching for Understanding* framework, Brad demonstrated little understanding of the framework when he designed and enacted his unit. He did not collect artifacts of his students' work during this unit, nor, with one exception, did he write reflections. He failed to respond to an online questionnaire based on the *Teaching for Understanding Checklist* that I asked teachers to complete. Thus, the data on which this analysis is based is more limited for Brad than the other teachers. However, it seemed clear that Brad's students' understanding about core democratic values was little more than that of learning definitions and connecting those with some examples. They were not able to apply what they learned in novel ways, such as connecting core democratic values to historical events (their families' immigration to Gladeville) and defending those connections with reasonable arguments.

*Brad's Ideas as the Professional Development Program Concluded*

To explain the development of Brad's ideas about how to teach core democratic values at the end of the program, I gathered data after Brad finished teaching his unit. The data consists of his unit reflection, an online meeting with other participating teachers, and a final interview. The final interview was conducted two times, since the tape recorder didn't work the first time. The second iteration of the final interview was conducted a month after the program had concluded.

Brad's ideas about how to teach core democratic values had developed in some ways by the conclusion of the program, but they were still vague and incomplete. His primary focus continued to be that of promoting an inclusive "democratic" classroom where students could investigate connections between core democratic values and their lives. One way they would do this was to develop multiple perspectives on core democratic values. He also had tentatively begun to think about teaching core democratic values in different ways, although his ideas were still very much in the formative stage. Brad was still unclear and ambivalent about the relationship between understanding core democratic values and learning content about history. In some ways, he now alluded to its importance, but his main emphasis remained on students' understanding of core democratic values in relationship to what went on in his classroom, their lives, and their community. For these reasons, although his ideas in some ways complemented the *Teaching for Understanding* approach, I concluded that they were incomplete.

*Brad's Ideas about how to Teach Core Democratic Values: Fostering a Democratic Classroom*

Brad's ideas about how to teach core democratic values at the end of the program were, in most ways, the same as at the beginning. He told me his goal was to "cultivate an inclusive classroom." In response to a question about his approach to teaching, he told me he accomplished this by "developing sort of a, you know, a little more give and take or friendly relationship" with his students.

> And just trying to cultivate respect and that translates into how I think about teaching social studies...it really focuses a lot on like if you wanta look at the core value diversity or injustice. I mean, trying to, whether it's, whether it's due to race, economics, whatever, the kids who might not necessarily do as well in a class or might not necessarily get the attention of their peers or teachers, trying to somehow, you know, let them know that, you know, that it's not always like this and just trying to even things out, I guess. And now, I just, that sounds very vague, I know, but doing activities where there's more student input.

Brad also reiterated ideas about how students could "do something about it" (i.e., what he saw as an imbalance in the social structure in American life) by going beyond the definitions of core democratic values and "looking at multiple, multiple perspectives on justice or something." When I asked him about how he thought he might promote the kinds of skills and dispositions in his students that were implied by his vision of teaching, he told me that he thought discussing issues in a civil manner was "a big part of democracy." It seemed apparent that he thought he had made some progress in this goal in his teaching.

Brad also told me that, in addition to students who could discuss issues in a respectful manner, he wanted to help students become citizens "who are trying to work for the better of their community." He said he had not figured out how to incorporate this idea into his teaching yet.

> And I, and I think that's what the core values, I mean are all about to me is empowering people and changing lives but that's not something that I can see, you know, I can see manifest itself yet. That's not something I've worked into my teaching but it's an idea I had in my head about that.

Brad's ideas about teaching core democratic values still included ideas about how he could extend students' learning beyond the classroom. In our first interview, Brad talked about an idea where his students would visit other schools and talk to students about questions that related to core democratic values such as justice. He elaborated on this idea in the final interview, but had still not decided exactly how he could go about making this idea a reality in his teaching.

> ...so things like that where there are students working with people other than those... I mean, working with each other first of all, and then working with folks in the larger community, like in the city, and then in other, in other connected communities. And it wouldn't just be, like meeting them. Like oh, what was it... You know, I just have ideas of like kids planning things, you know, like working on things in the community that are relevant to them.

Brad also said that conducting the case study on his students' thinking about core democratic values had made him think about using them even more in his teaching. He

said he thought that, if given the "space" and time, students could do pretty sophisticated thinking about core democratic values.

> ...so I would try and do more of that...using the core values a lot more and maybe not necessarily in the way that they were intended or other people use them but using them a lot more in doing, you know, the types of more investigative or, you know, looking at our own lives with the core values a lot more.

In the online meeting with the other teachers after the program ended, Brad talked about why his students focused on diversity and justice instead of the four values that were under consideration in the program, and why they seemed to have developed somewhat broader interpretations of justice. He told Kathy that he let students develop their own interpretations, and that he "basically let them run with whatever, as long as it pertained to how their family got to be the way it is." When Kathy asked if he thought his students had made connections to core democratic values, or whether they were more interested in their families' histories, he replied,

> The students were more concerned about broad histories, but after doing the project they could pigeon hole almost any CDV within their families' lives. I at first thought this was a downfall of the lesson, but shows the flex.(ability) of these ideals.

In response to my question regarding what he thought about changing in his practice after examining his focus students' ideas about core democratic values, he said there were two things he would change: One had to do with incorporating more structure in classroom discussions, the other with extending writing assignments. His ideas about

incorporating more structure in discussions were vague and tentative, suggesting that he had not thought these ideas through:

> ...you know, discussions, not necessarily doing more of them but more of... I don't know if more of a structure is right...

Later in the interview, he continued talking about a discussion strategy he used where students called on each other,

> In a few classes, it got to the point where they were, you know, they were kinda, it was, they were so foreign with it but a lot of times it came back to the students saying something and then the kids having their hands up and then like, you know, the person who just said something looking at me. And I was just like you have to call on someone, you know, and they didn't... they didn't quite, it hadn't sunk in. You know, it hadn't become a habit. And that's something I would probably try to make a habit out of more.

The other change that Brad told me he had considered was "...more long term writing." He said he already did a lot of writing, but that it wasn't cumulative. "It was like one idea for a day or two, then, you know, write a reflection type of thing. And then, on to a different topic and I didn't connect it as well as I wanted to." Although he did not connect this idea to ongoing assessment, this strategy could be used in that way.

*Ideas about the Relationship Between Understanding Core Democratic Values and Understanding History*

Brad's ideas about connecting the study of core democratic values to the study of history were somewhat vague. Studying history was a secondary concern in Brad's teaching, unless it related to his ideas about social justice, even though he was teaching

American history classes. For instance, in his final reflection, he wrote "CDVs are ideals...so as a teacher it is best to pick an era or individual (or governmental action) and discuss how it plays out." This statement suggests that Brad was more concerned about discussing social issues with personal relevance than he was in helping students make connections to core democratic values and historical events, although he alluded to history by mentioning "an era."

When he told me about his goals for connecting the study of core democratic values to students' lives, he added,

> And because that to me is like a big goal of mine. I see that as a lot more powerful than, you know, reading about George Washington. Not that there's anything wrong with George Washington, that we have things to learn about him, but, you know, I think if we talk about the ideals of early American democracy and then connect it to our lives, that's more powerful.

However, some data suggests that Brad was thinking about ways to integrate the study of core democratic values into the study of history, although his ideas were quite vague and ambivalent about how history should be studied. After examining Kathy's case, and the strategy she used to connect core democratic values to current issues and Enlightenment Thinker's ideas, he developed his own ideas about teaching that unit. His idea was to have students examine the social contexts around which the Thinkers' ideas had developed rather than just focusing on the ideas alone. This idea could become a generative topic. However, Brad's ideas about how to do this were very tentative, suggesting that he was not familiar with how historians investigate history.

...then I started thinking about how I would do something like that and I would

> sort of look at, I would look at it and I can't really think about necessarily how she did it right now but like a debated type of way and just look at the context surrounding that person and thinking about, just thinking about that ideal and not necessarily, you know, was it Locke or Rousseau but, you know, looking at the time period and thinking what was going on and what does this idea have to do with society then and now, instead of looking at necessarily the name and... But that's just, that's just kind of the way I am philosophically about, you know, ideas and people and so I think there's just people who bring things to the forefront but that's, I think that's as far as I would go in giving them credit. I don't know.

*The Teaching for Understanding Framework: "Why am I Doing This?"*

When I asked Brad about how the *Teaching for Understanding* planning tool had helped him think about teaching his unit, he responded positively about the framework and the planning tool.

> I think actually it's something I'm going to take up when I teach now, from now on, a little bit more seriously and hopefully a little more integrated into my planning because it really made me think about, okay, what am I trying to do?

Referring to the online planning tool, he said, "it was flexible enough that I could sort of plug ideas in, like here and there." He told me that he knew "it's changed me" because while planning for the summer school program he was teaching when I interviewed him, he said he kept asking the question, "Well, why are we doing this?" When I asked him if there was a particular part of the framework that helped him he said, "it was my own thinking...what do I really want to do? How am I gonna assess what's going on?"

However, it was unclear from what Brad told me exactly how it had changed his ideas about how to teach about core democratic values.

*Conclusions*

Brad's ideas about teaching about core democratic values at the end of the program had developed in some subtle ways, but overall his beginning ideas about teaching prevailed. Although Brad alluded to making connections between important historical or contemporary issues and these ideas, this did not seem to be a central focus of this teaching. His focus was on connecting core democratic values to students' lives and social action. In addition, it appeared that he did not understand the investigative strategies used by historians well enough to devise strategies so that his students could engage in similar kinds of practices in their own investigations of history. However, he acknowledged that the framework and planning tool could be useful, pushing him to question himself about purposes and assessment.

# CHAPTER 5

# DISCUSSION

In this chapter, I suggest reasons why teachers responded to the professional development program as they did. To accomplish this, I examine several factors associated with their knowledge of teaching and their novice status that appear to influence their responses. These are not discrete factors, but rather interconnected elements of a complex ecology that comprise teachers' practice. For the purposes of analysis, however, I address these factors separately.

Next, I examine four components of the program design, which as implemented, have a limited impact on teachers' learning. These components include the *Teaching for Understanding* framework, case-based learning strategies, teachers' research, and the technology-mediated environment. In this part of my analysis, I explain my expectations about what would happen and then offer an account of what actually happened. I also examine my roles as program designer, facilitator, and researcher. Finally, based on results and lessons learned from this study, I discuss the implications for future designs of professional development programs. This program was intended to be an experimental prototype, and the results, though disappointing in some ways, are promising in others.

## Teachers' Ideas Didn't Change

This study examined the following overarching and subsidiary research questions: How do teachers' ideas about how to teach about four "core democratic values" - liberty, justice, equality, and the common good - change, if at all, as they collaborate in a teacher-

research and case-based technology-mediated professional development program based on the *Teaching for Understanding* framework?

1. What are teachers' ideas about how to teach "core democratic values" before they begin the collaboration?
2. What are teachers' ideas about how to teach "core democratic values" after they have planned the unit?
3. What are teachers' ideas about how to teach "core democratic values" after teaching the unit?
4. What are teachers' ideas about how to teach "core democratic values" after examining their own and others' feedback on their research?
5. How do teachers react to, and evaluate key components of the professional development model?

Findings revealed no significant changes in teachers' ideas about teaching core democratic values, as a result of their participation in the professional development program. However, they did develop some insights into their teaching, albeit somewhat vague and tentative. None of them seemed to have learned much about the *Teaching for Understanding* framework. At the same time, Kathy and Brad, at least, seemed to express a continuing appreciation for the framework – something they apparently already felt as they entered the program. Lisa, however, appeared to still be somewhat wary of the approach to teaching suggested by the framework and only expressed mild interest in learning more about it. An interesting result was that all three teachers seemed to have understood that their teaching lacked coherency, although none of them could articulate exactly what that meant. This suggests that the teachers may have been in the beginning

stages of developing some understanding of the model, although this is by no means certain.

Results do not reveal one particular reason over others that explains why teachers responded to the professional development program as they did. Some reasons were fairly clear, while others were only vaguely suggestive based on limited findings from the study. All these reasons were connected in complicated ways and were arrayed across the complex "ecology" of each teacher's practice.

Definite reasons could be located in the design of the professional development program, which did not adequately support the development of teachers' learning. The program was too short and lacked critical components; for example, one that would have addressed learning more about the content teachers were expected to know in order to teach their students, that of the core democratic values. Teachers were also novices, who needed a type of support that would have ideally come from administrators and mentors, but that was not forthcoming. Perhaps this support would have emerged in the collaborative component of the professional development program, but that component never got off the ground and therefore was not tested.

Other reasons that were evident included teachers' limited understanding of subject matter and strategies for teaching it, lack of an informed focus on students' thinking, a variety of classroom management issues, time constraints, and their busy lives outside their classrooms.

Less definite reasons can only be speculated upon based on limited findings from the study. These reasons are connected to the part that administrators, peers, and each school's curriculum may have played in teachers' responses. Although technology was

problematic throughout the program, after the program had concluded, teachers still responded positively to its potential usefulness for professional development. How technology enhanced or limited teachers' opportunities to learn remains unclear.

## Why Didn't Teachers Teach Better?

In the following section, I explain factors that limited the effectiveness of teachers' teaching, including their lack of knowledge of teaching and their novice status that were not adequately addressed in the program intervention.

### *Teacher's Subject Matter Knowledge Limited the Effectiveness of their Teaching and the Program did not Address those Needs*

Factors that limited teachers' instructional effectiveness were (1) teachers' lack of knowledge and understanding about core democratic values, (2) teachers' lack of knowledge of teaching strategies, including inquiry strategies designed to help students learn content, and (3) teachers' lack of an informed focus on students' thinking (learner - learning concerns).

*Knowledge and understanding of subject matter.* Research suggests the importance of subject matter preparation to the development of good teaching practice (Ball & McDiarmid, 1990; Grossman, Wilson, & Shulman, 1989; McDiarmid, Ball, & Anderson, 1989; McDiarmid & Vinten-Johansen, 1993; Wilson & Mc Diarmid, 1996). In interviews and in their teaching, the teachers did not demonstrate much, if any, in-depth understanding of core democratic values, especially within the framework of the standard used to plan their units about core democratic values. The standard specifically outlines what content students are expected to know and understand. The state standard reads:

> All students will explain the meaning and origin of the ideas, including the core democratic values expressed in the *Declaration of Independence*, the *Constitution*, and other foundational documents of the United States. (Michigan curriculum framework, 1996).

Kathy's unit was the only one that directly addressed "the meaning and origin" of these ideas, but her ideas and her teaching suggested she didn't know much about them. After Kathy decided to teach about the Enlightenment Thinkers, she did not explain anything to students about how the Thinkers' ideas were related to core democratic values, nor did she ask students anything more than superficial questions about the topic. With the exception of a brief lesson where he solicited examples of core democratic values from students and wrote them on the board, Brad never specifically addressed these concepts in ways that would suggest that he had some knowledge of their historical roots. Although Lisa vaguely alluded to how she tied core democratic values into what her students were studying in economics, it seemed obvious from what she said to me and to the other teachers at the end of the program, that she found this connection to be illusory. Lisa was the only one of the three teachers who explicitly stated that she felt unprepared to teach core democratic values. However, the other teachers' ideas about core democratic values were also vague and lacked connections to disciplinary knowledge, which suggested their lack of knowledge and understanding of these concepts as well.

Teachers' lack of content knowledge was clearly one of the primary reasons they had difficulty grappling with the instructional problems posed to them in this program. However, I had not anticipated the degree to which they were ill-informed about core

democratic values, and therefore made no provisions for teachers learning about them as part of the professional development program. I had previously worked with elementary school teachers who also seemed unprepared to teach about core democratic values.

Despite this experience, I had naively expected secondary teachers' knowledge and understanding to be better, since this topic was supposedly a central focus of social studies education and professional development across the state in which this study was conducted. Including a content learning component about core democratic values would have perhaps improved teachers' ability to design and teach units. Depending on how these activities were structured it could also have influenced how teachers used inquiry strategies in their units. Overall, teachers didn't know much about these strategies either.

Kathy, Lisa, and Brad's subject matter preparation had been very different at the university. Kathy majored in American history, Lisa in political science, and Brad in anthropology. That they had different majors was problematic from the standpoint of the state standards, in that, with perhaps the exception of Kathy, they could not be expected to know what those standards suggest they know and understand, since their coursework did not correspond to the material suggested by the standards. In addition, there was apparently nothing in Kathy's academic preparation that would help her understand how to teach core democratic values – a major theme of the state social studies standards. Also, as has been suggested by at least one researcher, there is little connection between what students learn in political science courses and what they need to know in order to teach civics, the course Lisa taught (Cherryholmes, 1990).

The notion propounded by the authors of these standards that core democratic values be infused across the entire curriculum at all grade levels is highly unrealistic

given what we know about teachers' subject matter preparation. Research has documented the disconnection between teachers' subject matter preparation and their preparation in education schools (*Tomorrow's schools of education*, 1995); an enduring dilemma which persists on into teachers' professional lives and to which there seems to be no simple solutions. That this professional development program did not address this dilemma was a major flaw in the program design.

*Students' Knowledge and Understanding of Inquiry Strategies*

Teachers must not only know subject matter, they must also know how to design learning environments that help students learn content in the subjects they teach. Some commentaries suggest that teachers should use strategies that are derived from principles of inquiry in various disciplines.

> Teachers who do not understand the role played by inquiry in their disciplines are not capable of adequately representing and, therefore, teaching that subject matter to their students.(Grossman et al., 1989)

However, there is not yet a great deal of empirical evidence to support that stance. Some researchers and practioners (Kobrin, 1996; Levstik & Barton, 1997; Wilson, 2001a), including those who developed the *Teaching for Understanding* framework (Wiske, 1998), argue that teachers who are well versed in an approach to teaching history and social studies that is discipline and inquiry-based (as opposed to an approach that employs more generic strategies, e.g., decision making or critical thinking strategies), will succeed in fostering better understanding about subject matter (Bransford et al., 2000; Shulman, 1987). Research in science education has demonstrated more clearly how

students benefit from discipline-centered inquiry-based learning (Bransford et al., 2000; Brown, 1992; Wiske, 1998).

All three teachers in this study used, what at first glance might be called, an inquiry approach. Their students gathered information and used that information to construct some sort of performance. However, in the course of doing their research Kathy's students complained that they didn't know what they were supposed to be doing. This resulted in qualitatively different kinds of inquiry and culminating performances among the three groups in her class. Brad's students collected disparate and questionable kinds of information that didn't cohere in their culminating performance projects, while Lisa's students engaged in a type of "shadow" inquiry that mimicked disciplinary inquiry with research on "life-skill" questions that did not result in consequential findings or conclusions. Thus, teachers' uncertain knowledge about how to design activities that incorporated discipline and inquiry based strategies effectively limited students' opportunities to learn about the content.

Although she valued an inquiry approach to teaching, Kathy had not developed a repertoire of learner and disciplinary focused tools and strategies for teaching history, including teaching about complex topics such as Enlightenment Thinkers' ideas. Though she appeared to be interested in this content, she did not, for instance, model her interest or help students frame and refine questions that would guide their inquiries. Whether because of unresolved classroom management issues, or a lack of confidence in her own abilities to investigate and answer these questions, or because the *Teaching for Understanding* framework didn't provide more specific guidance about how students investigate history, or some other reason that did not surface during the program, Kathy

did not provide her students with the tools and guidance necessary for them to engage in historical inquiry. Thus, although she had developed an appropriate generative topic and understanding goals, she did not know how to help students develop performances of understanding based on those goals.

Lisa also appeared to be unfamiliar with tools of inquiry in the various domains in which experts have investigated ideas related to core democratic values, e.g., political science, philosophy, and history. Although she had students conduct research, this was a process of locating specifics types of information, such as how much an apartment cost in a particular city, and then reporting that information. Students were not taking the information they found and demonstrating understanding of it, for instance, some complex economic concept, such as scarcity, or of core democratic values. With few exceptions, Lisa's students' learning performances did not rise above the level of recitations.

Brad's unit was one where students were supposedly conducting an inquiry into their families' histories. However, Brad's teaching was so disjointed that it was hard to discern whether he was trying to teach an inquiry-based unit, or was simply stringing together several activities. His teaching suggested that Brad not only lacked knowledge and understanding of inquiry- based strategies, but of other teaching strategies as well. At times, Brad suddenly and illogically shifted gears without commenting on or summarizing what students had discussed, and proceeded to start another part of a lesson. In other cases, when an activity floundered, he simply dropped it and told students they could do something totally unrelated to the lesson or to learning. In his unit, Brad failed to even bring students' culminating project to closure. Thus, except for discussion

strategies that seemed vaguely inquiry oriented, Brad possessed a very limited repertoire of strategies to help students learn content, and none that suggested discipline-based inquiry.

Thus, another factor that limited teachers' ability to teach about core democratic values was their lack of knowledge about inquiry (and other) strategies designed to help students understand content. I had anticipated that teachers might have some difficulty designing activities that complemented *Teaching for Understanding* and suggested readings and sections of the *Teaching for Understanding* web site that contained examples of history teaching modeled on the approach that were inquiry-based. If they did indeed study these examples, they apparently made no impression. Including more activities in the professional development program that helped teachers gain a better understanding of discipline and inquiry based learning activities, along with time to complete them, would most likely have enhanced their teaching. However, complicating these factors was a third factor that further limited not only their abilities to teach, but to conduct inquiry on their teaching – a central feature of the professional development program – their lack of understanding of students' thinking.

*Students' Thinking about Core Democratic Values*

Cognitive and constructivist views of learning suggest that learners construct knowledge and understanding of new content with ideas that are drawn from their current knowledge and understanding. (Anderson, 1989; Bransford et al., 2000; Wiske, 1998). These perspectives suggest that teachers need to access students' ideas, assess the efficacy of those ideas, and use that information to design curriculum and instructional strategies that help all students learn new content. In doing this they must also attend to

students' subjective experiences of learning – their needs and interests. The *Teaching for Understanding* approach suggests the importance of conducting an ongoing assessment of students' understanding in order to provide them with feedback as they develop understanding.

Understanding students' initial ideas and conducting an ongoing assessment of those ideas as students attempted to learn new content proved most difficult for teachers as they planned and taught their units. Teachers' lack of skills for accessing and using students' ideas suggested they were novices in this regard; however, they were at different stages of development in understanding students' ideas and thinking about how these understandings could inform their teaching.

None of the teachers gave students much feedback on their ideas or learning performances, including feedback about misconceptions they may have held about subject matter. Teachers' ability to identify misconceptions was limited by a lack of subject matter knowledge, which in turn limited what they could ascertain about their students' ideas about core democratic values. This was problematic for the development of their students' understanding as well as teachers' understanding of what students were actually learning in their units.

Although Kathy was able to elicit some interesting responses about core democratic values from her two focus students when she interviewed them, she did not probe their ideas and the students seemed to lack inspiration to offer their ideas spontaneously. So, all she was able to conclude from this interview was that her focus students and a few other students learned from her unit, but the other students had not. Brad said he learned how much more core democratic values were open to interpretation

after interviewing his two focus students, but it wasn't clear how that finding would inform his teaching. Lisa found out that her focus student knew little, if anything, about core democratic values as a result of the unit she had just taught. That made her wonder whether any of her other students knew anything about them. Some research on teachers' research on their practice through the study of student's thinking suggests that knowledge and understanding of subject matter are necessary preconditions for understanding students' ideas (Duckworth, 1996). Thus, the teachers in this study were clearly not prepared to engage in inquiry on their practice for that reason.

Teachers did not have a well integrated focus that balanced the attainment of curriculum goals with students' interests and needs. Therefore, teachers did not have the skills necessary to access and use students' ideas about core democratic values to inform their practice as they taught their units. Their ideas about students' thinking were vague and not well articulated. Research suggests that helping teachers learn how to balance learner-learning concerns is a particularly difficult undertaking for teacher education (Darling-Hammond, 1996), but not impossible given appropriate learning environments, curricular and planning frameworks, and supports (Bransford et al., 2000; Wiggins & McTighe, 2001; Wiske, 1998). Although this program may have been headed in the right direction, by no means did it even come close to meeting teachers' needs in these regards. Perhaps with more time and opportunities for reading and discussion, and feedback on their teaching, teachers could have learned more about how to negotiate the "devilishly difficult dialectic" (Darling-Hammond, 1996) between content they wanted students to understand and the process that leads diverse learners toward understanding content.

Since possessing the sorts of skills and dispositions needed to pay attention to and use what students were thinking were preconditions for conducting research on their practice and making sense of their findings, it is not surprising that their research on their practice yielded few insights into what might lead to improved practice. In addition to subject matter preparation, and understanding how students make sense of subject matter, teachers may also have needed help in developing skills in conducting inquiry on their practice. Although I gave them a basic outline that suggested what they should do, either this was not enough or there was simply no time for them to do what I wanted. I also provided them with a study conducted by a social studies teacher that detailed her inquiry about two students' ideas about the Presidency (Delaney, 1986). All of the teachers told me they had not had time to read that study, however.

### *Teachers' Novice Status Limited the Effectiveness of their Teaching, and the Program did not Address that Status*

Research has documented how many factors may influence beginning teachers' first years of teaching (Bullough, 1987; van Hover & Yeager, 2000). The patterns identified in this research applied to all three teachers participating in this program, though in different ways and in different degrees. There were many instances during the program when it was evident that the competing demands of first-year teaching were frustrating and even overwhelming. More importantly, these demands further limited and constrained teachers' abilities to help students learn new content.

In this section, I explore factors associated with teachers' novice status that were not adequately addressed in the program design : (1) difficulties and demands of managing classrooms, (2) relationships with peers and supervisors, and curriculum

expectations, and (3) their busy lives in and out of school that left little time to focus on program goals.

*Classroom management issues.* Problems managing their classroom interfered with teachers' efforts to teach. Kathy deferred to some students by giving them license to dominate discussions and by failing to firmly reprimand them when they acted inappropriately. Other students were reprimanded and even punished for inappropriate behavior, while others were blamed for slowing the progress of group work. Lisa's students were often engaged in subterranean conversations that ranged from "chatty" gossip about relationships, shopping, and restaurants to more risqué conversations replete with colorful language, including sexual colloquialisms that would be deemed inappropriate in most public discussions. Although he assured me that he had tackled management issues earlier in the year, Brad's students often appeared to be disengaged. At times, he also appeared not to know how to manage instruction designed to facilitate students' learning experiences.

These management problems affected teachers' instructional decisions. Management issues played into Kathy's decision to withhold instructional goals from her students. Interactions between Lisa and her students seemed to suggest that they had negotiated a sort of implicit bargain; that is, students would tolerate a certain amount of work if it wasn't too challenging, and the teacher would tolerate a certain amount of fooling around if it didn't get too far out of hand. Problematic issues in Brad's teaching related to how he managed instruction. His planning was incomplete with only a thin veneer of content and few learning strategies evident, which led to loose and shaky implementation of his lessons.

It is not clear how this program could have helped teachers overcome some of the problems which interfered with their instruction that were connected to their abilities to manage their classrooms. Since content knowledge, knowing learning strategies and how to use them and understanding students' thinking are all inextricably connected to how teachers manage classrooms, perhaps providing more support in that regard would have impacted teachers' classroom management.

*Relationships with peers and supervisors, and curriculum expectations.* There were factors associated with what was going on outside teachers' classrooms that also appeared to influence their responses to the program. Meaningful levels of support and encouragement by administrators regarding teachers' participation in the program were missing across the three schools. In some cases, there appeared to be factors associated with administrators that actually discouraged teachers' active participation. Linked to this factor were curriculum expectations that may have influenced teachers' responses to the program.

Kathy and Lisa's hesitancy about using the framework and departing from their schools' curriculum appeared to be connected to how they thought their supervisors might view this. In Kathy's case, support from a peer apparently helped her overcome whatever anxiety she had about using a unit that departed somewhat from her school's curriculum, and my encouragement and advice apparently helped allay some concern she had about whether her department head would "approve" of the framework. In Lisa's case, however, there was some evidence that her relationship with her principal was of a nature that resulted in some apprehension about departing from what "they want you to teach."

While Kathy and Lisa both had mentors assigned to them as first-year teachers, only Kathy seemed to be actively engaged with her mentor in an ongoing fashion. How this affected their responses is not entirely clear, only that it apparently did. Kathy also had a colleague, Greg, who taught social studies next door to her room whom she greatly admired and relied on for advice. However, Lisa's closest peer was a French teacher, not a person likely to have much knowledge of her subject matter. Although Lisa had a mentor, his presence was never a factor during the program. He apparently did not express any curiosity about the program to Lisa, although I ran into him in the lunchroom one day and explained to him what was happening. Lisa also suggested that teachers, whom she consulted, could alternatively be both helpful and unhelpful.

In stark contrast to the other teachers, Brad did not have a mentor or another teacher upon whom he could rely for advice. Administrators in his school were apparently either unaware of or unconcerned about his participation in the program. Their presence was only evident one time during the six weeks of the program. That occurred when Brad explained to his class how he had been reprimanded for not filling out the proper forms to take them outside to explore school environs, an activity that was part of his unit plan. Brad did not appear to be concerned about covering content or about adhering to a specified curriculum. This may have been because no one had told him he had to do so, and may have been a factor in his "scatterbrained" approach to teaching that he had been attempting to improve, apparently without any support.

Lack of awareness on the part of administrators about the professional development program, as well as a lack of support on their part may have affected how teachers' responded to the program. In Lisa's case, I did talk to her principal before the

program began, but the principal's concerns did not seem to be related to how Lisa would respond to the program; rather, she appeared to be mostly concerned about the ramifications of my conducting research and whether students' pictures might be placed on the Internet. Lisa appeared to "jump" when her principal said "jump." Thus, if she had been actively encouraged to participate fully in the program by her principal she may have done so. However, principals and other administrators are often busily engaged in political activities and dealing with crises that have little relevance to teachers' instruction, and student's learning (Cusick, 1992). This seemed to be the case with all three principals, as well as with other supervisors, such as department heads.

The fact that mentors were often absent from the scene is not particularly surprising since research has revealed this situation for some time (Feiman-Nemser, Schwille, Carver, & Yusko, 1999). Mentors and interested peers could perhaps have played an important role in supporting teachers as they were engaged in this program, where I could not. Since this was a technology-mediated program my presence in teachers' classroom was for the most part only to gather data for my research. Although I did play an active part in what went on in teachers' classrooms at times, this would not have been possible had a larger number of teachers been involved in the program. It is also possible that if more supports had been built into the design of the technology-mediated environment, mentors' presence may not have been so critical.

*Busy lives in and out of school.* Because the program required so much of the teachers in such a short time span, their school-related responsibilities were demanding, and their professional and personal lives outside of school quite demanding, they were left with little time to focus on program goals. Constraints on time and the pressures it

created were a major factor in teachers' responses to the program. At one point, Kathy sent me a message telling me that there was "no way" she could do what I "wanted her to do," and fulfill her many other obligations. Lisa sent me an email message in which she told me she was a bit "stressed," and in another she apologized for not being more "helpful." In another message she told me she found the plan "a bit overwhelming." Like the other teachers in the study, Brad had a busy life outside the classroom, including family and professional obligations which had priority over program goals.

The length and timing of the program were features that could have been different. My own plans, as a graduate student, affected my decision to offer the program in the late spring, which in retrospect was not a good time for teachers. All of the teachers told me they thought the program would have been better if it had occurred over an extended period such as a semester or even school year. Research on professional development and teachers' learning demonstrates rather clearly how programs designed to facilitate teachers' learning programs work best when extended over relatively long time periods (Anderson et al., 2000; Borko & Putnam, 1996; Putnam & Borko, 2000; Richardson & Placier, 2001). Thus, although my expectations were only for teachers to gain a beginning understanding of the *Teaching for Understanding* framework during this six week period, that turned out to be an unrealistic expectation considering restraints on teachers' time, especially when considered with other factors mentioned above.

### *Summary*

Factors that influenced teachers' responses included teachers' limited knowledge and understanding of core democratic values, inquiry, and other teaching strategies, designed to help students learn about core democratic values and students' ideas about

core democratic values. These factors were not adequately addressed in the design of the professional development program. Other factors that influenced teachers' responses included classroom management issues, supervisory and school support issues, and issues outside of school including those connected to their professional and personal lives.

Closer communications and collaborations with school personnel, including supervisors and teachers' mentors, could have perhaps added a level of support that would have made it easier for teachers to participate. Issues involved in the design of the program, such as the time frame and length of the program, as well as additional online support for teachers could perhaps have alleviated some of the barriers associated with all of the constraints mentioned above. Limitations that influenced teachers' responses did not just reside with them. Instead, as this study suggests and as other research suggests, constraints seemed to be located across the entire "ecology" of teachers' practice with factors, including those associated with the program design, interacting and influencing each other. (Wideen et al., 1998). Thus, a closer examination of major components of the design of the professional development program follows.

## Evaluating Components of the Professional Development Program

In this section I discuss how I envisioned each component of the professional development program as I designed the program. I then offer an account of what actually happened as the program was enacted. The four components are *Teaching for Understanding*, case-based learning, teacher research, and technology-mediated professional development.

For each component, enactment fell short of my goals. Firstly, teachers did not gain a beginning understanding of the *Teaching for Understanding* approach as I had hoped they would. Secondly, strategies designed to help teachers think about how to teach core democratic values through studying and discussing online cases were ineffective because teachers did not have enough time to do so. Thirdly, my plan to have teachers conduct research on their practice in order to learn about teaching core democratic values through the study of their students' thinking never really got off the ground because of teachers' limited understanding of core democratic values and their lack of an informed focus on students' learning. Finally, the technology-mediated environment in which the program was situated, where I hoped teachers would communicate with each other and me about problems in their practice, was problematic, but still appealed to teachers as an environment that they felt could be used for professional development purposes should it be redesigned.

In retrospect, the complex nature of each component, the short time frame in which the program took place, teachers' lack of preparation, and problems associated with technology almost guaranteed that the program goals would not be met. However, despite the relative lack of success in meeting program goals, there was some evidence that the program concept was worthwhile and should be attempted again using findings from this study to inform the redesign of such a program.

### *Teaching for Understanding*

The primary goal of the professional development program was to introduce teachers to the *Teaching for Understanding* framework. I hoped this approach to teaching would help teachers design and implement a standards-based social studies unit about

complex subject matter and in the process gain some insight into both their teaching and students' learning. Although I knew other researchers had cautioned that the *Teaching for Understanding* approach takes a long time for teachers to learn (Blythe, 1998), I hoped teachers could at least begin this process by participating in the professional development program. The goal of having teachers develop a beginning understanding of the framework was far from being realized at the end of the program, however. Instead of a beginner's understanding of the framework, teachers barely gained a vague and uncertain sense of what *Teaching for Understanding* entailed.

Kathy and Lisa said they found the *Teaching for Understanding* framework to be confusing. Despite his claim that he was somewhat familiar with *Teaching for Understanding* at the beginning of the program, it was clear that Brad also didn't understand it. Their confusion appeared to be compounded by their misconceptions about the degree to which they were already using the *Teaching for Understanding* framework. One reason for this was most likely associated with the program design that didn't allow enough time and space for developing understanding of the framework, while another may have been that the framework did not comfortably map on to their entering conceptions of teaching, despite their use of what superficially looked like inquiry oriented teaching.

Although there was no evidence to suggest that teachers understood much more about the framework at the end of the program than they had at the beginning, it had apparently affected their thinking about their teaching. Kathy and Lisa both said the framework made them think more about "coherency" in their teaching, and, as Lisa put it, "between what I was teaching and why I was teaching it." Interestingly, Brad said

something similar when I asked him about the usefulness of the framework. All three teachers also expressed something positive about the framework at the end of the program. However, it is not clear how their positive ideas about the framework would inform further understanding of this approach since all three had vague notions, fraught with misconceptions, about what teaching with the framework actually entailed.

Although time constraints may have impeded the development of teachers' understanding more than other factors, the complexity of the framework was also an important factor that limited the development of their understanding. For instance, none of the teachers appeared to have understood that all of the principles must be understood as one dynamic conceptual construct where each component addresses different aspects of the same phenomena – the development of understanding. All three teachers seemed to recognize this complexity, at least implicitly, since they suggested that the program should extend over a semester or even a year or two.

An important reason why the framework was so confusing is that teachers' did not have a good grasp of the subject matter they were teaching. Research has demonstrated the importance of good subject matter preparation in teaching (Wilson, 2001b). Some researchers also advocate using teaching methods that are derived from methods of inquiry in disciplines, such as history (Shulman, 1987). Only one of the three teachers, Kathy, had had any experiences where they learned about inquiry in the disciplines from which their school subjects were derived.

In Kathy's case, this had been in a semester long social studies methods course. This experience had apparently generated enthusiasm for using an inquiry approach, but had not taught her how to incorporate methods of historical inquiry into her teaching. The

authors of the *Teaching for Understanding* framework claim that teachers can only go so far in learning the approach without grounding in the disciplines they teach (Wiske, 1998). It would also seem that teachers would need grounding in how research is conducted in the disciplines they teach in order to fully understand how to implement *Teaching for Understanding* in their practice. None of the teachers possessed anything more than superficial knowledge of core democratic values and none demonstrated that they knew how inquiries into these difficult concepts could be accomplished by students. These reasons, combined with the short time frame of the program, were why teachers had such difficult time learning about *Teaching for Understanding.*

An implication of teachers' lack of subject matter preparation is that the *Teaching for Understanding* framework may not be the ideal vehicle for helping teachers to learn how to teach history or social studies for understanding since the framework does not specifically address how teachers can learn how to teach their students to do in-depth inquiry in those subjects.

Another framework, associated with the state standards used in this study and developed specially for social studies, provides even less guidance for teachers in this regard (Harris & Yokum, 2000). Kathy had learned to use that framework, both in my class at the university and at a professional development program, sponsored by her school district. She appeared to have learned very little about how to structure historical inquiry activities for her students as a result of those experiences.

How much novice teachers could be expected to learn during their first few years would depend on how well programs were designed to teach them both subject matter and ways to help students learn subject matter. These programs would have to address the

many other issues that novice teachers must contend with including classroom management.

### *Case-Based Learning*

The design of the program included the use of cases as sites for teachers' learning that I hoped would help facilitate the development of teachers' understanding of both the *Teaching for Understanding* framework and core democratic values. The use of cases in teacher education and professional development programs has recently been advocated by a number of researchers and teacher educators (Merseth, 1996; Sykes & Bird, 1992), but with little evidence to support its use over other methods. Cognitive Flexibility Theory asserts that advanced learning in poorly structured domains like teaching can be fostered through the use of cases, but requires multiple transversals of cases in order for advanced learning to occur (Spiro et al., 1988). I had hoped that teachers would gain advanced understanding about their teaching through the study of cases, two online cases about teaching core democratic values constructed by others which I asked teachers to examine at the beginning and at the end of the program, and teachers' own cases about teaching core democratic values that were constructed with artifacts about students' learning and which I asked teachers to examine and discuss at the end of the program.

There was overwhelming evidence to indicate that teachers had not learned as much from these cases as I had hoped they would. One important reason for this was most likely the brevity of the program, which did not allow enough time for critical or collaborative reflection on the cases, including time to develop multiple perspectives that would have perhaps fostered more substantive connections between and among the online cases and their own cases. However, another possible reason this approach did not

work well was because I hypothesized that the two online cases and teachers' three cases would share enough similarities that they would serve as a kind of "meta-case." In retrospect, it might have made more sense to use one representative online case, have teachers teach a unit similar to the one used in the case, and then develop and study their research cases. This would have perhaps allowed for sufficient "crisscrossing" of the "landscape" that Cognitive Flexibility Theory asserts is necessary in order for complex learning to occur.

Some research does suggest that crisscrossing cases of teaching leads to the development of complex and flexible thinking. Lampert and Ball describe a hypermedia case environment which they designed using artifacts of Ball's teaching gathered over the course of a year in which she taught third grade math (Lampert & Ball, 1998). Although these researchers claim that mathematics education students, who study this large case of teaching, develop multiple perspectives on teaching mathematics, they also say they have no evidence to indicate how case-based learning eventually influences teachers' practice.

If similar claims can be made for teachers who construct and study their own cases, results of this study suggest much more time would have to be allotted for studying cases than was provided in this program. Cognitive Flexibility Theory asserts that cases must be complex so that learners are able to develop multiple representations on whatever it is they are studying – in this case how to teach core democratic values using the *Teaching for Understanding* framework. Teachers' cases, and other cases, were complex (even the "case" which was simply a lesson plan), especially when juxtaposed with the *Teaching for Understanding* framework which I asked teachers to use as a rubric

for assessing cases. Results of this program suggest that allowing enough time to study cases is critical and that enough time is also allotted for teachers to discuss cases.

Viewing particular instances of teaching through a lens that allows for and generates multiple representations is one indicator of the development of flexible thinking (Spiro et al., 1996), something I hoped to foster in teachers' thinking through their participation in the program. That this did not occur is not surprising, in retrospect, since teachers had just enough time to "cross" each other's cases one time, not the multiple transversals suggested as necessary by Cognitive Flexibility Theory. Thus, though teachers did develop some insights into their teaching through participating in the program, no claims can be made about the development of flexible thinking. There was simply not enough time for them to "crisscross" the cases.

### *Teacher Research*

Teachers constructed research cases where they were asked to investigate their students' ideas about core democratic values and present their findings to the other teachers. The cases were recorded on CD-ROMs for distribution. The plan was for the cases to serve as the culminating activity of the program when teachers could candidly discuss problems in their teaching, especially as they were related to students' learning. Although there was some of this in the written reflections that two of them sent me, and in their exchange in the final online meeting, their analyses only touched the surface of some of the issues embedded in their cases.

Ways in which teachers constructed their cases as well as their responses to each others' hypermedia cases indicated that they were unsure about how to investigate and interpret students' ideas about core democratic values. An analysis of these cases

revealed problematic and unsystematic approaches to these inquiries that were closely connected to their lack of knowledge and understanding about core democratic values, which, in turn, was connected to the lack of an informed focus on students' learning. This suggests that cases designed for teacher education may have to be much richer than mere instances of teaching. They may have to incorporate components designed to teach teachers subject matter knowledge, including discipline-based methods of inquiry, as well as teach them about strategies for helping students learn subject matter. So, they may have to be even more complex than the case used in this study, including teachers' cases.

The program did not provide the level of guidance and support teachers needed to collect and analyze data, arrive at some conclusions, and then derive implications for their practice. Interestingly, this parallels the lack of support and guidance teachers provided to their students in conducting inquiry. I gave teachers only general directions about how to construct and analyze their cases, but the considerable variation in their methods and analyses suggest that more attention be paid to research methods in such a program.

In addition to time constraints, perhaps another reason that teachers did not perform this task well was that they failed to incorporate and reflect on key elements of the *Teaching for Understanding* framework as their teaching progressed. Teachers had not learned what the different components of the framework were by the time the program concluded. This also suggests that much more time was required for teachers to learn the framework and that perhaps, initially, a step by step approach, where each part of the framework was considered and discussed separately, would have made sense. But, it is also rather clear that in order to learn about *Teaching for Understanding,* teachers

must also have already learned a great deal about teaching – their subject matter, how to teach it, and how students make sense of subject matter. Some researchers have suggested that teachers ought to start learning about how to teach for understanding as they learn about other conceptions of teaching during their pre-service education, and then learn more about *Teaching for Understanding* after they begin their practice (Scardamalia & Bereiter, 1989). This would be accomplished by designing the curriculum of teacher education around problem solving approaches that require pre-service teachers to investigate some of the core problems of teaching (Scardamalia & Bereiter, 1989). This might better prepare teachers to investigate and learn about approaches such as *Teaching for Understanding.*

*Technology-Mediated Professional Development Environment*

Technology-related problems were ubiquitous throughout the program. Some problems were the result of conditions beyond participants' control such as network and server problems or hardware failures. It seems that almost every technology problem that could have occurred did occur during this program. A few of these problems included lost network connections, insufficient computer memory, software that didn't work with certain web browsers, server problems that delayed delivery of email, network problems on school computers, computer viruses, software crashes, etc. Teachers were frustrated with these problems, as was I.

Other problems, however, resulted from a lack of user proficiency (teachers' and my own) with software programs used in the program, particularly *Tapped In.* At times the conversations on *Tapped In* were so discombobulated that it was hard to figure out who was saying what or when they said it. Without firm structures in place that allow

users to communicate more effectively, participants in online chat environments are talking at random instead of to each other. Although I attempted to impose some kind of discussion protocol in one meeting, teachers ignored it. However, the research that has been conducted on how teachers use these discussion environments suggests that alternative means for communicating should be explored rather than trying to figure out how to use what seems to be a technology that doesn't really work in ways that its supporters suggest it does (Selwyn, 2000).

Despite all of the problems we encountered, and much to my surprise, when I asked teachers at the end of the program whether they thought technology was an effective tool for professional development purposes, they all supported its use. They felt that new technologies can provide a means for teacher collaboration on topics such as the *Teaching for Understanding* framework.

Despite demonstrating possibilities for teachers' professional development, findings from this study suggest that designing and facilitating technology-mediated environments for such purposes is more problematic than much of the rhetoric on this subject suggests. For instance, I had assumed that these teachers were proficient users and could use program technologies with little difficulty. I based this assumption on my personal experiences with teachers knowing that they had used at least one of the technologies (*Tapped In*) previously. I also assumed they had adequate technology resources of their own that would allow them to participate in the program. However, I was wrong on both counts. It cannot, therefore, be assumed that once teachers have used a particular technology a few times that they will remain proficient in its use over time or that they possess adequate resources to participate in such programs.

Findings from this study also suggest that the technologies used in the program were far too complicated and that valuable time was expended on solving problems associated with the technology that could have been used more productively. These conclusions are not meant to discourage the idea of using technology-mediated environments for professional development; rather, they are meant to inform future development of those environments.

## Conclusions and Implications

For many reasons, teachers' own entering frameworks for teaching, rather than the *Teaching for Understanding* framework, informed their responses to the program. However, although their entering conceptions of teaching prevailed there was evidence to suggest that these conceptions were not firmly held. This study suggests that teachers' images did not uniformly conform to one typology, and that images may be amendable to change if sufficiently challenged. All three teachers entered the program with images of teaching that contrasted in different degrees and kinds with the K-12 apprenticeship typology, although there were similarities as well. For instance, all held a conception of teaching that incorporated some sort of inquiry model of learning, even if it coexisted with a knowledge accrual conception as it did with Lisa.

These ideas suggest that teachers, in some small way, had already moved along what Anderson et al. (2000) call a "trajectory" toward a *Teaching for Understanding* or constructivist approach, although it was still quite vague and ill-defined. This may have been because all of the teachers graduated from the same teacher education program that espouses a *Teaching for Understanding* approach. They all apparently took something

qualitatively different away from this program that included some of their entering conceptions of teaching that they had brought with them into that program as well as bits and pieces of "constructivist" ideas. They had not, in the interim between finishing that program and beginning the professional development program, been challenged to move toward goals of teaching that were even loosely consonant with ideals of that program. Their ideas, as they entered the professional development program, in some ways resembled a crazy quilt that was being assembled by someone who didn't really have much of an idea about what they were doing. However, this program also did not influence teachers' ideas to the degree that they had developed coherent and firmly held constructivist schemas as the program concluded. Instead, their ideas still suggested pieces of a patchwork quilt that had not been assembled into some sort of coherent pattern, the difference being that they had started to realize this, where before they had not.

This program was a weak intervention, yet it still led teachers to question their practice. All saw the need for developing coherence in their teaching. In addition, Lisa and Brad seemed to recognize the need for developing their knowledge base about subject matter. Also, although they articulated it differently, they all seemed to think teaching about core democratic values was important for reasons that went beyond preparing students for state standardized tests.

Findings from this study suggest that these teachers' experiences in teacher education and professional development programs had failed to sufficiently challenge their conceptions of teaching and help them construct new ones that are consonant with *Teaching for Understanding* models. Or perhaps teachers were not developmentally

ready to learn about this kind of teaching until they had had opportunities to learn about these complex models in the context of learning environments that are primarily situated in their practice. Perhaps, a more likely explanation combines both reasons.

The *Teaching for Understanding* framework did not help teachers develop more understanding about their teaching or about students' thinking, resulting in problematic findings from their research. Despite these outcomes, teachers did develop some insights into their teaching which may have been an indication that they were moving toward program goals, even if by seemingly indirect routes. Anderson et al. (2000) argue, in their study, that three pre-service teachers who entered the science education program which was the site of their study, were already moving along particular learning "trajectories." These researchers found that teachers followed different paths as they attempted to make connections between their entering ideas and ideas embedded in the science education program that were broadly consonant with the *Teaching for Understanding* approach.

Similar conclusions might be made about the three teachers in this study, that they entered the program moving along divergent paths. However, by the end of this program they seemed only to have tentatively moved to a staging area where they had not yet decided whether they would even embark on a path leading them in the direction of program goals. There were hints, of course, that they might. Kathy, with her willingness to try anything that might lead her to understand her practice better would be certain to, as perhaps, too, would Brad. Lisa, however, still seemed uncertain about whether she would make a commitment to learning more about *Teaching for Understanding* even though the program and her research had revealed her lack of preparation to teach about core democratic values in rather stark terms.

Teachers' ideas about teaching tend to focus in different degrees and kinds on "the needs and interests of individual learners," and "challenging curriculum goals for all students" (Darling-Hammond, 1996). However, they often find it hard to balance these concerns. Some educators argue that balancing these concerns is a prerequisite for creating schools where all students can learn challenging content (Darling-Hammond, 1996; Greeno et al., 1996; Kobrin, 1996). In assessing where Lisa's thinking and teaching could be positioned along a continuum of learner- learning concerns, she, among all three teachers, was most committed to attending to students' affective learning experiences, while Kathy seemed more committed to helping students learn content, and Brad seemed to be vacillating somewhere in between. However, Anderson et al. (2000) suggest that teachers' conceptions of teaching that mainly attend to students' interests and needs may be a necessary staging area for some teachers where they can begin exploring new conceptions that balance a concern for learners with content learning goals. Thus, it is not at all certain that Lisa, and the other teachers, may not have continued to move toward a more balanced conception if there were structured program goals toward which they were expected to aim, and in which in doing so they were supported. Given the other complexities of their practice it seems almost certain to say that they would not continue to progress toward those kinds of goals without such a program. This program was intended to be an experimental prototype and the results, though disappointing in some ways, are promising in others.

# APPENDICES

APPENDIX A

*Teaching for Understanding Reflection Checklist*[4]

YOU KNOW YOU ARE *TEACHING FOR UNDERSTANDING* WHEN....

***The learning is generative:***

- Instruction is focused around a few central topics.
- The topics are personally significant for you and your students.
- Students are actively engaged in their work.
- An atmosphere of genuine inquiry pervades the classroom.

**The understanding goals are clear and explicit:**

- Overarching goals or throughlines are clearly stated and posted in the classroom.
- Goals for particular units are closely related to overarching goals.
- You and your students regularly discuss and reflect on unit-long and overarching goals to help students make connections between what they are doing and why they are doing it.

***Students are working on performances of understanding almost constantly:***

- Students work actively in varied formats: pursuing projects and reflecting alone, collaborating and conferencing in small groups, and interacting in whole groups.
- Students are thinking and making that thinking visible in the contexts of performances of understanding that challenge their misconceptions, stereotypes, and rigid thinking.
- Students can explain why they are doing what they are doing.
- You spend your time coaching, conferencing, leading, participating in discussions, and sometimes lecturing.
- The room is filled with student work, both finished and in process.
- Responsibility and authority for the work is shared between you and your students.

***The assessment is ongoing:***

- Students engage in cycles of drafting, reflecting, critiquing, responding to, and revising their own and others' work.
- You and your students share responsibility for assessment.
- Everyone assesses work according to stated criteria and standards for quality, which are closely related to the understanding goals.
- Assessment is often casual, conversational, and spontaneous: periodically it is more formal, recorded, and planned.
- Self-reflection occurs frequently, in a variety of forms.

---

[4] *Teaching for Understanding Reflection Checklist* Developed by Lois Hetland, From *The Teaching for Understanding Guide* by Tina Blythe and Associates, Jossey-Bass, San Francisco, CA 1998. Another version of this list using a Likert scale instead of checks was made available to teachers online.

APPENDIX B

*Personal Information Survey and Initial Interview Prompts*

Please provide the following information and answers to questions:[5]

1. Name _____

2. School_____District_____

3. School
Address_____

4. Home Address _____

5. School Tel: _____Fax: _____ Home Tel: _____

6. Email _____

7. Web Address: http://_____

8. Grade level(s) you teach or have taught _____

9. Subject(s) you teach or have taught _____

10. Favorite subject to teach _____

11. Least favorite subject to teach _____

12. Years teaching _____

13. Other schools where you have taught _____

14. College(s) or university(s) attended _____

15. Academic major(s) _____ minor(s)_____

16. Teacher Certification _____

17. Highest Degree? B.A. ____ M.A. ____Specialist ____Ph.D._____

18. Professional organizations _____

[5] This form was designed with *Zoomerang*, a software program designed for survey research. The survey was accessible online where teachers' responses were recorded.

19. Please rate your proficiency with computer technologies (underline choice):

Expert Very Proficient Average Not Very Proficient Novice

20. During preliminary interviews, I would like to talk about the following topics. In order to prepare for the interviews you may want to think about these topics, or jot down a few notes in advance.

a. Your experiences with teacher preparation and professional development programs.
b. Your approach to teaching in general and social studies in particular.
c. Your ideas about citizenship education and how you approach it in your practice.
d. How citizenship skills and dispositions can be fostered in students.

# APPENDIX C

*Protocol for First Preliminary Semi-Structured Interview*

The first set of questions and probes was designed to find out about teachers' conception of teaching in general, and teaching social studies in particular.

1. What can you tell me in general about your approach to teaching?
   a. Can you explain that a bit further and give me some examples that will help me understand your approach better?
   b. During my observation in your classroom, I observed (some event or behavior). How does that (event or behavior) help me understand your approach to teaching?

2. What experiences did you have in college and your teacher preparation program that prepared you for teaching?
   a. What helped you learn about teaching? Why?
   b. What was not helpful? Why?
   c. If they were available, what experiences (including courses) would you seek out now, or in the future, that you didn't experience during college and that you now think would help you improve your practice

3. Can you tell me something in particular about your approach to teaching social studies?
   a. Can you explain that a bit further and give me some examples that will help me understand your approach better?
   b. During my observation in your classroom, I observed (some event or behavior). How does that (event or behavior) help me understand your approach to teaching social studies?

4. Can you describe in general what a social studies lesson or unit looks like in your classroom?
   a. In general terms, what is going on?
   b. What are you usually doing?
   c. What are students usually doing?
   d. In general, what kinds of learning outcomes do you expect of students?
   e. How do you assess student learning?

5. What experiences did you have in college to prepare for teaching social studies?
   a. What helped you learn about social studies teaching? Why?
   b. What was not helpful? Why?
   c. If they were available, what experiences (including courses) would you seek out now, or in the future, that you didn't experience during college and that you now think would help you improve, in particular, your social studies practice?

6. So then, how would you describe your current teaching strategies?
7. What do you think about professional development programs and conferences? What have you learned from those you have attended?
8. What are your goals for professional development? How do you plan to attain them?
9. Do you have any other comments you would like to make?

The second set of questions was designed to find out about teachers' ideas and approaches to teaching about citizenship education, and their use of civic education standards.

1. What does the phrase "good citizen" mean to you?
   a. Can you give me some examples that illustrate what a "good citizen" is or does?
   b. Do you think most students become "good citizens" because of their formal education? Why?
   c. Besides formal education, in what other ways do students learn to become "good citizens"?

2. What are your ideas about citizenship education?
   a. How do you approach it as a teacher?
   b. How can you tell if students are learning about, for instance, "core democratic values"?
   c. What could educators do that they are not currently doing to improve citizenship education?

3. How can educators foster good citizenship skills and dispositions among students?
   a. What are good citizenship skills and dispositions?
   b. How do you know if you are fostering these skills and dispositions in students?
   c. How do you assess students' learning about these skills and dispositions? In other words, how do you know "what" students are learning and what do you know about "how" they are learning it?
   d. What role can teachers and schools play in fostering the development of these skills in students?

4. Do you use the state framework, or other standards for planning your instruction?
   a. If so, how? If not, why not?
   b. Do you think standards should be important in your practice? Why?

5. To conclude our discussion, how would you describe your current teaching strategies in social studies, and citizenship education in particular?

6. Do you have any other comments you would like to make?

## APPENDIX D

*Protocol for Second Preliminary Semi-Structured Interview*

The first set of questions was designed to probe teachers' interpretations of the standard.

1. Were you familiar with this standard before reading it for this interview? If so, did rereading it change your thinking about it in any way? How? If not, what was your first impression after reading it? Why?

2. Can you tell me a bit more about your interpretation of the standard?
   a. For instance, you say _____. Why?
   b. Your interpretation sounds (similar or different) to/from the actual text. Can you explain why that is?
   c. How do you think other teachers would respond to your interpretation? Why?
   d. Did this activity provoke any ideas about content or teaching approaches associated with using this standard in your teaching that were new? If so, what were they? If not, what were your ideas beforehand?

The second set of questions was designed to probe teachers' ideas about core democratic values.

1. How do you define "core democratic values"?
   a. Can you give me examples of "core democratic values" that would help me better understand your definition?
   b. Is your definition different from how you think the standards document defines these values? If so, how?

2. We are going to use four "core democratic values" in the units we plan and enact – liberty, justice, equality, and the common good.
   a. How do you define each one of these values?
   b. Can you give me an example of each one?

3. Do you think these values are related? If so, can you describe how?
   a. Can you provide an example that shows how they are related?
   b. Would it be important to help students understand this relationship? Why?

4. How do you think students can best learn about "core democratic values"?
   a. What content should they know?
   b. What approaches to teaching about the content would help students learn?

5. How do you, or would you assess students' learning about "core democratic *values"?*

a. How would you know when students understand what "liberty, justice, equality, and the common good" means?
b. How would you know that students' understanding connects in some way to what they already know?
c. How would you know that what students understand connects in some meaningful way to the student's life beyond school?
d. How would we know if we were succeeding in our efforts to teach students about "core democratic values"?

## APPENDIX E

*Preparation for 2nd Preliminary Interview*

This collaboration involves teaching about "core democratic values." We will use the state framework standards related to "core democratic values" to plan units during the program. The standards are online and available at:

http://cdp.mde.state.mi.us/MCF/ContentStandards/default.html

To prepare for the second interview, which will be conducted online, please read the specific standard and benchmarks associated with "core democratic values", or "ideals of American democracy" (Social Studies: III Civic Perspective: Content Standard 2) (Michigan curriculum framework, 1996). Then, formulate and write your own brief interpretation of the standard using a word processing program, and save it in rich text format file (RTF) or in portable document format file (PDF). Please send it to me as an email attachment (or in the body of the message). Your interpretation will serve as the basis of our conversation.

## APPENDIX F

*Prompts for Case Study and Case Writing*

I. Examine, Social Studies Meets Technology: Reflections of a First-year Teacher, a case about teaching about "core democratic values" – available at http://www.citeforum.org/social/case/casestudies/reflections/home.html

Then, please respond to these questions:

1. What do you think about this teacher's approach to teaching about "core democratic values"?
   a. What did you like about her approach? Why?
   b. What didn't you like? Why?
   c. What would you do differently

2. What do you think students learned from this unit?
   a. What evidence is there in the case that provides an understanding about what students learned or understood from the lesson? Please explain.
   b. Was students' thinking visible? If so, how? Please explain.
   c. Do you think students will be able to use what they learned or understood in other contexts? Please explain.
   d. Do you think the use of technology enhances students' learning in this lesson, or is it incidental to learning? Why?

3. Would you use this unit or something similar with your students? Why?

4. Was it evident that the teacher, Julia, was integrating specific "core democratic values" into her lesson? If so, what were they? Do you think she did so effectively?

5. What evidence is there from research that either supports or does not support this teacher's approach to teaching social studies?

6. Do you have any other comments you wish to make?

II. Examine the lesson plan, **With Liberty and Justice for All** (available: http://www.civnet.org/resoures/teach/lessplan/wlib30.htm).
How would you teach this lesson/unit? Write a **brief** case that incorporates your own ideas about teaching the lesson/unit. The narrative, in the third person, might follow the structure of the first case you examined, but incorporate your own approach to teaching. Specify which "core democratic values" you would highlight and how you would integrate them into the lesson/unit. How would you assess students' learning? Include problems you might expect to encounter based on your previous experiences, and how you would work toward solutions of those problems.

APPENDIX G

*Guidelines for Developing Hypermedia Case Study*

**Excerpt from Program Agenda: (5-13-00)**

Choose one student whose thinking and ideas about "liberty, justice, equality, & the common good" you would like to study over the next four weeks. Strategies for gathering data on this student's thinking and ideas should include daily notes as you observe and talk with this student, writing in-depth weekly summaries, collecting artifacts of their work, videotaping a lesson in which you focus on this student, and conducting at least one in-depth videotaped interview. You should make the student's guardians aware of your study, and make sure you have a record of the guardian's and student's "consent to participate" in your study.

**Excerpt from Email Message to Teachers (5-26-00)**

The case should be focused on the student you chose to study. Read or skim the Delaney chapter on "The Presidency" to get an idea of how she explored two students' ideas about the presidency.

The question you are examining is:

"How does_____ (student) understand the four core values - liberty, justice, equality, and the common good?"

As evidence that should help you answer this question, and that will help others understand how you arrived at your conclusions, I suggest that you include the following in your mini-case:

1. Your TfU/CDV[6] unit plan that you constructed online - you can save the plan as a Word doc. - just follow instructions under "print preview."

2. A short piece of digitized video tape (about 5 - 7 min.) of one of your unit lessons that shows the student you are studying engaged in some activity that you think reveals something interesting or puzzling about their learning or how they think about the four CDVs. Include a short description of the lesson.

3. A short piece of digitized video tape (5 - 7 min.) from an interview you conduct with the student about their learning or their thinking about the four CDV's.

4. An artifact of an activity produced during the unit that further illuminates your conclusions about the student's thinking about the four CDV's.

---

[6] *Teaching for Understanding* /Core Democratic Values

5. Incidental notes you may have taken as you observed this student, or other items not mentioned here that you think important to include.

6. Your conclusions, in which you briefly (a paragraph or two is sufficient) talk about how this study helped (or did not help) you understand your teaching, particularly about teaching CDV's, and how it may affect how you teach about CDV's in the future. Also, talk briefly about what still puzzles you about this student's thinking (if anything), and questions you have about teaching CDV's that remain unanswered (if any).

7. I suggest that you put this all together with PowerPoint. That way others can easily locate different parts of your mini-case. Use the HTML option in PowerPoint. All you have to do to accomplish that is to use a web page template in PowerPoint. I'll think about the best way of collecting all of the cases - your suggestions are welcome! One suggestion: Each person burns their own CD and makes copies for everyone. If you find that daunting, then another suggestion is: Put your case (in PowerPoint) on a server at your school - get me ftp access, and I download files and burn one CD to distribute to all of you. As a group we need to decide how we will assess these cases.

APPENDIX H

*Protocol for Final Interview*

**Approach to teaching:**

1. During the first interview I asked you to tell me about your approach to teaching, teaching social studies, and teaching about core democratic values in particular. How would you respond to those questions today?

2. I also asked you about what you thought good citizenship skills and dispositions were, how we should try to foster those among students, and how we would know if we were successful or not. What are your thoughts about those questions today? Has your thinking about them changed in any way?

**New approach to teaching: *Teaching for Understanding*:**

1. How did planning this unit with the TfU online planning tool affect how and what you planned? Was there anything you did that was different from your regular planning process? (How do you regularly plan?)

2. What appealed to you the most about this framework for teaching and learning? What was not appealing or was difficult to understand or implement in your teaching?

**Teacher's ideas about case study about students' ideas about core democratic values:**

1. After examining the video segment and artifacts you chose to include in your study about your focus student's thinking and ideas about core democratic values, what conclusions have you come to?

2. Is there anything you can think about the process of constructing and enacting your unit that you might change as a result of studying this student's ideas about core democratic values? If so, can you elaborate by giving a few concrete examples about what in particular you might change?

3. Is there anything you observed or learned about the other teachers' cases that would influence your thinking about either of these questions?

**Teachers' ideas about standards-based practice:**

Have your ideas about using standards as a way to guide your planning and instruction changed in any way? Can you elaborate?

**Professional development model:**

So, tell me what you really think about all this? I really wanted this to be about professional development. Did you think this was about professional development or did you think it was about my research? Could this model of professional development work? If so, what advice would you give me about changing this model to improve it? If you don't think a model that uses technology and distance learning works, can you tell me why you think it won't work?

# REFERENCES


Anderson, L. M. (1989). Learners and learning. In M. C. Reynolds (Ed.), *Knowledge base for the beginning teacher* (pp. 85-100). Oxford: Pergamon Press.

Anderson, L. M., & Bird, T. (1995). How three prospective teachers construed three cases of teaching. *Teaching & Teacher Education, 11*(5), 479-499.

Anderson, L. M., Smith, D. C., & Peasley, K. (2000). Integrating learner and learning concerns: Prospective elementary science teachers' paths and progress. *Teaching and Teacher Education, 16*, 547-574.

Bain, R. B. (1995). *The world-history standards: A teacher's perspective*. Education Week on the Web. Retrieved February 2, 2002, from the World Wide Web: http://www.edweek.org/ew/ewstory.cfm?slug=22bain.h14&keywords=World%2Dhistory

Ball, D. L., & Cohen, D. K. (1999). Developing practice, developing practitioners: Toward a practice-based theory of professional education. In L. Darling-Hammond & G. Sykes (Eds.), *Teaching as the learning profession: Handbook pf policy and practice* (pp. 3-32). San Francisco, CA: Jossey-Bass Inc.

Ball, D. L., & McDiarmid, G. W. (1990). The subject-matter preparation of teachers. In W. R. Houston (Ed.), *Handbook of research on teacher education* (pp. 437-449). NY: Macmillan.

Barton, K. C. (2001). A sociocultural perspective on children's understanding of historical chnage: Comparative findings from Northern Ireland and the United States. *American Educational Research Journal, 38*(4), 881-913.

Blythe, T. (1998). *The Teaching for Understanding guide*. San Francisco: Jossey-Bass Publishers.

Borko, H., & Putnam, R. T. (1996). Learning to teach. In D. C. Berliner & R. C. Calfee (Eds.), *Handbook of educational psychology* (pp. 673-708). New York: Simon & Schuster Macmillan.

Bransford, J., Brown, A. L., & Cocking, R. R. (2000). *How people learn brain, mind, experience, and school* (Expanded ed.). Washington, D.C.: National Academy Press.

Brophy, J., Alleman, J., & O'Mahony, C. (2000). Elementary school social studies: Yesterday, today, and tomorrow. In T. L. Good (Ed.), *American education: Yesterday, today, and tomorrow: Ninety-ninth yearbook of the National Society*

*for the study of education: Part II* (pp. 256-312). Chicago, Illinois: The University of Chicago Press.

Brophy, J., & VanSledright, B. (1997). *Teaching and learning history in elementary schools*. NY: Teachers College Press.

Brown, A. L. (1992). Design experiments: Theoretical and methodological challenges in creating complex interventions in classroom settings. *The Journal of the Learning Sciences, 2*(2), 141-178.

Brown, J. S., Collins, A., & Duguid, P. (1989). Situated cognition and the culture of learning. *Educational Researcher, 18*, 32-42.

Bullough, R. V. (1987). First-year teaching: A case study. *Teachers College Record, 89*(2), 220-237.

Cherryholmes, C. (1990). *Political scientists on civic education: A nonexistent discourse* (Series No. 15). East Lansing, MI: The Center for the Learning and Teaching of Elementary Subjects, Institute for Research on Teaching, Michigan State University.

*Civics online: (Re) envisioning the democratic community* (2000). [Internet]. MATRIX and H-Net: Humanities and Social Sciences OnLine and College of Education, Michigan State University. Retrieved, 2000, from the World Wide Web: http://www.civics-online.org/

Cochran-Smith, M., & Lytle, S. L. (1999). The teacher research movement: A decade later. *Educational Researcher, 28*(7), 15-25.

Cohen, D. K., & Barnes, C. A. (1993). Conclusion: A new pedagogy for policy? In D. K. Cohen & M. W. McLaughlin & J. E. Talbert (Eds.), *Teaching for Understanding* (pp. 240-275). San Francisco, CA: Jossey-Bass Inc, Publishers.

Cohen, D. K., McLaughlin, M. W., & Talbert, J. E. (1993). *Teaching for Understanding: challenges for policy and practice* (1st ed.). San Francisco: Jossey-Bass.

Collins, A. (1992). Toward a design science of education. In E. Scanlon & T. O'Shea (Eds.), *New directions in educational technology* (pp. 15-22). Berlin, Germany: Springer-Verlag.

*Common core of data: Information on public school districts in the United States* (1999-2000). United States Department of Education National Center for Education Statistics. Retrieved May 11, 2002, from the World Wide Web: http://nces.ed.gov/ccdweb/school/index.asp

Cotton, K. (1997, September 7, 1997). *School improvement research series: Educating for citizenship* [Internet]. Northwest Regional Educational Laboratory. Retrieved September 13, 1999, from the World Wide Web:

Creswell, J. W. (1994). *Research design: Qualitative and quantitative approaches.* Thousand Oaks, CA: Sage Publications.

Cuban, L. (1993). *How teachers taught: Constancy and change in American classrooms* (2nd ed.). New York, NY: Teachers College Press.

Cusick, P. A. (1992). *The educational system: Its nature and logic.* New York: McGraw-Hill, Inc.

Darling-Hammond, L. (1996). The right to learn and the advancement of teaching: Research, policy, and practice for democratic education. *Educational Researcher, 25*(6), 5-17.

Delaney, M. K. (2001). Understanding the presidency. In E. Duckworth (Ed.), "Tell Me More": Listening to learners explain. New York: Teachers College Press.

Dewey, J. (1916). *Democracy and education.* New York: The Free Press.

Dinkleman, T. (1997). The promise of action research for critically reflective teacher education. *The Teacher Educator, 32*(Spring), 250-274.

Dow, P. B. (1992). Past as prologue: The legacy of sputnik. *The Social Studies*, 164-171.

Duckworth, E. (1996). *"The having of wonderful ideas" and other essays on teaching and learning* (2nd ed.). New York, NY: Teachers College Press.

Edelson, D. C. (2002). Design research: What we learn when we engage in design. *The Journal of the Learning Sciences, 11*(1), 105-121.

Evans, R. (1990). Teacher conceptions of history revisited: Ideology, curriculum, and student belief. *Theory and Research in Social Education, XVIII*(2), 101-138.

*Expect excellence: Curriculum standards for social studies.* (1998). National Council for the Social Studies.

Feiman-Nemser, S., & Remillard, J. (1996). Perspectives on learning to teach. In J. Sikula (Ed.), *The teacher educator's handbook* (2nd ed., pp. 63-91). NY: Macmillan.

Feiman-Nemser, S., Schwille, S., Carver, C., & Yusko, B. (1999). *A conceptual review of literature on new teacher induction* (Informational Analyses). Washington, DC: National Partnership for Excellence and Accountability in Teaching.

Finkelstein, B. (1988). Rescuing civic learning: Some prescriptions for the 1990s. *Theory into Practice, 27*(4), 250-255.

Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: a basic strategy underlying qualitative research.* Chicago: Aldine.

Goodlad, J. (1990). *Teachers for our nation's schools.* San Francisco: Jossey-Bass.

Graber, K. C. (1996). Influencing student beliefs: the design of a "high impact" teacher education program. *Teaching and Teacher Education, 12*(5), 451-466.

Greeno, J. G., Collins, A. M., & Resnick, L. B. (1996). Cognition and learning. In D. C. Berliner (Ed.), *Handbook of educational psychology* (pp. 15-46). NY: Macmillan.

Grossman, P., Smagorinsky, P., & Valencia, S. (1999). Appropriating tools for teaching English: A theoretical framework for research on learning to teach. *American Journal of Education, 108*, 29.

Grossman, P. L. (1990). *The making of a teacher: teacher knowledge and teacher education.* NY: Teachers College Press.

Grossman, P. L., Wilson, S. M., & Shulman, L. S. (1989). Teachers of substance: Subject matter knowledge for teaching. In M. C. Reynolds (Ed.), *Knowledge base for the beginning teacher* (pp. 23-36). Oxford: Pergamon Press.

Harris, D., & Yokum, M. (2000). *Powerful and authentic social studies (PASS): A professional development program for teachers.* Washington, DC: National Council for the Social Studies.

Hawley, W. D., & Valli, L. (1999). The essentials of effective professional development. In L. Darling-Hammond & G. Sykes (Eds.), *Teaching as the learning profession.* San Francisco, CA: Jossey-Bass Inc., Publishers.

Hill, J. (1997). Whatever their merits, the national standards will not be widely implemented. *The History Teacher, 30*(May), 341-345.

Hsi, S. (1998). *The multimedia forum kiosk: Using design experiments to understand electronic scientific discussions.* Paper presented at the Annual Meeting of the American Educational Research Association, April 13-18, 1998, San Diego, CA.

Huberman, A. M., & Miles, M. B. (1994). Data management and analysis methods. In N. Denzin, Lincoln, Y. (Ed.), *Handbook of qualitative research* (pp. 428-444). Thousand Oaks, CA: Sage Publications.

Kobrin, D. (1996). *Beyond the textbook : teaching history using documents and primary sources.* Portsmouth, NH: Heinemann.

Lampert, M. (2001). *Teaching problems and the problems of teaching*. New Haven: Yale University Press.

Lampert, M., & Ball, D. L. (1998). *Teaching, multimedia, and mathematics investigations of real practice*. New York: Teachers College Press.

Lanier, J. E., & Little, J. W. (1986). Research on teacher education. In M. C. Wittrock (Ed.), *Handbook of research on teaching* (3rd ed., pp. 527-569). New York: Macmillan.

Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge: Cambridge University Press.

Levstik, L. S., & Barton, K. C. (1997). *Doing history: Investigating with children in elementary and middle schools*. Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.

Little, J. W. (1993). Teachers' professional development in a climate of educational reform. *Educational Evaluation and Policy Analysis, 15*(2), 129-151.

Little, J. W. (1999). *Teachers' professional development in the context of high school reform: Findings from a three-year study of restructuring schools*: University of California, Berkeley.

Lutkus, A. D., Weiss, A.R., Campbell, J.R., Mazzeo, J. Lazer, S. (1999). *The NAEP 1998 civics report card for the nation* (NCES 2000-457). Washington, DC: U.S. Department of Education. Office of Educational Research and Improvement. National Center for Education Statistics.

Lybarger, M. B. (1991). The historiography of social studies: Retrospect, circumspect, and prospect. In J. P. Shaver (Ed.), *Handbook of research on social studies teaching and learning* (pp. 3-15). New York: Macmillan Publishing Company.

Marx, R., Blumenfeld, P. C., Krajcik, J., S., & Soloway, E. (1998). New technologies for teacher professional development. *Teaching and Teacher Education, 14*(1), 33-52.

McDiarmid, G. W., Ball, D. L., & Anderson, C. W. (1989). *Why staying one chapter ahead doesn't really work: Subject-specific pedagogy* (Issue Paper 88-6). East Lansing, MI: The National Center for Research on Teacher Education, Michigan State University.

McDiarmid, G. W., & Vinten-Johansen, P. (1993). *The teaching and learning of history - From the inside out.* (SR 11/93). East Lansing, MI: National Center for Research on Teacher Learning.

Merseth, K. K. (1996). *Cases, case methods, and the professional development of educators* (ERIC Digest ED401272). Washington, DC: ERIC Clearinghouse on Teaching and Teacher Education.

*Michigan curriculum framework.* (1996). Lansing, MI: Michigan Department of Education.

Murray, N. R. (1998). Are teachers stupid?--setting and meeting standards in social studies. *The Social Studies, 89*(2), 66-70.

*NAEP 1998 Civics report card for the nation.* (1998). Washington, DC.

*National standards for civics and government.* (1995). Calbasas, CA: Center for Civic Education.

*National standards for social studies teachers* (1997). [Internet]. National Council for the Social Studies Task Force on Social Studies Teacher Education Standards. Retrieved May 5, 2002, from the World Wide Web: http://www.socialstudies.org/standards/teachers/vol1/home.shtml

*National standards for United States history.* (1998). Available: http://www.sscnet.ucla.edu/nchs/us-toc.htm: National Center for History in the Schools.

*National standards for world history.* (1998). Available: http://www.sscnet.ucla.edu/nchs/wrldtoc.html: National Center for History in the Schools.

Newmann, F. M. (1990). Higher order thinking in teaching social studies; a rationale for the assessment of classroom thoughtfulness. *Journal of Curriculum Studies, 1*, 41-56.

Newmann, F. M., Secada, W. G., & Wehlage, G. G. (1995). *A guide to authentic instruction and assessment: Vision, standards, and scoring.* Madison, WI: Wisconsin Center for Education Research.

Parker, W. C., & Hess, D. (2001). Teaching with and for discussion. *Teaching and Teacher Education, 17*, 273-289.

Parker, W. J., Ninomiya, A., & Cogan, J. (1999). Educating world citizens: Toward multinational curriculum development. *American Educational Research Journal, 36*(2), 117-145.

Pea, R. D. (1999). New media communications forums for improving education research and practice. In E. C. Lagermann & L. S. Shulman (Eds.), *Issues in education research.* San Francisco: Jossey Bass.

Pellegrino, J. W., & Altman, J. E. (1997). Information technology and teacher preparation: Some critical issues and illustrative solutions. *Peabody Journal of Education, 72*(1), 89-121.

Putnam, R. D. (1995). Bowling alone: America's declining social capital. *Journal of Democracy, 6*(1), 65-77.

Putnam, R. T., & Borko, H. (2000). What do new views of knowledge and thinking have to say about research on teacher learning? *Educational Researcher, 29*(1), 4-15.

Richardson, V., & Placier, P. (2001). Teacher change. In V. Richardson (Ed.), *Handbook of research on teaching* (4th ed.). Washington, D.C.: American Educational Research Association.

Rosaen, C., & Schram, P. (1997). Professional development for beginning teachers through practical inquiry. *Educational Action Research, 5*(2), 255-281.

Rosaen, C. L., & Wilson, S. M. (1995). Making teacher education problematic: Using cases to prepare teacher educators. *Teacher Education, 7*(1), pp.45-52.

Ross, E. W. (1996). Diverting democracy: the curriculum standards movement and social studies education. *International Journal of Social Education, 11*(Spring/Summer), 18-39.

Rothstein, R. (2002, March 6). *Going beyond mere facts in the study of history* [Internet]. The New York Times on the Web. Retrieved March 6, 2002, from the World Wide Web: http:www.nytimes.com/2002/03/06/education/

Salamone, R. C. (2000). *Education for democratic citizenhship* [Internet]. Education Week on the Web. Retrieved March 22, 2000, from the World Wide Web: http://www.edweek.org/ew

Scardamalia, M., & Bereiter, C. (1989). Conceptions of teaching and approaches to core problems. In M. C. Reynolds (Ed.), *Knowledge base for the beginning teacher* (pp. 37-46). Oxford: The American Association of Colleges for Teacher Education.

Schwille, J., & Amadeo, J.-A. (Draft, 2000). The paradoxical situation of civic education in school: Ubiquitous and yet elusive. In Steiner-Khamsi & J. Torney-Purta & J. Schwille (Eds.), *New paradigms and recurring paradoxes in education for citizenship.*

Seixas, P. (2001). Review of research on social studies. In V. Richardson (Ed.), *Handbook of research on teaching* (pp. 545-565). Washington, DC: American Educational Research Association.

Selwyn, N. (2000). Creating a "connected" community? Teachers' use of an electronic discussion group. *Teachers College Record, 102*(4), 750-778.

Shulman, J. H. (Ed.). (1992). *Case methods in teacher education.* NY: Teachers College Press.

Shulman, L. S. (1987). Knowledge and teaching: Foundations of the new reform. *Harvard Educational Review, 57*(February), 1-22.

Shulman, L. S. (1992). Toward a pedagogy of cases. In J. H. Shulman (Ed.), *Case methods in teacher education* (pp. 1-30). New York: Teachers College Press.

*Social studies-history standards.* (World-wide web)(1998). Southfield, MI: National Board for Professional Teaching Standards.

Spiro, R. J., Coulson, R. L., Feltovitch, P. J., & Anderson, D. K. (1988). *Cognitive flexibility theory: Advanced knowledge acquisition in poorly structured domains.* Paper presented at the Tenth Annual Conference of the Cognitive Science Society, Hillsdale, NJ.

Spiro, R. J., Feltovich, P. J., Jacobson, M. I., & Coulson, R. L. (1992). Cognitive flexibility, constructivism, and hypertext: Random access instruction for advanced knowledge acquisition in poorly structured domains. *Educational Technology, 11*(5), 24-33.

Spiro, R. J., Feltovitch, P. J., & Coulson, R. L. (1996). Two epistemic world-views; Prefigurative schemas and learning in complex domains. *Applied Cognitive Psychology, 10*, 51-61.

Sykes, G., & Bird, T. (1992). Teacher education and the case idea. In G. Grant (Ed.), *Review of research in education* (Vol. 18, pp. 457-521). Washington, DC: American Educational Research Association.

*Tomorrow's schools of education.* (1995). East Lansing, MI: The Holmes Group.

van Hover, S., & Yeager, E. A. (2000). *"Just trying to stay above water": A case study of three beginning teachers and their teaching of historical thinking.* Paper presented at the Annual Meeting of the College and University Faculty Assembly of the National Council for the Social Studies, San Antonio, TX.

Wertsch, J. V. (1994). Struggling with the past: Some dynamics of historical representation. In M. Carretero & J. F. Voss (Eds.), *Cognitive and instructional processes in history and the social sciences* (pp. 323-338). Hillsdale, N.J.: L. Erlbaum Associates.

Wideen, M., Mayer-Smith, J., & Moon, B. (1998). A critical analysis of the research on learning to teach: Making the case for an ecological perspective on inquiry. *Review of Educational Research, 68*(2), 130-178.

Wiggins, G. P., & McTighe, J. (2001). *Understanding by design* (Vol. viii). Upper Saddle River, N.J.: Merrill/Prentice Hall.

Williams, S. M. (2002). *Anchored collaborative inquiry.* Paper presented at the Society for Information Technology & Teacher Education 2002 13th International Conference, Nashville, TN.

Wilson, B. G. (Ed.). (1996). *Constructivist learning environments: Case studies in instructional design.* Englewood Cliffs, NJ: Educational Technology Publications, Inc.

Wilson, S. (2001). Research on history teaching. In V. Richardson (Ed.), *Handbook for research on teacher learning* (pp. 527-544). Washington, DC: American Educational Research Association.

Wilson, S. M. (1991). Parade of facts, stories of the past: What do novice history teachers need to know? In M. M. Kennedy (Ed.), *Teaching academic subjects to diverse learners* (pp. 97-116). NY: Teachers College Press.

Wilson, S. M., & Berne, J. (1999). Teacher learning and the acquisition of professional knowledge: An examination of research on contemporary professional development. In A. Iran-Neyed & P. Pearson (Eds.), *Review of research in education* (Vol. 24, pp. 173-209). Washington, DC: American Educational Research Association.

Wilson, S. M., & Mc Diarmid, G. W. (Eds.). (1996). *Something old, something new: What do social studies teachers need to know?* (1st ed.). San Francisco: Jossey-Bass Publishers.

Wineburg, S. (1999, October 20, 1999). *Historical thinking and other unnatural acts* [Internet]. Phi Delta Kappan. Retrieved January 7, 2002, from the World Wide Web: http://www.pdkintl.org/kappan/kwin9903.htm

Wiske, M. S. (Ed.). (1998). *Teaching for Understanding: Linking research with practice.* San Francisco: Jossey-Bass Publishers.