

BUILDING CURRICULUM FOR TEACHER EDUCATION:  
A STUDY OF VIDEO RECORDS OF PRACTICE

By

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## CHAPTER 1

### INTRODUCTION

#### The Educational Problem

In the national debate over education reform, “teacher quality” has emerged prominently, an issue underscored by research confirming that teachers are a critical factor that shapes PK-12 students’ achievement (Rowan, Correnti & Miller, 2002; Sanders & Rivers, 1996). With increased attention to and demand for a larger, high-quality teacher workforce, policy makers, educators, and citizens have called for the reform of teacher preparation (Cochran-Smith & Fries, 2001; Darling-Hammond & Bransford, 2005). This dissertation addresses “practice-based” teacher education, focusing on the use of video records as a practice-based approach, as a potentially powerful framework for transforming of the preparation of new teachers.

University-based teacher education, as the primary route for those seeking teacher certification (U.S. Department of Education, 2006), is routinely criticized as failing to produce teachers who are prepared for teaching from their first days in the classroom. Most recently, Secretary of Education Arne Duncan (2009) stated, “By almost any standard, many if not most of the nation’s 1,450 schools, colleges, and departments of education are doing a mediocre job of preparing teachers for the realities of the 21st century classroom.” Commentator George Will (2006) has argued that schools of education act to the detriment of the country’s neediest students by focusing not on the

skills and pedagogies that teachers need to work with students, but on fuzzy aspects of teacher preparation such as “professional dispositions” and the development of “child-centered” philosophies. Others have drawn ammunition from Arthur Levine’s (2006) report, which characterized teacher education programs as “unruly and chaotic” Wild West towns that lack a standard approach. Even those inside the university-based teacher education establishment acknowledge the lack of a coherent, proven program for the preparation of teachers. Lee Shulman (2005) has noted, “There is so much variation among all programs in visions of good teaching, standards for admission, rigor of subject matter preparation, what is taught and learned, character of supervised clinical experience, and quality of evaluation that compared to any other academic profession, the sense of chaos is inescapable.” This “chaos” is the landscape for current teacher education reform efforts and the context for this dissertation study.

Practice-based teacher education is developing as a promising effort to re-envision university-based teacher education. While teacher education has traditionally treated actual teaching as just one component of novices’ preparation, practice-based teacher education uses teaching as the primary context for preservice teachers’ learning (Ball & Cohen, 1999). This dissertation investigates features of the curriculum that developed through a practice-based approach—the use of video records of preservice teachers’ teaching—as a way of informing the broader project of building a curriculum for practice-based teacher education. In this introduction, I describe the rationales for practice-based teacher education and the role of video in practice-based teacher education. I conclude with a study overview.

## The Challenge of Learning Teaching

The goal for preservice preparation, then, is to provide teachers with the core ideas and broad understanding of teaching and learning that give them traction on their later development. (Bransford, Darling-Hammond & LePage, 2005, p. 3)

Learning to teach is challenging work because teaching itself is challenging work.

Scholars of teaching often refer to the work as “complex” (e.g., Lampert, 2001; Leinhardt, 1993) and studies of PK-12 teaching have endeavored to conceptualize this complexity in various ways. Nel Noddings (2003), for example, has characterized teaching as a “relational” practice; that is, teachers’ work depends on sustaining productive relationships with students in order to engage them with the subject matter under study. Many scholars have focused on reflection as a critical process in which teachers engage (e.g., Schön, 1983). Others have focused on the near constant decisions involved in teaching, as teachers encounter dilemmas in their efforts to manage variation, interaction, and complexity to enable student learning (Lampert, 1985). In these conceptualizations of teaching, the knowledge and reasoning that are part of teachers’ skillful efforts to manage their work are often tacit, highly contextualized, and difficult to observe and define (Leinhardt, 1989).

Other efforts have focused on making explicit the knowledge, skills, and dispositions that teachers need to do their work effectively. Examples of these are represented in the numerous handbooks, edited volumes, and standards documents devoted to understanding PK-12 teaching and teacher education. Darling-Hammond and Bransford’s (2005) edited volume, for example, includes chapters on meeting PK-12 students’ diverse needs, developing curricular vision, the teaching of subject matter, assessment, and classroom management. Elsewhere, the National Board for Professional

Teaching Standards offers five core propositions related to what teachers should know and be able to do ([http://www.nbpts.org/the\\_standards](http://www.nbpts.org/the_standards)): commitment to students and their learning; knowledge of subject matter and how to teach it; responsibility for managing and monitoring student learning; systematic thinking about one's practice; and membership in professional communities. Each of these breakdowns represents a sort of anatomy of PK-12 teaching, a way of organizing the complexity into definable parts.

Indeed, all of these efforts are directed at making PK-12 teaching an approachable subject to be learned—and yet the field is, in Grossman and McDonald's (2008) terms, “still dreaming of a common language” (p. 186). Given the complexity of the work of teaching and the diversity of frameworks that endeavor to organize it, universities are challenged to design and enact teacher education that consistently prepares new teachers for success in their first classrooms.

#### A New Direction for Teacher Education

“Practice-based” teacher education seeks to change the way university-based education does business by taking the enacted work of teaching as both content and context for preservice teachers' learning (Ball & Cohen, 1999). Of course, practice has long had a place in the curriculum for teacher education; however, it is frequently considered (or perceived by preservice teachers as) just one component among many, generally occurring in PK-12 classrooms as “field experience.” In contrast, practice-based teacher education recommits university-based teacher education to a focus—regardless of the venue for learning—on what preservice teachers *do*.

Practice-based teacher education is a developing reform effort. It has roots in scholars' endeavors, particularly in the 1990s, to develop approaches to teacher education

that acknowledged teaching as a professional practice that requires not only skill, but also thinking, reasoning, and investigation (e.g., Cochran-Smith & Lytle, 1990; Harrington, 1995; Lampert & Ball, 1998; Zeichner, 1996). Practice-based teacher education seeks to build on this research base to develop a coherent, comprehensive program of preparation with practice at its center. The University of Michigan School of Education’s Teacher Education Initiative is one such effort ([www.soe.umich.edu/tei](http://www.soe.umich.edu/tei)), but it is not alone in this work. Proponents at other institutions (e.g., Grossman, Compton, Igra, Ronfeldt, Shahan & Williamson, 2009; Kazemi, Lampert & Ghouseini, 2007), though they may or may not take up the name “practice-based,” also push for teacher education that focuses on “teaching...as an interactive, clinical practice, one that requires not just knowledge but craft and skill” (Grossman & McDonald, 2008, p. 189).

In a practice-based program, preservice teachers’ engagement in doing and studying PK-12 teaching goes beyond traditional field experience that may leave preservice teachers on their own to navigate “the rush of minute-to-minute practice” (Ball & Cohen, 1999, p. 14). Practice-based approaches have the potential to overcome a disconnect often perceived by preservice teachers (Darling-Hammond & Hammerness, 2005; Wilson, Floden & Ferrini-Mundy, 2001): between “theory,” as principles and ideas emphasized in their coursework, and “practice,” as the knowledge and skills learned through work with experienced teachers and children in actual classrooms. Regardless of venue—whether university, PK-12 classroom, or elsewhere—preservice teachers encounter actual teaching in a structured, supported manner. As they routinely investigate representations of teaching and engage in the work of teaching, preservice teachers can access PK-12 teaching as a complex practice rather than approaching it in a piecemeal

manner. They can learn how to move their bodies in particular ways, while also engaging with the “know-how”—the principles, judgments, and understanding—that is essential to teaching practice.

### Video in Practice-Based Teacher Education

Video is not new to teacher education, but has long been recognized as a resource for recording, studying, and evaluating preservice teachers’ developing practice (e.g., Burleigh & Peterson, 1967). Its use is certainly growing in teacher education, given the increased accessibility and affordability of technologies that facilitate the collection of video and other records of teaching practice. Within the framework of practice-based teacher education, video records can facilitate preservice teachers’ in-depth study of PK-12 teaching. The medium has qualities that, unlike fast-paced “live” classrooms, allow novices to investigate teaching deliberately and in depth (LeFevre, 2004). Video supports collaborative study of a common “text” (Hatch & Grossman, 2009). The records can be resources both for investigating problems and issues in specific instances of teaching and for drawing generalizations about the nature of and approaches to teaching (Hiebert & Stigler, 2000).

Research has largely addressed the use of video relative to teacher educators’ pre-established goals rather than examining the range of possibilities related to the study of teaching that the approach affords. Most studies focus on videos representing “expert” or “experienced” teachers rather than preservice teachers. This study contributes to the literature on video in teacher education by providing a better understanding of the curricular implications of this practice-based approach to teacher education. The study

investigates features of the curriculum that developed through instructional use of videos collected by preservice teachers as they documented their beginning efforts at teaching.

### Study Overview

Given recent technological and theoretical advances, video has the potential to become an everyday tool for practice-based teacher education. This dissertation examines preservice teachers' study of video as a regular part of their teacher education, addressing the question of "what comes up" through preservice teachers' ongoing, collective study of their own and other novices' teaching through video. In this way, the dissertation is a study of enacted curriculum—that is, features of content and instruction that emerge when a teacher educator and preservice teachers interact around video representations of teaching. The features of the enacted curriculum that developed through this use of a practice-based approach can be informative for the larger project of developing a curriculum for practice-based teacher education.

With video, preservice teachers can potentially study students, teaching methods, subject matter, and innumerable other aspects that are intertwined within the representation of teaching. Yet because this approach is contingent upon the uncertain, relational work of PK-12 teaching as captured in representations, it is difficult to anticipate the ideas that will be addressed. Further, the enacted curriculum is contingent upon the interaction of preservice teachers and teacher educator around the selected representations. This study, then, addresses both *what* ideas develop and *how* the ideas develop—that is, it addresses both content and instruction. The research question is: *What curriculum for teacher education can develop over time through instructional use of video records of preservice teachers' practice?* Two sub-questions drove the analysis:

- a. In what ways do particular teacher educators' and preservice teachers' interactions with video and one another shape the development of the curriculum?
- b. What content develops in the case where video records of practice are used in a single class session? What content develops across multiple class sessions?

I addressed these questions in a case study of a teacher education program that emphasized the study of video records of preservice teachers' teaching. Data were collected in 2007-08, the pilot year of a one-to-one technology project—that is, a project that provided each preservice teacher with the technology needed to capture, share, and study video representations of their teaching. Throughout their one-year master's program, preservice teachers pursuing secondary teacher certification used video technology to document and share their teaching efforts. In Winter 2008 (January-April), videos were used for several purposes, but this study focused on a particular, recurring assignment. For this task, the preservice teachers were directed to: 1) record one or more instances of their own teaching, 2) select a five-minute video clip that represented an issue or problem they experienced in their teaching, 3) share it with a small group of five to eight classmates and a teacher educator, and 4) discuss it with the group for the purposes of interpreting it and making plans for future teaching. Study participants included seventeen preservice teachers and five teacher educators. The data included:

- video recordings of seven class sessions (including 16 discussions of preservice teachers' videos) facilitated by me as the teacher educator;
- audio recordings of six planning meetings among teacher educators; and
- copies of course and program documents.



The case study addressed features of the enacted curriculum—including both content and instruction—that emerged in the interactions of teacher educators and preservice teachers around video representations of secondary school teaching. I used verbal analysis methods (Chi, 1997) to address the content, or the ideas about teaching practice developed within and across class sessions. Through the lens of activity theory, I addressed the ways interactions among participants shaped the content. Analyses of planning meetings and documents richly contextualized the curriculum within the language and goals of the teacher education program.

Chapter 2 of this dissertation describes the research base related to the use of video in teacher education and situates this study as a contribution to that base. The chapter organizes previous studies of the use of video in teacher education according to the teaching-related content and processes they addressed, and reiterates this study's contribution in providing a better understanding of the curricular implications for preservice teachers' ongoing, collective study of their own teaching through video. In Chapter 3, I articulate the theoretical framework. I assert that the notion of practice (Reckwitz, 2002) is a useful way to conceptualize teaching because it emphasizes what teachers do—their everyday actions, performed with “know-how”—as they pursue the goal of supporting student learning. Practice-based teacher education, then, focuses teacher educators on what preservice teachers learn to do—not just in “the field,” but across the venues in which teacher education occurs. I clarify curriculum from an enacted perspective (Snyder, Bolin & Zumwalt, 1992); that is, curriculum as developing in the interaction of teacher educator, preservice teachers, and the teaching represented in video. Then I present activity theory (Engeström, 1987) as a framework for interpreting a

teacher education curriculum that is focused on practice. Chapter 4 is a detailed description of the research design, including the context for the case study, data set, methods of analysis, and means of establishing trustworthiness. I present the results in Chapters 5 and 6. Chapter 5 addresses the instructional features intended by teacher educators and the ways these manifested or changed in the actual video class sessions. I then identify the discourse moves that recurred in the video discussions. I illustrate these with an in-depth look at one video discussion and use activity theory to analyze the contradictions that existed within the activity of video discussion as it was conceived by teacher educators and by preservice teachers. Chapter 6 addresses the content of the curriculum constructed in the video class sessions. I present findings related to two analytic lenses: the content lens, through which I identified the broad categories of ideas raised during discussions, and the practice lens, through which I established the ways participants developed ideas about practice, including the “know-how” that characterizes teachers’ work. Finally, I highlight key features of the enacted curriculum in Chapter 7 and consider the implications for practice-based teacher education.

## CHAPTER 2

### LITERATURE REVIEW

#### Overview

In this chapter, I review literature related to the use of video in teacher education. This review serves two purposes for this dissertation: it elaborates the meaning of the research questions by clarifying terminology and concepts, and it situates this study as a contribution to the existing research base. The review addresses three key questions. First, *what do I mean by “video records of practice?”* To answer this question, I examine conceptual underpinnings of three research programs focused on video records of practice. Second, *what might be studied through video records of practice?* For this question, I review 26 studies that give some insight into this dissertation’s research question, examining the content that these studies purport to address. Finally, *what might be studied through video records of preservice teachers’ practice?* For this question, I examine six studies that focus on novices’ study of their own teaching through video.

#### What Are “Video Records of Practice”?

Video is not new to teacher education, but has long been recognized as a resource for recording, studying, and evaluating preservice teachers’ developing practice (e.g., Burleigh & Peterson, 1967). Richard Biberstine, writing in 1971, described the use of “videotape equipment” in the teacher education program at Indiana State University. Biberstine highlighted four uses of video: 1) to provide almost-immediate feedback to student teachers after they teach, 2) as part of a microteaching sequence to enable the

preservice teacher to “study his/her own behavior” in teaching a carefully planned lesson (Kallenbach, cited in Biberstine, p. 219), 3) to ensure that programmatic information is shared (for example, by recording meetings missed by some preservice teachers) and 4) to provide “instructional tapes” (p. 220) that illustrate techniques and situations that are under study in a course. These four uses emphasize video as a documentation tool that enables teacher educators and preservice teachers to revisit and share events that already took place.

More recently, studies in teacher education have taken advantage of technological advances that make video use more accessible. Such studies also address the theoretical shift from behaviorist to cognitive views of teaching (Sherin, 2004). In the 1980s and 1990s, the field developed a conception of teaching as involving complex cognitive skill (Leinhardt & Greeno, 1986), and the teacher as a decision maker within the complex environment of the classroom (e.g., Lampert, 1985; Leinhardt, 1989). Studies of teacher education also took a new direction, focusing on supporting preservice teachers’ understanding of and capacity to make reasoned decisions during fast-paced instruction. The use of “records of practice” in an ongoing way was one such advance toward capturing the complexity of teaching and making it accessible for study (Lampert & Ball, 1998).

By records of practice, I mean artifacts and documentation drawn directly from teaching. Artifacts include teachers’ lesson plans and notes, student work, and curriculum materials—concrete items that are part of teachers’ work in classrooms. Documentation includes authentic recordings of classroom interactions, including video representations of teachers’ work with students in classrooms, which are the focus of this dissertation.

Video has characteristics that make it a particularly powerful medium for records of practice. Videos provide a lasting record; they can be collected and edited; and they enable certain kinds of interaction, including time to reflect, collegiality, and fine-grained analysis (Sherin, 2004).

Here, I highlight three research programs to elaborate on the ways video records are conceptualized as tools for studying teaching. Certainly, numerous studies have advanced the field's use of video; I selected these three research programs as design studies that were “conducted to develop theories, not merely to empirically tune ‘what works’” (Cobb, Confrey, diSessa, Lehrer & Schauble, 2003, p. 9). These research programs focused on theorizing video as a tool for studying teaching. Their approaches were innovative and comprehensive, attending closely to the design of video, the conceptualization of teaching as “subject matter,” the setting in which videos were used, and their use over time. In doing so, these research programs provided a foundation for numerous other studies—including this one—that involve the use of video in teacher education.

#### *The M.A.T.H. Project*

In 1989, Magdalene Lampert and Deborah Ball received a National Science Foundation grant to support their Mathematics and Teaching Through Hypermedia (M.A.T.H.) Project. Their aims were 1) to document one year of mathematics teaching in grade 5 (Lampert's teaching) and grade 3 (Ball's teaching), 2) to create a digital environment with these records of practice for use in a teacher education setting, and 3) to investigate the use and effects of the digital environment with teacher educators and preservice teachers. The digital environment represented Lampert's and Ball's teaching

in the form of videos of their lessons, copies of their lesson plans and journals, and samples of students' work. Over several years, Lampert, Ball, and colleagues used the digital environment with more than 200 preservice teachers in their mathematics methods courses. Hypermedia enabled preservice teachers to explore and manipulate these records of practice, working both individually and in small groups, in order to investigate their questions about teaching. Lampert and Ball reported their experiences and findings in a 1998 book entitled *Teaching, Multimedia, and Mathematics: Investigations of Real Practice*.

Lampert and Ball did not claim that preservice teachers learned more or better with the digital environment, but that they learned differently. Preservice teachers used evidence from the records of practice to investigate self-selected questions, which frequently challenged their assumptions about mathematics teaching and learning. However, preservice teachers rarely addressed mathematics, but instead tended to focus on pedagogical and psychological aspects of teaching. Lampert and Ball raised questions about the relationships between specifics and generalizations in the study of records of practice, noting that preservice teachers frequently leapt to broad claims based on the specifics of the records.

Along with these results, Lampert and Ball's conceptual basis for studying teaching through video (and other records of practice) was an important contribution to the field. Lampert and Ball conceived of teaching as "a text to be interpreted" (p. 40), and video and other records as formats that made this text studyable. Prior to their development of the M.A.T.H. Project, they had found the occasional use of stand-alone videos and other records with preservice teachers inadequate. The records of practice

included in the digital environment, which covered a full year and represented various aspects of teaching, could support “a series of different journeys across the terrain of teaching” (p. 45). They envisioned these “journeys” as allowing preservice teachers to study more than the visible aspects of teaching; Lampert and Ball sought to provide opportunities for preservice teachers to develop “strategic ways of reasoning and knowing in practice” (p. 44). In short, Lampert and Ball used the digital environment to support preservice teachers’ study of *teaching*—not particular teachers or particular lessons—and the complexity it entails.

#### *1995 TIMSS Video Study*

The 1995 TIMSS Video Study is a second key research program that has shaped the way teacher educators conceive of video records of practice. James Stigler, James Hiebert, and colleagues had three main goals in conducting the study: 1) to learn how eighth grade mathematics was taught in the United States, 2) to learn how eighth grade mathematics was taught in the two comparison countries (Germany and Japan), and 3) to learn how American teachers viewed reform and to see whether they were implementing teaching reforms in their classrooms (Stigler & Hiebert, 1998, 1997). They used video technology to “paint national portraits” (p. 15) of eighth grade mathematics instruction in the three countries. They recorded one lesson each, at points across the school year, in 100 classrooms in Germany, 81 in the United States, and 50 in Japan. The videos were transcribed and coded, which allowed the researchers to conduct various analyses.

The focus of the 1995 TIMSS Video Study was not the development of video tools for teacher education; but the study findings certainly had implications for teacher education. Analyses of the data from the 1995 TIMSS Video Study led to profiles of

mathematics instruction in Germany, the U.S., and Japan. Findings addressed the cultural scripts that shaped teachers' work in each country, including how lessons were structured and delivered, what kind of mathematics was presented, and the kind of mathematical thinking in which students engaged (Stigler, Gonzales, Kawanaka, Knoll & Serrano, 1999). These findings furthered the field's understanding of the complexity of teaching, and mathematics teaching in particular.

Like Lampert and Ball, Stigler and Hiebert conceived of video as useful for studying teaching—not to focus on particular teachers or types of lessons, but to understand common aspects of the work that could be seen across video records. The researchers emphasized teaching as “a system of interacting elements, not just a collection of features” that is “embedded in a cultural context that overdetermines its nature” (Hiebert & Stigler, 2000). Stigler and Hiebert also pushed the field to recognize video as having both advantages and limitations. This recognition expanded the view taken, for example, by Burleigh and Peterson in 1967: “The videotape presents the total situation and leaves the evaluation to the viewer” (pp. 35-36). Certainly, the 1995 TIMSS Video Study embraced the video medium as offering unprecedented opportunities to study teaching. Videos remove viewers from the complex action of the classroom, allow multiple viewings of the same events, and provide a common “text” for examination by a group. However, Stigler, Hiebert, and colleagues also emphasized the inherent limitations of the video medium, in particular the influence of videographers' decisions, including the angles from which to film, when to zoom in or out, and how to edit (Stigler & Hiebert, 1997).



### *Inside Teaching*

The third and most recent research program, *Inside Teaching*, differs from the others because it uses a Web-based format as well as multiple designers who are teacher educators, teachers, and preservice teachers. Originally, the Web-based format was used to document the practice of Carnegie Academy for the Scholarship of Teaching and Learning (CASTL) fellows, who were nominated for excellence in PK-12 teaching and their efforts to study their teaching. The fellows designed Web sites that included videos of their teaching as well as lesson plans, curriculum materials, and student work. Pam Grossman and colleagues then documented their efforts to use the CASTL representations with preservice teachers in teacher education courses, and some preservice teachers documented their work with CASTL Web pages, including some teaching efforts of their own. All of these records became part of an online gallery called *Inside Teaching*, which is publicly available for anyone's use.

The *Inside Teaching* project is ongoing, and definitive "results" of studies related to its use are not yet published. However, Hatch and Grossman (2009) have described the conceptual framework underpinning the *Inside Teaching* collection, which conceived of:

- teaching as a complex, situated, and ill-defined activity;
- teacher learning as a long-term engagement with evolving understandings of practice;
- multimedia representation of teaching as a key means for facilitating collaborative examinations of practice from multiple perspectives; and
- learning from representations of teaching as dependent on the affordances of the representations and the settings in which they are examined (p. 73).

This coherent framework, which aligns with the work of the M.A.T.H. Project and the TIMSS Video Study, summarizes the conceptual advances that shape the ways many studies—including this dissertation—approach the use of video in teacher education. First, these studies view PK-12 teaching as a complex but learnable practice. Teacher education is equally complex; learning to teach is an ongoing, evolving process that extends from initial teacher preparation throughout one’s teaching career. Second, video (with other records of practice) is a tool that can support learning in and from teaching because it accommodates collaborative study of a common “text.” This text may focus on individual teachers or specific lessons, but also enables the study of PK-12 teaching across contexts. Third, in an important contrast with Biberstine’s (1971) uses of video in teacher education (see page 11), these studies view the outcomes of video study as dependent on the interaction between the technology and the viewer—the characteristics of each and of the setting for the interaction (see also Giddens, 1984; Orlikowski, 2000).

### What Can Be Studied With Video?

To some extent, the literature provides insight into the key research question for this dissertation—that is, studies of video records in teacher education point to “curriculum” that they might be used to address. To get a sense of the content and instruction addressed in past studies involving video, I used two online databases, Web of Science and Education Resources Information Center (ERIC), to search for articles focused on the instructional use of video (including video embedded in hypermedia or multimedia) with preservice teachers. To ensure the relevance of the review, I attended to context and design in selecting the studies. The studies included in this review: 1)

described actual use of video in teacher education, not just the design of videos or multimedia; 2) focused on outcomes of instructional use in teacher education settings, not just self-reported measures of usability and engagement; 3) used video of “real” PK-12 teaching, not simulated; and 4) targeted preservice teachers, not practicing teachers, as the users of the video or multimedia tool. I eliminated articles that focused on the use of video in distance education since distance education implies goals and raises issues quite different from those of site-based teacher education.<sup>1</sup> In total, I selected 26 relevant studies.<sup>2</sup>

The reviewed studies, in general, embraced the assumptions about video and teaching addressed in the previous section. They conceived of teaching as a complex, situated, and ill-defined activity that requires time to learn. They conceived of video as providing a lasting, reviewable record, a common text that supports collaborative study. In addition, the reviewed studies did not focus on the video medium in isolation; they addressed the (sometimes elaborate) instructional settings in which preservice teachers encountered the videos. Preservice teachers encountered freestanding videos as well as video in hyper- and multi-media forms, with or without the support of an instructor. Preservice teachers worked with video through the lens of particular observational frameworks, engaged in repeated viewings, and interacted with teacher educators and fellow preservice teachers.

In developing this review, I benefited from examining others’ reviews of the literature on the use of video in teacher education, which have found largely positive

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<sup>1</sup> For example, educators in distance settings often use video and other technology to create a university presence, facilitate personal interaction, and build community among students, as they lack a physical classroom space for fulfilling these aspects of the educational experience (Roberson & Klotz, 2002; Shin & Chan, 2004).

<sup>2</sup> Appendix A is a detailed summary of the 26 studies included in this review.

effects on preservice teacher learning (Grossman, 2006; Wang & Hartley, 2003). A 2003 review by Wang and Hartley found that studies on the use of video in teacher education address positive effects on preservice teacher learning in three general areas: transforming preservice teachers' beliefs about teaching and learning, developing pedagogical content knowledge, and supporting pedagogical understanding of different PK-12 learners. Indeed, 25 of the 26 studies in this review reported positive findings related to the use of video in teacher education.<sup>3</sup> Rather than focusing on outcomes, I address the objectives for preservice teachers' learning claimed by the 26 reviewed studies. These objectives generally address two elements of preservice teachers' learning, which I term *process* and *content*.

### *Process*

First, *process* refers to the ways preservice teachers should think or act as they engage with the video. Some of the studies explicitly stated processes as part of the objectives for the use of video records with preservice teachers, and in other cases I inferred the processes through the researchers' descriptions of the conceptual framework for and instructional use of the video. Table 2.1 categorizes the 26 studies by the processes that they purport to address through the use of video in a teacher education setting.

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<sup>3</sup> The exception is the study by Schrader, Leu, Kinzer, Ataya, Teale, Labbo and Cammack (2003), which found no difference in performance among preservice teachers in three treatment groups: a "traditional" approach including readings, presentations, discussions, assignments, and field experiences; a traditional approach augmented with videos from a commercial series; and a traditional approach augmented with multimedia literacy cases. The researchers found the preservice teachers were equally confident in their ability to teach reading, and there was no difference in their identification of aspects of effective literacy instruction. The researchers noted that the instructor's lack of experience with case-based instruction may have influenced these results.

Table 2.1  
*Processes Addressed by Video Studies*

Process	Studies
Noticing/ Meaning making/ Investigating (9)	Beck, King & Marshall (2002) Copeland & Decker (1996) Eilam & Poyas (2006) Kagan & Tippins (1991) Nelson (2008) Rosaen, Lundeberg, Cooper, Fritzen & Terpstra (2008) Santagata, Zannoni & Stigler (2007) Star & Strickland (2008) Van Es & Sherin (2002); Sherin & Van Es (2005)
Developing knowledge of/for teaching (7)	Asan (2003) Boling (2007) Daniel (1996) Friel & Carboni (2000) Goldman & Barron (1990) Schrader, Leu, Kinzer, Ataya, Teale, Labbo & Cammack (2003) Winitzky & Arends (1991)
Reflecting/ Reflecting-in-action (6)	Abell, Bryan & Anderson (1998) Bencze, Hewitt & Pedretti (2001) Hewitt, Pedretti, Bencze, Vaillancourt & Yoon (2003) Whitehead & Fitzgerald (2007) Wong, Yung, Cheng, Lam & Hodson (2006) Yerrick, Ross & Molebash (2005)
Transferring to own practice (4)	Koehler (2002) Masingila & Doerr (2002) Moreno & Valdez (2007) Van den Berg, Jansen & Blijleven (2004)

The largest group includes nine studies focused on developing preservice teachers' ability for noticing, meaning making, or investigating. "Noticing" is perhaps the best developed of these processes, described by Sherin and Van Es (2005) as: attending to details within complex teaching scenarios, making connections to broader principles about teaching and learning, and reasoning through the situation to bring it to a productive conclusion. In Sherin and Van Es' study, six preservice teachers seeking secondary science and mathematics certification (the treatment group) uploaded videos of

their own teaching to a multimedia system. Over three sessions, the system prompted them to interact with the videos in particular ways. In analyzing the essay reflections written by the preservice teachers, the researchers found that the treatment group transitioned from writing chronological descriptions to organizing analyses around what they noticed, offering supporting evidence. The treatment group also engaged in more interpretive work than the control group of six other preservice teachers. Other studies in this category focus on the processes of meaning making and investigating; though described with less detail, these also emphasized teachers' need to focus on details, interpret the details, and make decisions about how to proceed based on those interpretations.

The second group (seven studies) focused on preservice teachers' acquisition of knowledge of and for teaching. In one of these, Boling (2007) framed video as a medium between stories of teaching and preservice teachers' stories. Twenty-five preservice teachers in an elementary literacy course used a multimedia system to search for video clips that represented ideas and approaches that would support their teaching of literacy lessons in the field. They responded to activities in which they selected, viewed, shared and discussed some of these clips. Using a rich case of one student, Boling found that the multimedia case activities revealed some transformation of this preservice teacher's knowledge and beliefs related to literacy, created cognitive dissonance in terms of her experiences as a student of literacy, and illustrated the ways narrative served as an organizing framework for her making meaning of the cases. Studies that focus on preservice teachers' acquisition of knowledge, like Boling's, emphasized both knowing

*what* (such as subject matter or principles of PK-12 teaching) and knowing *how* (such as the enactment of approaches to PK-12 teaching).

The third group (six studies) focused on developing capacity for reflection. Reflection involves more than thinking about one's actions; reflection is a complex process of considering events in light of one's experiences and beliefs (Schön, 1983). In one study addressing reflection, Bencze, Hewitt and Pedretti (2001) examined the use of multimedia case methods and the connection to 42 preservice teachers' development of habits of praxis, or critical reflective practice. In a science methods course, the preservice teachers were introduced to a particular framework for studying teaching and learning and then applied this framework as they viewed a science multimedia (including video) case. Preservice teachers engaged in three activities around the case: first, they reflected individually on case-related issues before viewing; second, they discussed their observations of the video in small groups; and third, they debriefed as a large group. Bencze, Hewitt and Pedretti presented several propositions based on their analysis: the preservice teachers grasped the presented framework; they distinguished among intended, implemented, and achieved curricula; the majority were careful not to overgeneralize from the case; and their work indicated a propensity for reflection on teaching. This and the other five studies addressed the process of reflection as one that synthesizes theory and practice as preservice teachers engage in reasoning, defend their decisions, and consider alternatives.

The fourth and smallest group (four studies) focused on transfer—that is, the use of certain ideas and methods in the preservice teachers' own practice. Of these four studies, two focused on preservice teachers' actual teaching, as the tasks around video

were designed to elicit performance by the preservice teachers in relevant domains of practice. In Van den Berg, Jansen and Blijleven's (2004) study, 46 preservice teachers planned an elementary science lesson after several class sessions of work with a case that included video and multimedia components. The researchers found that most preservice teachers used the activity represented in the video and other records of practice as a kind of template for their own lessons, which the researchers characterized as "near transfer." Further, 17 preservice teachers actually enacted their planned lessons in their field work. Among the four studies in this category, what counted as "transfer" varied, from demonstrating a way of thinking to using an approach with students; but all emphasized that the preservice teachers actually engaged in some aspect(s) of the work of teaching.

Although only the fourth group of studies emphasized preservice teachers' engagement in teaching, all four of the processes noted in Table 2.1 could fit the broader category of *enactment*. Preservice teachers, by engaging in these processes, were in some respect "doing" teaching. These studies conceived of teaching as a complex, situated practice, and these processes as necessary to the teacher's role of making reasoned decisions during fast-paced instruction. The studies used video to allow preservice teachers the time and space to notice, know, reflect, or plan for transfer—processes that would be challenging to study during the act of teaching or through observation of "live" teaching. The researchers' broader goal was that the preservice teachers would enact noticing, knowing, reflecting, and transferring not only in their study of video, but in their actual teaching as well.



*Content*

*Content* is the other aspect of the objectives stated in the 26 studies. Content refers to the aspects of or ideas about teaching that preservice teachers should be able to study through video. The studies explicitly stated this content, and I developed five categories for grouping these. Table 2.2 categorizes the 26 studies by the content that they purport to address.

Table 2.2  
*Content Addressed by Video Studies*

Content	Studies
Classroom Interaction/ Environment (14)	Asan (2003) Beck, King & Marshall (2002) Copeland & Decker (1996) Daniel (1996) Eilam & Poyas (2006) Goldman & Barron (1990) Moreno & Valdez (2007) Rosaen, Lundeberg, Cooper, Fritzen & Terpstra (2008) Santagata, Zannoni & Stigler (2007) Schrader, Leu, Kinzer, Ataya, Teale, Labbo & Cammack (2003) Star & Strickland (2008) Van den Berg, Jansen & Blijleven (2004) Van Es & Sherin (2002); Sherin & Van Es (2005) Winitzky & Arends (1991)
Student Thinking/ Cues (4)	Friel & Carboni (2000) Kagan & Tippins (1991) Koehler (2002) Masingila & Doerr (2002)
Beliefs/Theories about subject area teaching (4)	Abell, Bryan & Anderson (1998) Boling (2007) Wong, Yung, Cheng, Lam & Hodson (2006) Yerrick, Ross & Molebash (2005)
Teachers' Decision Making/Situated Knowledge (3)	Bencze, Hewitt & Pedretti (2001) Hewitt, Pedretti, Bencze, Vaillancourt & Yoon (2003) Whitehead & Fitzgerald (2007)
Equity and Access (1)	Nelson (2008)

Studies addressing Classroom Interaction/Environment, by far the largest category, used video to examine particular aspects of teaching, their relationships to one another, and their connection to the complex system of classroom activity. Santagata, Zannoni, and Stigler (2007), for example, reported on two studies involving preservice teachers seeking secondary mathematics certification in an Italian teacher education program. In each study, preservice teachers viewed a video and wrote comments about “interesting” features, which were coded for elaboration, links to evidence, mathematics content, student learning, and critical approach. The duration of the video (a full lesson versus several short segments) was the key difference between the studies; however, the results of post-tests for both studies indicated that preservice teachers’ comments were more specific and elaborated, more focused on mathematics content, and more attentive to student learning and behavior. In another study, Beck, King and Marshall (2002) reported on an approach they called “videocase construction” to support preservice teachers’ development as observers of teaching. Over a ten-week period, the researchers studied 62 preservice teachers divided evenly between two conditions: a technology-supported treatment group in which preservice teachers participated in videocase construction in addition to their standard field observation, and a control group engaged in standard field observation with an instructional technology lab. Preservice teachers in the treatment group recorded and edited a single, “ordinary” lesson by a mentor teacher. They selected and repeatedly viewed 2- to 7-minute sequences from various perspectives and then wrote reflections about how the clips demonstrated “effective teaching” as defined through particular observational frames (e.g., teacher strategies, student learning). A video observation test revealed that those involved in videocase construction

outperformed those in the control group in terms of identifying, interpreting, and analyzing effective teaching. These and other studies in the Classroom Interaction/Environment category emphasized video's capacity to visually and audibly represent complex classroom activity. Studying the enactment of a teacher's strategy or approach on video, for example, potentially gives preservice teachers access not only to "how to," but also to instances of how students respond, problems that arise, and contextual aspects that influence the way a teacher enacts the approach.

Four studies are in the category of Student Thinking and Cues. Friel and Carboni (2000), for example, took a case-based approach to using video, complemented by other activities (e.g., interviews with elementary students about their mathematical thinking), with preservice teachers in an elementary mathematics methods course. The videos represented reform-oriented lessons that emphasized children's reasoning in a whole class setting. They used the video records in three ways: as exemplars, as opportunities for analysis and problem solving, and as stimulants for personal reflection. In analyzing collected course assignments as well as interviews with five of the preservice teachers, the researchers found a shift in preservice teachers' thinking of mathematics teaching from teacher-centered to student-centered; that is, they came to understand "mathematics as something that can be developed by students themselves" (p. 123). As in the previous category, studies in this category relied on video's capacity to provide visible and audible evidence of a phenomenon within the complex activity of the classroom, but the focus was on student behavior, both verbal and nonverbal.

The three remaining categories also relied on video's capacity to represent classroom complexity, but they foregrounded beliefs, knowledge, and principles. These

categories address more abstract content, in contrast with the previous categories that address more concrete features of PK-12 teaching. Teachers' beliefs, knowledge, and principles certainly permeate a teaching situation, but they may be difficult to pinpoint; as a lasting, reviewable record, video can ground preservice teachers' study of beliefs, knowledge, and principles in actual teaching. The study by Wong, Yung, Cheng, Lam and Hodson (2006), for example, involved 88 preservice teachers in a secondary science methods course who used videos of reform-oriented science lessons as a means of reflecting on their beliefs about "good" science teaching. The researchers compared the preservice teachers' pre-video and post-video identification of features of good science teaching. They found that the post-video conception revealed significant growth in terms of the range and elaboration of the identified features. The researchers posited that the use of video raised awareness of alternative approaches to teaching and different classroom situations, serving as an effective prompt for individuals to reflection on their beliefs about and conceptions of science teaching. In another study, Hewitt, Pedretti, Bencze, Vaillancourt, and Yoon (2003) examined the ways video cases helped preservice teachers develop awareness of and skill with their own decision making processes. Forty participants in two elementary science methods courses examined several segments of a first-year teacher's lesson on photosynthesis. The lesson was stopped at four points that represented "authentic classroom problems," and the preservice teachers individually recorded their decisions about how the teacher should respond, and then discussed and modified their responses in small groups. The researchers found at each stopping point, 70 to 80 percent of preservice teachers modified or reinvented their decisions after discussing the event in a small group. They developed awareness of new considerations

that shaped their decision making, including giving new explanations to students, issues of timing and pacing, classroom management concerns, ways to redirect student thinking. These and the other studies in the three remaining categories use video as a means of studying the enactment of beliefs, knowledge, and principles in PK-12 teaching.

This analysis of content, as well as the previous section on process, hints at the curriculum that can be addressed through the use of video records in teacher education. As preservice teachers engage with videos, which capture audible and visible details of a situation in a lasting, reviewable record, they have access to the “content” of complex PK-12 classroom activity. Preservice teachers can potentially maintain a sense of the whole system while studying specific features of that activity, such as teachers’ actions, students’ responses, and the classroom environment. They can study these concrete aspects in relation to abstractions such as beliefs, knowledge, and principles.

#### What Can Be Studied With Videos of Preservice Teachers’ Teaching?

This dissertation focuses on video records of preservice teachers’ own teaching in secondary school classrooms. Among the 26 studies included in the previous section, most focused on videos of “expert” or experienced teachers; just six of those 26 studies used preservice teachers’ videos. These six studies, like those that focused on video of others’ teaching, drew upon video’s capacity for creating reviewable records of classroom interaction, potentially providing evidence that could be connected to knowledge, beliefs, and principles. The key difference is, of course, that these records represent the novices’ own teaching. The video records likely make possible a kind of study that cannot occur during the act of teaching; but the records are also novice and

personal, which raises questions about differences in the ways the videos are used and the content that they can be used to address.

In one such study, Kagan and Tippins (1991) used video as a way to amplify student teachers' (in the final semester of their program) field experiences. The researchers sought to help student teachers attend to student cues while teaching – that is, to provide systematic practice at “reading” the verbal and nonverbal behaviors of students and thinking about the instructional implications. They conducted four viewing and discussion sessions each with five student teachers. The first three sessions with each student teacher focused on videos of her recent lessons (addressing social studies, mathematics, science, or language arts), while in the fourth session, each viewed another student teacher's video before re-viewing one of her own. Kagan and Tippins identified several themes in the data: focus on pupil case description; focus on management-related cues rather than instructional cues; few impromptu changes in the lesson; and use of their own feelings to measure success of the lesson. However, in four of the five cases, viewing another student teacher's video produced a stronger shift in perspective when they revisited their own video. Kagan and Tippins posited that the student teachers were overly uncomfortable with evaluating their own instruction; they asserted that viewing another novice's video allowed the student teachers to disengage from their own feelings and to take a more analytical mindset toward their own work.

Nelson's (2008) study framed video as a “self-reflective” tool with the potential to cause disequilibrium, allowing preservice teachers to recognize their own assumptions and alter their beliefs about equity in the science classroom. Elementary preservice teachers in two sections of a science methods course engaged in a five-step task. Each

preservice teacher video recorded herself teaching a science lesson, wrote a reflection paper based on her memory of the lesson, viewed the video as many times as she wanted, responded to prompts to provide contextual information, and finally wrote a paper synthesizing her experiences, analyses, and relevant literature. Nelson found that the preservice teachers' memory-based reflections indicated that most thought they had done a "pretty good job;" in video-based reflections, however, the preservice teachers found evidence of children who were excluded from full participation in the science lesson. Nelson concluded that the video-assisted self-reflection enabled the preservice teachers to make some connections between their actions and individual children's access to materials, content, and engagement in scientific thinking during in a science lesson.

To study elementary preservice teachers' reflections on their "discussion-based" teaching in literacy and science, Rosaen, Lundeberg, Cooper, Fritzen and Terpstra (2008) also compared video-supported reflections with memory-based written reflections. Three preservice teachers video recorded two lessons (one literacy, one science) each. After teaching a lesson, each preservice teacher engaged in three activities: she wrote a reflection based on her memory, then reviewed the video of the lesson and used editing tools to select segments for analysis, and then wrote another reflection to explain her choice of video segments. The researchers' analysis indicated three major findings. Video-supported reflection helped the preservice teachers to (a) write more specific, rather than general, comments about their teaching, (b) focus more on instruction and less on classroom management, and (c) focus more on children and less on themselves less on themselves.

Van Es and Sherin (2002) (see also Sherin & Van Es, 2005) studied the ways video supported preservice teachers' development of the ability to "notice" (described above) and interpret classroom interactions. Twelve preservice teachers seeking secondary science and mathematics certification participated in the study, six in the treatment group and six in a control group. The treatment group uploaded videos of their teaching to a multimedia system, and over three sessions, the system prompted them to interact with the videos in particular ways. The data set consisted of essays written by all twelve preservice teachers at the beginning and end of the summer and fall class sessions. In each essay, the preservice teacher reflected on a video of his or her own teaching. The researchers found that the treatment group transitioned to organizing their analyses around what they noticed and used evidence to support these, rather than giving chronological descriptions. Further, the preservice teachers who used the multimedia system engaged in more interpretive work than the control group, though all teachers appeared to take a consistently evaluative stance toward their own teaching.

Whitehead and Fitzgerald (2007) examined the use of video as a mediating tool in the interactions of preservice teachers and their mentor teachers in a study among the few that was not situated in a particular teacher education course. As part of a broader effort to promote "a generative approach to mentoring" (p. 2) over a three-year period, preservice teachers and mentors engaged in self-study using videos to study their own teaching. Together, preservice teachers and mentors participated in a multi-step process: 1) they co-planned a lesson together, 2) the mentor taught the lesson, 3) the mentor and preservice teacher viewed a video of the lesson and discussed it, 4) they revised the plan for the preservice teacher to teach in another class, 5) the preservice teacher taught the



lesson, and 6) they viewed the video and debriefed. The data set included interviews, questionnaires, and videos of the lessons and reflective dialogues between mentors and preservice teachers. Analyses revealed several themes: professional identity as ongoingly formed for both mentors and preservice teachers; recognition of practitioner knowledge as situated and in flux; and realization of a more democratic form of mentoring.

Finally, Yerrick, Ross and Molebash (2005) studied preservice teachers' use of digital video editing tools as they reflected on videos of their own teaching. The elementary preservice teachers in a science methods course engaged in an "instructional cycle," during which each preservice teacher planned, taught, and recorded their teaching of a science lesson. In analyzing the instructional cycle artifacts, including a final video project that "represented their learning and reflection upon their learning in the course" (p. 357), the researchers found that the video editing technology influenced shifts in three areas: reflections regarding children's thinking, planning and instruction informed by reflection, and notions of teaching expertise and requisite knowledge.

These six studies emphasized the potential of video evidence as a tool for overcoming preservice teachers' impression-based evaluations of their teaching. By studying videos of their teaching, the preservice teachers attended closely to their students' behavior and thinking and took a more complex perspective on the environment that shaped their instruction. In short, the preservice teachers took a more evidence-based, reasoned perspective on their teaching than they might have without the use of video. In addition, these studies indicated that the preservice teachers gained a better sense of what it means to know how to teach—that is, they were able to study the situated, contextual nature of teachers' knowledge in relation to their own teaching.

## Situating This Study

As was noted, this literature review provides a kind of answer to the main research question for this dissertation; that is, the results of past studies give some sense of a “curriculum” that might be addressed through the use of video in teacher education. That answer, however, is incomplete, and this study seeks to build on the research base to address the question more fully. All of the 26 reviewed studies focused on outcomes relative to particular objectives established by the teacher educators. Some studies did address unintended outcomes; however, no study examined the *enacted curriculum* that is a central concept for this dissertation—that is, curriculum as developed by preservice teachers and teacher educators as they interact with one another and video representations of teaching (for further discussion, see Chapter 3). This study will contribute to the literature on video records in teacher education by providing a better understanding of the curricular possibilities for this practice-based approach to teacher education.

This study focuses on video records that represent preservice teachers’ teaching practice. The six studies in this category emphasized preservice teachers’ progress toward using evidence to assess their own teaching, but none explicitly addressed how the preservice teachers might have access to different content by studying videos of their own and their fellow novices’ teaching. This dissertation takes up this question, examining aspects that might differentiate preservice teachers’ study of their own and other preservice teachers’ teaching from their study of experienced or expert strangers’ teaching through video: their self-selection of the video and their questions about the video, their knowledge of the school context, and their role as agent within the video record. Further, five of the six studies drew data from just one or a few instructional

sessions, and the data in four studies consisted of preservice teachers' polished projects—specifically, individually written essays or video presentations. With the technological and theoretical advances described earlier in this chapter, video records have the potential to become an everyday tool rather than a “special project” in teacher education. This dissertation examines preservice teachers' study of video as a regular part of their teacher education, taking up the question of “what comes up” through preservice teachers' ongoing, collective study of their own teaching through video.

CHAPTER 3  
THEORETICAL FRAMEWORK

Overview

The following propositions summarize the theoretical framework for this dissertation:

- Teaching is a practice; it involves skillful action that is underpinned by understanding and judgment.
- Teacher education's primary purpose is to support novices' learning of practice by engaging them in practice.
- Curriculum in teacher education, as in any classroom, is actively constructed as individuals interact around representations of content.
- Activity theory provides a framework for organizing and interpreting the features of practice and curriculum.

In this chapter, I elaborate on these statements and clarify their connection to this study's objective: to understand features of the curriculum that develops when preservice teachers study videos of their own teaching.

Practice

*Facets of Practice*

I argue for *practice* as a productive way to conceptualize teaching as it occurs in PK-12 schools and as the content studied in teacher education programs. The term has been used frequently in the literature related to teaching and teacher education, but its

meaning is complex and slippery. In this section, I draw upon sociocultural theory to give some precision to the concept.

In a layperson's terms, "practice" implies action; the word might be considered a synonym for *things that we do*. Consider three definitions from the Merriam-Webster Online Dictionary, which defines practice as: 1) the usual way of doing something; 2) a systematic exercise for proficiency; and 3) the continuous exercise of a profession. Across these three definitions, the words *usual*, *systematic*, and *continuous*, as well as *doing* and *exercise*, indicate the essence of practice as "routinized action" (Reckwitz, 2002, p. 251). However, as Namubiru (2007) points out, a closer look at even such simple definitions indicates that practice involves more than mere muscular coordination. We "practice" primarily to achieve a goal (e.g., to get the dishes clean, to communicate an idea, to prepare students for an upcoming test); achieving this goal involves acting with "specialized knowledge and practical wisdom...to bring about a specific change of state in behavior or solve a problem" (Namubiru, pp. 45-46). The last Merriam-Webster definition links practice to professions, implying a connection to the particular knowledge, skills, and ideas involved in, for example, medicine, law, or teaching.

"Practice theory" falls under the umbrella of social theory in its emphasis on the interdependence of social and individual processes in what we know and understand. However, it differs from other theories in its conceptualization of the body, mind, tools, knowledge, discourse, structure, and the individual. Reckwitz (2002) contrasts practice theory with other theories that endeavor to explain human action and social order based on where each theory locates the social and its smallest unit of analysis. In comparison with other theories that locate the social in the mind (e.g., Levi-Strauss), in signs,

symbols, and discourse (e.g., Foucault, Geertz), or in interactions (e.g., Blumer, Mead), practice theory places the social *in practices*. Practice theorists focus on the body as the site of individuals' practical engagement with the world.

Postill (forthcoming) usefully distinguishes between two generations of practice theory. The first generation dealt with how practice could be understood as a way of navigating between individualism and social determinism. Pierre Bourdieu in *The Logic of Practice* (1990), for instance, focuses on practice as “the site of the dialectic of the *opus operatum* and the *modus operandi*” (p. 52), or a process of interaction between the results of our acts and the ways we act. Bourdieu focuses primarily on the sociocultural logic that drives practice—specifically, the *habitus*, or the systems of dispositions, structures, and principles that subconsciously or unconsciously shape how we behave. In another instance, Anthony Giddens (1979, 1984) situates practice along a continuum with two endpoints: at one end, the deterministic properties of artifacts and at the other, the variability of human agency. Giddens' structuration theory attempts to sit at the midpoint on this continuum. Both the artifact and the individual user bring interdependent “structures” into play, and practice manifests as the interaction of these two.

In Postill's terms, the second generation of practice theory builds on the first by elaborating on the roles of history and culture and by developing more complex notions of what practice entails. As a theorist of this second generation, Andreas Reckwitz (2002) endeavors to build an “ideal” practice theory that draws upon Bourdieu, Giddens, and others. Reckwitz describes the nature of practice with more specificity than his predecessors; he articulates a kind of anatomy of practice that can act as a framework for understanding and learning professional work such as teaching. Drawing upon Reckwitz

and additional literature from organizational studies and psychology, I assert that practice has four key characteristics: it is active, it involves understanding, it is social, and it gains meaning in context.

To reiterate, the practice—skillful human performance of a regular, everyday activity—is the unit of analysis, not the individual or interactions among individuals. According to Reckwitz, a practice is “a routinized way in which bodies are moved, objects are handled, subjects are treated, things are described and the world is understood” (p. 250). As with the Merriam-Webster definitions above, Reckwitz’s definition emphasizes practice as routinized action that involves much more than physical behavior.

Reckwitz explains that individuals are “carriers” of practice; as such, they “are neither autonomous nor the judgmental dopes who conform to norms: They understand the world and themselves, and use know-how and motivational knowledge, according to the particular practice” (p. 256). Etienne Wenger (1998) echoes this emphasis on human understanding, explaining that practice is about “the experience of meaningfulness” in everyday activity (p. 51). To perform a meaningful action, an individual engages in a way of understanding. This understanding is not simply “knowing that,” but knowing how, when, and why to engage in the act. Such implicit understanding involves motivations, intentions, and anticipation that drive the act and carry it to completion.

In Reckwitz’s terms, the understanding involved in practice is “largely historically-culturally specific” (p. 253), which indicates its social dimension. The action itself is not necessarily social, as it may or may not directly involve others, but practice is social in the sense that it gains meaning as it is recognized and enacted by others over

time. As Wenger (1998) notes, “It is doing in a historical and social context that gives structure and meaning to what we do. In this sense, practice is always social practice” (p. 47). With Jean Lave, Wenger developed the concept of “community of practice” to clarify the social dimension of practice; Wenger notes that associating community with practice makes it a more “tractable” concept than activity, culture, or structure (p. 72; see also Lave & Wenger, 1991; Lave, 1996). As individuals, we belong to any number of communities of practice, such as a family, a class, a working group, or a circle of friends. Within a community, individuals engaged in a “shared enterprise” develop practices that move them toward accomplishing their common goals. Individuals enact practices in their everyday lives, and collectively constructed understanding of its purposes, qualities, and meaning underpins those practices. Yet individuals within a community of practice are not mere reproducers of practices; they also transform the practice based on their experiences. Change occurs as individuals, while engaging in practices, encounter “crises” that require them to modify the routine in order to meet their goals (Reckwitz, p. 255; see also Engeström, 1987).

Finally, context is essential to practice. Cook and Brown (1999) note that the organizational context informs the activities of individuals doing their “real work” (p. 387). The context makes the practice meaningful, and it also gains meaning as the practice is enacted. Individuals engaged in practice find certain aspects of the environment salient, while other aspects remain unrecognized. They draw upon particular tools within the context, including objects, symbols, and discourse, to carry out an act. Tools are essential to practices; they “enable and limit certain bodily and mental activities, certain knowledge and understanding as elements of practice” (Reckwitz, p.



253). In essence, the context makes the practice possible, rather than merely acting as a backdrop for it (Nardi, 1996).

### *Teaching as a Practice*

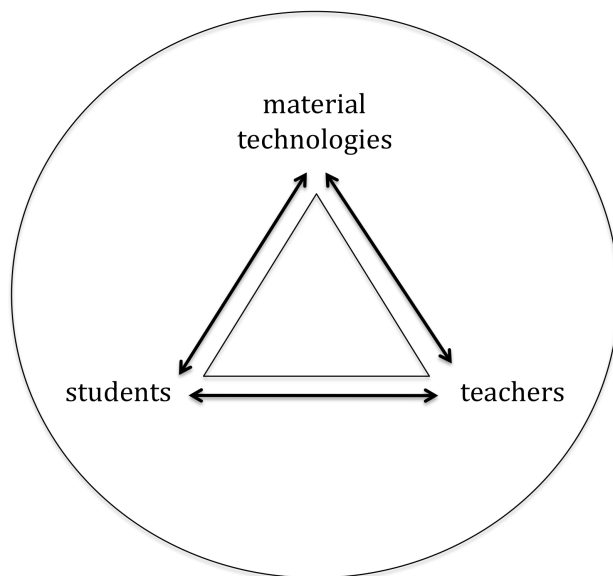
The literature on PK-12 teaching and teacher education frequently uses the term “practice.” Lampert (2010) points to the several ways that practice is used in reference to the work of teaching: as that which contrasts with theory, as a collection of defined things that teachers do (“teaching practices”), as rehearsal for future performance (“practicing”), and as an occupation or profession (“the practice of teaching”). In the teaching and teacher education literature, its meaning is complex and slippery, and it is often used in ways that assume understanding of the concept in order to build other ideas (e.g., Lave, 1996; Noddings, 2003). In this section, I endeavor to give precision to the notion of teaching as a practice as it informs this dissertation. I describe teaching as a practice as defined by Reckwitz: “a routinized way in which bodies are moved, objects are handled, subjects are treated, things are described and the world is understood” (p. 250).

The complexity of PK-12 teachers’ work in classroom environments has long occupied scholars’ attention. Philip Jackson, among others, advanced the field’s understanding of this complexity with his 1968 study, *Life in Classrooms*. Jackson’s analysis highlighted the multiple roles involved in being “teacher” or “student” and the many features of the environment with which teachers and students must contend. This perspective challenged the process-product research model and encouraged identification of the numerous factors that influence and mediate student learning.

Many researchers in the 1970s and 1980s took seriously Jackson’s charge to “move up close to the phenomena of the teacher’s world” (p. 159). In this vein, some

scholars developed a triangular model for representing teaching (e.g., Cohen & Ball, 1999; Lampert, 2001; Sizer, 1984) that addresses some dimensions of practice theory. With this triangular model, these scholars endeavored to capture teaching's variable and complex nature while attending to the features of action, roles, and tools. Figure 3.1 depicts one example, Cohen and Ball's (1999) model of instruction.

Figure 3.1  
*Triangular Model of Instruction (Cohen & Ball, 1999)*



The teacher, the student, and the subject matter under study are the “points” of the triangle. Two-headed arrows connect these points, demonstrating the essential relationships that exist between them. Teachers’ work depends on interaction with students, which is why Noddings (2003) characterizes it as a “relational practice” (see also Cohen, 2005). Content, or the thing that is to be learned, mediates this teacher-student relationship (Hawkins, 1976). The content generally takes the form of “material technologies” (i.e., written texts, images, explanations) that represent it.

Scholars' elaboration on this simple triangular model points to the nature of teaching as a practice. The teacher's practice is her active, reasoned manipulation of relationships—of teacher with student, teacher with content, and student with content—toward the goal of student learning (Lampert, 2001). Teachers and students have experiences, understandings, and commitments that shape the ways they interact with one another and their approach to representations of content. The representations, as part of the context of the classroom environment, have characteristics that enable their use in certain ways and limit their use in other ways. The teacher interprets the qualities of these entities, anticipating the ways they may shape the interactions among them (Cohen & Ball, 1999). Based on her interpretations, she makes decisions about how to act.

Interpretations of the triangular model are less clear about the social dimension that is essential to teaching as “routinized action.” Jackson (1968) notes, “[T]he identifiable forms of classroom activity are not great in number” (p. 8). Teachers, as members of a professional community of practice, have some shared understanding of teaching. They have common but flexible approaches, which encompass “know-how,” that they use across contexts and situations. Teachers, for example, commonly ask questions, give lectures, and organize group work. Lampert's (2001) “microscopic” analysis of leading a whole class discussion indicates that the form of a common teaching structure (such as whole class discussion) varies according to subject matter, student response, and the time of day and year; yet such structures are recognizable as ways teachers manipulate the relationships represented in the triangular model just described.

The notion of practice, I assert, is a useful way to conceptualize teaching. Practice theory builds on the triangular model that has helped the field to recognize the

complex roles of and dynamic relationships among teacher, students, and content within instruction. It emphasizes what teachers do—their everyday actions, performed with “know-how”—as they pursue the goal of supporting student learning.

### *Practice-Based Teacher Education*

I suggest that this view of PK-12 teaching as a practice can be highly generative for teacher education. Of course, practice, conceived of as the enacted work of teaching, has long had a place in the curriculum for teacher education; however, it is frequently considered (or perceived by preservice teachers as) just one component among many, generally occurring in PK-12 classrooms as “field experience.” Colleges and universities have historically neatly packaged “content” and “methods” into separate courses, addressing various teaching-related topics with the expectation that preservice teachers will carry these ideas into their field experience, where they observe and engage in actual teaching. As a result, preservice teachers often experience a disconnect between what they perceive as “theory” (the principles and ideas emphasized in their coursework) and what they perceive as “practice” (the knowledge and skills learned through work with experienced teachers and children in actual classrooms) (Darling-Hammond & Hammerness, 2005; Wilson, Floden & Ferrini-Mundy, 2001). One implication of this is “the problem of enactment” (Kennedy, 1999): preservice teachers may possess a wealth of content knowledge and profess beliefs in certain principles and ideals, but they may not actually enact these in their teaching.

Teacher education, which is frequently criticized as disjointed and inadequate (e.g., Will, 2006), would benefit from committing to one primary objective: to support novices’ learning of practice by engaging them in practice. Taking practice as the primary

focus represents a significant shift for the field, which has generally situated practice as one among many domains for teacher learning.<sup>4</sup> With the conception of practice developed in this chapter as the central focus for teacher education, teacher educators can address what preservice teachers learn to do—not only how to move their bodies in particular ways, but also the “know-how” that is essential to skillful acts of teaching. From the perspective of practice theory, as they actively engage in doing teaching within a particular context, preservice teachers are also making judgments, manipulating environments, and continually building understanding. This kind of teacher education would occur not just in “the field,” but across the venues in which teacher education occurs, thereby bridging the perceived disconnect between theory and practice.

Such “practice-based” teacher education places the enacted work of teaching at the heart of the curriculum and as the context for preservice teachers’ learning opportunities (Ball & Cohen, 1999). A number of tools and pedagogies—for example, written cases, multimedia representations, and microteaching—might be considered early forms of practice-based approaches, but the field is only beginning to comprehensively conceptualize practice-based teacher education. Recent work by Grossman and colleagues and Lampert and colleagues are steps in this direction.

Grossman, Compton, Igra, Ronfeldt, Shahan and Williamson (2009) have studied the ways practice is represented and studied in professional preparation for clergy, clinical psychology, and teaching. They note that these three professions, though they differ significantly, share key characteristics: all are relational, meaning they depend on

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<sup>4</sup> This is illustrated by Hammerness, Darling-Hammond, and Bransford’s (2005) “framework for learning teaching,” which depicts the components of *vision*, *understandings*, *dispositions*, *practices*, and *tools* (pp. 385-386). In their framework, practices are the “how to” of teaching—these include particular instructional activities to promote student learning and the design and implementation involved in planning, assessment, and providing feedback.

productive interaction between the professional and the client, and all require complex work in uncertain conditions. Grossman et al. propose a three-part framework for understanding the study of practice in these domains, which involves: representations (practice made visible), decomposition (practice broken down into parts), and approximations (“safer” opportunities, similar to the real thing, to engage in practice). Grossman et al. argue that such a framework could be useful in moving teacher education toward conceptualizing a continuum for preparation and away from focusing on discrete pedagogies.

Lampert and colleagues (Ghousseini, Lampert, Lewis, Murray, & Scott, 2008; Lampert & Graziani, 2009) use *rehearsal* as a central feature of practice-based teacher education, specifically targeting novices’ preparation for “ambitious instruction.” Building on Lampert’s study of a language teacher education program in Italy (e.g., Lampert, 2005), the approach engages preservice teachers in planning and enacting a defined instructional activity (e.g., a storybook read-aloud) in a reduced-risk setting, with ample opportunities for coaching by a teacher educator and revision by the preservice teachers. The coaching addresses varied aspects of the novice’s performance, such as presentation style, responses to particular student errors, and use of representations. The preservice teachers then teach the activity in a “real” classroom setting, followed by a debriefing session, often with video recordings of the teaching event. The teacher educator continues to coach during the debriefing, and the cycle begins again with the same or another instructional activity. This approach encompasses multiple pedagogical tools (i.e., coaching, video) that were often treated discretely in past studies of teacher

education. In the rehearsal cycle, these pedagogical tools are used in combination in the service of preservice teachers' learning to practice.

The use of video in this study is another manifestation of practice-based teacher education, or a pedagogical means of making PK-12 teaching accessible for study by engaging preservice teachers in doing and investigating the actual work. Video is a tool for the learning of practice because it can support collaborative study of a common "text." The text is a representation of practice that allows preservice teachers to simultaneously attend to teaching's active, social, and contextual aspects and the understanding it entails. The videos in this study represent the preservice teachers' own practice, which allows them to draw on their understanding of the context as they interpret the events; yet the text extends beyond individual teachers or specific lessons as preservice teachers work collectively to make meaning of the teaching represented in the video. Videos potentially serve as resources both for investigating problems and issues in specific instances of teaching and for drawing generalizations about the nature of and approaches to teaching. (The conceptualization of videos for teacher education was further discussed in Chapter 2.)

### Curriculum

A second part of the theoretical frame relates to the curriculum for teacher education as an emergent, evolving construct. Traditional definitions of curriculum refer to "courses of study" for an institution or domain—that is, the subject to be taught and how it should be taught (Schubert, 1986). These definitions represent curriculum as static, captured in materials such as syllabi, textbooks, and policy documents. This dissertation takes an alternative view of curriculum, one related to the triangular model of

instruction described in the previous section. In PK-12 classrooms, when the teacher and students engage with one another and with representations of content, they interact in particular ways and develop ideas that are made available to all those present, all of which may or may not align with the teacher's intentions. In this dissertation, the triangular model is also relevant to teacher education: the teacher educator and preservice teachers engage with one another and with video representations of the preservice teachers' teaching. In doing so, they develop ways of interacting and ideas about PK-12 teaching practice, which are then accessible to all those present. This way of conceptualizing curriculum—as developed by teacher and students (or teacher educator and preservice teachers) as they interact with representations of content—has been termed the *enacted curriculum* (Ball & Cohen, 1996; Snyder, Bolin & Zumwalt, 1992).

The concept of enacted curriculum is used frequently in the teaching literature, often in contrast with the “intended,” “formal,” or “official” curriculum, meaning the formalized, planned subject matter that students are to study. Tracing the roots of the term is beyond the scope of this dissertation; however, it should be noted that the concept relates to the field's advances, particularly in the 1960s and 1970s, in understanding curriculum in relation to the complex work of classroom instruction. Joseph Schwab's (1973) four “commonplaces of equal rank” (p. 508) placed subject matter squarely inside the classroom. Schwab argued that the learner, the teacher, the milieu, and the subject matter all need to be coordinated in the work of curriculum making. Around the same time, Douglas Barnes (1975) described curriculum as needing to be enacted in order to “become meaningful”; curriculum is “embodied in the communicative life of an institution, the talk and gestures by which pupils and teachers exchange meanings even



when they quarrel or cannot agree” (p. 14). Barnes’ conception placed negotiation and collaboration in contrast with the traditional notion of “transmitting” the curriculum. These lenses on curriculum in light of the complex nature of classroom instruction supported the field’s understanding of the transformative nature of teachers’ and students’ work with subject matter in classrooms.

This conceptualization of curriculum as enacted in the interaction of preservice teachers, teacher educators, and representations of teaching may seem to imply that “anything goes,” but that is not the case. The enacted curriculum has a structure reflective of deliberate acts by the teacher educator and the preservice teachers as well as the recognized qualities of the materials used during instruction.

In the realm of PK-12 education, Janine Remillard (1999, 2005) has focused her study of the enacted curriculum on the “participatory relationship” between teacher and curriculum materials. The teacher takes the role of active decision maker and the curriculum materials are static representations of the developers’ ideas and intentions; yet both teacher and materials contribute to the curriculum that develops as materials are used in classroom instruction. The teacher has ideas and experiences that influence the ways she approaches the curriculum materials. Ball and Cohen (1996) assert that teachers’ work with curriculum materials is influenced by five domains: their thinking about their students, their understanding of the material to be taught, the ways they design instruction, the intellectual and social environment of the class, and their views of the broader policy and community contexts in which they work (p. 7). In this study, the same apply to the teacher educator. She acts deliberately, based on her experiences, dispositions, and understanding of instructional goals, in ways that influence the ideas

about practice that develop in her interactions with preservice teachers as they discuss videos of their teaching.

Further, the conception of the enacted curriculum emphasizes the agency of the student (or the preservice teacher)—an individual who brings her own experiences and understandings into the classroom context. As Barnes (1975) noted, “School for every child is a confrontation between what he ‘knows’ already and what the school offers” (p. 22). The development of content and instruction that build on and within students’ experience was a centerpiece of John Dewey’s philosophy of education for progressive schools, which challenged traditional expectations for explicating and standardizing the curriculum for all students. Of the curriculum for progressive schools, Dewey (1938) wrote, “[T]he field of experience is very wide and it varies in its contents from place to place and from time to time. A single course of studies for all progressive schools is out of the question; it would mean abandoning the fundamental principle of connection with life-experiences” (p. 78). In this regard, the practice-based approach studied in this dissertation might be considered “progressive”: the curriculum is built on and within preservice teachers’ own experiences in secondary school teaching (as captured in video and shared in discussions among peers) and in teacher education (occurring over seven class sessions within one semester of a year-long preparation program).

Likewise, the representations of content have certain characteristics that give shape to the ways they may be used. In this study, the videos selected and shared by preservice teachers addressed certain ideas, included specific images, and used particular language. Given these features, the videos have the “structural potential” (DeSanctis & Poole, 1994) to support preservice teachers’ discussion of some ideas and not others.

However, these features may or may not be appropriated by users; characteristics may be recognized, ignored, manipulated, or changed as the video is used in the classroom context. As with textbooks, manipulatives, and other classroom resources, video records of practice depend on the characteristics they have as well as how they are understood and used in a particular classroom context (Cohen, Raudenbush & Ball, 2003).

In short, this dissertation addresses features of the curriculum that develops when the teacher educator and preservice teachers, drawing on their ideas and experiences, interact around particular video representations of teaching. In those interactions, the teacher educator and preservice teachers develop ideas about PK-12 teaching practice, which are made available for study by those present in the classroom. The video's characteristics potentially enable preservice teachers to study students, teaching methods, subject matter, and innumerable other aspects that are intertwined within the representation of teaching. Yet because this approach is contingent upon the uncertain, relational work of secondary school teaching as captured in representations, it is difficult to anticipate the ideas that will be addressed. Further, the curriculum that is "covered" is contingent upon the interaction of preservice teachers and teacher educator around the selected representations. Analyzing features of the enacted curriculum, then, involves both *what* ideas develop and *how* the ideas develop—that is, the analysis must address both content and instruction.

### Activity Theory

So far in this chapter, I have focused on the conceptions of practice and curriculum that underpin this dissertation. Practice theory allowed me to elaborate on "practice" as a central concept for PK-12 teaching and teacher education. I described

practice as active, social, contextual, and involving understanding. In doing so, I endeavored to give precision to a concept that, while frequently mentioned in teaching and teacher education, has not yet developed as a meaningful framework for understanding teaching and teacher education. I then described the enacted curriculum as actively developed in the teacher education classroom when the teacher educator and preservice teachers, drawing on their ideas and experiences, interact around particular video representations of teaching practice. In this section, I describe activity theory as a framework for interpreting the practice-based curriculum, given its emphases on action, context, and social understanding.

Activity theory specifies engagement in social, practical activity as essential to consciousness (Blanton, Moorman & Trathen, 1998). Defined by Aleksei Leontiev (1978), the ascribed author of activity theory, activity is “a unit of life, mediated by psychic reflection, the real function of which is that it orients the subject in the objective world” (p. 50). What we know and understand, in short, is inextricably connected to what we do.

Yrjo Engeström, who has elaborated on Leontiev’s work over several decades, spearheaded activity theory’s expansion from the focus on individual activity to networks of activities (e.g., 1987, 2000). Engeström (2001) summarizes activity theory with five principles (pp. 136-137):

1. A collective, artifact-mediated, and object-oriented activity system—in a network of other activity systems—is the prime unit of analysis.
2. Activity systems are “multi-voiced”; that is, activity systems encompass multiple points of view, traditions, and interests.

3. History is critical to understanding activity systems, as they are continually shaped and transformed over time.
4. Contradictions—or structural tensions within and between activity systems—are sources of change for an activity system.
5. Expansive transformation is possible—that is, an activity system may be radically changed when the object of activity is reconceptualized.

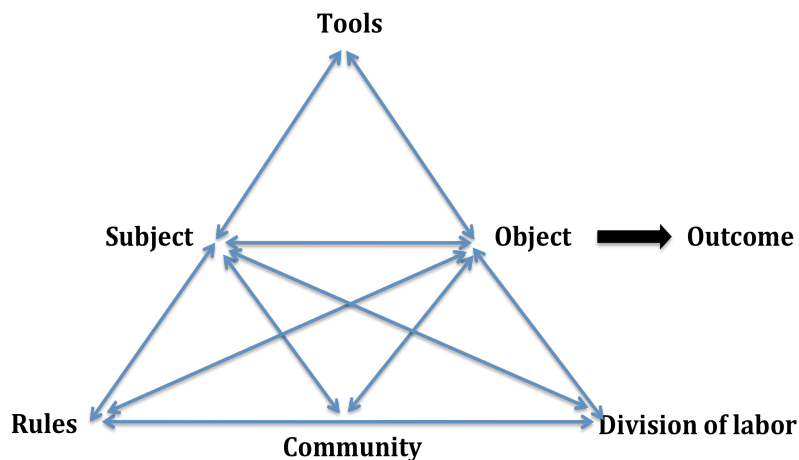
Given the above principles, activity theory is particularly well suited to interpreting the enacted curriculum in relation to teacher education that is focused on practice. In this dissertation, I approach the video discussion as an activity system, particularly focusing on Engeström’s first through fourth points.

As individuals, the preservice teachers bring various experiences to bear on their participation in teacher education. They draw upon histories as PK-12 students and their current status as preservice teachers, among other experiences. In addition, they have experiences as teacher education students who have discussed video records, which accumulate across the semester. The teacher educator also brings experiences, including a sense of procedures and goals for the discussion, which shape the activity. The context for the activity has a “voice” as well. Spatial organization, time constraints, and available resources, for example, influence the ways videos are presented and shared. In part, the contextual aspects are manifestations of the decisions of the teacher educators involved in planning the video class sessions as well as the administrators who allocate program resources. The context also reflects the priorities and understandings of the preservice teachers and teacher educators participating in the discussion, as these shape the ways they use their environment.

Each video class session takes into account the influences of the past and the present. As an activity system, the video class session is dynamic, undergoing transformation and reconstruction by the preservice teachers and teacher educator presently interacting within it (Engeström, 1987; Ratner, 1996). Such change occurs when participants encounter contradictions—tensions within an element or between two or more elements—within or between activity systems. Seeking to resolve these contradictions, participants may, for example, renegotiate the procedure for discussion or the kinds of topics that are of interest to the discussion group.

Activity theory enables concurrent attention to the multiple elements involved in the development of the enacted curriculum in video class sessions. Engeström (1987) has developed a model to organize these elements of activity, illustrated in Figure 3.2.

Figure 3.2  
Engeström's Model of Activity



The middle line depicts the relationships among *subject* (the individual[s] engaged in the action or activity), *object* (the focus that motivates the activity), and *outcome* (what occurs as a result). In video discussions, this line represents the essence of the enacted curriculum: it indicates the relationship of participants to some shared goal in

relation to the task of video discussion, which results in the development of certain ideas about teaching that are made available to all those present. Tools, indicated above this middle line, mediate the relationship between subject and object. The video is just one tool that shapes the activity in video discussions; participants develop and draw upon other tools according to their needs. Community, in the center below the middle line, is the collective to which subjects with the same general object belong. The elements of rules and division of labor account for participants' understandings of structures and boundaries that shape the ways the activity unfolds.

In this section, I have described the framework provided by activity theory, asserting that such a framework brings together the ideas about practice and curriculum developed earlier in this chapter. I use the tenets of activity theory, and Engeström's model in particular, to illustrate the ways ideas about teaching are actively developed in discussions of preservice teachers' videos of teaching (see Chapter 5).

### Situating This Study

With this theoretical framework, this dissertation examines a case of practice-based teacher education: preservice teachers' ongoing study of video records of their own and other novices' teaching during one semester of a teacher education program. I examine features of the enacted curriculum that emerged in the interactions among teacher educators, preservice teachers, and the teaching represented in video. In doing so, I endeavor to understand the curricular implications of this practice-based approach to inform a comprehensive practice-based curriculum for teacher education.

## CHAPTER 4

### METHODS

#### Overview

The primary research question for this dissertation is: *What curriculum for teacher education can develop over time through instructional use of video records of preservice teachers' practice?* As the theoretical framework indicated, studying the enacted curriculum involves both *what* ideas develop and *how* the ideas develop. This study thus addressed the content, or ideas about teaching practice that were constructed over time and the instruction, or the ways interactions among preservice teachers and teacher educators shaped the content. The following sub-questions drove the analysis:

- a. In what ways do particular teacher educators' and preservice teachers' interactions with video and one another shape the development of the curriculum?
- b. What content develops in the case where video records of practice are used in a single class session? What content develops across multiple class sessions?

This chapter describes the study context, design, data set, and methods for analysis. I also describe the ways I have sought to establish the study's trustworthiness as a way of ensuring validity.

#### Study Context

Context becomes the framework, the reference point, the map, the ecological sphere; it is used to place people and action in time and space and as a resource for understanding what they say and do. The context is rich in clues for interpreting the experience of the actors in the setting. We have no idea how to decipher or decode an action, a gesture, a



conversation, or an exclamation unless we see it embedded in context. (Lawrence-Lightfoot & Hoffman Davis, 1997, p. 41)

This dissertation is an examination of verbal data. Verbal data include various representations of spoken and written human articulations that can be analyzed in terms of patterns of interaction, changes over time in the use of language and concepts, and comparisons of cultures (Lemke, 1998). Language is intertwined with culture; it is both instantiation and construction (Martin & Rose, 2003). Thus, the discourse analyst makes sense of verbal data *in context*—in relation to the activity in which they were used, the roles of individuals who verbalized them, the social events surrounding the particular activity, and so on. Before detailing the specifics of the design, I describe the context for the study. In this section, I elaborate on the teacher education program and the specific course in which the study occurred as well as my perspective and role.

#### *The Program, the One-to-One Technology Pilot, and the Course*

This study involves a one-to-one technology pilot project that was situated in a teacher education program within the School of Education at a large midwestern university. One-to-one technology projects, which are growing in both PK-12 schools and higher education (e.g., Kay, 2006; Penuel, 2006), provide every student with ready access to technology that could support his or her learning. The teacher education program that housed this one-to-one technology project involved preservice teachers in one year of teacher preparation, leading to a master's degree and secondary teacher certification within a selected subject area. It was one of four such programs (elementary undergraduate, elementary master's, secondary undergraduate, secondary master's) at the university. Preservice teachers in the teacher education program had already earned at least a bachelor's degree in a selected subject area: mathematics, English, history or

social science, science, or foreign language. They included recent college graduates and career changers, and ranged in age accordingly.

The teacher education program acted relatively independently of the other three programs, with its own goals, instructors, schedule, and budget. The teacher education program's mission emphasized the goal of developing "thoughtful, critical, reflective, inquiring educators who are prepared both to teach in schools as they currently exist and to be agents of change for schools as they might be" (program brochure, 2003). The ideas about developing preservice teachers' capacity for "reflective practice" and as change agents were recurrent in the teacher education program's recruitment literature. The teacher education program curriculum was described as "intensive" (program brochure, 2003), as preservice teachers earned 40 credit hours over four semesters in a 12-month period. Preservice teachers' preparation took place in two spaces: in university-based courses and in local middle and high school classrooms. This study focused on the winter term (January-April), when preservice teachers worked in their school placements full-time ("student teaching") while taking two evening courses at the university.

Two faculty members spearheaded the teacher education program's involvement in the one-to-one technology pilot, which enabled preservice teachers' regular use of video records. Both faculty members had many years of experience working in the School of Education and in the teacher education program specifically. Dr. Chester, a clinical professor, was the teacher education program coordinator. He was the lead administrator, meaning he oversaw all aspects of the program, including budgetary, logistical, and pedagogical details. Dr. Baines was a lecturer who taught courses, including English methods and reading in the content areas, both in the teacher education

program that hosted the pilot and in the undergraduate secondary program. Dr. Baines was also a member of the School of Education's Technology Committee that was exploring the possibility of incorporating one-to-one technologies into all the teacher education programs.

In spring 2007, the Technology Committee invited Dr. Baines and Dr. Chester to submit a proposal describing their goals and plans for using one-to-one technologies in the teacher education program. If approved, the teacher education program would be funded to provide technology for all preservice teachers and many of the teacher educators as well as technical support for one full year. For several reasons, Dr. Baines, Dr. Chester, and the Technology Committee believed the teacher education program was a good fit for piloting one-to-one technologies; they believed that lessons learned through the pilot would inform a School of Education-wide one-to-one technology program (Dr. Chester, personal communication). First, as the teacher education program enrolled approximately 50 preservice teachers per year, they thought the logistical issues involved with initiating one-to-one technologies—including distributing equipment, training users, and providing technical support—would be manageable. In addition, the teacher education program had a stable faculty and leadership. The faculty had collaborated for several years and shared understanding of program goals and major tasks; they could therefore work together to develop ways to use the technology to support preservice teachers' learning. Finally, the teacher education program had already worked to incorporate technology into its requirements. Preservice teachers took a course on using technology in the classroom and they developed an electronic portfolio as a summative

assessment that represented their teaching philosophy and experiences. The new technology could serve to amplify and build on these past uses.

Dr. Baines and Dr. Chester developed a proposal that described their goals and plans for using one-to-one technology in the teacher education program. The proposal focused on three areas: (1) the use of technology to guide beginning teachers' deepening understanding of their practice and the curricular supports needed to enable their use of the technology; (2) the ways courses could be designed to support the use of records of practice; and (3) the challenges faced when new technology, practices, and ideas are introduced into the program's curriculum (Technology Pilot Proposal Appendix; see Appendix B). The teacher education program purchased the needed technology and arranged for the provision of technical support beginning in fall 2007. Each secondary preservice teacher, along with several of the teacher educators, received a recording device (capable of capturing video, audio, and stills), a laptop equipped with software to download, edit, and store the recordings, and an external hard drive for storage.

Dr. Baines and Dr. Chester were co-instructors for ED 650, the course that became the primary site for preservice teachers' work with one-to-one technology generally and video records in particular. This year-long course, entitled "Reflective Teaching Field Experience," had the broad goal of supporting preservice teachers' work in area schools. The one-to-one technology project, Dr. Baines and Dr. Chester thought, presented an opportunity to expand the course's historical emphasis on preservice teacher reflection through records of practice. In the years prior to the technology pilot, ED 650 emphasized preservice teacher reflection through the use of copies of lesson plans, student work, and teacher journal entries, and it included one assignment related to

sharing and discussing a video of each preservice teacher's teaching (Video Assignment, Winter 2007; see Appendix C). During the study, the 53 enrolled preservice teachers, who represented various subject areas, were required to attend ED 650 class sessions once a week. Each class session was three hours long, with approximately one hour devoted to small group study of videos. The class session data were collected in seven of the thirteen weeks of the ED 650 course during the winter term.

### *My Perspective*

In Lemke's (1998) terms, two contexts bring meaning to verbal data: the context in which the verbal data were produced, and the context in which the analyst encounters the verbal data. In this way, verbal data are always to some extent about the analyst's "culture" as well as the participants' "culture." As both analyst and participant, my assumptions and experiences are therefore critical components of the context. This section details my work as a teacher and a teacher educator, as that work is most relevant to this study.

I graduated from college in 1997 with a bachelor's degree in elementary education. As a new teacher, I quickly realized the limitations of my preparation for my first job. I had received high marks in my college's teacher education program; nonetheless, I experienced intense on-the-job training, spending long hours planning for and trying out the practice I envisioned but struggled to enact. After I transitioned into educational evaluation and research, I became deeply interested in what I perceived as a gap between teacher education and actual teaching. I talked with numerous teachers—both novice and experienced—who expressed their frustrations about trying to teach in ways that they found were responsive to children while they also managed policy

demands. Yet they found professional development and other learning opportunities inadequate, perceiving that these did not address the realities of work in their classrooms. I brought these experiences to my doctoral studies. I became involved with colleagues and in projects that continued to shape my deep regard for teachers and my desire to bridge “the gap” between teacher education and the reality of PK-12 teaching by developing ways to support teachers’ learning in and from the practice of teaching.

During my doctoral program, I worked as a teacher educator in the School of Education’s two elementary teacher education programs. When I began as a teacher educator, I had never heard of “records of practice,” but the concept quickly became central to my work. My colleagues buzzed about ways to incorporate video and paper artifacts of teaching into our courses, and their use—articulated by Lampert and Ball (1998), among others—seemed directly related to my desire to support teachers’ learning in and from teaching. I became involved as a research assistant for several projects that used records of practice, which were related to ongoing work on redesigning teacher education at the School of Education. I became convinced that the use of representations of teaching as a primary “text” in learning about teaching provided a strong bridge between teacher education and actual teaching.

During this time, my teaching with and writing about records of practice (and video records in particular) transitioned in focus. Early on, I used records of practice, primarily written accounts and audio recordings, to amplify my existing teacher education practices. As I became familiar with technologies and databases (e.g., [gallery.carnegiefoundation.org/insideteaching](http://gallery.carnegiefoundation.org/insideteaching)), I used video records with greater frequency. At the same time, I became interested in structuration theory (Giddens, 1984)

and activity theory (Leontiev, 1978). Through these theoretical frameworks, I began to see records of practice as “resources” (Feldman, 2004) and as opportunities to *change* my teacher education practice. I became concerned about the ways records were used—the pedagogies and activities that structured preservice teachers’ work with records of practice.

This was my perspective when I became a graduate student assistant for the one-to-one technology pilot at its inception in September 2007, a position I held through May 2008. When I was hired, my role was ambiguous, which allowed me some latitude in shaping it. First, I was an instructor. In the fall semester, I taught large group sessions around records of practice, and in the winter semester, I led small group discussions among preservice teachers. I participated fully in planning meetings with other teacher educators, during which we made decisions about how to use videos, particularly in the ED 650 course. I did not, however, have responsibilities for assessment and grading. Second, I was a researcher. I took responsibility for documenting activities during planning meetings and my own class sessions, and I distributed and collected equipment so that other teacher educators could document their small group discussions. I contributed to meetings with the pilot program leadership, in which we reviewed small parts of the data in order to inform our future practice with videos. Third, I was an adviser. I participated as a member of the “steering committee” and the “study group,” both of which served as advisory groups for the technology pilot. The steering committee met six times during the year, and the study group met approximately twice each month. Each group was composed of School of Education administrators, faculty, staff, and

students, and each provided feedback on a variety of issues—conceptual, research-related, and practical.

## Study Design

### *A Case Study*

To immerse oneself in naturally occurring complexity involves what qualitative methodologist Norman Denzin (1978) has called “the studied commitment to actively enter the worlds of interacting individuals.” (Patton, 2002, p. 48)

To study teaching—in this case, teacher education as a particular kind of teaching—the researcher must examine the individual elements (teacher, students, subject matter), their interactions, the host of cultural, historical, and organizational influences on their interactions, and the ways all of these change over time (Erickson, 1986). As a form of inquiry, the case study embraces the complexity of a particular phenomenon within its context, rather than attempting to disentangle or control the context in which the phenomenon occurs (Yin, 1994). A case study design enabled me to focus on in-depth understanding of curriculum development as a “real-life phenomenon” (Yin, 2008, p. 18) while attending to important conditions that influence the phenomenon. Specifically, the case study design enabled me to remain deeply attentive to three key considerations for studies of teacher education: context, activity, and timescales.

Research on teacher education must attend to the various contexts in which teaching and learning occur. Individuals, interacting with one another, are an integral part of a larger system that encompasses cognition, culture, and activity; thus, “the boundary between inside and outside, or between individual and context, should be softened” (Hutchins, 1995, p. 288). The activity of teacher educator and preservice teachers with one another and subject matter draws upon historically, socially, and culturally defined



possibilities (Cobb, McClain, deSilva Lamberg & Dean, 2003), and from these possibilities, context is actually enacted in their interactions. This dynamic view of context-as-process implicates teacher education as both constituting and constituted by historical trends, cultural norms, and organizational settings.

“Context” in this sense is broadly conceived. With a case study design, I endeavored to attend to the enacted curriculum, including the norms, resources, and settings that emerged as salient in the activities of preservice teachers and teacher educators around video. Further, I endeavored to address the ways preservice teachers understood their own and others’ contexts in their study of videos. By analyzing data from planning meetings, I accounted for the expectations of the teacher educators (including myself) for preservice teachers’ learning with videos and the ways these were reflective of the broader teacher education program. These expectations likely shaped the kinds of opportunities that were created and the resources used to realize those opportunities.

As noted in the theoretical framework, the enacted curriculum develops among preservice teachers and teacher educators as they interact with one another (Ball & Cohen, 1996; Remillard, 1999). In this case study, activity is another key methodological consideration. *Activity* refers to physical acts, the understandings that mediate those acts, and the understandings constructed in those acts (Leontiev, 1978). It encompasses the meaning such acts have for those who accomplish them and those who perceive them (Erickson, 1986).

Activity has relevance to this study in three ways. Primarily, this case study addressed activity relevant to the study of teaching in video discussions, meaning the

interactions of preservice teachers and teacher educators with representations of teaching, whether of others' practice or their own. The case study also addressed the activity of teacher educators' planning for the use of videos in the ED 650 course and the teacher education program. This activity gave insight into the goals, language, and ideas that shaped activity in the class sessions. The video itself represented a third kind of activity—the preservice teacher's interaction with secondary school students around representations of content. The data set did not include these videos; yet the activity within the videos is nonetheless relevant, as they were the “texts” that preservice teachers and teacher educators worked with during the video discussions.

As indicated by the focus on both context and activity, research on teacher education must occur over time. Teaching, including teacher education as a kind of teaching, occurs across different *timescales* that shape and connect the activity of teacher, students, and content within contexts (Lampert, 2001). As Ball and Lampert (1999) note, “Teaching and learning are seamless activities that occur in the streams of human experience and interaction. . . . Although they are interactive, they do not occur only when teacher and students are face to face. Any particular event is connected in multiple and complex ways to the events that preceded it” (p. 381). Capturing and connecting these various timescales seems an enormous task; the issue is to identify the timescales that are relevant to one's interests and the ways each level shapes or influences the others (Lemke, 2000). This means connecting a given moment of teaching with what occurs just before and after (on relatively “local” timescales), but also situating it within the historical, cultural, and organizational processes that occur on longer timescales.

With a case study design, I focused on each video discussion as a single event to understand features of the curriculum that emerged in each. I then sought to identify connections and themes between discussions, within class sessions that encompassed multiple discussions, and across the semester. The video discussions were the main focus of analysis; but through recordings of teacher educator planning meetings and selected program documents, I also examined the processes and meanings—developed over several years—that shaped the teacher education program in which these class sessions were situated.

### *Data*

The most complete form of the sociological datum, after all, is the form in which the participant observer gathers it: an observation of some social event, the events which precede and follow it, and explanations of its meaning by participants and spectators, before, during, and after its occurrence. (Becker & Geer, 1970, cited in Patton, 2002, pp. 21-22)

Over the course of the 2007-08, I helped to collect data on several activities in the one-to-one technology project. This large data set is represented in Table 4.1.

Table 4.1  
*Overview of the 2007-08 One-to-One Technology Pilot Data Set*

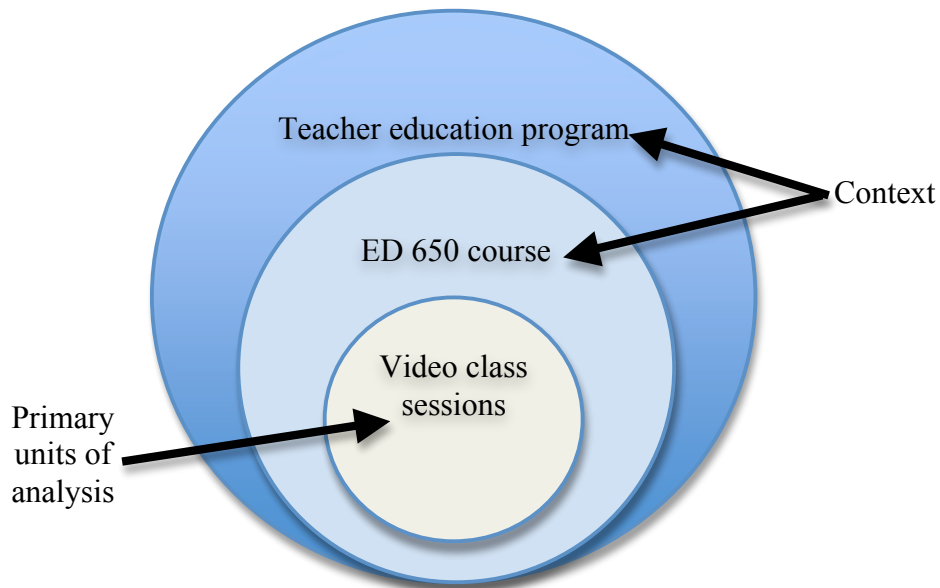
Source	Format	Number of files (approx.)
Preservice teachers' records of practice <sup>a</sup>	Video, audio, digital documents	1100
Class sessions focused on videos of teaching	Video	40
E-portfolio presentations	Video	50
ED 650 course documents	Paper copies	16
Teacher educator planning meetings	Audio	13
Teacher education program documents <sup>b</sup>	Paper copies	35

<sup>a</sup>These records of practice include videos of teaching, lesson plans, audio recordings of planning conversations with mentor teachers, and reflective writing tasks.

<sup>b</sup>These documents include the one-to-one technology pilot proposal, agendas for various meetings, technical support documents, recruitment literature, and the program's Effective Teaching Standards.

I purposefully selected a subset of the data for this dissertation. To reiterate, the “phenomenon” under study is the curriculum for teacher education that is constructed through the ongoing study of videos of preservice teachers’ practice. To examine this phenomenon, I selected data collected in three relevant venues: the class, the course, and the program. Figure 4.1 illustrates these venues as concentric circles, as they are connected: the class sessions occurred as part of the ED 650 course, which was a part of the year-long teacher education program.

Figure 4.1  
*Venues Relevant to Curriculum Development*



At the heart of this case study are recordings of seven class sessions in which preservice teachers and teacher educators were engaged in discussions of 16 different videos. In this way, the main focus of the case study was bounded by time (seven class sessions over one semester), space (the classroom), and participants (preservice teachers and teacher educators). To better interpret features of the curriculum that was constructed in these seven sessions, I included additional data that would richly contextualize the class session analyses: from the ED 650 course in which the video class sessions occurred, and from the teacher education program that housed the course and the technology pilot.

Table 4.2 represents the data set for this case study, which is a subset of the full data set in Table 4.1. The data were collected between December 2007 and April 2008.

Table 4.2  
*Data Set*

Venue	Format	Contents
Video class sessions	Video recordings (transcribed) Paper copies	7 class sessions (16 discussions) Video assignment guidelines
ED 650	Audio recordings (transcribed) Paper copies	6 teacher educator planning meetings 6 planning meeting agendas Course syllabi (fall and winter) Assignment guidelines (RWT)
Teacher education program	Paper copies	Recruitment literature Pilot proposal Effective Teaching Standards

*Class Session Recordings*

As noted above, the video recordings of class sessions were the main focus for analysis, providing a window on interactions among preservice teachers and teacher educators around videos. In Winter 2008, videos were used for several purposes, but these video recordings represent preservice teachers' discussions of videos of their own teaching, a recurring ED 650 assignment (Appendix D). For this task, the 53 preservice teachers were directed to: 1) record one or more instances of their own teaching, 2) select a clip that depicted about five minutes of teaching and represented some area of concern for the preservice teacher, 3) share it with a small group of five to eight classmates and a teacher educator, and 4) discuss it with the group for the purposes of interpreting it and making plans for future teaching. There were three rotations of small groups over the seven class sessions; that is, the preservice teachers worked with the same group for Sessions 1 and 2, changed to a new group for Sessions 3, 4, and 5, and changed again for Sessions 6 and 7. Every preservice teacher engaged in the task—selecting, sharing, and discussing a video record of his or her teaching—three times, once in each small group rotation. In total, the seven class sessions encompassed 16 separate video discussions.

As noted in the description of study design, I planned to account for the context that shaped the curriculum over time. The teacher educator acted as the guide for video class sessions, and her approach, relative to the guidelines developed by the teacher educators in their planning, was a critical aspect of the context that shaped video discussions; therefore, I chose to focus on class sessions facilitated by a single teacher educator. For two reasons, I selected the class sessions in which I was the teacher educator rather than analyzing those of another teacher educator.

First, use of these data lessened my concern regarding the issue of the teacher educator's role in video discussions, which became a major focus of the technology pilot (this issue is elaborated in Chapter 5). As the pilot year unfolded, the teacher education program leadership became acutely aware of how the limited experience of several teacher educators influenced the quality of video discussions. Many teacher educators involved in the pilot had limited experience with facilitating discussions of teaching around videos; in fact, several had worked with videos only once, as preservice teachers shared videos of their teaching one time in the previous academic year. Although I was not an expert in facilitating discussions of video records of practice, I had more experience than most of my fellow teacher educators because I had used videos to work with preservice teachers in an elementary teacher education program. Further, I was an active participant in teacher educator planning meetings that are also part of the data set; thus, I was able to analytically account for some of the concerns raised in those meetings and the ways I sought to address them in the video class sessions I facilitated.

The second reason for selecting the class sessions I facilitated involved the quality of the data. We relied on each teacher educator to record his or her own class sessions.

The quantity and quality of these recordings varied across the teacher educators as they occasionally forgot to bring the recording equipment, forgot to turn on the camera, or experienced technical difficulties with the camera. However, I was diligent about gaining high quality recordings of the class sessions; the seven class sessions included in the data set represented almost an entire semester’s work and were consistently audible.

As has been noted, I facilitated the class sessions, with one exception: I was absent for Session 4, which was led by another teacher educator. In Sessions 6 and 7, I co-facilitated with another teacher educator. Over the three rotations, I worked with 17 of the 53 preservice teachers enrolled in the teacher education program. One preservice teacher (indicated as “2” below) was in every one of my class sessions, purely by chance.

Table 4.3 represents characteristics of these data:

Table 4.3  
*Characteristics of Class Session Data*

Rotation	Class Session	Students Present	Teacher Educator
A	1	1, 2, 3, 4, 5, 6	Amy
	2		Amy
B	3	2, 7, 8, 9, 10, 11	Amy
	4		Andy
	5		Amy
C	6	2, 12, 13, 14, 15, 16, 17	Amy/Rich
	7		Amy/Rich

*Planning Meeting Recordings and Documents*

Audio recordings of six planning meetings provided insight into the evolution of goals and ideas related to video use between January and April 2008. During these



meetings, four teacher educators (Dr. Chester, Dr. Baines, another graduate student, and me) discussed our experiences with facilitating discussions around videos and made decisions about how to proceed in future class sessions. The recordings of these meetings varied in length from about two hours to less than 30 minutes. These data indicated the evolution of intentions, goals, and ideas in response to teacher educators' reflections on their instructional experiences.

Analyses of syllabi, assignment materials, and discussion protocols—all documents related to the course and program in which videos were used—articulated the intentions for video records as they were codified in documents. These data contextualized the class sessions in terms of the goals, purposes, and content that preservice teachers' study of video was intended to address.

### *Methods*

In spoken and print form, the data are verbal data, and the methods I used for analysis are in the realm of discourse analysis. In general, discourse analysis investigates meaning as it is linguistically constructed—by words used, their relationships to one another, and the ways they develop as meaningful (Banister, Parker, Burman, Taylor & Tindall, 1994; Stubbs, 1983). In this study, the “meanings” included the ideas about teaching that developed within class discussions (the content), the interactions among participants that shaped the content (the instruction), and the ideas about teacher education that shaped the ways these class sessions progressed (the context for the curriculum). In this section, I describe the specific methods used to analyze the data<sup>5</sup>: videos of class sessions, audio recordings of planning meetings, and documents.

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<sup>5</sup> The class sessions were the primary focus of the dissertation, and the methods for analysis were therefore more elaborate than for the planning meetings and documents.

### *Analysis of Class Session Data*

I approached the class session data using the verbal analysis methods described by Michelene Chi (1997). One use of verbal analysis methods is to represent a learner's knowledge (Chi, p. 274); in this study, I represented the teacher education curriculum as what *could be* learned. Verbal analysis involves organizing the content of what is articulated by individuals as well as interpreting the relationships among the ideas presented. With transcripts of the video recordings, I operationalized Chi's functional process in four iterative steps to analyze the class sessions: segmenting, coding, representing, and writing analytic memos. In this section, I describe these steps in general, and then I describe how, through this process, I analyzed the data through three analytic lenses.

*Verbal analysis process.* First, I segmented the transcripts of the seven class sessions. This step involved selecting sections of the data that were relevant to the research questions<sup>6</sup> and then dividing these selected sections to define and organize units of analysis for coding. Initially, I divided the class sessions according to each presenter, for a total of 16 video discussions that occurred over seven class periods. Then I divided these 16 discussions into smaller segments for coding. These divisions were preliminarily defined semantically (e.g., ideas about teaching practice around which the talk cohered). I then confirmed the segments by noting syntactic markers, such as conjunctions and affirmative or negative markers. In ambiguous situations, I returned to the video records to examine body language (i.e., hand gestures, eye contact) that indicated continuations of or shifts in topic. In total, I identified 166 segments across the class session data.

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<sup>6</sup> I eliminated, for example, sections of the data in which preservice teachers chatted informally before the start of class and conversation related to video set up and how to resolve technical difficulties.

The segmenting process allowed me to “package” the class session data into units. I could then work through an iterative coding process to determine the content under study and the discourse moves enacted by participants (described further below). The coding process had commonalities with a grounded theory approach, with analysis occurring as I moved between two levels: the actual words used by participants and my conceptualization of these (Strauss & Corbin, 1998, p. 126). In this way, the development of a coding scheme was a combined top down/bottom up process, as described by Chi: Some codes emerged as I became familiar with the data, and others developed based on my knowledge of teacher education and experience as a teacher educator. Table 4.4 represents one coded segment, indicating the relationships of the transcript to the initial category, intermediate category, and segment codes.

Table 4.4  
Sample Coded Segment

	Transcript	Initial Category	Intermediate Category	Segment
1	Ruth: The context of my lesson is American history at [local high school] with 11 <sup>th</sup> graders. And we're doing a lesson on the Ku Klux Klan as part of the 1920s. So the way the lesson worked, first we read an article by the Imperial wizard of the Klan, basically giving his justification for the Klan's beliefs. And I had read it, but I didn't realize how much the students were going to have problems with just the vocabulary. ...I did a lot of, in the middle of it, a lot of explaining, like trying to help them to understand certain vocabulary words or allusions or trying to help them connect with what they'd learned before. And so I guess what I want you to focus on is...what you do when it turns out that it's harder than you expected it would be for them, and how you clarify or if those are, if I'm using good explanations or if I'm trying to explain something and not doing a very good job.	Subject area School Grade level Subject matter Lesson summary Content  Unanticipated student difficulty Vocabulary  Teacher response Explaining/ Clarifying  Request for alternatives "What you do..."  Request for evaluation Good/Not good	Context  Context  Context  Frame for viewing  Frame for viewing	Segment 1: Procedure: Establishing Context and Frame for viewing
2	Colleen: What grade is this?	Grade level	Context	
3	Ruth: 11 <sup>th</sup> . It's a regular American history and it's just got a real mix of students. Like some students could be in AP and some students can hardly read, and it's just a real range of	Subject matter Students' ability levels	Context	
4	Amy: So what we're going to watch is the reading, and you inserting explanations.	Lesson summary Video contents T. explanation	Context	
5	Ruth: Right...mostly it'll be me explaining to them. And also I do explain an activity that will be done after and I, yeah, I don't think I did a very good job of that. But comments on how to clarify explanations...	Lesson summary Video contents T. explanation  Self-evaluation Request for alternatives "How to..."	Context  Interpretation  Frame for viewing	

The third step in the verbal analysis process involved representing the coded data to enable recognition of patterns and their interpretation. These representations were developed both during and following the coding process. All analyses were represented in a series of tables, one for each of the 16 video discussions, which clearly indicated the connection of codes to data. The consistency of these tables allowed the comparisons and refinement of codes described above. From these tables, I created additional forms of representation to support my interpretations of the curriculum—one form for findings across the class session data and one form for individual video discussions. I prepared tables summarizing the number of segments within the code categories for each analytic lens, which allowed me to examine patterns across the class session data. Further, for each of the 16 video discussions, I constructed a map using Inspiration software. Each map illustrated the ideas that were initiated in discussion, the extent to which ideas were elaborated, and the degree to which ideas built on one another.

The fourth step in the verbal analysis process involved finding patterns, identifying anomalies, and making interpretations. Looking across the representations of the data, I documented these in a series of analytic memos that focused closely on the data. The memos addressed themes related to each analytic lens and raised questions for additional analysis.

*Three analytic lenses.* Using these methods, I analyzed the data through three analytic lenses: a content lens, a discourse moves lens, and a practice lens. The process of coding for content occurred first, in tandem with the segmenting process. In order to establish the distinction among segments, I identified the topics around which the discussions cohered—the content. Working chronologically through the entire set of

transcripts, I worked line-by-line to develop initial codes that adhered closely to the language used by the participants. Then I developed intermediate category codes that were relevant to the particular discussion from these initial codes. Looking across discussions, I then established a set of segment codes that encompassed the content for all 166 segments. This was an iterative process, which required repeated comparison across transcripts to refine the coding scheme and ensure consistency.

Second, I coded the data in terms of discourse moves, or patterns of performance within social interaction that shape the ways the interaction can proceed (Johnstone, 2002). Johnstone notes that a useful parallel in the kinds of “moves” made in a game such as chess; one player’s shift of a game piece on the chessboard affects how the other player can respond. The discourse move is functionally, rather than structurally, defined; it may involve multiple sentences and more than one speaker. In reviewing transcripts of video discussions, I recognized that participants used different discourse moves and sought to target these with a second pass at coding. Again, I worked chronologically, beginning with the transcript of the first video discussion, to establish initial codes. I developed intermediate codes that were relevant to each discussion, and then established a set of codes that reflected the discourse moves that were enacted across the video discussions. Again, this was an iterative process, and I compared codes across transcripts to refine the coding scheme and ensure consistency.

The third analytic lens allowed me to examine the class session data relative to the conception of practice articulated in the theoretical framework. This analysis drew upon the previously conducted analyses of content and discourse moves. I began with the analytic memo for each video discussion to determine its main theme—that is, the

primary idea or set of ideas that developed over the course of participants' discussion around a video of teaching. Then I used the content maps and coded tables to examine the ways this theme developed; that is, I established patterns among the coded segments that contributed to the theme.

#### *Analysis of Planning Meeting Data and Documents*

I approached the other forms of data as “intertexts” (Lemke, 1998), or data that exist “around” the video class sessions. The analysis of recordings of planning meetings and documents served to richly contextualize the analysis of class sessions within the language and ideas of the ED 650 course and the program. Such rich context sharpened the analysis of class sessions by confirming or disconfirming emergent ideas.

I analyzed the audio recordings to identify contextual aspects that influenced the development of the curriculum, particularly the ways teacher educators' decisions shaped the instruction in video discussions. I used Chi's process to divide the partially transcribed data into segments. Then I repeatedly reviewed the segments to identify recurrent instructional issues. I selected key segments in which these instructional issues were directly implicated and coded them to identify shifts in meaning that shaped the ways videos were used during class sessions.

Finally, I repeatedly reviewed and referenced the documents throughout the analytic process. These served primarily to elaborate, confirm, or disconfirm the ideas developed through verbal analysis of the class session and planning meeting data.

#### *Limitations and Trustworthiness*

Thus it is from our relationships within interpretive communities that our constructions of the world derive. (Gergen & Gergen, 2001, p. 1026)

Traditional perspectives on “validity” and “reliability” are often considered uneasy fits for qualitative research (Gergen & Gergen, 2001). As Guba (1981) points out, the assumptions underpinning qualitative inquiry—unlike the rationalistic paradigm—embrace the potential for multiple realities that may be constructed through interpretive work, as well as the shaping influences of interpersonal relationships and context on a study’s results. Given these assumptions, the qualitative researcher also needs an alternative conception of validity, which many qualitative researchers term *trustworthiness* (e.g., Guba, 1981; Kreftig, 1991). Gergen and Gergen describe “methodological innovation” that supports trustworthiness; these innovations “challenge the traditional binary between research and representation” (p. 1027), instead becoming an ongoing, iterative part process in qualitative inquiry. In this section, I describe challenges to this study’s trustworthiness and the function of reflexivity and accountability to others in counteracting those challenges.

One potential limitation of this study, which is also a challenge to its trustworthiness, is my dual role as both participant and researcher. Certainly, taking both roles provided unique opportunities. My presence as a participant likely helped other participants feel more at ease with my role as researcher, as they were able to get to know me as we worked together with videos. Because I interacted with them as a fellow participant in the one-to-one technology pilot, they were likely less inhibited in my presence than if I was a detached researcher, and I gained access to a wide range of teacher education program activities and documentation. Further, being deeply engaged in the pilot and particularly in video class sessions meant that I used “all of [my] sense and capacities, including the capacity to experience affect no less than cognition” (Patton,



2002, p. 49). My experience as a teacher educator in planning meetings and video class sessions sharpened my analysis of the data, as I was able to draw upon my understandings of meanings and recollections of events. Yet as Yin (1994) notes, taking the dual roles of participant and researcher is also potentially problematic—particularly in terms of biases. As a teacher educator represented in the data, my work was under scrutiny in the analysis. To some extent, I was naturally inclined to paint a positive picture of our interactions around videos, which affects the degree to which the results can be considered trustworthy.

The nature of the data represents a second possible limitation. Hall (2000) argues that the process of collecting video records (and, I would add, audio records) can:

- “reorganize the tasks and experiences of research participants,
- serve different research interests by selectively attending to different aspects of human activity,
- reinforce or break open traditional boundaries between researchers and their study participants, and
- provide both limited and privileged access to aspects of human interaction” (p. 658).

The data had strengths that opened up interesting analytic possibilities, but they also had limits. The video recordings, audio recordings, and collected documents richly represented the work of preservice teachers and teacher educators, yet these were only a series of snapshots of their experiences during the year-long pilot program. Further, the media in which some of these data are captured presented another set of issues. The data were shaped by the qualities of the technology by which they were captured—the angle

of the video camera lens, for example, or the strength of the microphone that picked up talk. The presence of a recording device may or may not have caused participants to alter their behavior.

To address both of these limitations—my dual role in the study and the nature of the data—I endeavored to practice *reflexivity*, which emphasizes making plain the historical, cultural, and personal ways in which the study is situated. In Patton’s (2002) terms, reflexivity is the “ongoing examination of *what I know* and *how I know it*” (p. 64). In an effort to manage my biases while maintaining the benefits of the participant-researcher role, I articulated my experiences and predispositions (see Context, above) so that I could continually assess my interpretations against them. I also sought continual awareness of the strengths and limits of the data. I needed to be constantly mindful that the data were necessarily incomplete, but I also endeavored to analytically manage the limitations. The analysis plan was painstakingly iterative, as described by Chi (1997), to ensure that the data were appropriately and consistently coded relative to the research questions. In the analysis, I initially used low inference descriptors to keep interpretations grounded in the data. The data represented a one-semester (about 13 weeks) period of time, which afforded opportunities for confirming patterns and seeking nonconfirming evidence between and among events.

While I endeavored to practice the continual self-awareness implied by reflexivity, I also sought *accountability to others* as means of establishing trustworthiness. My analyses and interpretations were shaped and reshaped as I met with committee members and other graduate students. They were not directly involved in the technology pilot or the research; their “outsider” perspectives enabled them to take the

role of “critical friend” (Arthur & Kallick, 1993). Their questions and ideas pushed me to return to the data and to reconsider my assumptions. I also conducted participant checks with Dr. Baines and Dr. Chester. As “insiders,” they shared perceptions and recalled details that confirmed some of my interpretations and encouraged me to reconsider others.

## CHAPTER 5

### INSTRUCTION IN VIDEO DISCUSSIONS

#### Overview

In this chapter, I address the interactions of teacher educators and preservice teachers around video records of practice. In the theoretical framework, I described teaching as involving some degree of uncertainty because of the relational nature of the work. The content addressed through discussion of video records is potentially rich and varied—ranging from the study of students to teaching methods, subject matter, and innumerable other aspects that are intertwined within representations of teaching—but it is dependent on the skill and care of teacher educators to make it accessible and the active participation of preservice teachers to develop it. The enacted curriculum has a structure reflective of the preservice teachers' interests and actions, deliberate decision making by the teacher educator(s), and the recognized qualities of the video (and other materials) used during instruction.

In this chapter, I examine the structure of those interactions in two venues: the meetings among teacher educators as they planned for video class sessions, and the class sessions involving preservice teachers and teacher educators as they discussed the videos. This analysis provides insight into the first research sub-question: *In what ways do particular teacher educators' and preservice teachers' interactions with video and one another shape the development of the curriculum?*

## Teacher Educators' Intentions for Video Discussions

As was noted in Chapter 4, the teacher educators met weekly to plan for the upcoming class session in which preservice teachers would share and discuss their video records of practice. To understand the teacher educators' decisions about how to use video in the teacher education program, I drew upon recordings of some of the weekly planning meetings. The planning meetings involved four teacher educators: Dr. Chester, Dr. Baines, Andy, and me. Dr. Chester was a clinical faculty member and Dr. Baines was a lecturer; both also had leadership roles in the teacher education program. Andy and I were graduate students, both with backgrounds in elementary (not secondary) education, who became involved in the one-to-one technology project because of our interests in innovative approaches to teacher education and the use of technology to support teacher education. In the planning meetings, we engaged in tasks ranging from practical (organizing a syllabus, dividing preservice teachers into groups) to reflective (describing our experiences with facilitating recent video class sessions). We grappled with negotiating our understanding of the potential benefits of video study with historical structures—including goals, assignments, and roles—of the teacher education program and the ED 650 course. Over time, as we engaged in the activity of planning for video class sessions, we articulated and refined our expectations for the ways preservice teachers would work with and what they would learn from videos of their teaching.

In repeatedly reviewing the transcripts of the planning meetings, I identified three aspects of instruction that the teacher educators repeatedly addressed: the purposes or objectives for studying video, the tasks and responsibilities of the preservice teacher in video discussions, and the role of the teacher educator in video discussions. I selected key

segments in which these instructional issues were directly implicated and coded them to identify the ways teacher educators dealt with these instructional issues. I used several documents (e.g., syllabus, assignment guidelines), which were referenced and produced during these meetings, to elaborate on the ways the teacher educators managed these issues.

### *Instructional Purpose*

First, the teacher educators grappled with the purpose for preservice teachers' ongoing study of video records of their teaching. Early in the semester, planning for the video class sessions addressed the relationship of the video discussion task to parts of the ED 650 course that had long-standing significance as well as ideas about how teachers should study and reflect on their work.

In their planning, the teacher educators worked to put together a task with a long history in the teacher education program—namely, the Reflective Writing Task (RWT) (Appendix E)—with newer, somewhat less defined ideas about using video to develop dispositions of inquiry toward teaching. The RWT was a recurring, elaborate written assignment involving records of practice that had been a main focus within ED 650 for several years, and the teacher educators initially sought to align the video discussion assignment with it. The stated objective for the RWT was “To use the Standards and Benchmarks as a way to think about aspects of effective teaching and to introduce the format used in the Teaching e-Portfolio” (ED 650 Fall 2007 Syllabus). For each of the program's Effective Teaching Standards, preservice teachers collected records and artifacts of teaching to demonstrate their understanding of Preparing and Planning for Instruction, Designing and Using a Variety of Assessments, Implementing Instruction,

and the other program-identified facets of teaching. The RWT assignment, which involved five to ten written pages to accompany multiple records of practice, necessarily required time and often multiple revisions by the preservice teachers.

The following exchange, which occurred during a meeting focused on developing video assignment objectives that would appear on the syllabus, indicates teacher educators' efforts to negotiate these ideas:

Excerpt 1

- 1 Dr. Baines: What we could do is say, To gather records of practice that demonstrate your increasing skill in teaching and sharing... We could put in the description, You will share clips, take off the time restraint, share clips of your teaching in areas in which you would like feedback, or something like that.
- 2 Amy: I don't think that's the purpose I understood this to be about, that this was about gathering records of practice to demonstrate increasing skill. I thought this was really in some ways another form of inquiry...they were using [the records] to inform some problem of practice or puzzle that they could then discuss with their group. Am I not right in that?
- 3 Dr. Baines: I think you are. The reason I emphasized that 'demonstrate your increasing skill in teaching' is linking it to the RWTs. (January 31 Planning Meeting)

The language used by the teacher educators in this exchange gave the presenting preservice teacher responsibility for directing the discussion, as the presenter could identify "areas in which you would like feedback" or "some problem of practice or puzzle." Yet Dr. Baines also used the phrase "demonstrate your increasing skill in teaching," which reflected one purpose of the RWT assignment: "To provide evidence that tracks progress toward becoming an effective teacher" (RWT 2 Assignment Guidelines, November 28, 2007). The syllabus, which was shared with the preservice teachers at the class session following the January 31 meeting, included an objective that maintained the new video assignment's link to the historical RWT assignment:

“Purposes: To gather records of practice that demonstrate your increasing skill in teaching and to use records to facilitate discussions of practice among colleagues” (Winter 2008 Syllabus).

At the next planning meeting, Dr. Chester reported having heard numerous complaints about the amount of work required in the one-credit ED 650 course (February 7 Planning Meeting). He made some suggestions about how to “lighten the load” for preservice teachers, including replacing one video class session with a field instructor panel presentation on classroom management. In responding to his suggestion, Dr. Baines presented competing concerns that had implications for understanding the purpose of the video assignment:

Excerpt 2

- 1 Dr. Baines: I’m just trying to visualize what goals we had this term. And I think we wanted them to look at their own practice. Big goal, big overall goal. So what I would like to see happen is have work done, work dropped that doesn’t focus on looking at their practice.
- 2 Dr. Chester: What would you drop?
- 3 Dr. Baines: I would spend February 11 and 18 having them focus on the videos that they’re bringing in of themselves teaching. I would carry that over...[which adds] no new assignment for them. ...I don’t know what we’re going to do with classroom management that will help them more than looking at their practice. (February 7 Planning Meeting)

Dr. Chester initiated the discussion with concern for the preservice teachers’ workload, which he wanted to decrease. Dr. Baines introduced another concern: the teacher educators’ goal of using video and other records of practice to support preservice teachers’ study of their own practice. Meeting this “big goal,” she said, meant retaining the assignment that Dr. Chester wished to drop and perhaps looking for a different way to decrease the workload. Later in the meeting, Dr. Baines added another concern: she



expected that, in reporting on the year's progress to the Teacher Education Initiative (the supporting organization of the technology pilot), she would have to justify the teacher educators' instructional choices for the use of the one-to-one technology:

Excerpt 3

1 Dr. Baines: I just really am concerned about, at the end of this term, when we're writing about how we've used records of practice, that we have not done enough with them looking at themselves teaching.

...

2 Dr. Chester: We're doing it four times more than last year. I'm just saying, we're doing a lot.

3 Dr. Baines: I know we're going to have to justify it. I think I feel that [with] the personal inquiry [assignment] they don't have to bring their own practice. (February 7 Planning Meeting)

Dr. Baines implied that "looking at themselves teaching" was an important activity that was uniquely supported by the available technology. She also indicated that it was a more justifiable use of class time, in terms of reporting to the Teacher Education Initiative, than the alternative (the panel presentation) posed by Dr. Chester, which did not involve the technology. She pointed out that the personal inquiry assignment, another recurring task involving records of practice, did not necessarily require preservice teachers to study their own teaching. As the discussion continued, Dr. Baines shifted her argument to the video assignment's relevance to the preservice teachers' future careers:

Excerpt 4

1 Dr. Chester: I think you've got to look at what they're [the preservice teachers] saying.

2 Dr. Baines: I think you have to listen to what they're saying, but I think you also have to filter it through what makes sense. And...if part of our goal is to teach them to use records of practice, you know, their record of practice, their use of it as a professional will not be going through their videos and looking for pieces of evidence that support

an RWT. It won't be looking for pieces of evidence that support assessment issues. It will be saying, here's a picture of me teaching. And I want to go back and I want to look at what's going well, what's not going well... That's what we said we would be doing.

- 3 Dr. Chester: This is not either or.
- 4 Dr. Baines: So what do we get rid of? Let's not give up that.
- 5 Dr. Chester: But we're still doing that. I don't know why you feel we're making such a sacrifice when we're talking about one opportunity in February, which is a hard month for them. (February 7 Planning Meeting)

Here, Dr. Baines prioritized the development of preservice teachers' dispositions toward studying their teaching over the "demonstration of increasing skill" required by the RWT. She linked her argument to her concern about "justifying" instructional choices as she noted, "That's what we said we would be doing" (Line 2). Dr. Chester continued to prioritize the preservice teachers' workload and his desire to lessen it, drawing upon his understanding of February as a historically challenging month for the preservice teachers enrolled in the program.

The outcome of teacher educators' negotiations on February 7 was a sustained emphasis on preservice teachers' study of their own teaching within a refined set of video assignment guidelines. The teacher educators foregrounded an instructional priority: the development of preservice teachers' dispositions of inquiry toward their own teaching. This priority responded to Dr. Baines' concerns about meeting the teacher educators' "big goal" for the semester, justifying their instructional choices, and teaching preservice teachers a way of studying their teaching that they can use throughout their careers. The assignment guidelines de-emphasized the "topics" laid out in the Effective Teaching Standards as well as RWT preparation; instead, the preservice teachers' interests largely drove the video class sessions through their selection of videos and framing of questions

about videos (Revised Video Assignment, March 10, Appendix F). In response to the more immediate concern for the preservice teachers' workload, the video assignment was streamlined so that each preservice teacher presented a total of three videos over the course of seven class sessions.

### *Preservice Teachers' Tasks and Responsibilities*

The previous section hinted at the changes in expectations for the preservice teachers, particularly their responsibilities involving video records, that occurred as the teacher educators planned for the video class sessions. In negotiating the requirements and tools that would guide the discussions, teacher educators initially drew upon the video assignment guidelines from past years, which framed a particular role for preservice teachers. The previous assignment guidelines required preservice teachers to share a lesson plan and a written statement of the area of focus, which could be accessed by other participants before class, when they would show a 25-30 minute video of their teaching (Video Assignment 1 Guidelines, March-April 2007). These videos were supposed to relate in some way to two or three benchmarks from the program's Effective Teaching Standards. Building on this model, Dr. Baines suggested that the use of one-to-one technology would allow each presenter to also share her video (not just the supporting documents) prior to the class session. She suggested that before class, each preservice teacher could view the presenter's entire video and select a shorter clip that she found "engaging" from that lesson, which she could then describe during the class session. In this model, preservice teachers in a small group had shared responsibility for making selections from the video; however, the criteria for making the selections were unclear.

The following exchange indicates the influence of the previous year's video assignment (which occurred only once, in contrast to the new, recurring video assignment) on teacher educators' planning for the new assignment. In Excerpt 5, I referenced the previous year's video assignment and introduced an alternative model that I had used as a teacher educator in an elementary teacher education program:

Excerpt 5

- 1 Amy: I heard you saying that each [preservice teacher] would select a 20-25 minute clip of their teaching. The other [preservice teachers] in their small group would view the others' records and select a clip from each that they think is engaging. That seems like a lot of work, though.
- 2 Dr. Baines: But then we backed off of it a little and just said that we would have them, it wasn't that we were going to pair them up, but if they look at the description of what the lesson is about, they could pick one or two and do that. So they wouldn't be watching all of them... The danger in that is that we could have some people that don't have anyone looking at theirs.
- 3 Amy: I also have questions about that because one of the things that I think is difficult, and I think we've talked about in the study group as difficult in viewing teaching, when you don't have intimate knowledge of the context, you don't understand what's going on. And so one of the ways we work on this in the elementary program is we have the student teacher pick the two-minute clip of their own teaching. And then they have to frame it for the group and really do more of a presentation of this is what I'm working on, this is the problem of practice I want feedback on. (January 31 Planning Meeting)

In the alternative model I described, the presenter would select a short video clip of her teaching and "frame" it for the group by describing the "problem of practice" that she wanted to address. I emphasized the importance of building "context" that would help the other preservice teachers understand the teaching in the video. The presenter had responsibility for video selection and the focus for discussion, which would make the discussion relevant to her particular concerns about teaching. I used some ambiguous

terms in this description; still, my description of the approach shifted responsibility for shaping the direction of the discussion to the presenting preservice teacher.

The assignment guidelines developed at the January 31 planning meeting drew upon features of both of these models, requiring that preservice teachers post a 5-minute “video clip of your teaching that illustrates two or three of the benchmarks for Standard 3, Instruction. We will use the video clips to discuss your understanding of the benchmarks delineated in Standard 3” (Teaching Video Assignment, February 11 Guidelines). These guidelines gave the presenting preservice teacher responsibility for selecting and sharing a short video, while maintaining the emphasis on the Effective Teaching Standards.

The teacher educators’ subsequent planning brought greater precision to the nature of the presenting preservice teacher’s responsibility for shaping discussions. At the next planning meeting, Dr. Chester sought to maintain the Effective Teaching Standards as a framework for discussing videos, while Dr. Baines pushed to eliminate “hunt and seek” assignments, meaning those in which preservice teachers search for records of practice that illustrate some stated idea, such as the Effective Teaching Standards. Dr. Baines seemed to favor an open-ended focus on “your practice,” leaving the criteria for selecting and framing a video to the presenting preservice teacher. I suggested that the presenting preservice teacher should indeed drive the discussion, and offloaded to the facilitating teacher educator the responsibility for connecting to the Effective Teaching Standards:

#### Excerpt 6

- 1 Dr. Chester: I thought what we talked about was to say, All right, you bring in, what we want to do is kind of front a different topic. And you’re going to bring in a video

clip of how you, an issue or something that you care about in relationship to preparation and planning. And that you were going to make the connection with the two. It's a time when they were still dealing with their instruction.

- 2 Dr. Baines: That was what I was trying to say a minute ago. To me, that's the hunt and seek kind of assignment. Not the bringing in a video of your practice. So those are the kind of assignments that I would like to see us eliminate for them.
- 3 Amy: So what if we changed ... to just [focusing on] instruction, and do the same kind of thing where they bring in a clip of their practice. But then we can sort of coach our facilitators to say, try to raise issues of differentiated instruction when you see it. Or try to raise issues of how this connects to planning. I mean, I don't know if that's worthwhile, but.
- 4 Dr. Baines: I think it would slow it down, it would give more time on the analysis....That's an easier edit [for preservice teachers working with videos], when you're saying edit for that time as opposed to edit for a particular topic. (February 7 Planning Meeting)

My suggestion bridged Dr. Chester's and Dr. Baines's competing concerns. The suggestion pushed the role of the presenting preservice teacher from illustrator of the Effective Teaching Standards to the driver of discussion, which she would accomplish through her video selection and related questions. In the revised assignment guidelines, the presenting preservice teacher was directed to choose a 5-minute video "of your teaching that illustrates a problem, issue, question, or success you would like feedback on" (Teaching Video Assignment, March 10 Guidelines; see Appendix F). These broad guidelines made no mention of the Effective Teaching Standards; the guidelines left the choice of video and framing question up to the preservice teacher.

#### *Teacher Educator's Role*

In Line 3 of Excerpt 6, I also implicated the teacher educator, but this was not the first time the teacher educator's role was raised. As the teacher educators in planning meetings revised the video assignment and de-emphasized the RWT, we attended more to the importance of the teacher educator's role in small group discussions around video.

During early negotiations around objectives, I explained, “And so the assignment would be, you need to be prepared as part of the collegial conversations...to share a clip of your practice... And so then it’s the responsibility of [the preservice teacher] to bring in their three minutes [of video] and say, Well, I’m thinking about this RWT on instruction, so here’s what I brought. And then the [teacher educator] has to be ready to handle that and facilitate the discussion” (January 17 Planning Meeting). This comment indicated that, although the presenting preservice teacher would shape the discussion with her choice of video and framing questions, the facilitating teacher educator would take the role of sustaining the discussion. At a later meeting, Dr. Chester explained that one aspect of the teacher educator’s work is to “make people more conscious of what they’re seeing and actually get them to see it. It’s not just, let’s just talk about instruction, it’s looking at [particular] aspects of it” (February 6 Planning Meeting). The teacher educator would ensure the relevance of the discussion to evidence in the video and raise key points that were not addressed by preservice teachers. Given that the presenting preservice teacher’s video and frame for viewing were shared during the class session (and not before), the teacher educator’s role demanded a great deal of “on your feet” thinking with little opportunity for advance preparation.

As we discussed our experiences as teacher educators leading discussions and observed other teacher educators’ efforts, we returned repeatedly to the nature of the instructional work and the implications for the teacher educator’s role. We recognized that the seven field instructors who also facilitated the video discussions represented a special challenge. The work of facilitating video discussions seemed at odds with field instructors’ expectations about their role, which had developed through their past years of

work in the teacher education program. In their role, the field instructors relied heavily on their years of secondary school teaching experience and their knowledge of the program's Effective Teaching Standards; they did little advance planning for any class session (Dr. Baines, personal communication).

At the March 19 planning meeting, we reviewed a video recording of a video discussion that had been facilitated by Dr. Baines. This was the first time we engaged in this exercise with the objective of identifying ways the video could be used for teacher educators' professional development. During this meeting, we drew upon our interpretations of the video and our own experiences with facilitating video discussions to develop a tool for making the work manageable. We endeavored to develop a "protocol" (March 19 Planning Meeting) that teacher educators could use to help them manage the challenge of facilitating video discussion. The protocol could prescribe the basic organization of video discussions, from the presenter's introduction to the teacher educator's elicitation of "lessons learned" at the discussion's close. Using a protocol, we thought, would help teacher educators (and especially field instructors) as well as preservice teachers anticipate their tasks and provide some coherence to the discussions. In Excerpt 7, the teacher educators constructed a component of the protocol:

#### Excerpt 7

- 1 Andy: A useful thing to write down for field instructors, at least a heuristic they can use in these groups is, tell the students to say [the frame for viewing] in ten words or less. You should have such a working knowledge of what you want the group to say that it can be that concise.
- 2 Amy: And so that someone can say it back to you.
- 3 Andy: I have a sense that some students just think, I have this thing for class and I think there's something there. [They think] I'm just going talk for about a minute and see if something falls out of my mouth that'll guide the group.



- 4 Dr. Chester: I like it. The other thing is, that I would say to them as well, have somebody restate it.
- 5 Amy: The instructor could model the restating.
- 6 Dr. Baines: It sounds a little pedantic to say, Someone say it back to us. But if the field instructor does it, it's another test for the field instructor too. (March 19 Planning Meeting)

Although this exchange addressed a small component of the entire protocol—the “ten words or less” summary of the presenter’s frame for viewing—it indicates the two overall purposes for the protocol. First, the protocol would make clear the tasks of the teacher educator and the preservice teacher within the discussion. It would provide some sense of what they could expect, enabling them to prepare. Second, it would hold them accountable for those tasks. The “ten words or less” guideline required that the presenting preservice teacher be precise about the area of concern that frames the discussion. By restating the frame for viewing, Dr. Baines pointed out, the teacher educator could “test” her own clarity about the preservice teacher’s area of concern, which should be a focus of discussion.

As we continued to view the video at the March 19 planning meeting, we identified a “problem” evident in Dr. Baines’ recorded class session. I noted, “[T]he conversation [in the recorded video discussion] has already moved to, ‘What if you did this instead?’ ... And not on what happened in the video.” We identified this as a recurring problem in video discussions: some preservice teachers quickly jumped to offering alternatives that the presenting preservice teacher might use in the future. This jump to alternatives skirted the evidence—such as features of the environment that influenced the teacher’s actions—in the video. In the recorded class session, the teacher educator did not attempt to turn preservice teachers’ attention to evidence that would

support their suggestion of alternatives. Later, I explained, “I think you want to unpack...what’s happening in the video before you go there [to suggesting alternatives]. It needs to be grounded in, this is what occurred, this is what I see in terms of student reaction and student learning. Therefore I can make an informed statement about what might make a difference” (March 19 Planning Meeting). This comment indicated my understanding of one benefit of using video to study teaching: the access to evidence that could support interpretations of and assertions about one’s teaching. Further, my comment valued the development of shared understandings among group members rather than individuals’ suggestions based on their own (often unspoken) interpretations of the video. The identification of this problem implied a third purpose for the protocol: it helped the teacher educator manage recurring problems—like the jump to alternatives—by directing the small group’s activity in particular ways.

These negotiations at the March 19 planning meeting resulted in the articulation of a protocol with six steps, intended for use in the remaining video discussions. We introduced the protocol to field instructors at a meeting on March 24, and we reviewed it as a group in subsequent meetings:

1. Presenter sets the context (i.e., lesson objectives, the part of lesson being viewed, instructional method)
2. Presenter states the focus question
3. Small group views video
4. Instructor reviews the focus question
5. Small group unpacks the video, focusing on both teaching moves and what students are learning
6. Instructor elicits lessons learned (March 31 Faculty Meeting Agenda)

The first two steps in the protocol related to the presenting preservice teacher’s responsibilities (described in the previous section)—specifically, the tasks of framing the discussion with information about the context and the area of focus, stated in question

form, that she wanted to work on (which later became the “frame for viewing”). These occurred before participants viewed the video (Step 3) to provide a structure for their observation of the teaching in the video. Steps 4 through 6 related to the teacher educator’s role. Step 4 is rather specific, directing the teacher educator to revisit the presenting preservice teacher’s question, thereby situating it as a point of focus immediately following the video viewing. Steps 5 and 6 highlight general areas of focus, not particular ways that the teacher educator might direct the discussion. The direction to “unpack,” for example, oriented the teacher educator to focus the group’s attention to the details of the video; however, it is unclear both how this might be accomplished and how the “unpacking” relates to the other aspects of the protocol.

The generality of the protocol in terms of the teacher educator’s responsibilities may speak to the degree of uncertainty involved in this approach to teacher education. As was noted in the theoretical framework, the enacted curriculum is shaped by teacher educators’ and preservice teachers’ actions and the characteristics of the video and other instructional tools; and the content—the practice of PK-12 teaching—is complex in ways that mean the ideas that develop cannot be fully anticipated. In this case, features of the assignment heightened this uncertainty, as the videos were selected by preservice teachers and not available for preview before the class session. It was therefore difficult to prescribe “moves” for the facilitator that would enable discussion of a particular set of ideas. The protocol’s generality may also be attributed to the field instructor’s historical role in the teacher education program, which had involved little planning and allowed the field instructors to interact rather informally with preservice teachers while sharing their teaching experiences. Dr. Chester and Dr. Baines recognized that facilitating video

discussions included instructional demands that required changes to the historical role of the field instructor, and they were reminded by at least one field instructor that any additional time commitment would need to be negotiated with the newly formed union (Dr. Baines, personal communication). Dr. Chester and Dr. Baines may have been concerned about altering that role, which had developed over several years in the teacher education program, too dramatically by prescribing specific changes through a more detailed protocol. As it was worded, the protocol offered a set of steps that could broadly shape, but not define, video-based discussions of teaching.

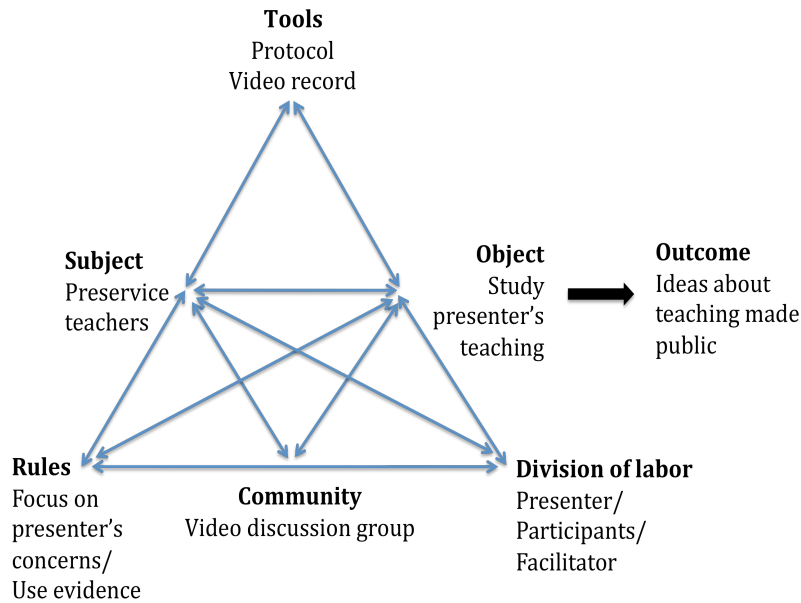
#### *Intended Instructional Model*

In planning for video discussions, the teacher educators drew upon their experiences within the teacher education program, including their understanding of its historical structures (i.e., Effective Teaching Standards, RWT, field instructor's role), as well as their work with using video in teacher education. In constructing responsibilities for the presenting preservice teacher and the teacher educator, as well as a tool (the protocol) to guide their engagement in those responsibilities, the teacher educators created a model for instruction in the video class sessions.

As was noted in the theoretical framework, activity theory provides a framework for interpreting the interactions of participants around video records. Activity theory supports concurrent attention to the multiple elements that are part of preservice teachers' and teacher educators' interactions around representations of practice in video class sessions. Engeström's (1987) triangular model (see Chapter 3, Figure 3.2) is a way of depicting the relationships among these elements. Figure 5.1 uses Engeström's triangle to depict the intended instructional model constructed by the teacher educators—that is, the

teacher educators' view of the preservice teachers' activity system for the study of videos of their own teaching.

Figure 5.1  
*Teacher Educators' Intended Instructional Model*



The middle line represents the essence of the enacted curriculum in video discussions—the relationship among *subject* (the individual[s] engaged in the activity), *object* (the focus that motivates the activity), and *outcome* (what occurs as a result). In this case, the teacher educators conceived of preservice teachers focused on one group member's (the presenter's) practice, with the outcome of some set of ideas about teaching that would be made public and available for study by all. In this intended instructional model, the tools that mediated the relationship between subject and object included the video and the protocol—both of which were intended to focus preservice teachers on a particular instance of teaching, the concerns of the presenting preservice teacher, and the implications of these for one's own teaching. As members of the video discussion group (the community defined by the teacher educators), preservice teachers were intended to focus on the presenter's concerns and use evidence to support their ideas about the

presenter's teaching (the rules). The teacher educators defined a division of labor among presenter (the preservice teacher sharing her teaching), participants (the preservice teachers observing and discussing the video) and facilitator (the teacher educator), who had different roles to fulfill in video discussions. In short, the teacher educators' model depicted the instructional activity of a video discussion as a cooperative enterprise among preservice teachers, supported by a teacher educator, with the outcome of making certain ideas about teaching available for study by all, that is, having relevance to all group members. In this model, the nature of the content (the developed ideas about teaching) depended on the stated interests of the presenting preservice teacher and the ways the interests were collectively understood and elaborated in relation to the video by the participants in the video discussion group.

#### Instruction in Video Discussions

To reiterate, the teacher educators' intended instructional model depicted video discussions as a collective enterprise with the object of making ideas about teaching (relative to the presenter's stated interests) public and therefore accessible to all preservice teachers. This section examines what actually occurred in video discussions. I address the discourse moves (defined below) that the participants used during discussion, reporting on findings across all 16 video discussions. Then I illustrate those discourse moves with the case of one video discussion to examine video discussion as an activity (Engeström, 1987).

#### *Discourse Moves Across Video Discussions*

The preservice teachers, with the facilitating teacher educators, enacted five *discourse moves* during video discussions. Barbara Johnstone (2002) characterizes the

discourse move as a unit of social interaction that is defined functionally rather than structurally; it is a performance (e.g., apologizing, asking a favor) within the particular setting of some larger unit of discourse (such as a conversation) that shapes the way it will proceed. The grain-size of a discourse move varies; it may take one or more sentences, involve one or more participants, and use one or more turns of conversation to accomplish. In this section, I identify the common discourse moves enacted in video discussions, which feature different purposes and different uses of the video record and other forms of evidence, thus generating different categories of ideas about teaching.

To analyze the data using verbal analysis methods (Chi, 1997), I divided the video discussion into segments and coded the segments in a combined bottom up/top down manner, working iteratively to refine the codes throughout the analytic process. I worked chronologically, beginning with the transcript of the first video discussion, and engaged in line-by-line coding that adhered closely to the language used by the participants. Working line by line through the entire set of transcripts, I recognized distinct discourse moves and developed categories to target these. In all, I identified five categories of discourse moves that occurred across the segments, which are listed and defined in Table 5.1.

Table 5.1  
*Categories of Discourse Moves*

Discourse Move	Description
Enacting Procedures	Responsive to the procedures outlined in the teacher educators' protocol (e.g., stating frame for viewing, describing lessons learned)
Developing Context	Describe circumstances surrounding the events of the video (e.g., lessons that came before and after, students' prior knowledge and characteristics, classroom features)
Interpreting	Explain the meaning of events and characteristics depicted in the video
Suggesting Alternatives	Address adjustments that the presenter might make to her teaching; focus on concrete approaches, techniques, and language that could change the events depicted in the video
Generalizing	Address ideas having application across teaching contexts; usually in the form of principles or dilemmas

Preservice teachers used these discourse moves across the video class sessions. As recurrent, they may be considered “scripts,” or “standard plots of types of encounters whose repetition constitutes the setting’s interaction order” (Barley, 1986, p. 83). Participants repeatedly enacted procedure, built context, made interpretations, suggested alternatives, and developed generalizations, which in turn influenced the nature of the ideas about teaching that were made public. Table 5.2 indicates the distribution of these discourse moves across the 16 video discussions.



Table 5.2  
*Discourse Moves by Video Discussion*

Video Discussion	Enacting Procedures	Developing Context	Interpreting	Suggesting Alternatives	Generalizing
1	1	0	6	0	0
2	2	0	5	2	0
3	1	1	6	8	1
4	1	1	4	3	2
5	1	3	4	1	1
6	2	0	2	0	0
7	2	1	5	1	0
8	1	1	2	2	3
9	2	2	3	2	5
10	1	1	1	2	2
11	1	2	5	0	0
12	3	4	6	9	2
13	2	0	4	2	4
14	1	2	2	0	2
15	3	1	3	3	1
16	1	3	1	0	2
Number Segments	25	22	59	35	25

Total Segments = 166

The results presented in Table 5.2 point to consistent emphases on Enacting Procedure and Interpreting in every video discussion. The emphasis on procedure indicates the shaping influence of the teacher educators’ protocol—particularly in terms of the presenter’s introduction of context and frame for viewing—throughout the semester-long focus on video study. The emphasis on interpretation of the teaching in the video indicates preservice teachers’ focus on the details of the presenter’s teaching. More variation exists in terms of the emphases on Suggesting Alternatives and Generalizing in each video discussion. This can be attributed, in part, to the nature of the presenter’s frames for viewing, which oriented the participants more or less toward suggesting

alternatives and making generalizations (the influence of the frames for viewing is discussed further in Chapter 6).

The bottom row of Table 5.2 accounts for the discourse moves as they occurred across all 16 video discussions, which included 166 segments. Based on those findings, I can assert that participants focused closely on the teaching represented in each video. Over one-third of the segments fell in the Interpreting category, meaning that participants focused on making meaning of the presenter's teaching. In the Enacting Procedures and Developing Context segments, participants identified the presenter's area of interest, addressed issues represented in the video, and established the circumstances surrounding the events of the video. Combining the Interpreting segments with those in Enacting Procedures and Developing Context categories, nearly two-thirds of the segments directly addressed the teaching in the video under discussion. Fewer than one-fourth of the segments addressed teaching practice in a hypothetical sense, as alternatives perceived to be relevant to the teaching represented in the video record. The smallest number of segments addressed teaching in a generalized way, as principles and issues that apply across teaching contexts.

In the next section, I examine the discourse moves as they occurred in the context of a single video discussion—specifically, Video Discussion 12 in Table 5.2. By examining a single discussion, I can empirically explore the elements of activity as they manifested in and among participants' use of discourse moves.

#### *Analysis of One Video Discussion*

The results reported in Table 5.2, which encompass all the video discussions, cannot address the context that gives meaning to the video discussion as an *activity* as it

is described by Leontiev and Engeström. Using a rich instance of instruction allows a more thorough examination of *how* and *why* the curriculum was constructed in the video class sessions. As is indicated by Engeström's model (depicted in Chapter 3, Figure 3.2), the elements of activity work in relation to one another; thus, they are meaningful when described in the context of time and space.

The class session analyzed here is a “representative” discussion in that the discourse moves and themes defined in the analysis are applicable across the class session data. In other ways, it is not representative, but has some unique characteristics that make it useful for analysis from the perspective of activity theory. In particular, the entire class session was devoted to discussion of a single video, whereas other class discussions addressed two, three, or four video records over the course of about an hour. Given the discussion's length, it included multiple instances of each of the discourse moves described in Table 5.1; in addition, some features of discussion that appear in other class sessions were exaggerated in this one, providing richer illustrations than might be found in other class sessions.

The class session took place on March 31, the third (and final) session in the second round of video discussions. Andy and I were present as facilitators. Katie was the last presenter in the small group. The teacher educator who facilitated each discussion used her judgment to determine how long to address each video; in this case, the group had discussed the video records of the other five preservice teachers (Emily, Larry, Peter, Rachel, and Ruth) in the previous two class sessions. Because Katie was the last presenter, the group could devote the entire class session (about one hour) to her video.

As a student teacher, Katie's primary teaching assignment was in high school English, and she also taught one section of introductory French. She presented a video from her women's literature class, in which the high school students were reading *Their Eyes Were Watching God*. In her description of the context for the video, Katie explained that she felt she had to "bring up race" so that students could make sense of some of the book's themes. In the lesson prior to the one captured in the video, she explained, she had engaged students in an activity called "Unpacking the White Backpack." Katie described the activity: "I read off fifteen statements that had to do with privilege. And you stepped forward if it applied to you. You stayed back if it didn't." In this way, she said, students could think about their own experiences and visually compare their experiences with those of their classmates. After the activity, her students wrote in their journals, which Katie collected and reviewed. Katie interpreted some of her students' journal responses as indicating some confusion about the distinction between race and ethnicity. The video included her impromptu effort at explaining the two concepts. In her explanation of race and ethnicity to her high school students, Katie (who self-identified as black, a point that was raised during the video discussion) offered several examples of evidence to support a key statement: race is not genetic.

In the remainder of this section, I describe instances of each of the discourse moves described above. In doing so, I address themes related to tools, rules, and division of labor as mediating aspects of the preservice teachers' activity system. This analysis does not address the entire discussion, and the selected excerpts do not tell a continuous "story"; they were selected as rich illustrations of preservice teachers' activity in video discussions (see Appendix G for the full transcript).

### *Enacting Procedures and Developing Context*

As prescribed by the protocol, the presenter described the context and frame for viewing to inform participants' viewing of the video record at the beginning of each video discussion. After the video viewing and during discussion, the development of context and refinement of the frame for viewing continued, as participants asked questions and the presenter provided more information about these aspects. In this way, the elements of context and the frame for viewing became public knowledge, available for reference throughout the discussion.

Excerpt 1, which took place before participants viewed Katie's video, is an instance of enacting procedure. Katie, the presenter, enacted part of the protocol that had been designed by the teacher educators and used in several video discussions before this one. The protocol indicated that the presenter would describe the "context" and the "focus question" (which had become the "frame for viewing") that targeted an issue or puzzle. Katie did so without prompting, an indication that this part of the protocol was well known by this time:

#### Excerpt 1

- 1 Katie: So they gave me their feedback [in their journals] but one thing that I noticed... was that someone had said, Oh, well, people feel as if they can tell your race by looking at you... And that's not true for everyone. So what this clip is, begins with, is that after, after they had given me all their feedback, I just wanted to clarify for them the difference between race and ethnicity. Race being skin color, ethnicity being culture and sometimes skin color. I didn't consider that contentious. Anyway, I guess in this clip, what are we looking for? Ten words. How do I do at creating a safe environment? How's that?
- 2 Amy: How do I do at creating a safe environment?
- 3 Katie: Or how successfully do I create a safe environment? From what you see of the back of the classroom.

[Participants view video]

- 4 Amy: So I think I want to revisit the frame that you set for us. Right? What were we looking at here? Can you restate for us?
- 5 Katie: Do I create a safe environment. Though I'm going to note that...this was not the discussion component of the class. Just so you're aware of like, I hadn't set this up as like let's, they were going to discuss and they had already had some chances to discuss but this, the particular segment was not. So in explaining, do I create, or seem to create based on student response and things like that, a safe environment?

As presenter, Katie was in a position of authority on her classroom, students, and events of the video, while the other preservice teachers and the teacher educator were receivers of the information that Katie made available. She decided on the elements of her teaching context that she perceived necessary for other participants to understand the video. Katie also described the area of focus (the frame for viewing) to which she wanted participants to attend. This frame was constrained by a “ten words or less” guideline, (Line 1) newly established in the previous class session as a way to ensure a concise, clearly stated focus for each discussion. I further referenced the protocol as I asked Katie to “restate” it after the group viewed the video (Line 4). Katie’s frame, a question about “safe environment,” became a collective focus for participants in the discussion.

Excerpt 1 illustrated how the presenting preservice teacher, with support from the teacher educator, used the protocol as a way to begin the discussion. The other preservice teachers might ask questions to get more information or to clarify the presenter’s statements, but they were, on the whole, recipients of the information that the presenter decided to provide. The protocol placed “context” and “frame” as procedural elements dealt with prior to viewing the video; yet these elements developed throughout the discussion as participants continued to probe and build shared knowledge of the context and, to some extent, the frame for viewing. In Excerpt 2, which occurred *after*

participants had viewed Katie's video, Rachel asked Katie for additional contextual information.

### Excerpt 2

- 1 Rachel: Can I ask about the, I mean it's hard to even see, but what kind of races are represented in the classroom? I mean you said there was someone who's Arab American
- 2 Katie: I have about six black kids, one Arab American kid, and a few kids who are mixed, Mexican and, at least they have said that they're Mexican and something else. But in terms of who looks ethnic, probably about five. One of the girls who spoke, Sophie, is black, but she looks white. ... Sophie was the girl who said, she was talking about disease shaping, shaping genetics. And she's the girl who's, she's black, I mean she really does look white... so for her, this has been, I mean she actually really likes the class. But I think part of it for her is just that she has more opportunities to share experiences that let people know that she's black...
- 3 Andy: Let me ask why you selected the frame as a safe culture, as opposed to something else. For example, this could have been about discussion, questioning techniques. Why did you choose safe culture to frame it?

Having viewed the video, Rachel asked Katie to identify her students' races, an element of context that Katie did not address in her introduction but had relevance to the content under study and her frame for viewing. Following Katie's response, the topic shifted as Andy asked Katie about her rationale for her frame for viewing (which he termed "safe culture" rather than safe environment). Both Rachel's and Andy's questions led Katie, still in the position of authority on her own teaching, to elaborate on her opening statements about the context and frame for viewing. These now-public descriptions of the context and the frame for viewing for the video record shaped the discussion in later segments. Participants referenced the high school students' races as they discussed the students' sense of "ownership" of the topic of race and as they discussed the effects of Katie's race (as they thought it was perceived by her high school

students) on her authority with the subject matter and assessed the degree to which the environment could be considered “safe.”

### *Interpreting*

Interpretations are explanations of meaning—in this case, explanations of the meaning of the events of the video record under study—which participants in video discussions readily offered. Efforts at interpreting could be viewed as responsive to the protocol’s directions to “unpack” the video and focus on “teaching moves and what students are learning” (Protocol, Faculty Agenda, March 31). In Excerpt 3, the influence of Katie’s frame for viewing is evident as Peter referenced it and clarified that in this case, “safe environment” had more to do with “emotion” than with physical safety. Peter interpreted events from the video as indicating that students felt comfortable in the classroom environment. He directed his initial comment to Katie, the presenter (referenced as “you”):

### Excerpt 3

- 1 Peter: With regard to safe environment, I don’t think we’re really addressing physical safety here or anything crazy going on. I think more sort of emotion safe, you know, you feel safe in an academic environment with your comments. And just very objectively, there were at least two students who seemed to have, I don’t think they were necessarily contradicting, but they were at the very least clarifying some, some ideas that they had that were not really with what you were saying. So if the two of them felt comfortable enough to bring that up to you, I think that’s a good sign. I think whenever we have, we’re knowledgeable about something, and I think you did this, to sort of hold onto it and let them like finish, you know, and make sure they’re fully express their idea because we’re always, we always have that extra layer of knowledge that we want to share. I think you did like pause and let them sort of express instead of jumping in or something like that.
- 2 Amy: So Peter, where did you see that? Where was one of those moments where you felt like a student was kind of pushing back just a little or asking for clarification?



- 3 Peter: Oh I, in the sense of, not necessarily really pushing back, but just the one girl, I mean, I just remember the one girl starting her sentence by saying, you know, I don't, I'm not trying to
- 4 Amy: Attack you or whatever, mm-hm
- 5 Peter: But the fact that she would say something that, you know, like that shows that she feels, she feels comfortable, you know. And so her point that she was, so one of them was questioning about the bone structure difference. She was really, wanted to dig into it and say, Okay, are we sure, you know? So I think that's cool to have an environment like that. Because a lot of times you have that question, they say, Are you sure about that? But they'll just hold it in, it's like, Well, I don't want to question what the teacher's saying. So that's what I think.

In responding to Katie's question about safe environment, and in directing his comments to her, Peter demonstrated responsiveness to Katie's stated interests related to her teaching. Peter initially supported his interpretation of the "safe" environment by mentioning two students depicted in the video. He made general references to aspects of the video, and I asked him to describe the evidence in more detail. In his response, Peter backed away from his interpretation somewhat ("not necessarily really pushing back," Line 3), but he provided some detail about the particular students' words that led to his interpretation. He justified this as evidence of students' comfort by referencing his own experience ("a lot of times you have that question...but they'll just hold it in," Line 5), and complimented Katie in relation to her frame for viewing ("that's cool to have an environment like that," Line 5).

Excerpt 4 is another instance of a participant interpreting the video, as Ruth addressed students' responses as well as the teacher's changing demeanor. As did Peter in Excerpt 3, Ruth directed her comments to Katie relative to the frame of "safe environment." Ruth began by noting that some high school students in the video seemed to have their "hackles rising" as Katie described race and ethnicity. Ruth focused on

interpreting students' responses as well as her own response to the content Katie presented in the video, and did so in light of Katie's demeanor as the teacher represented in the video:

#### Excerpt 4

- 1 Ruth: I was like, Wow, this is a good topic to bring up and a hard topic for these kids to talk about, you know? I could totally sympathize...it was provocative, your statement, for a lot of them, you know? ... Especially knowing you, you get passionate about things, I was impressed by the way that you were just like trying to keep it, you know, casual. And then after one of the girls, you started to get a little bit more excited, like I think it was probably the girl who said I don't want to make you angry. And you started like talking a little bit louder, a little faster. And I thought, like I understood exactly what was going on, but then my other thought was that they could interpret this as like getting aggressive and defensive. And so I was impressed with how well you did but also aware of the need in talking about this type of thing. And especially unfortunately because they do say, Oh well, she's black, so like the need to be really careful to honestly to keep, almost to try to keep emotion out of it, I guess, which sounds, I mean on a lot of topics it's good to get emotional. But I think when it's so closely connected to something to us, you know, you need to kind of keep our emotions out of it to create that safe space.
- 2 Amy: And actually, what's interesting about that is that your examples became more personal as the, I mean as the clip sort of went on. So then you said, I was really angry when I saw on CSI. Right? And so then that, and you said, My mom is white. Are you going to find a half black half white skeleton? So it's becoming even more personal. [Ruth: Mm-hm] I mean, at least one could interpret that there was a little bit more emotion on your part.

Ruth continued the attention to Katie's stated concerns and her teaching context. She used her experience to elaborate on her interpretations, including both her own reaction to the subject matter ("I could totally sympathize," Line 1) and her relationship with Katie ("especially knowing you, you get passionate about things," Line 1). Ruth's comments were not simply declarative; she used some interpretations to compliment Katie ("I was impressed," Line 1), particularly on her demeanor. Ruth shielded Katie from the full force of her critique in two ways, both of which avoided the specific details of Katie's teaching. She affirmed Katie's approach in a general way (often, "it's good to

get emotional”) and she framed Katie’s teaching as one instance of a broader category of teaching sensitive topics (“when it’s so closely connected to something to us, you need to kind of keep our emotions out of it to create that safe space”).

When interpreting, the participants did not readily articulate specific details from the video as support. In both Excerpt 3 and Excerpt 4, I emphasized the need to support interpretations with details from the video record. First I asked Peter to provide it, and then I provided it in reference to Ruth’s interpretations. These efforts implied that, at least from my perspective as teacher educator, a focus on the presenter’s area of interest was not enough; participants needed to ground their interpretations in evidence from the representation of the presenter’s teaching. Instead, participants tended to characterize the teaching according to their impressions, with general references to the events of the video (e.g., “two students...were at the very least clarifying,” Excerpt 3, Line 1).

### *Suggesting Alternatives*

Throughout the video discussions, preservice teachers suggested approaches, techniques, and language—areas within the teacher’s control—that they believed would change the events depicted in the video. Often, they suggested alternatives that related directly to the frame established by the presenter, as participants refined their sense of the context and the “problem” embedded in the frame for viewing. Occasionally, participants and the presenter also suggested alternatives unrelated to the frame for viewing, usually as they made connections between their experiences and the teaching represented in the video. Participants’ experiences in the form of anecdotes and “tips” were key tools in the development of alternatives.

Excerpt 5 is an instance of the preservice teachers engaged in suggesting alternatives. Prior to Excerpt 5, the discussion group had constructed a shared sense of a “problem” that they saw evident in Katie’s video: the students seemed uncomfortable or resistant to the discussion of race and ethnicity, which had implications for how “safe” they could consider the environment. They had also developed a shared sense of the context in which Katie had encountered the problem, including the less visible parts, such as her intentions and students’ background and experiences. Peter described an alternative way of “presenting” information that might make students feel more comfortable, based on his experience as a physics student. He described the approach of a former professor who presented information “sort of like from a third person” to allow the students to consider evidence and form their own ideas about a topic. Peter explained, “[Y]ou almost attack it from the sense of like language. Like, I’m not attacking your identity or your beliefs. I’m just saying the word race, the way that people really are using it today, is this way.” In Excerpt 5, Katie responded to Peter’s alternative:

#### Excerpt 5

- 1 Katie: One thing that I would say to the idea of presenting something like race that isn’t just a scientific concept but is tied to people’s emotions is that, to me, it’s actually dangerous to say, Some people think that race is not genetic. Because it’s not ‘some people.’ I mean, science does not support the idea that there are different races. ...[I]f you present, you know, the Big Bang theory as a maybe, few people are going to be threatened by it so they’ll be willing to go along with you. ...[It is different] if you present...things that are touchier topics, [for example] if I were to say, Some people say that women are equal to men.
- 2 Peter: Right. That’s a statement too. Why are you being so, yeah.
- 3 Katie: You know? I don’t know, I just worry about that.

...

- 4 Peter: I think you know across the sciences, we talk about it in a matter of fact way, but many times it's meant to be talked about in terms of evidence. ... [Y]ou could even just take the scientific community, like that's very credible and just say, Well, look, the scientists, the people who actually test the genetics, there's consensus among them that there's no difference, you know? And maybe that takes you out of the picture just enough. You can still keep that credibility... Because then at that point, they're focusing their concerns in the right place. It's not, oh, my teacher, I'm going to question my teacher, you know what I'm saying?
- 5 Katie: Mm-hm. I mean, I don't mind saying scientists believe that. ... I'm worried that if I said some people may believe X, that that says some people have valid reasons for believing Y.

This back-and-forth between Katie and Peter resulted in a refinement of Peter's initial suggested alternative. Peter's alternative was a relatively small instructional move, a change in the teacher's language, which he expected would address the "problem" of students' negative reactions while keeping Katie's objective in tact. Responding to Peter's anecdote about his experience as a student of science, Katie took an evaluative role, indicating that students could dismiss the presented ideas "as a maybe" (Line 1), which she wanted to avoid. Peter then drew upon his experience as a member of the science community. He altered his suggestion to emphasize the credibility of scientists rather than that of the teacher, which Katie accepted.

Peter seemed to feel a connection to the subject matter that Katie was addressing in the video, perhaps because it fell generally in the area of science, his subject area major. Still, he was careful to outline the context for his comments and to note the differences. In developing the alternative, Peter related an anecdote from his experience as a university student of physics, which provided a point of contrast with Katie's approach in the video. Prior to Excerpt 5, he also asked Katie to describe her subject matter background before asserting his experience as a member of the science community. Peter's regard for context acted as a buffer against direct critique. In this

case, Peter established that his and Katie's contexts and experiences were not the same, and therefore the alternative he described could only be considered a suggestion, open to refinement for use in Katie's context.

### *Generalizing*

As participants engaged in generalizing, they developed ideas with application across teaching contexts, often in the form of principles and dilemmas, or recurring issues that teachers seek to manage in their work. In part, the generalizations responded to the last step of the protocol: "lessons learned." They were publicly stated ideas that might allow all participants to take something meaningful away from a discussion that closely focused on one preservice teacher's teaching. These generalizations often developed later in discussions, after participants had some shared sense of context and had shared, compared, and refined their interpretations of the video record. Participants drew upon this public information as well as evidence from the video and their own experiences as teachers, high school students, and university students.

During the discussion of Katie's video, Rachel had offered an interpretation as insight into "what went wrong." She noted that the way Katie had introduced the topic of race—with a question—communicated to students that "their voice counted." Rachel explained that the students' voices did not actually count because Katie's stated objective was to "present" the distinction between race and ethnicity. Using the approach of asking a question, Rachel indicated, "opened a huge can of worms." Katie acknowledged that "if you pose something as a question, someone's much more likely to think that there's going to be variance in the answer." These statements gave greater nuance to the problem that the preservice teachers had identified earlier—the students' reluctant and negative

responses to her statement about race. Rachel had identified a mismatch between Katie's objective and her approach to achieving that objective as a cause of the high school students' reactions.

In Excerpt 6, Peter and Rachel addressed the implications of Katie's approach of asking the students for their perspectives on race (Lines 1 and 2). As the discussion continued, these interpretations led the group to construct a dilemma that any teacher might encounter in her work:

#### Excerpt 6

- 1 Peter: You know, it's how do you present the whole topic? Because if you treat race as a kind of personal, what's a person's personal perspective on it, you know, that's probably not the way you want to present race. You're interested in more of an objective aspect...which is what you wanted to convey to them. So I think that's a good idea.
- 2 Rachel: Also because I think the students hadn't prepped an answer to that question, that's why they felt like, She asked us, and then she has a right answer. I mean, just like we say sometimes our professors do in this program. They fish for answers and then don't get the right—not you, Amy—but they don't get the right answer and then they tell us what they wanted in the first place. And it's like, why ask? ... It's one of those practices that students don't really understand.
- 3 Amy: So that's really interesting because that's a real teaching tension...when do you just tell? [Peter: Yes] Right? We always want to have them construct and ask the question and get the prior knowledge, but are there moments when you just tell? And might this have been a moment when you put it out there and then we're back in the book or whatever your next move was? That's a good point, I think.
- 4 Emily: But I think with this, you can't just say that to them and then just move on. ... I was even...a little blown away by that statement even though I see where you're coming from. It's just like, that is a big statement to make. So I think with something like that, it's like, you have to allow for discussion or at least some kind of debriefing...
- 5 Amy: But there's still the tell, right? And then maybe you need to talk about what the tell is, right?
- 6 Katie: I definitely, second go-round, would approach it differently. [Laughter]

Rachel's and Peter's interpretations highlighted the mismatch between Katie's objective and her instruction, but they did not question her approach; in fact, Rachel initially avoided critique by noting, "I'm not saying it's the wrong can of worms" and Katie "could have never known" about the result of taking the approach. In Excerpt 6, I used Rachel's and Peter's interpretations to call closer attention to Katie's intention to explain, or to "tell," the distinction between race and ethnicity. I stepped away from the specificity of the video and stated a generalized issue for teaching: Are there times in teaching when you "just tell" students what they need to know? I formulated questions that could invite discussion from the participants (e.g., "Are there moments..." Line 3). Emily's response implied an affirmative response to my questions, as she described the need to debrief as a condition on the act of "telling." Emily's caveat returned the discussion to Katie's context by referencing her statement about race. Katie then turned the discussion even further toward the specifics of her experience: "I definitely, second go-around, would approach it differently" (Line 6). She went on to describe changes she would make if teaching the same scenario again, and the larger question of when and if "telling" is appropriate was left unaddressed.

Of the discourse moves described in this chapter, the ideas generated through generalizing were the least developed. In this case, participants were not responsive to my effort to extend this generalization across their experiences, even though the complex question of when and if "telling" is appropriate does indeed recur across teaching contexts (see, e.g., Ball, 1993; Chazan & Ball, 1999). My remarks may have been worded in ways that deterred response, as the comment "That's a good point, I think" (Line 3) could render the questions rhetorical, though Emily did respond indirectly. Two features



of the preservice teachers' orientation to the video discussion activity offer other explanations for the ways they engaged in generalizing.

First, the participants were focused on giving feedback on Katie's teaching relative to her question about safe environment. The discussion focused largely on the context and impression-based interpretations of the video that had been constructed up to this point. They referenced their own experiences as anecdotes and reactions, as Rachel did in describing professors who "fish" for answers (Line 2) and Emily did in describing her own response to the subject matter (Line 4), to justify their interpretations while remaining focused on Katie's frame for viewing. They may have seen efforts to generalize as taking attention away from Katie's stated needs and the ideas, focused on her teaching, constructed by the group.

Second, participants may have perceived that my questions came too close to criticism. My statements brought the appropriateness of Katie's objective and approach into question; this contrasted with the development of interpretations and alternatives that kept the presenter's objectives in tact. Throughout the discussion, participants did not question Katie about the content she was addressing; yet they seemed unfamiliar with and uncertain about her statement that "race is not genetic." Emily indicated this when she said, "I was even...a little blown away by that statement even though I see where you're coming from" (Line 4). This was yet another instance of participants refraining from critique of the presenter.

#### *Video Discussion as an Activity*

This section has illustrated how the participants in video discussions enacted a set of discourse moves that shaped the ways they interacted with the video and one another.

The instructional model developed by the teacher educators and codified in the protocol provided a loose shape for participation in video discussions; it oriented participants toward a strong focus on the presenter's teaching, situating the presenter as an authority on her context and the video as a text to be examined relative to her stated frame for viewing. Enacting procedures was, however, just one of the discourse moves used by participants. As they discussed the presenter's teaching, the preservice teachers developed context, interpreted, suggested alternatives, and generalized.

The case of Katie's video discussion indicates at least two perspectives at play during video discussions: the teacher educator's (mine) and the preservice teachers.' From the perspective of activity theory, this case indicates two activity systems occupying the same time and space—one conceived by the teacher educators and one by the preservice teachers. The teacher educators' activity system may be linked to the planning activity of the teacher educators (described earlier in this chapter), while the preservice teachers' activity may be linked to their activity within the "cohort," the social community of the teacher education program. Using Engeström's triangular model (see Chapter 3, Figure 3.2) to examine these activity systems in relation to one another, I identified several contradictions, or tensions that occurred between the nodes of the concurrent activity systems. It should be noted that contradictions are not viewed negatively in activity theory; contradictions are the impetus for learning and change, and their modeling offers a means of practically informing the design of systems (Turner & Turner, 2001). Here, the contradictions related to the object of video discussions, the roles taken by participants, and the conception of video as a tool.

A first contradiction existed in terms of the object of video discussions as conceived by the teacher educators and the preservice teachers. As was noted in the discussion of the teacher educators' intended model, the teacher educators sought to orient preservice teachers toward studying the presenter's teaching in order to generate ideas about teaching with widespread relevance for the group. This was my orientation as the teacher educator during Katie's video discussion. In terms of the preservice teachers' perspective, they likely had multiple motivations for participating in video discussions; for example, they may have engaged in the tasks of video presentation and discussion primarily to secure the necessary credit in the ED 650 course that was required for graduation from the teacher education program. However, the context for the case study indicated that the preservice teachers in this teacher education program were motivated beyond grades and graduation. In interacting with the preservice teachers, I found that as graduate students—many of whom had returned to school to become teachers after years of working in different fields and most of whom were paying at least some tuition—they often spoke of wanting to get the most out of their opportunities in the teacher education program. They expressed concern about gaining the knowledge and skills needed both to be successful student teachers and to begin well as first-year teachers. They saw the video discussions as opportunities, in a friendly environment, to elicit opinions and get advice on their teaching. As Rachel said during one discussion, "Please, feedback on anything...because I never get feedback on my teaching. I never know what I'm doing right or wrong or what seems to be working. Anything, really" (Video Discussion 8, Line 24). This, then, was the object of the preservice teachers' activity system: to give and get "feedback" on their teaching. Between the preservice teachers' and teacher educators'

orientations to the video discussion activity, the focus on the presenter's teaching was consistent, but the perceived benefit of that focus—whether for the presenter or all the preservice teachers—differed.

Second, a contradiction existed in the conceptions of participants' roles in video discussions. As was noted in the previous section that addressed the planning meetings, the teacher educators conceived of the teacher educator's role as that of a wise facilitator who focused participants on the elements of the protocol, highlighted aspects of the teaching video not raised by the preservice teachers, and established connections between contextually-specific and principled ideas about teaching. In their planning, the teacher educators also conceived of a distinction between the preservice teachers—the presenter and the participants. The presenter was an authority on her own teaching and shaped the initial direction of discussion by stating her frame for viewing. The participants used evidence from the video to support assertions about teaching relative to the presenter's frame for viewing while also establishing relevance to their own teaching.

The analysis of Katie's video discussion indicated that the preservice teachers considered this division of labor among themselves somewhat differently. This difference likely resulted from their engagement in a particular community: the "cohort," a social group that encompassed all preservice teacher in the teacher education program, which was designed to develop "a sense of community" among preservice teachers (program brochure, 2003). As a cohort, the preservice teachers interacted with one another throughout the one-year teacher education program, in classes, in meetings, and at informal social occasions; as a key organizational feature within the "intensive" nature of the program (program brochure, 2003), the cohort provided individual preservice teachers

with academic as well as social support (Dr. Chester, personal communication). The preservice teachers' relationships as members of the cohort influenced the roles they took in video discussions. As conceived by the teacher educators, the presenter was indeed an authority on her teaching context, particularly in terms of establishing the frame for viewing that oriented the discussion. However, the other preservice teachers positioned themselves as problem solvers on the presenter's behalf, as they desired to give her "feedback" on her teaching that would help her become a better teacher. Their feedback emphasized compliments and affirmations of the perceived positive aspects of the teaching in the video, indicating the preservice teacher participants' distinctly supportive, rather than critical, role in video discussion.

Third, the teacher educators and the preservice teachers had different conceptions of what constituted evidence in video discussions, which meant that the video as a tool was used differently. In planning meetings, the teacher educators had identified preservice teachers' use of evidence from the video to ground their assertions as desirable, and during the discussion of Katie's video, I emphasized the need to specify supporting details. The preservice teachers readily made interpretations that were responsive to the presenter's frame for viewing and in doing so, referenced the teaching in the video; however, they tended to use statements of their impressions of the teaching rather than detailing specific evidence from the video to support their interpretations. They used an additional form of evidence, not explicitly anticipated by the teacher educators: anecdotes about their experiences as secondary school students, university students, and fellow novice teachers. Using these anecdotes, preservice teachers could make comparisons with the events of the presenter's video in order to indicate aspects of

the teaching that they believed problematic or questionable without pointing directly to those aspects in the video. Using evidence in this way, the preservice teachers distanced themselves from direct critique of the presenter's teaching (thus maintaining a positive focus, as described above) while still addressing the object of giving feedback. For the preservice teachers, the video was a representation of the presenter's work, but not necessarily a source of specific evidence for their assertions about that work.

As the case of Katie's video discussion demonstrated, as preservice teachers enacted the discourse moves throughout the discussion activity, they accumulated, complicated, and refined ideas about teaching. By identifying the discourse moves, I have begun to identify categories of content. The discourse moves—enacting procedure, developing context, interpreting, suggesting alternatives, and generalizing—shaped the content that was made accessible in the video discussions, as well as how developed the content was. In the next chapter, I elaborate on the content to further specify features of the practice-based curriculum that developed in this case.

## CHAPTER 6

### CONTENT IN VIDEO DISCUSSIONS

#### Overview

This chapter details the content of the practice-based curriculum that developed over the course of the 16 video discussions that occurred over seven class sessions. The findings presented here focus on the ideas about teaching practice that developed as preservice teachers and teacher educators interacted around videos of teaching. These findings are responsive to the second research sub-questions: *What content develops in the case where videos are used across multiple class sessions? What content develops in a single class session?* In short, this chapter takes multiple perspectives on the question: What “comes up” in discussions of preservice teachers’ videos of their teaching?

I present three sets of findings related to the content that emerged through this practice-based approach. First, I describe the preservice teachers’ frames for viewing, which provide a backdrop for interpreting the other results. Then I report on the *content lens*, through which I categorized the coded segments by the teaching-related topics they addressed. Finally, I report on the *practice lens*, through which I established the major theme of each discussion and the ways the development of the theme gave participants access to teaching as a practice.

#### Preservice Teachers’ Frames for Viewing

In this section, I report on a key aspect of this study’s context as an important framework for understanding the content of the curriculum. As was noted in Chapter 5,

preservice teachers' own interests and concerns related to their teaching oriented the video discussions. The teacher educators conceived of each video discussion as an opportunity for the presenting preservice teacher to work on a self-identified area of concern; this "frame for viewing" took the form of a topic or question related to the video. Table 6.1 depicts the frames for viewing for the sixteen video discussions.

Table 6.1  
*Preservice Teachers' Frames for Viewing*

Video Discussion	Frame for Viewing
1	Addressing my concern for "discipline" while supporting students' enthusiastic "engagement"*
2	Degree of "student engagement" evident; whether the effort put into the lesson was worthwhile*
3	Ways to get students more engaged when the content is "dry"*
4	My presenting style
5	How students reacted during the lesson; what you do when the lesson is harder than you expected it would be for students; how to give good explanations*
6	Ways I could have better directed the discussion with younger students who have limited experience with discussions*
7	Differences among the three teachers present; effective ways to explain so that students understand what to do*
8	How well did I question students during discussion?
9	Are the students on the same page and is the lesson flowing well?
10	How I could better present this information, rather than just chalk and chalkboard?
11	How effective is the discussion? Are there any possible improvements?
12	How successfully do I create a safe environment?
13	How does one go about a test review, especially in history, without making it just complete recall? What questions can I use to address broader concepts rather than facts?
14	How effective was this activity in scaffolding the key ideas for the students? Could I have done anything differently or better?
15	Do I effectively engage the students from the beginning of class?
16	What does a proper review look like? How do you test your students' knowledge and prepare them without giving them the exact questions from the test?

\* = paraphrased



Two features of Table 6.1 are noteworthy in terms of the content of the curriculum. First, these frames for viewing addressed two main topics: 1) structures that teachers use, including explanations, discussions, and test reviews (referenced in eight frames) and 2) student engagement or student response (referenced in six frames). The self-selected focus on teachers' actions and students' responses indicates that these were particular concerns for these preservice teachers across the 16 video discussions. They may have perceived video, as a visual, reviewable representation, as particularly useful for studying these aspects of their teaching. Second, five of the sixteen frames focus directly on the "effectiveness" of the teaching represented in the video, and nine questions address how to improve instruction—how to do something "better" or in a more "effective" way. These preservice teachers were focused on *doing*, and doing well, in teaching.

The frames indicate a shift in the ways the presenting participants, over the course of the discussions, approached the video as a resource for examining these concerns. The first seven discussions addressed the video in two ways: 1) as specific evidence to support participants' interpretations (e.g., "how students reacted during the lesson," Video Discussion 5) and 2) as a stimulus for the suggestion of alternatives (e.g., "ways to get students more engaged when the content is dry," Video Discussion 3). At Video Discussion 8, the frame for viewing had an evaluative bent: "How well did I question students during discussion?" Several other frames in the sessions after Video Discussion 8 continue this orientation toward evaluation, focusing on what is "effective" or "successful" in the teaching represented in the video (e.g., "How effective is the discussion?," Video Discussion 11). The others in this latter half of the video discussions

focused on alternatives, again approaching the video as a stimulus for suggestions from the other participants.

As Chapter 5 indicated, the frame for viewing oriented participants toward the particular concerns of the presenting preservice teacher. The themes noted in Table 6.1 further indicate that the frame for viewing may also have served to orient participants toward using the video in particular ways. These frames provide a backdrop for examining the content that developed during the video discussions.

### Content Lens

To understand the content of the curriculum, I first sought to establish the teaching-related topics that were addressed in video discussions. Through the content lens, I established these topics for each of the 166 segments. This analysis responds in the most direct way to the question of what “comes up” in preservice teachers’ discussions of videos of their teaching. As part of the segmenting process (Chi, 1997), I worked chronologically through the entire set of transcripts, beginning with line-by-line codes that adhered closely to the language used by the participants. From these line-by-line codes, I determined the key idea represented by each full segment. Through such systematic coding, I recognized relationships among the ideas, and I then developed categories to encompass the segment codes across all 16 discussions. Table 6.2 summarizes these categories—that is, the content addressed by all 166 segments—across the 16 video discussions.

Table 6.2  
*Segments by Content Category Across Video Discussions*

Content Category	Number Segments
Managing Student Response	45
Teacher's Role in Instruction	40
Procedure	25
Context	22
Planning	11
Assessment	8
Teacher Presence	7
Subject Matter	6
Studying Teaching	2

Total Segments = 166

Table 6.2 indicates that the categories of Managing Student Response and Teacher's Role in Instruction encompassed fully half of the segments. These two categories reflect the emphases of the frames for viewing listed in Table 6.1; they indicate that the content of the curriculum emphasized 1) the interactions of teachers with their students and 2) commonly used actions and tools that teachers use to mediate those interactions. Table 6.3 is a closer look at the subcategories related to these two largest categories.

Table 6.3  
*Subcategories for Managing Student Response and Teacher's Role in Instruction*

Content Category	Subcategory	Number Segments
Managing Student Response	Engagement	15
	Participation	14
	Emotional response	11
	Behavior	5
Teacher's Role in Instruction	Moves/strategies/techniques	24
	Language/explanations	8
	Classroom environment/tools	4
	Determining "effectiveness"	4

Total Segments = 85

In the Managing Student Response category, the segments addressed issues related to students' engagement, participation, emotional responses, and behavior and

ways teachers can manage those issues. In the Teacher’s Role in Instruction category, the connection of the segment to a particular issue was less clear, but these segments still took the teacher’s perspective. Most dealt with teaching “moves,” or ways teachers act to shape students’ classroom experiences. These moves included, for example, organizing students before they work independently and using explicit instruction. The Teacher Language/Explanation subcategory included using “accessible” language, giving additional examples of the phenomenon under study, and clarifying within an explanation. Only four segments addressed specific features of the classroom environment (e.g., arrangement of desks), and four directly evaluated the “effectiveness” of the teaching depicted in the video.

These findings indicate that the content of the curriculum largely emphasized the authority of the teacher to act deliberately in ways that influence their students’ classroom experiences—and in particular the students’ participation and engagement during instruction. The findings also underscore the influence of the instructional model on the content that developed, as these two categories (Managing Student Response and Teacher’s Role in Instruction), align with the themes identified in the preservice teachers’ frames for viewing. As was noted earlier, the topics of structures that teachers use and issues of student engagement or student response were special areas of concern for this group of preservice teachers (see Table 6.1). They used video, as a reviewable record, to make them visibly and audibly accessible to all participants as they engaged in problem solving

Returning to Table 6.2, which outlined the 166 segments according to content focus, the two categories of Procedure and Context were the next largest. The Procedures

category included segments related to the protocol (described in detail in Chapter 5) that was designed to shape the ways teacher educators and preservice teachers engaged in discussions around video. These 25 segments dealt with the opening comments of the presenter (in which she described the context for the video and her area of interest, or frame for viewing), references to the frame for viewing during the discussion, and occasionally, a formal closing in which the presenter summarized the “lessons” she would apply to her future teaching. As was noted in Chapter 5, ideas about context continued to develop beyond this opening procedure. The 22 segments in the Context category involved information about the presenter’s intentions for the lesson, the setting for the lesson, the students’ backgrounds and experiences, and the nature of prior and subsequent lessons—information both volunteered by the presenter and requested by other participants after they had viewed the video. As was indicated in Chapter 5, participants attended closely to the presenter’s teaching; it follows, then, that the content of the curriculum emphasized the contextual details of the teaching under study.

The remaining categories in Table 6.2 included smaller numbers of segments, meaning those topics were less frequently addressed. To a limited degree, the content of the curriculum directly addressed behind-the-scenes aspects of teaching, including planning, and more subjective features of teaching, such as the teacher’s demeanor (e.g., “style”) and classroom environment (e.g., its characterization as “safe”). Compared with the subcategories for Managing Student Response and Features of Instruction (Table 6.3), these less-discussed topics were not readily visible in videos of teaching; these ideas often developed in relation to the context or as suggested alternatives, rather than directly addressing the teaching represented in the video.

Although it was frequently mentioned as part of the context explained by the presenter, subject matter, or the content being taught to secondary students in the videos, was the explicit focus of discussion in just six segments. A similar finding was reported by Lampert and Ball (1998) in their study of preservice teachers' use of multimedia to investigate elementary mathematics teaching: subject matter "was somehow not prominent on the teacher education students' list of what to pay attention to" (p. 106); instead, preservice teachers tended to examine teaching through pedagogical or psychological lenses. In this case study, the instructional model, and specifically the make up of the discussion groups, may have influenced this pattern. As the preservice teachers in each discussion group taught in different subject areas, grade levels, and schools, they may have perceived each other as lacking understanding of or teaching experience with the subject matter under study by the secondary students in the videos.

#### Practice Lens

In the theoretical framework, I described teaching as a practice with four characteristics: it is active, it involves understanding, it is social, and it gains meaning in context. I described practice theory as building on the triangular model that has helped the field to recognize the complex roles of and dynamic relationships among teacher, students, and content within PK-12 instruction. Teacher education focused on practice emphasizes what teachers do—their everyday actions, performed with "know-how"—as they pursue the goal of supporting student learning. I asserted that discussions around preservice teachers' videos of their teaching represent a kind of "practice-based" teacher education. In this section, I test that assertion by responding to the question: How does

the content of the curriculum in this case align with my conception of teaching as a practice?

### *Analysis of Practice Across Video Discussions*

The process of analysis through the “practice lens” was not as straightforward as the processes for discourse moves (Chapter 5) and content (above), but in fact developed from my analytic work through those other lenses. In focusing on content, I determined the main theme for each video discussion—that is, the primary idea or set of ideas that developed over the course of participants’ discussion around a video of teaching.<sup>7</sup> This theme became evident as I examined the content maps and analytic memos for each video discussion to determine the relationships among the segments, which were coded for content. Table 6.4 summarizes the themes and the number of segments in each discussion that contributed to the development of each theme.<sup>8</sup>

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<sup>7</sup> Not all segments contributed to the theme; some addressed tangential topics that, while raised, were not elaborated by the group.

<sup>8</sup> I could not identify coherent themes for Video Discussions 1 and 2, which occurred in the first class session. I attribute this to the newness of the activity and the lack of a clear instructional routine at that early point in the semester. I also eliminated Video Discussion 6 and Video Discussion 16 because the pattern of context, evidence, and alternatives did not hold for these. Video Discussion 6 occurred at the end of a class session and lasted only 10 minutes, and Video Discussion 16 built on the ideas developed in Video Discussion 13 and focused mainly on the application of those ideas to the presenter’s context.

Table 6.4  
*Video Discussion Themes*

Video Discussion	Theme	Number Segments
3	Managing Student Participation	11
4	Checking for Understanding	7
5	Explaining to Support Student Understanding	6
7	Influence of Teaching “Styles”	4
8	Engaging Students in Discussion	8
9	Increasing Student Involvement	10
10	Using Explicit Instruction	4
11	Organizing Effective Discussions	8
12	Creating a Safe Environment for Controversial Subject Matter	15
13	Reviewing for Tests of Higher Order Thinking	8
14	Hooking Students’ Interest in Important Content	5
15	Increasing Student Engagement	6

Total Discussions = 12

The themes for the 12 discussions listed in Table 6.4 align with the content lens findings: they emphasize the authority of the teacher to act deliberately in ways that influence their students’ classroom experiences—and in particular their participation and engagement during instruction. As was noted earlier (see Table 6.1), the topic of structures that teachers use, particularly in relation to student engagement or student response, was a special area of concern for this group of preservice teachers.

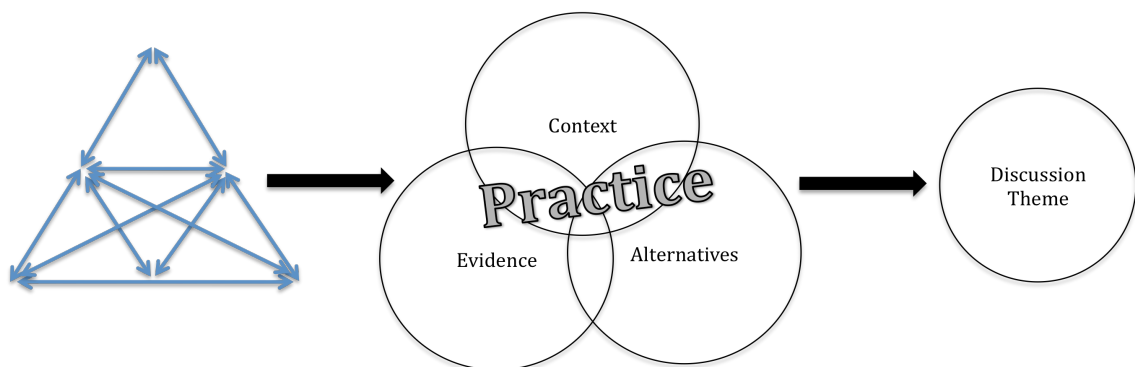
The connection to practice as conceived in the theoretical framework became evident as I considered the nature of the segments that contributed to each discussion’s theme. I noted that the contributing segments fit three categories: context, evidence (in the form of interpretations of the video and anecdotes from individuals’ experience), and alternatives. These categories overlap with those related to the discourse moves in Chapter 5. And indeed, the findings reported in Chapter 5 are useful for explaining this pattern of segments contributing to the development of each discussion’s theme. With the object of giving feedback on the presenter’s teaching, participants were oriented toward



“problem solving” in the video discussions, with a focus on the presenter’s stated area of concern or interest. They did so by suggesting alternative instructional approaches, language, and classroom tools that they thought would likely address the presenter’s problem or change the events depicted in the video. The participants were not, however, focused on quick fixes without regard for the presenter’s circumstances, as indicated by the emphases on context and evidence. Participants drew upon the presenter’s descriptions of context and requested additional details. They interpreted events from the video and they shared anecdotes from their own experience. All of these details informed their suggestion of alternatives that might resolve the presenter’s stated problem (or in some cases, the refined problem that developed through discussion).

Figure 6.1 models the connections of participants’ instructional work to the development of context, evidence, and alternatives, which in turn shaped the discussion theme. As the central element of Figure 6.1 indicates, the interplay among context, evidence, and alternatives is the discussion group’s collaborative engagement with *practice*.

Figure 6.1  
*Model of Theme Development in Video Discussions*



In Chapter 3, I described the teacher’s practice as her active, reasoned manipulation of relationships—of teacher with student, teacher with content, and student with content—toward the goal of student learning. As members of a professional community of practice, teachers have common approaches that they use across situations; though such structures vary according to context—including the subject matter being addressed, students’ responses, and the time of day and year—they are generally recognizable to others in the community. These structures encompass “know-how,” meaning they are performed based on teachers’ thinking about their experiences, understandings, and commitments. Based on her interpretations of her instructional goals, the demands of the subject matter, her students’ needs and interests, and the qualities of representations of content, the teacher makes decisions about how to act. Figure 6.1 indicates that in video discussions, participants made practice accessible for study. They focused on the active work of teaching, with regard for the presenter’s context, to consider evidence from the video and their own experiences to interpret her teaching and to suggest alternative means of teaching. The development of the discussion’s theme occurred as participants collaboratively addressed the presenter’s practice—evidence of the teacher’s performance including the “know-how” that drove it, the aspects of context that shaped the performance, and alternative ways of acting that might have altered the events represented in video. In the next section, I illustrate ways the interplay among context, evidence, and alternatives during one discussion gave participants access to practice.

### *Analysis of Practice in One Video Discussion*

The following short case, developed from Video Discussion 5 listed in Table 6.4, was selected as typical; that is, it is representative of most of the video discussions as it generally followed the protocol (described in Chapter 5) and reflected the pattern of interplay among context, evidence, and alternatives. The analysis presented here does not address the full video discussion, but focuses on those segments that contributed to the development of the discussion's theme—the teachers' use of explaining to support students' understanding (see Appendix H for the full transcript).

The discussion took place on February 18, during the second class session involving video records. Andy and I were present as teacher educators with six preservice teachers: Adrienne, Bob, Colleen, Lynne, Ruth, and Sheila. Among them, these preservice teachers represented the subject areas of Spanish, science, social studies, and English. Ruth, the presenter, was the third preservice teacher to share a video during the class session. She student taught social studies to high school students, and she was teaching an 11<sup>th</sup> grade American history class in the video recorded lesson. The video depicted a short introductory segment of a lesson, during a unit on the 1920s, in which Ruth led the students in reading several passages from an article by the Imperial Wizard of the Ku Klux Klan. She had directed her students to read along and use a highlighter to mark important points. Ruth explained that she believed it was important for students to understand the text because following this introductory activity, they would be using the text to complete another activity in small groups.

At the beginning of the video discussion, Ruth enacted the introductory procedure prescribed by the protocol, describing the context and her frame for viewing before the

group viewed the video. She described the subject area, grade level, and subject matter, and then she summarized the events of the video and her frame for viewing. Ruth described a problem that she had encountered during her teaching: she realized, belatedly, that some vocabulary in the passages that her students were reading would be challenging for them:

Excerpt 1

1 Ruth: I had read [the article], but I didn't realize how much the students were going to have problems with just the vocabulary. ...I called on different students to read a paragraph. And then, but I would sometimes like stop in the middle of a paragraph and say, Hold on. Does everyone know what such-and-such means, or whatever? Because I could tell if I waited until the end of the paragraph, they wouldn't, like they would have lost it. ...But it does break up the reading. So just that, how you, what you do when it turns out that it's harder than you expected it would be for them, and how you clarify or if those are, if I'm using good explanations or if I'm trying to explain something and not doing a very good job. That kind of thing is what I'm interested in.

...

- 2 Amy: So what we're going to watch is the reading, and you inserting explanations.
- 3 Ruth: Right. Mostly, I think a little bit of reading, but mostly it'll be me explaining to them. And also I do explain an activity that will be done after and I, yeah, I don't think I did a very good job of that. But comments on how to clarify explanations.

Ruth articulated her need to make a quick decision about how to help students understand the challenging vocabulary so they could understand the article's key ideas and move into the "real" focus of the lesson. Ruth wondered about effectiveness: did her action, to "insert" explanations as students read aloud, actually help or hinder students' understanding of what they read? Ruth mentioned a broader question about "what you do when it turns out it's harder than you expected it would be for them," but it was not the focus of the discussion. Her request for evaluation—"if I'm using good explanations or...not doing a very good job" (Line 1)—served to focus participants' viewing of the video and initially shaped the development of the discussion's theme.

Following this exchange, participants viewed the video. Bob and Shelia then complimented Ruth on what they interpreted as her “good” explanations. Colleen asked, “Is that what you were worried about?” Ruth responded by refining her rather general frame for viewing, explaining that she was unsure whether she had provided students with adequate time to “respond”:

Excerpt 2

1 Ruth: [D]id I give them enough time to respond? It’s always that question of how long do you wait. And it wasn’t part of the lesson. I wasn’t planning on doing that and so it was off the cuff.

2 Amy: I don’t think you were asking for their response. Were you?

3 Ruth: I guess, well, that’s a good question then. Should I be? Should I wait and just clarify? Or do you, like I guess the one with the natural selection, I knew they’d learned that and I wanted them to connect it.

...

4 Lynne: Well, I think to bring it back to your original statement, which is you certainly couldn’t have let them read a whole bunch and then gone back and explained five different things... I think it’s much better to stop...so the only thing is, and maybe you did it, is to say, As you guys read, please don’t feel offended if I’m going to interrupt you. Because I’m going to stop it at a point where I think it needs some explanation.

Although Ruth’s early statement in this exchange was broad (“It’s always that question,” Line 1), my response implied my interpretation of the specific teaching represented in the video—that Ruth had sought to explain with no expectation for students’ responses. She revised her question (“Should I be?”, Line 3) in a way that requested more specific evaluation and alternatives. Lynne referenced Ruth’s opening statements to affirm her decision to interrupt the reading and offer clarification to students. She followed this affirmation with an alternative, a small change about prefacing the interruptions so students are prepared for them, which was not further discussed by the group.

The trend continued—as it did across video discussions—toward affirming the positive aspects of the teaching represented in the video. Adrienne noted, “The clarification was great,” and went on to cite an example from the video—Ruth’s explanation of “mongrel,” a word used in the text—as evidence of clarification. Ruth herself had raised the idea of “clarifying” as she described the context and frame for viewing (see Excerpt 1). Adrienne highlighted clarification as a desirable feature of explanations that supports students’ understanding of challenging vocabulary and ideas, and the idea of clarification went on to become part of the shared language of the discussion group. Further, the group repeatedly referenced and modified Ruth’s use of the mongrel example as a way to illustrate variations to the act of clarification, thus maintaining some attention to the context of the subject matter she was teaching.

The discussion group had begun to construct understanding of the act of “clarification”—a teacher’s selective explanation of potentially challenging vocabulary and ideas as students encounter them in text—based on their interpretations of Ruth’s videos and their own experiences. Clarification became the focus of the discussion. In Excerpt 3, Lynne again referenced the mongrel example to suggest an alternative to clarification: Ruth could “open it up” to the class. Lynne indicated that asking students for their ideas was a way of building on the move of clarification:

### Excerpt 3

- 1 Lynne: Another thought, because you were explaining mongrel. ...[Y]ou could open it up to the class and say, Does anyone know? What is a mongrel?...
- 2 Ruth: What do you think it means?
- 3 Lynne: What do you think that means? Right? So if you sort of open it up. So you stop for the clarification and you say what you want to clarify and you let the students

try to clarify. I think that would be an opportunity if you wanted to take it that way.

...

- 4 Andy: Yeah, it was the way in which you phrased the questions. The tone was that you were looking for an answer. ...And then it was, you immediately answered your own question. There is this question between how do you phrase it as well as its function in the give and take. ...
- 5 Amy: And actually, I wonder if engaging students in that way would actually lead to a discussion of, I highlighted this because it was important. Like if that would help them with that original task, you know, to sort of take that on differently.
- 6 Ruth: Yeah, and that gets at, are you clarifying just so that they'll understand, or are you clarifying really important points? ...I guess you'd want to do both, but I can see them disengaging because they don't understand something. So you want to clarify that, but it might not, I mean the mongrel wasn't a key, I mean it's involved in a key idea, but that's not a key point of the reading.

Once Lynne described the alternative in practical terms, Andy returned to an interpretation of the video to indicate that in her teaching, Ruth had in fact asked for students' response, but in a way that did not actually allow students to respond—which related to Ruth's own earlier interpretation ("Did I give them enough time to respond?", Excerpt 1, Line 1). I maintained attention to the context of Ruth's lesson, noting that involving students in the process of clarification might help them with the assigned task of highlighting important ideas in the text. Ruth's response did not necessarily relate to the alternative of "opening it up," but more broadly addressed the understanding a teacher brings to selecting content for clarification. She referenced the mongrel example to illustrate how instructional purpose—whether to help students understand the text, to support them in the task of selecting important points, or both—could drive the teacher's decisions about what and when to clarify.

Next, I attempted to summarize the discussion to this point, noting, "So it sounds like the group is in agreement that your explanations are very clear and when you're

bringing in examples, I mean for me as a listener they were very helpful. So from a clarity perspective...we all seem to think you're right on." I then addressed the alternative suggested by Lynne: "But in terms of what you want from the students and how you engage the students...[one thing we are asking is] how long do we really want this to take?" After I raised time as one consideration for the decision to "open it up" to students, other participants contributed to refining understanding of the alternative. Participants drew upon evidence from their experiences as teachers and as students to anticipate problems, in a general sense, that might occur when enacting the alternative of opening it up:

#### Excerpt 4

- 1 Colleen: And also, I mean, if you were to open it up [by saying], Who knows what mongrel means? For some kids, it's just going to drive them nuts because you're all the sudden getting off topic and they need to stay focused on what they're reading. If you go off in all these different directions, I can see that being a disengaging factor for certain kids.
- 2 Ruth: I think that's a hard thing. In general, I agree, let's get the kids involved. But since these were interjections and even like the middle of a paragraph, if you go too far afield it's hard to come back. Okay, what did, what was the sentence before where we just departed?
- 3 Amy: And what's important? What am I highlighting?
- 4 Lynne: The other thing that occurs to me too, if you had a class that had some behavioral issues, then like Colleen's saying, if [you] go a little off target, you're going to lose them to some separate conversation... So you as their teacher have to decide what's the purpose and at what point do you
- 5 Adrienne: If it's crucial to the understanding of the content or if it's something that you just kind of glaze over with an interjection to yourself.

Although Colleen briefly invoked the mongrel example, participants spoke in general terms rather than in the context of Ruth's teaching. In Line 3, I specifically referenced the "highlighting" task that Ruth had assigned, but Lynne and Adrienne



followed with general comments about potential problems related to students' interests and abilities. Between them, Lynne and Adrienne articulated factors that might influence the decision about when to involve students in clarification. They reiterated Ruth's earlier suggestion about attending to instructional purpose and they highlighted the demands of the content.

In summary, the content constructed by the video discussion group in this case focused on specific acts by the teacher: the move of "clarifying" challenging vocabulary and ideas within a text, with the alternative of "opening it up" as a variation to involve students in the clarifying process. The focus was not only on the physical act. "Clarifying" and "opening it up" became short-hand terms that encompassed the understanding—including reasoning about instructional purpose, time, and students' needs and abilities—that a teacher should bring to the decision of whether and how to perform the acts. To some extent, participants accounted for the context of Ruth's teaching as they collectively developed these as meaningful terms. Per Ruth's request, they evaluated the "effectiveness" of her particular efforts, focusing on the positive, and they used impressions of and brief references to the video (especially the mongrel example) to illustrate their points. As the discussion continued, however, participants used more general terms to describe students (e.g., "a class that had some behavioral issues") and subject matter (e.g., as "crucial" or not). In doing so, they identified and elaborated on the points of caution needing consideration when engaging in clarifying or opening it up; they generated guidelines for performing these acts that could apply across contexts.

## Content of the Enacted Curriculum

Analyses through the content lens revealed that the content of the curriculum emphasized the authority of the teacher to act in ways that influence her students' classroom experiences, particularly their participation and engagement. These emphases are attributable to the presenters' interests, as stated in their frames for viewing, and to the video medium, which made these aspects of teaching visibly and audibly accessible for study by all participants. The content infrequently addressed assessment, the teacher's presence or style, and subject matter, all topics that may have been less accessible in video recordings of teaching within the instructional model. The findings confirmed those reported in Chapter 5, which described the video discussions as emphasizing close attention to the presenter's teaching. The content was contextualized as participants attended to the history and circumstances that they perceived and the presenter described.

The case of Ruth's discussion indicates the ways video discussions gave preservice teachers access to practice as conceived in the theoretical framework—that is, practice as active, social, contextual, and involving understanding—which held as a pattern across 12 of the video discussions. The content addressed the teacher's deliberate actions within the classroom—physical acts, performed with understanding, which were represented in the video and in the suggested alternatives. Although they verbally treated both the context for teaching and evidence from the video with variable depth in developing their ideas about practice, participants used references to and instances from the active work of teaching represented in the video to develop meaningful terms (e.g., clarification, opening it up) that addressed “why” as well as “how to.” In a generalized

way, they addressed ways of doing as well as the kinds of thinking about content, students, time, and other factors that would lead to the reasoned enactment of these acts.

For the non-presenting preservice teachers, the content encompassed the presenter's efforts at working with particular content and particular students, from which they gathered illustrations and made interpretations that provided points of comparison with their own experiences. Participants' understanding of the presenter's context and the evidence provided by the video provided a kind of traction for their collaborative development of ideas, comparisons, and alternatives. For two reasons, participants' access to practice was likely more robust than it would be without a video or with a video depicting a stranger's teaching: the presenter was at hand to narrate her context and thoughts about teaching in conjunction with visible evidence from the video, and the presenter's teaching represented a novice's work in which participants could likely see themselves. The teaching represented in the video was a springboard for generating guidelines for practice that could apply across contexts.

For the presenter, the content was accessible in a different way than for the other preservice teachers. With a question or problem in mind related to a particular teaching event, she did not need to rely solely on her memory to consider the event; the qualities of the video made her teaching available for review in a supported, collegial environment. The group could develop and challenge the presenter's recollections of this teaching event, and also help her consider how she might act in a future, similar situation. In the case of Ruth, it is possible, in that instant in which she decided to "clarify" for students as they read the text, that she had thought through some or all of the variables identified by the discussion group as shaping the action. In the slowed-down, collegial

environment of the video discussion, Ruth was certainly able to think these through. In sharing and discussing a video of her teaching with this group, the presenter was able to actually revisit, at a much slower pace with the help of others' perspectives, the moment in which she encountered the need to make a decision about how to act within her teaching.

Still, these results need to be considered in light of the findings presented in Chapter 5. There, I described the object of preservice teachers' activity around video as giving "feedback" on the presenter's teaching. This feedback was shaped by several elements of the preservice teachers' activity system: the interests of the presenter (her frame for viewing), the varying depth of participants' understanding of the presenter's context and teaching in relation to their own experiences, and perhaps most especially, the participants' emphasis on what they perceived as positive aspects of the teaching represented in the video. The preservice teachers focused on giving compliments and avoiding critique; these elements of their interactions influenced the degree to which preservice teachers engaged in clinical reasoning and shaped the kinds of ideas about practice that could develop in video class sessions.

## CHAPTER 7

### CONCLUSION

#### Overview

In this chapter, I revisit the main research question: *What curriculum for teacher education can develop over time through instructional use of video records of preservice teachers' practice?* I begin by reviewing the case study findings according to the research sub-questions related to instruction and content in the video discussions. Then I describe the several themes related to these findings that indicate the key features of the enacted curriculum in this case. I then discuss the study's implications for the teacher education program that housed the one-to-one technology project and for practice-based teacher education more broadly. I conclude by outlining directions for future research.

#### Revisiting the Research Questions

The first research sub-question addressed instruction in video class sessions, specifically the ways teacher educators' and preservice teachers' interactions with video and each another shaped the development of the curriculum. To address this question, I examined data collected in two relevant venues: the teacher educators' planning meetings and the video class sessions. My analyses indicated the development by teacher educators of a general model for video discussions; when preservice teachers enacted this model during actual class sessions, they collectively used discourse moves that involved ways of addressing one another and using the video and other tools. The second research sub-question addressed the content that developed through preservice teachers' and teacher

educators' interactions during discussions of the preservice teachers' videos of teaching. My analyses addressed the categories of topics and ideas that developed in video discussions, both in terms of individual segments and the themes for full discussions. Following the summary of the findings, I examine several themes related to the enacted curriculum that developed through this use of video records of preservice teachers' own teaching.

### *Summary of Case Study Findings*

*Research Sub-Question a: In what ways do particular teacher educators' and preservice teachers' interactions with video and one another shape the development of the curriculum?*

The teacher educators, in their planning, grappled with developing an instructional framework for video discussions that would serve at least two purposes: to provide guidance to the facilitating teacher educators and the preservice teachers about how to engage in discussion around video, and to allow preservice teachers the agency to pursue topics and issues that they perceived as most relevant to their teaching. The teacher educators constructed a model for video discussions that conceived of the video discussion as a collective enterprise among preservice teachers and teacher educators with the object of studying the presenting preservice teacher's teaching to make public certain ideas about teaching—ideas that, while relevant to the presenter's stated interests, were accessible for study by all participants. The teacher educators designed a “protocol” as the key tool for communicating this model to teacher educators and preservice teachers. In the teacher educators' model, the nature of the content (the developed ideas about teaching) depended on the stated interests of the presenting preservice teacher and the ways the interests were collectively understood and elaborated in relation to the video

by the participants in the discussion group. As such, their intended instructional model was broadly conceived and could only loosely structure the content that developed in video class sessions.

Working within the teacher educators' framework, the participants focused on the presenting preservice teacher's "frame for viewing" as the orienting aspect for their video viewing and discussions. The preservice teachers demonstrated ways of speaking to one another, referencing the video, and using the protocol in video discussions—that is, they enacted particular discourse moves that shaped the nature of the content and its accessibility. They enacted procedure, developed context, interpreted, suggested alternatives, and generalized. Across the video discussions, preservice teachers and teacher educators collectively focused on making sense of the teaching represented in the video (as interpretations and context-building), with some attention to addressing teaching in the hypothetical sense (as alternatives) and less emphasis on principles and issues that apply across teaching contexts (as generalizations).

My analysis of video discussion as an activity indicated contradictions between the activity system conceived by the teacher educators and the activity system conceived by the preservice teachers. In contrast with the teacher educators' orientation toward studying the presenter's teaching in order to generate ideas about teaching with widespread relevance for the group, the preservice teachers saw the video discussions as opportunities for "feedback"—opinions on and advice about their teaching as represented in the video. Between the preservice teachers and the teacher educators, the focus on the presenter's teaching was consistent, but the perceived benefit of that focus—whether for the presenter or all the preservice teachers—differed.

The analysis of Katie's video discussion indicated that the preservice teachers viewed the division of labor among themselves somewhat differently than the teacher educators. The preservice teachers' relationships as members of the teacher education cohort influenced the roles they took in video discussions. As participants, they positioned themselves as problem solvers on the presenter's behalf, as they desired to give her feedback that would help her become a better teacher. Yet their feedback emphasized compliments and affirmations of the perceived positive aspects of the teaching in the video, indicating the preservice teacher participants' distinctly supportive, rather than critical, role in video discussion.

The conception of evidence in video discussions also differed between teacher educators and preservice teachers, which meant that the video as a tool was used differently. As the teacher educator, I focused on the video as a source of evidence for assertions about teaching. The preservice teachers tended to use statements of their impressions of the teaching as well as anecdotes about their experiences as secondary school students, university students, and fellow novice teachers as evidence to support their interpretations. Using evidence in this way, the preservice teachers distanced themselves from direct critique of the presenter's teaching while still addressing the object of giving feedback. For the preservice teachers, the video was a representation of the presenter's work, but not necessarily a source of specific evidence for their assertions about that work.

*Research Sub-Question b: What content develops in the case where video records of practice are used in a single class session? What content develops across multiple class sessions?*



Across video discussions, the individual segments reflected the areas of interest articulated in the presenters' frames for viewing, and in most video discussions, the main theme or set of ideas developed from the presenter's stated interests in each discussion. The content of the curriculum emphasized the authority of the teacher to act in ways that influenced her students' classroom experiences, particularly their participation and engagement, which were areas of concern stated in most of the frames for viewing.

Building on these analyses of content as well as the previous chapter's analysis of instruction, I established that video discussions gave preservice teachers access, to some degree, to practice as conceived in the theoretical framework—that is, practice as active, social, contextual, and involving understanding. In 12 of the 16 discussions, preservice teachers developed coherent ideas about a teacher's deliberate actions within the classroom—physical acts, performed with understanding. Together, participants developed meaningful terms that addressed “why” as well as “how to”; they addressed ways of doing as well as the kinds of thinking about content, students, time, and other factors that would lead to the reasoned enactment of these acts. They were able to study practice within the presenter's specific context, and also developed some principles that could apply across contexts.

### *Features of the Enacted Curriculum*

The findings just summarized indicate several themes that are responsive to this study's main research question: *What curriculum for teacher education can develop over time through instructional use of video records of preservice teachers' practice?* The enacted curriculum in this case study was characterized by three themes: participants'

collective engagement in clinical reasoning, the interplay of evidence from the presenter's teaching and the participants' experiences, and the culture of "nice."

### *Collective Engagement in Clinical Reasoning*

In the case study, the preservice teachers engaged, to some extent, in the kind of professional decision making that is inherent to teaching practice (Lampert, 1985). As Schön (1983) explains, much of the information needed to make effective professional decisions emerges in the context of the work. In video discussions, this context was illustrated in the presenter's video and developed through the presenter's descriptions and the participants' interpretations and comparisons. Preservice teachers used references to and instances from the active work of teaching in the particular classroom represented in the video to develop meaningful descriptions of and ways of thinking about these actions. The group could develop and challenge the presenter's recollections of the teaching event, and also help her consider how she might act in a future, similar situation. In this way, discussions around videos of preservice teachers' own teaching supported collective engagement in what is known in the health professions as "clinical reasoning," or "the best judged action in a specific context" (Higgs & Jones, 2008, p. 4; see also Dutton, 1995, cited in Rose, 1999). The preservice teachers collaboratively focused on making the best judgment about how a teacher should act in response to the presenter's identified problem in a specific context; as will be discussed next, they also layered experiences from their own teaching and learning contexts in ways that stretched the relevance of their reasoning across contexts.

### *The Nature of Evidence in Video Study*

My analyses of instruction and content in video discussions indicated the varied forms of evidence that participants used to develop ideas about practice—evidence both related and unrelated to the teaching represented in the video. One category of evidence was context-focused, or related to the circumstances of the teaching represented in the video. In sharing a video of her own teaching, the presenter was in a position of authority; she described the context that shaped the initial direction of the discussion and then further developed ideas about context throughout the discussion. The participating preservice teachers addressed the presenter's efforts at working with particular content and particular students by gathering illustrations from and making interpretations of the teaching, though these were variably grounded in explicitly stated details from the video.

A second category of evidence was experience-focused. The preservice teachers used two tools to create contrasts with the teaching represented in the video: anecdotes about their own experiences as teachers and students, and statements of their personal reactions to the teaching. These anecdotes and reactions allowed the preservice teachers to make comparisons with the events of the presenter's video in order to point out aspects of the teaching in the video that they believed problematic or to suggest other ways of acting in a similar scenario. By creating contrasts with the teaching represented in the video, participants developed alternatives and, to some extent, generalizations about practice that could apply across contexts.

This theme indicates the potentially generative interplay between preservice teachers' understanding of the presenter's teaching and their own experiences, a feature of the discussions that was likely heightened by two factors in the study of preservice

teachers' own videos. First, the presenter was at hand to narrate her context and thoughts about teaching in conjunction with visible evidence from the video. Second, the presenter's teaching represented a novice's work in which participants could likely see themselves. Preservice teachers attended closely to the presenter's teaching, particularly as they sought to problem solve on her behalf; and their understanding of the presenter's context and interpretations of the video provided a kind of traction for their development of comparisons and links to their own experiences. The development of generalizations as principled statements that apply across teaching contexts was somewhat limited; however, this theme indicates that the collective work of video study generated ideas that could be relevant to all participants.

### *The Culture of "Nice"*

The promise of these first two themes—engagement in clinical reasoning and the use of evidence—is tempered by the nature of instruction in this case study. Specifically, the ways the preservice teachers interacted with each other shaped their engagement in clinical reasoning and use of evidence. The preservice teachers' deep regard for one another's teaching emerged as an implicit, pervasive rule that structured their activity around videos of their teaching. They were eager to respond to the presenter's desire for "feedback" on her teaching; but in giving feedback, the preservice teachers drew upon their relationships as supportive peers in the larger teacher education program. The video discussions were characterized by the sharing of compliments on and affirmations of what the preservice teachers perceived as positive aspects of the teaching represented in the video. Preservice teachers attended to the presenter's identified area of concern as the "problem" under study but generally avoided critical assessment of the presenter's

teaching; instead, they used their own experiences to create contrasts that highlighted potentially problematic areas of the presenter's teaching. This overarching feature of preservice teachers' interactions—emphasizing the positive—shaped the ways the video was used and the ideas about practice that developed.

The preservice teachers' focus on compliments and avoidance of critique indicates a culture of "nice" that shaped interactions in video discussions. This expression has been used to describe a pervasive challenge for several professions—including development and aid work, clerical work, and PK-12 teaching—that are considered "relational" (Noddings, 2003), or dependent on productive relationships with others. The literature on supervision and evaluation of teachers indicates the pervasiveness of the culture of nice in PK-12 schools, which manifests as reluctance by administrators or peers to critique another's teaching in substantive ways (e.g., Marshall, 2005). Hall (2007) indicates that they may "ignore the realities of a teacher's performance, favoring instead to scribe innocuous pleasantries in order to pacify the teacher and prolong the 'culture of nice,' which leads nowhere but to bland instruction, mediocre education, and a stultified status quo." In this case, the culture of nice influenced the features of the presenter's teaching to which preservice teachers attended and the depth with which they studied the presenter's teaching as it was represented in the video. This theme, then, is a limitation on the nature of the ideas about teaching practice that can develop through video study; further, it potentially contributes to the perpetuation of this professional problem as preservice teachers enter the PK-12 teaching workforce with an orientation toward teaching as highly personal work.

## Implications

This study's findings indicate that preservice teachers' study of videos of their teaching, as a practice-based approach to teacher education, could contribute positively to a comprehensive curriculum for teacher education—one that encompasses, for starters, a robust conception of teaching as a complex practice, goals for teachers' learning of that practice, instructional approaches and activities that support their learning in and from practice, and ways of assessing their progress toward the goals. As a case study situated in one teacher education course, this dissertation does not seek to make broad claims about the design of such a challenging, comprehensive curriculum project; but the features of the enacted curriculum that developed in this instance of video study provide lessons that can contribute to the field's ongoing efforts to develop a curriculum for practice-based teacher education. Here, I review the relationship of the case study findings to teacher education curriculum at two levels: within the teacher education program that housed the one-to-one technology project and in the field of teacher education as we move toward a comprehensive practice-based curriculum.

### *For the Teacher Education Program Curriculum*

The fact that the preservice teachers had repeated opportunities to study videos of their own and other novices' teaching, previously an occasional occurrence in the teacher education program, might be considered a positive outcome of the one-to-one technology project. Still, the findings of this dissertation indicate areas for improvement of the instructional model for preservice teachers' study of videos of their teaching. Here, I make recommendations for the teacher education program that housed the technology project.

First, the one-to-one technology project and preservice teachers' study of videos of their teaching were largely limited to the ED 650 course. Video technology—and other technology that supports the study of records of practice—has the potential to provide a wider bridge between the university and the field; preservice teachers' and teacher educators' work with video records could have implications for their learning in, for example, methods courses or research courses. In the early stages of the one-to-one technology project, Dr. Baines and Dr. Chester had met with teacher educators in other courses to discuss how the technology could be used in various aspects of the teacher education program. These meetings occurred when planning for the new semester was already underway and several of these teacher educators declined to make substantive use of the technology (Dr. Baines, personal communication). Teacher educators likely have little incentive to start using technology when it is framed simply as a way of enhancing their existing practices, which they have worked to refine over many semesters. An alternative approach would begin with “deconstructing and rebuilding a new set of artifacts to shape organizational practices” (Halverson, 2003, p. 6). Artifacts, in Halverson's terms, refer to “the programs, procedures, and policies designed to shape or reform existing practices in the institutional context” (p. 6). The teacher education program leadership could begin by establishing the teacher education program's commitment to practice as it was articulated in this dissertation, rather than endeavoring to fit the technology into existing program frameworks. Collectively, teacher educators could develop a shared understanding of the program's practice-based goals and the curricular framework for reaching those goals. This would situate the use of one-to-one technology, and video records in particular, as a programmatic resource for preparing

novices for the practice of teaching in secondary schools. In short, the use of the technology would be mapped on to a revised, practice-focused framework, rather than mapping the existing framework (including the Effective Teaching Standards, course syllabi, and the RWT assignment) onto the new technology.

Second, within the ED 650 course, the analysis of the teacher educators' planning sessions revealed a loosely defined instructional model. This model, which was realized primarily in the protocol, gave the preservice teachers the agency to pursue topics and issues that most interested them, yet it was ambiguous about how these would be pursued. The teacher educators did not address, for example, the types of video or the topics and issues that would be substantive for all participants. They did not thoroughly articulate—either among themselves or with the preservice teachers—the kinds of discourse that would support participants' engagement in productive discussion. As my analysis indicated, participants in video discussions organically developed ways of interacting, or discourse moves, within the teacher educators' framework that shaped the content that could develop. As on the teacher education program level, I suggest that the teacher educators focus more broadly on developing artifacts that support a commitment to practice within the ED 650 course. A key aspect of this “network of artifacts” (Halverson, 2003, p. 8) within the course could be a set of PK-12 teaching practices that would be the focus of preservice teachers' video study. The content of the curriculum in this case study indicated preservice teachers' strong interest in knowing what to do and how to do it within particular circumstances; teacher educators could build on this interest by focusing on a set of well-defined but flexible practices that resonate with preservice teachers' experiences in PK-12 schools (see, e.g., Grossman & McDonald,



2008 on a “framework for teaching” and Lampert & Graziani, 2009 on “instructional activities”). Using a handful of practices (e.g., warm-ups, whole class discussions) as the underlying framework would make video study more coherent, with evident connections over time among the developed ideas, and relevant to preservice teachers’ other teacher education experiences.

Finally, the preservice teachers worked in heterogeneous groups to discuss their videos—that is, they represented a mix of subject areas, grade levels, and school contexts. In some ways, these heterogeneous groups were an advantage because participants had to work together to make sense of the presenter’s teaching and context in detail; in other ways, the grouping was a limitation because participants may have believed some aspects of teaching, such as subject matter, were less accessible to others with different experiences and qualifications. Further, the preservice teachers rotated groups three times over the course of the seven class sessions. These rotations meant participants had intermittent, rather than consistent, opportunities to develop relationships around video study. A consistent group, working together across class sessions, would allow participants to develop a more robust “community of practice” (Wenger, 1998) that could build a coherent set of ideas about teaching and language for articulating those ideas.

#### *For Practice-Based Teacher Education Curriculum*

In this section, I consider two major implications for video study involving preservice teachers’ own videos in terms of a teacher education curriculum focused on practice: the role of the teacher educator and the importance of language. Addressing these areas might realize the promise of this practice-based approach more fully.

### *Teacher Educator's Role*

The study of videos of preservice teachers' own practice is demanding work for the teacher educator. Being a teacher educator is acknowledged as complex work that involves acting as both model and messenger; Loughran (2006) indicates that the work involves being able to "theorize practice in such a way as to know and be able to articulate the what, how and why of teaching and to do so through the very experiences of teaching *and* learning about teaching" (p. 14). The teacher educator deals constantly with tensions; she seeks to make explicit the complexities and messiness of teaching while also helping preservice teachers feel confident enough to proceed (Berry, 2004). Yet teacher educators often work in conditions that impede close attention to individual preservice teachers' progress (i.e., limited time, large numbers of preservice teachers), have few well-developed pedagogical models to draw upon, and lack a culture of collaboration that would support improvement of teacher education (Korthagen & Kessels, 2001).

This study enabled me to analyze the teacher educator's role, but also supported my reflection on my experience as a facilitator in video discussions. The teacher educator's role was one of supporting preservice teachers in responding to the concerns of the presenter, and doing so in ways that developed ideas about teaching that were both useful to the presenter and accessible for study by all participants. Although the role was at least broadly defined, the discrete tasks and dispositions needed to enact the role were not defined. In hindsight, I recognize the many demands on me during video study, as well as my variable success in meeting them. I needed to support preservice teachers in selecting and articulating their reasons for selecting a video of their teaching. I needed to

support all the preservice teachers in identifying evidence in the video and their experiences that shed light on the presenter's problem, and then make explicit the concrete aspects of teaching, the reasoning behind teaching acts, and frameworks for thinking about practice in ways that would be generative for all those present. I needed to create a collegial atmosphere in which preservice teachers felt comfortable sharing their own teaching and discussing their peers' teaching. These tasks were made all the more complex by one factor that is characteristic of practice-based teacher education: the support I offered needed constant adjustment according to the problems preservice teachers identified in their teaching and the ways they sought to resolve them. In a parallel with "ambitious teaching" as it is conceived for PK-12 schools (e.g., Lampert, 2001), practice-based approaches require that the teacher educator teach in response to what the diverse preservice teachers are able to do, while holding them accountable to ambitious learning goals that are responsive to the complex nature of teaching.

The case study illustrated the challenges for individual teacher educators using video study and might be considered representative of some of the challenges of practice-based teacher education. The teacher educator within a practice-based model must have the knowledge and skills of a clinical educator, "able not only to profess about teaching, in the abstract, but able to provide skilled feedback and coaching" (Grossman, Hammerness & McDonald, 2009, p. 287). Realizing this conception of the teacher educator's role can begin with a commitment by all teacher educators, university-based and PK-12 school-based, to reconfiguring teacher education programs in support of preservice teachers' constant work on teaching as a practice—as active, social, contextual, and involving understanding. Acting on this commitment will require

structural changes to the standard model for university-based teacher education. It requires careful attention to the selection and development of teacher educators, rather than assuming that an experienced PK-12 teacher will be a competent teacher educator (Dinkelman, Margolis & Sikkenga, 2006). It requires erasing traditional divisions between “foundations” and “methods” courses and between “coursework” and “fieldwork” so that teaching, both live and in records, is the primary text that preservice teachers encounter (Grossman, Hammerness & McDonald, 2009).

### *Importance of Language*

The findings of this dissertation indicated the importance of language in practice-based teacher education. As Freeman (1996) has observed, preservice teachers often voice their practice in a “local language” constituted by their experiences as PK-12 students, teacher education students, and novice teachers. During video discussions, preservice teachers and teacher educators gave name in a very “local” way to practice—particularly the structures that teachers can use to shape interactions with students and the ways those could be used productively with students in certain contexts. Participants’ local language likely developed from numerous sources; these included the “apprenticeship of observation” (Lortie, 1975) conducted in their previous schooling experiences, the case knowledge shared by experienced others (Doyle, 1990) such as mentor teachers and field instructors, and the frameworks guiding the teacher education program such as the Effective Teaching Standards. In this local language, participants in video discussions collaboratively developed ideas that became meaningful within the study group, but those ideas may not have meaning beyond the boundaries of that community.

Freeman described articulation—“the process through which the teachers gain access to their thinking about classroom practice” (p. 226)—as occurring when preservice teachers used the “professional” language of the teacher education program with their local language to reflect on and critique their teaching. As was pointed out in Chapter 1, the professional frameworks that might support such reflection and critique are numerous and varied, ranging across levels from the teacher education program to state departments of education to national organizations such as the voluntary National Board for Professional Teaching Standards. This diversity points to a broader problem for teaching and teacher education: we lack a coherent, meaningful professional framework to guide teachers’ learning and the improvement of their work in classrooms. Despite several decades of advances in understanding the nature of teaching, the field is “still dreaming of a common language” (Grossman & McDonald, 2008, p. 186).

Preservice teachers and teacher educators engaged in video study and other practice-based approaches to teacher education would benefit from a professional language that would allow them to develop ideas about practice in language that has resonance across experiences—in university classrooms and PK-12 classrooms, from preservice through inservice. Of course, the problem is not just related to language as the words we use, but to the practice (with active, social, and contextual characteristics and involving understanding) represented by language. This problem—the lack of a professional teaching framework for teacher education, which sustains the disconnected nature of teaching and teacher education—has been raised frequently; indeed, a recent issue of *The Elementary School Journal* was devoted to it (Morris & Hiebert, 2009).

Doyle (1990), Hiebert, Gallimore and Stigler (2002), and others have proposed using practitioners' knowledge, rather than researchers' findings, as a starting point for building a professional knowledge base. Hiebert, Gallimore and Stigler describe practitioners' knowledge as grounded in context and linked to problems that teachers experience in their work; as such, it is detailed, concrete, specific, and integrated (p. 6)—a description that aligns with the ways participants articulated practice during video discussions. They note two key challenges related to using practitioner knowledge to build a professional knowledge base for teaching: representing practitioner knowledge in a principled (rather than “local”) way, and supporting its nature as flexible and fluid according to the contexts in which teachers work.

There is a potentially symbiotic relationship between the development of a professional language and the development of practice-based teacher education. Resolution of both issues—the need for a professional language and the need for a curriculum for practice-based teacher education—can occur with a coordinated focus on what teachers do. Such important work would depend on a network of collaboration among researchers and practitioners, committed to developing both the knowledge base for PK-12 teaching and practice-based teacher education. Their collaboration would not necessarily need to focus on gathering new data to inform these issues; it could center on the sharing of already-collected data in case studies like this one, which are numerous in teacher education. The preservice teachers' teaching videos in this case study, for example, could be systematically analyzed by accomplished PK-12 teachers and researchers of teaching as part of a larger effort to establish an “anatomy” of teaching practice. As such an anatomy of teaching practice develops, it could be used to inform

and improve the next iterations of practice-based approaches, including the study of videos of preservice teachers' teaching. In addition to providing coherence to preservice teachers' developing understandings of PK-12 teaching practice within the teacher education program, this framework could potentially mediate the "culture of nice" as a means of focusing on teaching rather than teachers—on professional, rather than personal, work.

### Directions for Future Research

The findings of this study suggest several avenues for future research, especially as the field is poised both technologically and conceptually to use video as an everyday tool in practice-based teacher education. Here, I articulate a research agenda that will focus on developing a more robust understanding of the role of video study in supporting preservice teachers' capacity to practice. The research agenda addresses three areas: building further understanding of the instructional setting; developing an instructional model; and assessing preservice teacher and teacher educator learning.

### *Understanding the Instructional Setting*

A first line of research will further address the factors and conditions that shape the regular use of videos of preservice teachers' practice in a teacher education setting. This study has highlighted, through the lens of activity theory, several issues related to roles, tools, and rules in this case of video study, all of which require further investigation. Notably, these areas for investigation may also apply to the use of other types of records of practice (e.g., audio recordings, student work samples) in teacher education and to other technology-focused practice-based approaches as well.

Research should further examine the degree and types of structure in which preservice teachers encounter videos of their teaching. “Structure” includes such features as the task assigned to preservice teachers and teacher educators, the tools developed to support their engagement in the task, and the features of the setting in which its enactment occurs. The study findings indicated the functions of tools, rules, and roles within the instructional dynamics of this case; but additional analyses of the same data set can add nuance to these understandings while continuing to build on the literature related to the use of video in teacher education. Questions include: How do characteristics of participants (e.g., subject area majors, school placement characteristics, work experience prior to teacher education) influence their involvement in discussions of videos representing their own and other novices’ teaching? How can the relationships among the various tools used in video discussions (e.g., video record, protocol, forms of evidence) be conceptualized?

In addition, research is needed to address the videos themselves as key “texts” in an instructional framework. In the case study, the videos selected and shared by preservice teachers addressed certain ideas, included specific images, and used particular language—qualities that, when appropriated by participants in video discussions, certainly influenced the ideas about teaching that developed in video-based discussions (Sherin, 2004). If the study of videos of preservice teachers’ practice is to become an everyday part of teacher education, more research is needed to understand the video, both in terms of its construction by the presenter and its use by participants in video discussions. Questions for future research include: How do preservice teachers select videos of their teaching? How do they conceive of the relationship between their video



selection and the frame for viewing? How do features of the video itself (i.e., length, audio and visual clarity, degree of panning or zooming) influence the ideas that are generated in discussion?

### *Developing an “Ambitious” Instructional Framework*

A second line of research involves design work, specifically, the development of an instructional model. The results of this case study indicate the potential of video study to engage preservice teachers in clinical reasoning by stimulating their use of context-focused and experience-focused evidence; but more work is needed to develop an “ambitious” instructional model—one that is both supportive and flexible—that can maximize their access to practice. Design studies can build on the broad model enacted in this case study to examine the influence of various aspects of the settings, groupings, and discourses that might support preservice teachers’ productive study of videos of their own teaching. Questions include: What kinds of issues and topics related to preservice teachers’ videos of their teaching are most generative for all participants’ learning? How does a focus on specified practices (e.g., whole class discussion, instructional explanation) change the enacted curriculum? How do different forms of evidence (i.e., details from the video versus impression-based statements) influence what participants can learn from the study of videos of their teaching? What kinds of tools (practical and/or conceptual) can support preservice teachers in productively selecting their own videos and discussing others’ videos? Can direct instruction on how one engages in professional critique mediate the culture of “nice”?

The teacher educator is an essential component of such an instructional framework. This study has hinted at the demands of practice-based teacher education on

the teacher educator and the need for a better understanding of how such work can be accomplished on an everyday basis. Design research should also address the teacher educator's role in video study and other practice-based approaches to teacher education, responding to the questions: What knowledge, skills, and dispositions does an effective "clinical educator" need? What kinds of practical tools (e.g., a protocol) support the teacher educator in facilitating discussions of preservice teachers' videos of their practice? In doing so, this line of research might also address teacher educators' preparation—the kinds of professional development that support their engagement in this ambitious work.

### *Learning Through Video Study*

A final area for future research addresses learning by both preservice teachers and teacher educators that occurs through their engagement in regular study of the preservice teachers' videos of their teaching. To reiterate, this study's contribution relates to the curricular possibilities related to the use of preservice teachers' teaching videos—that is, it focused on what could be studied, rather than what was learned, by participants in video discussions. Future research on learning could build on the use of activity theory that began in this case study. It could address preservice teachers' learning by investigating how their developing understandings of practice influence their ability to teach in PK-12 classrooms. It could also address preservice teachers' and teacher educators' learning in the "expansive" sense (Engeström, 1987). Expansive learning, which is part of the "third generation" of activity theory, takes two interacting activity systems as its minimal unit of analysis (Engeström, 2001). This conceptualizes learning beyond the activity system of the video discussion to investigate the ways activity in

video discussions shapes or even transforms activity in other aspects of teacher education.

In terms of preservice teachers' learning, the case study findings indicated the promise of video study for engaging preservice teachers in collective clinical reasoning, particularly as they focused on deliberate acts teachers use in response to particular problems experienced in teaching. However promising, this engagement in clinical reasoning in the relatively "safe" environment of video discussions means little if it makes no difference in the participants' teaching of PK-12 students. Indeed, this dissertation was undertaken with the assumption that the study of videos of their own teaching contributes to preservice teachers' development as well-started beginning teachers.

Future research should address what preservice teachers learn through the study of videos of their own and other novices' teaching and what their learning means for their development as beginning teachers. By focusing on learning, this line of research asks: to what degree does involvement with practice-based teacher education actually make a better teacher? This involves questions of transfer; as such, it implicates the preservice teachers' work in other aspects of their teacher education, including their various university-based courses and field work in PK-12 schools. This research could trace, across the various settings that are part of a preservice teacher's preparation, changes in the language and ideas that preservice teachers use to discuss practice as well as the nature of their professional interactions with others (peers, mentor teachers, and university-based teacher educators). Perhaps most importantly, this line of research should address how preservice teachers' study of videos of their teaching influences their

practice as teachers in PK-12 classrooms. Focused on preservice teachers' "real time" teaching, this research could examine, over time, the instructional choices that they perceive as available to them and changes in the nature of the clinical reasoning in which they engage.

The findings of this case study hinted at the possibilities for teacher educators' learning as well. In planning meetings, the teacher educators constructed a model that represented a different way of doing their work; but the study was not designed to address how their work actually changed within and beyond the ED 650 course. Future studies could examine how the use of video study, as a practice-based approach, changes a teacher educator's work within a particular course, and further, how it changes the teacher educator's work in the teacher education program. By examining the teacher educator's learning in this manner, one can also address the implications of those changes for the teacher education program. Questions include: To what degree does ongoing video study shift the teacher education program's orientation toward teaching as a practice? How does the incorporation of video study change the meaning of "field work" in a teacher education program?

#### A Final Thought

One might argue that a limitation of this study is that, like so many other studies of the use of video in teacher education, it focuses on a small group of preservice teachers working in a single course over the rather short period of one semester. However, the results of such "small" studies can be far more powerful when situated in a larger teacher education framework—in this case, the growing movement toward practice-based teacher education. The results of this study may be useful in a very practical way, as ongoing

study by preservice teachers of videos of their teaching may play a key part in practice-based teacher education; but this dissertation might also be considered more conceptually as an instance of the promise and challenge involved in placing practice at the center of preservice teachers' preparation. At this opportune time when teachers and their preparation are the focus of national attention, the field is positioned to make strides toward reform, and I hope this study contributes in some small way to our conception of more effective teacher education.

APPENDIX A: STUDIES INCLUDED IN LITERATURE REVIEW

Citation	Research Question	Conception of Video	Enactment of Video	Study Design	Findings
Abell, S. K., Bryan, L. A., & Anderson, M. A. (1998). Investigating preservice elementary science teacher reflective thinking using integrated media case-based instruction in elementary science teacher preparation. <i>Science Education</i> , 82, 491-510.	How do prospective elementary teachers construct images of themselves as teachers of science? What do their reflections on the integrated media classroom science cases reveal about their personal theories of science teaching and learning?	Case-based integrated media instruction  Reflection as an instructional strategy in teacher education to uncover and perturb personal theories about teaching and learning	Video as one of four “course contexts” for reflection; used relative to four tasks  Elementary science methods course  Series of reflection tasks over 7 class periods	Action research  N = 49  Data sources = reflection task responses  Analysis = grounded theory; within-/cross-case analyses	Profile of preservice teachers: personal science histories influenced their visions of selves as science teachers; written observations drew upon a judgmental framework but lacked supporting evidence; personal theories valued activities, group work; employed frames as learner, methods student, and teacher
Asan, A. (2003). School experience course with multimedia in teacher education. <i>Journal of Computer Assisted Learning</i> , 19, 21-34.	(paraphrased) What is the impact of a multimedia tutorial program on preservice teachers’ learning experiences compared to traditional lecture?	Video as a situated learning context; represents a “scaled version” of actual experience  Enables “self-accessed and student directed” learning	Two different teaching modes for same content in School Experience course: “traditional lecturing” by faculty vs. multimedia system with no faculty present  Stand-alone multimedia system with individual or small group work; no instructor support	N = 22 in traditional condition; 23 in multimedia condition  Data sources = preservice teachers’ reflective reports  Analysis = scoring by checklist; <i>t</i> -tests	Preservice teachers in the multimedia condition scored higher on depth of understanding, accuracy, rich supporting detail, organization, scope, reflection
Beck, R., King, A. & Marshall, S. (2002). Effects of videocase construction on preservice teachers’ observations of	(paraphrased) What is the effectiveness of preservice teachers’ use of videocase construction as an observation tool?	Video cases enable vicarious experience of the realities of the classroom from a removed perspective  Videos as intervention;	Two conditions observed over 10 weeks: technology-supported (videocase construction) lab plus standard field observation vs. standard field observation with instructional technology lab	N = 31 in technology-supported condition; 31 in standard condition  Data sources =	Preservice teachers who constructed video cases outperformed their peers in their ability to identify, interpret, and analyze evidence of effective teaching during

teaching. <i>Journal of Experimental Education</i> , 70 (4) 345-361.		representations of "best practices"	Videocase construction task: - record and edit a single, "ordinary" lesson by mentor teacher - repeatedly view short sequences - write reflections relative to observational frames	preservice teachers' written responses to three "best practices" videos  Analysis = scoring with Video Observation Test; <i>t</i> -tests	observation of all three video episodes  Results attributed to opportunities for different kinds of cognition about observation afforded by video
Bencze, L., Hewitt, J. & Pedretti, E. (2001). Multi-media case methods in preservice science education: Enabling an apprenticeship for praxis. <i>Research in Science Education</i> , 31, 191-209.	(paraphrased) How does video case analysis foster habits of praxis in preservice teachers?	Video cases make teaching relevant; illustrate both common and unique teaching situations  A means to developing habits of praxis	Two science methods classes (elementary and secondary) in a 10-month program  Preservice teachers viewed a video case and responded to three tasks: 1) individual reflection on case-related issues before viewing; 2) observations while viewing; 3) group debriefing session	Ethnographic approach  N = 42  Data sources = class videos and field notes, questionnaires, responses, planning meeting recordings  Analysis = coding	Preservice teachers grasped Lock's model; distinguished among intended, implemented, and achieved curricula; majority were careful not to overgeneralize from the case; activity sheets indicated a propensity for reflection on teaching
Boling, E. (2007). Linking technology, learning, and stories: Implications from research on hypermedia video cases. <i>Teaching &amp; Teacher Education</i> , 23, 189-200.	How do preservice teachers respond to the images and stories represented in hypermedia video-based cases? How do their personal stories and experiences interact with their interpretation and understanding of these cases?	Video cases enable conceptual change; promote cognitive dissonance  Video cases act as a medium between stories of teaching and preservice teachers' stories	Elementary literacy methods course  Task: search for video clips to support given idea (i.e., to support teaching of a lesson, to support comprehension of an article, to illustrate effective practices)	N = 25  Data sources = collected written assignments (journals, quick-writes, self-assessments) and interviews  Analysis = cases of 5 preservice teachers	"Making personal connections to the content of the videos and clips prompted students to reevaluate their prior assumptions about literacy instruction. Questioning their own learning experiences and connecting them to what they were viewing in RCE clips supported students in forming new understandings about literacy instruction." (pp.

					198-199)
Copeland, W. & Decker, D. L. (1996). Video cases and the development of meaning making in preservice teachers. <i>Teaching &amp; Teacher Education</i> , 12 (5), 467-481.	(paraphrased) What are the effects of work with video cases on the meaning preservice teachers make of vignettes of classroom teaching and learning?	Tool for supporting development of “meaning making”	Post-baccalaureate teacher education program – video use occurred outside of coursework  Cycle of 1) individual meaning interview; 2) group case discussion; 3) individual meaning interview	N = 14 (4 groups of 3 preservice teachers)  Data sources = interviews  Analysis = coding for introduction/development of new topics or ideas	“[D]uring over one third (39%) of the opportunities that our teacher education students had to adopt, transform, or create new ways of making meaning of the vignette they worked with, they used those opportunities” (p. 478)
Daniel, P. (1996). Helping beginning teachers link theory to practice: An interactive multimedia environment for mathematics and science teacher preparation. <i>Journal of Teacher Education</i> , 47 (3), 197-204.	(paraphrased) How does a multimedia tool (CView) affect beginning teachers’ understanding of teaching that is oriented from constructivist learning theory?	A tool to enable cognitive flexibility (“complex subject matter can be presented without oversimplifying the content” p. 197)	10 weeks, 4 mathematics and science methods courses  3 sections offered CView as extra credit/assignment exchange; 1 section required CView as 10% of grade	N = 39  Data sources = interviews, observations, questionnaires, think aloud protocols  Analysis = constant comparative method	“The results of this study indicate that a constructivist orientation can be assumed when planning computer-based instruction, and that a computer-based environment can model some aspects of teaching with a constructivist orientation” (p. 202).
Eilam, B. & Poyas, Y. (2006). Promoting awareness of the characteristics of classrooms’ complexity: A course curriculum in teacher education. <i>Teaching &amp; Teacher Education</i> , 22, 337-	(paraphrased) To what extent does a video/internet-based intervention promote preservice teachers’ awareness of complexity, understanding of cognitive aspects of teaching-learning relationship, and capacity to relate	Video case gives access to complexity, cognitive aspects of teaching, theory-practice relationships	Undergraduate secondary methods course  Video-case-based intervention with five literature lessons in middle/high schools, taught by “expert” teachers; preservice teachers were prompted to engage in knowledge processing	N = 21  Data sources = preservice teachers’ responses to descriptive, interpretive, and evaluative tasks  Analysis = pre/post ( <i>t</i> -test) comparisons of responses to each	Improvement in all three areas: descriptive, interpretive, evaluative  “The mindful interaction between technology and pedagogy may transcend the university classroom’s time and space barriers, working in tandem to help novices move toward more



351.	theory and practice?			task	expertise in grasping the complexity of a whole system and especially of implicit cognitive teaching-learning processes.” (p. 350)
Friel, S. & Carboni, L. (2000). Using video-based pedagogy in an elementary mathematics methods course. <i>School Science and Mathematics, 100</i> (3), 118-126.	(paraphrased) How does video-based pedagogy impact preservice teachers’ cognitions about teaching mathematics?	Video and case methods as bridging theory and practice  Organizing scheme – videos as: - exemplars - opportunities for analysis and problem solving - stimulants for personal reflection	Elementary math methods course  Four sets of commercially produced videos used in context of course	Exploratory study  N = 19  Data sources = course assignments; interviews with 5 preservice teachers  Analysis = coding; case studies for 3 preservice teachers	Cases reveal an apparent shift in thinking of mathematics teaching teacher-centered to student-centered; each made efforts to teach unanticipated ways  Videos provided common point for reflection; access to alternative images of mathematics teaching
Goldman, E. & Barron, L. (1990). Using hypermedia to improve the preparation of elementary teachers. <i>Journal of Teacher Education, 41</i> (3), 21-31.	(paraphrased) How can video disc and hypermedia provide a classroom context for the study of factors that influence teaching and learning in elementary school subject areas?	Expert/novice literature and school reform efforts inform the ways teacher education bridges theory and practice	Math methods course  “Video illustrations” of math methods course topics: Exemplary teachers/ Novice teachers as comparisons	N = ?  Data sources = course exams; observations of teaching  Analysis = Scoring comparisons of those enrolled prior to use of videos / those enrolled after	Preservice teachers responded positively to the videos; use of video illustrations made no difference in performance on final exam; video group scored higher in the following areas, based on observations of their teaching: basic skills development, development of higher-order problem solving skills, management practices, development of positive attitudes toward math, pupil involvement,

					on-task behavior
Hewitt, J., Pedretti, E., Bencze, L., Vaillancourt, B. & Yoon, S. (2003). New applications for multimedia cases: Promoting reflective practice in preservice teacher education. <i>Journal of Technology and Teacher Education</i> , 11 (4), 483-500.	To what extent, and in what ways, do preservice teachers modify their immediate personal responses to the case teaching scenarios after reflection and discussion?	Video as case: focus on surfacing and refining personal reactions toward the goal of developing praxis	2 courses in post-baccalaureate program  Process: preservice teachers view case; record initial reaction; discuss reaction as a group; co-construct revised response; then view rest of video	N = 40  Data sources = initial reflection sheets, selected recorded group discussions, and post-activity questionnaire  Analysis = coding	Modification of immediate personal responses: 70-80 percent in each event modified or reinvented their responses – categories of new considerations: giving new explanations to students, timing/pacing issues, classroom management concerns, redirecting student thinking
Kagan, D. & Tippins, D. (1991). Helping student teachers attend to student cues. <i>The Elementary School Journal</i> , 91 (4), 343-356.	(paraphrased) How do video-based conversations about their teaching influence student teachers' attention to student cues and behaviors?	Video as a tool that provides systematic practice at “reading” the verbal/ nonverbal behaviors of pupils; videos of student teacher reflection are “centerpieces of dialogue”	Videos as part of field supervisory work; four one-on-one sessions  Three step process: 1) video first 15 minutes of a lesson, 2) one week later, view video and identify cues that seem to indicate student engagement and understanding; 3) interviewer probes (e.g., interpretation of cues, success of the lesson, changes if retaught)  Fourth session: Student teachers viewed video of another's teaching, then revisited own video	N = 5  Data sources = transcripts of interpretation sessions  Analysis = thematic analysis	Themes: focus on pupil case description; focus on management-related cues rather than instructional; few impromptu changes in the lesson; use of own feelings to measure success of the lesson  Viewing and analysis of another's video before revisiting own produced a stronger shift in perspective in four of five cases; “allowed them to disengage from their own feelings” (p. 351)
Koehler, M. (2002). Designing case-based hypermedia	(paraphrased) How and what do preservice teachers learn	Video as cases: more similar to “being there” than paper-based cases	Math methods course  Hypermedia cases: episodic	N = 12 in episodic condition; 12 in narrative condition	Higher scores on both classroom video and student work for

<p>for developing understanding of children's mathematical reasoning. <i>Cognition &amp; Instruction, 20 (2), 151-195.</i></p>	<p>differently from case-based, hypermedia episodes versus narratives?</p>	<p>Principles: situated in practice; layered with interpretation and annotation; annotations emphasize big ideas of the domain; cases are used to criss-cross the conceptual landscape; cases anchor exploration</p>	<p>vs. narrative (longitudinally connected)</p>	<p>Data sources = classroom video interview; student work interview  Analysis = <i>t</i>-tests; illustrative cases</p>	<p>preservice teachers who used narrative cases</p>
<p>Masingila, J. &amp; Doerr, H. (2002). Understanding preservice teachers' emerging practices through their analyses of a multimedia case study of practice. <i>Journal of Mathematics Teacher Education, 5, 235-263.</i></p>	<p>(paraphrased) How do multimedia cases of practice support preservice teachers in making meaning of complex classroom experiences and in developing strategies and rationales for using student thinking to guide instruction?</p>	<p>“Carefully designed, multimedia case studies that capture the complexities and richness of exemplary, reformed-based classrooms may be of value...to the extent that such case studies can create new images of practice.” (p. 236)  Multimedia cases enable reflecting on reflection-in-action</p>	<p>Secondary mathematics teacher education program (during student teaching)  Multimedia case study used in weekly two-hour seminar on general teaching/learning issues  Assignments completed in and out of class</p>	<p>N = 9  Data sources = transcripts of class discussions; video presentations; preservice teachers' bookmarks, journal entries, and final papers; questionnaire; instructor journal; field observations  Analysis = coding</p>	<p>Higher delayed retention for video, higher immediate transfer for video, higher affective ratings for video  “In summary, the findings suggest that students who learn by observing or reading exemplar teaching strategies are more likely to transfer the modeled strategies to their own teaching experiences than those who learn without a teaching exemplar. In addition, video presentations appear to encourage more modeled answers than text narratives. Although both the video and text conditions showed a decline in transferring modeled answers over</p>

					time, the text condition showed a much more rapid decline than the video condition.” (p. 202)
Moreno, R. & Valdez, A. (2007). Immediate and delayed effects of using a classroom case exemplar in teacher education: The role of presentation format. <i>Journal of Educational Psychology</i> , 99 (1), 194-206.	Does the format of a classroom exemplar affect students’ recall of the case information? Does the presentation of a classroom exemplar affect students’ transfer? Does the presentation of a classroom exemplar and/or exemplar format affect students’ learning perceptions?	Video cases as exemplars (not dilemmas) – provide a “common anchor” for participants in course  Supports learning with cognitive and affective dimensions	Educational psychology course in elementary teacher education program  Task (for treatment groups): - take pre-assessment - study case (video or text) - take post-assessment	N = 18 in video case condition; 18 in text case condition; 17 in control group  Data sources = written retention test; written transfer test; learning perceptions questionnaire  Analysis = ANOVA/ANCOVA; coding	Higher delayed retention for video, higher immediate transfer for video, higher affective ratings for video  “In summary, the findings suggest that students who learn by observing or reading exemplar teaching strategies are more likely to transfer the modeled strategies to their own teaching experiences than those who learn without a teaching exemplar. In addition, video presentations appear to encourage more modeled answers than text narratives. Although both the video and text conditions showed a decline in transferring modeled answers over time, the text condition showed a much more rapid decline than the video condition.” (p. 202)
Nelson, T. H.	What do preservice K-	Video as a “self-	Elementary science methods	N = 88	“The guided, video-

<p>(2008). Making the hidden explicit: Learning about equity in K-8 preservice teacher education. <i>Journal of Science Teacher Education</i>, 19 (3), 235-254.</p>	<p>8 teachers learn from guided reflection on their videoed science teaching about gaps between their intentions and beliefs about teaching and learning and their actual enactment of learning opportunities? (p. 239)</p>	<p>reflective tool”: challenging assumptions; causing disequilibrium</p>	<p>course</p> <p>Video task:</p> <ul style="list-style-type: none"> <li>- video own science lesson with focus on teacher-student interactions</li> <li>- write reflection based on memory</li> <li>- view video as many times as desired</li> <li>- respond to prompts to provide contextual information</li> <li>- write individual papers synthesizing experiences, analyses and literature (with prompts)</li> </ul>	<p>Data sources = guided reflection papers (55 total)</p> <p>Analysis = thematic analysis; coding</p>	<p>assisted self-reflection did help these preservice teachers make some connections between their pedagogical actions and individual children’s opportunities to access the materials and content in a science lesson and to engage in scientific thinking.” (p. 250)</p> <p>In memory-based reflections, nearly all thought they had done “a pretty decent job”; upon viewing videos, they found “at least one interaction that excluded children from full participation or sent unintentional messages about who can participate” (p. 250)</p>
<p>Rosaen, C., Lundeberg, M., Cooper, M., Fritzen, A. &amp; Terpstra, M. (2008). Noticing noticing: How does investigation of video records change how teachers reflect on their experiences? <i>Journal of Teacher</i></p>	<p>To what extent and in what ways might using video help interns reflect on their discussion-based teaching in a more complex manner than when they use memory-based written reflection? (p. 347)</p>	<p>Video as a tool supporting the experience of “disruptions” and “uncertainties” to ensure teacher change</p> <p>Support “noticing”</p>	<p>Master’s elementary teacher education program; student teaching semester</p> <p>Task:</p> <ul style="list-style-type: none"> <li>- initial interview about beliefs</li> <li>- video recorded two discussion-based lessons</li> <li>- wrote memory-based reflections</li> <li>- used editing to select segments for analysis</li> <li>- wrote explanations of</li> </ul>	<p>N = 3</p> <p>Data sources = interviews; written reflections and explanations</p> <p>Analysis = coding (cross-case analysis)</p>	<p>Three major findings: Video-supported reflection helped interns to (a) write more specific (vs. general) comments about their teaching than writing from memory, (b) shift the content of the reflections from a focus on instruction when video is available, and (c) focus less on themselves and more on children</p>

<i>Education</i> , 59 (4), 347-360.			selection choices and perceived value of video-based reflection		when they reflect on video clips of their teaching (p. 348)
Santagata, R., Zannoni, C. & Stigler, J. (2007). The role of lesson analysis in preservice teacher education: An empirical investigation of teacher learning from a virtual video-based field experience. <i>Journal of Mathematics Teacher Education</i> , 10 (2), 123-140.	What can preservice teachers learn from the analysis of videotaped lessons? How can preservice teachers' analysis ability, and its improvement, be measured? (p. 123)	Video as making field experiences more productive and useful; providing guidance on how to conduct observations	Secondary math teacher education program; located in Italy  Two studies  Task (conducted with 3 different TIMSS videos): - view video in entirety (Study 1); in segments (Study 2) - respond to guided viewing framework	N = 38 (Study 1); 30 (Study 2)  Data sources: preservice teachers' pre/ post analysis of teaching; course evaluation survey and lesson planning task (Study 2 only)  Analysis: coding; <i>t</i> -tests	"on a pre- and post-measure of analysis abilities, preservice teachers provided comments that were more specific and elaborated, more focused on mathematics content, and more attentive to student learning and behavior. Overall preservice teachers became more critical and more capable of justifying the alternative strategies they proposed" (p. 138)
Schrader, P., Leu, D., Kinzer, C., Ataya, R., Teale, W., Labbo, L. & Cammack, D. (2003). Using Internet delivered video cases to support preservice teachers' understanding of effective early literacy instruction: An exploratory study. <i>Instructional Science</i> , 31, 317-340.	(paraphrased) How might learning outcomes be different when CTELL cases are used compared to a traditional approach (readings, presentations, discussions, field work) and a traditional approach plus video viewing?	"Anchored video cases" allow sustained, repeated explorations of classroom instructional scenarios to enable preservice teachers to understand the kinds of problems teachers encounter and the knowledge they use in their decision making	Case-based approach  Literacy methods course  Three conditions for course approach: traditional, traditional plus video, traditional plus CTELL cases  Preservice teachers completed concept map task and confidence measure at beginning and end of the semester	N = 13 in traditional condition; 9 in traditional plus video; 11 in traditional plus cases  Data sources = preservice teachers' concept maps, confidence measures, interviews; instructor journal entries  Analysis = ANOVA; constant	"The results indicate that students in all three classes completed the course feeling equally confident in their ability to teach reading. In addition, there was no difference between the three sections in their performance (pre-post) on several measures derived from a concept map of effective reading instruction. ... The lack of differences... may be explained by the qualitative data" (i.e.,

				comparative techniques	instructor's lack of experience with case-based instruction) (p. 336)
Sherin, M. & van Es, E. (2005). Using video to support teachers' ability to notice classroom interactions. <i>Journal of Technology and Teacher Education</i> , 13 (3), 475-491.	(paraphrased) How does video support teachers' ability to notice and interpret classroom interactions?	Video provides access to classroom interactions that is not possible during the act of teaching itself: a permanent record, allows multiple viewings, allows teachers to remove selves from the classroom and reflect rather than act  A tool for supporting "noticing"	One-year certification program  Three-hour VAST sessions outside of course work  VAST online system: teachers upload videos of own teaching and are prompted to interact with and analyze them in certain ways	N = 12  Data sources = pre/post narrative essays  Analysis = grounded theory approach; coding	Focus on three areas: student thinking, teacher's roles, classroom discourse in mathematics teaching – "teachers in the VAST study became better able to identify significant features of the video segments rather than focus chronologically on the full range of events that took place" (p. 482)  Shifts from evaluation to interpretation; greater degree of evidence-based comments
Star, J. & Strickland, S. (2008). Learning to observe: Using video to improve preservice mathematics teachers' ability to notice. <i>Journal of Mathematics Teacher Education</i> , 11 (2), 107-125.	(paraphrased) What is the impact of video viewing as a means to improve teachers' ability to be observers of classroom practice? (p. 108)	Video as supporting development of "noticing"	Post-baccalaureate math teacher education program  Task: - Pre-assessment - 50-min TIMSS video viewing in 5 observation categories - Post-assessment	N = 28  Data sources = pre/post assessments  Analysis = rubric scoring; <i>t</i> -tests	Preservice teachers "got better" at noticing (p. 121)  Large gains in classroom environment and tasks categories; same (high) level in classroom management category; modest gains in content and communication categories
Van den Berg, E., Jansen, L. & Blijleven, P.	Do PSTs perceive the multimedia case as a worthwhile learning	Case-based learning as a means of overcoming theory/practice divide;	Elementary science methods course	N = 46  Data sources =	Preservice teachers "retrieved" a substantial amount of information

<p>(2004). Learning with multimedia cases: An evaluation study. <i>Journal of Technology and Teacher Education</i>, 12 (4), 491-509.</p>	<p>tool? What did they actually learn from the case? Can they transfer the information acquired from the multimedia case to student teaching activities?</p>	<p>promotes cognitive flexibility; maintains the complexity of classroom teaching</p>	<p>Single multimedia case Task: - instructor introduced case - preservice teachers completed five assignments using case - preservice teachers completed final assignment (transfer task)</p>	<p>observations of preservice teachers' work; evaluation questionnaire  Analysis = coding; scoring; cases of two preservice teachers' final assignments</p>	<p>about the case across the five assignments; 89% expressed opinions and 46% supported their opinions; most preservice teachers used the activity as a kind of template for the transfer (planning) task ("near transfer"); 17 preservice teachers enacted the lesson in their field work</p>
<p>Van Es, E. &amp; Sherin, M. (2002). Learning to notice: Scaffolding new teachers' interpretations of classroom interactions. <i>Journal of Technology and Teacher Education</i>, 10 (4), 571-596.</p>	<p>(paraphrased) How does video support preservice teachers' development of the ability to notice and interpret classroom interactions?</p>	<p>Video as a tool that enables teachers to remove themselves from the action and examine (and reexamine) classroom events  "Noticing"</p>	<p>One-year certification program  Three-hour VAST sessions outside of course work  VAST online system: teachers upload videos of own teaching and are prompted to interact with and analyze them in certain ways</p>	<p>N = 12  Data sources = pre/post reflective essays  Analysis = grounded theory approach; coding</p>	<p>"[A]ll six of the teachers in the experimental group moved to Levels 3 and 4, while only two of the teachers in the control group moved to these levels." (p. 589) – transition to organizing analyses around evidence-based call-outs rather than chronological descriptions, more interpretive work</p>
<p>Whitehead, J. &amp; Fitzgerald, B. (2007). Experiencing and evidencing learning through self-study: New ways of working with mentors and trainees in a training school partnership.</p>	<p>(paraphrased) How do video and self-study shift power relations between mentors and preservice teachers?</p>	<p>Video captures reflection-in-action and situated knowledge; promotes reflective dialogue between mentors and trainees</p>	<p>3-year initiative to use video to shift power relations; promote "a generative approach to mentoring" (p. 2)  Process: 1) mentor/PST co-plan lesson, 2) mentor teaches lesson, 3) mentor/PST view video of lesson and debrief, 4) mentor/PST revise plan for PST to teach in another class, 5) PST teaches lesson, 6)</p>	<p>Action research/ self-study  N = ?  Data sources = interviews; questionnaires; videos of lessons and reflective dialogues between mentor and</p>	<p>Professional identity revealed as ongoingly formed for both mentors and preservice teachers; recognition of practitioner knowledge as situated and in flux; realization of a more democratic form of mentoring</p>



<i>Teaching &amp; Teacher Education</i> , 23, 1-12.			mentor/PST view video and debrief	preservice teacher Analysis = coding	
Winitzky, N. & Arends, R. (1991). Translating research into practice: The effects of various forms of training and clinical experience on preservice teachers' knowledge, skill, and effectiveness. <i>Journal of Teacher Education</i> , 42 (1), 52-65.	For overall CCP studies (3 studies total): 1) How can we most effectively take advantage of clinical teachers' expertise in modeling research-based teaching practices so as to enhance beginners' knowledge and teaching skill? 2) How can we most effectively take advantage of clinical teachers' expertise to help beginners become more reflective about teaching? (p. 54)		Clinical Classroom Project (CCP): development of multiple classrooms that are settings for learning about and reflecting on research-based teaching approaches  General methods course  Three treatment groups: live observation with seminar led by observed teacher; video lesson viewing with seminar led by observed teacher; video lesson and seminar viewing	N = 37  Data sources = tests of reflectiveness and content  Analysis = <i>t</i> -tests	Study 1: "videotaped demonstrations may be as effective as live ones" (p. 57)  "We do not claim that videotape alone is sufficient, but rather that carefully planned and executed videotape demonstrations by clinical teachers followed by discussions with the clinical teacher may be as powerful as on-site observation and discussion." (p. 63)
Wong, S., Yung, B., Cheng, M., Lam, K. & Hodson, D. (2006). Setting the stage for developing preservice teachers' conceptions of good science teaching: The role of videos. <i>International Journal of Science Education</i> , 28 (1), 1-24.	(paraphrased) How does the study of video affect student teachers' identification of features of "good" science teaching?	Video provides: <ul style="list-style-type: none"> <li>• Exemplary practitioners as role models</li> <li>• Awareness of alternative methods/ approaches</li> <li>• Awareness of different classroom situations</li> <li>• Proof of existence of good practice</li> <li>• Opportunity for</li> </ul>	Secondary science methods course  2 science lessons on video - experienced teachers, reform-oriented lessons  2 tasks: pre-video identification of "good" science teaching; post-video identification of "good" science teaching	N = 88  Data sources = pre/post video responses; follow up interviews  Analysis = coding?	"A comparison of the features of good science teaching mentioned in the 'pre-video entry conception' and the 'post-video entry conception' reveals a significant growth both quantitatively (i.e., more features) and qualitatively (i.e., a more diverse range of features with greater elaboration" (p. 9)

		reflection			Video images and structure of prompts affected responses.
Yerrick, R., Ross, D., & Molebash, P. (2005). Too close for comfort: Real-time science teaching reflections via digital video editing. <i>Journal of Science Teacher Education, 16</i> (4), 351-375.	How do preservice elementary teachers use digital video editing to reflect upon their own science teaching practices? (p. 355)	Video as a “vehicle” for reflection; to challenge held beliefs and envision alternatives	Two-semester post-baccalaureate program; science methods course  Instructional cycle: Preservice teachers tell science autobiography, conduct clinical interview with student, plan and facilitate a lesson; record lesson and “edit a final digital video that represented their learning and reflection upon their learning in the course” (p. 357)	Phenomenology  N = ? (3 semesters of methods course)  Data sources = artifacts from instructional cycle  Analysis = thematic analysis	The impact of digital video editing technology on preservice teachers’ beliefs included shifts in (a) reflections regarding children’s thinking, (b) planning and instruction informed by reflection, and (c) notions of teaching expertise and requisite knowledge.” (p. 351)

APPENDIX B: ONE-TO-ONE TECHNOLOGY PROJECT PROPOSAL APPENDIX

***FOCUS AREAS***

**Use of Technology**

**Question 1A**

Note: The columns in this table are designed to be read vertically as opposed to horizontally. The first column identifies a general area that will be addressed during the pilot. The second column states a question that will be investigated during the pilot; the third column lists examples of evidence that will be collected to help answer the question; and the fourth column describes strategies that instructors and beginning teachers will use to evaluate and analyze the evidence. The fifth column lists products that will be developed to describe what we learned during the pilot; these products will be shared with faculty and other interested audiences.

<b>Focus</b>	<b>Question</b>	<b>Evidence</b>	<b>Evaluation</b>	<b>Product</b>
<b>Use of Technology</b>	Question 1A How can digital technology be used to support beginning teachers learning to document and interpret their practice as they organize, annotate, archive, and share their records of practice with others?	Sample records of practice from beginning teachers will be used as evidence that is collected to help answer the question. These would include some of the following examples: 1. Videos of developing practice (e.g., micro teaching recordings) 2. Work samples (e.g., homework assignments, lesson plans, lectures, PowerPoint presentations, Web sites) 3. Feedback from	Multiple sources will be used to determine the extent to which beginning teachers have learned how to document, interpret, annotate, archive and share records of practice. Instructors and beginning teachers will evaluate and analyze some of the following examples: 1. The range and quality of beginning teachers' use of records of practice to document and interpret their	Reports and presentations describing the records of practice used by beginning teachers to deepen their understanding of the complexities of teaching. They will also describe how beginning teachers collected records of practice, how they organized, annotated, archived them and who they shared them with. 2. Annotated records of practice that chronicle

- |  |  |   |
|--|--|---|
| <p>instructors (e.g., course instructors, field instructors, mentors)</p> <ol style="list-style-type: none"> <li>4. Video and audio records of class discussions</li> <li>5. Interactions with small groups of students</li> <li>6. Interviews with students and mentors</li> <li>7. Video and audio recordings of planning sessions with mentors, fellow students, and field instructors</li> <li>8. Course assignments (e.g., substantive conversation, text analysis, assessment task, RWTs* and e-Portfolio**, scheme for indexing their records of practice)</li> </ol> | <p>teaching to determine the range and quality of their work (e.g., lesson plans, assessments, Web site utilization, substantive conversation) as they progress through the program</p> <ol style="list-style-type: none"> <li>2. Beginning teachers' use of feedback (e.g., documentation of their strengths and weaknesses) to determine how it is used to improve teaching.</li> <li>3. Increasing use and quality of feedback beginning teachers provide to one another in small group sessions throughout the program.</li> <li>4. Organization of records of practice on Web sites, how that information is stored, and the ease of its</li> </ol> | <p>beginning teachers' experiences using digital records (e.g., video clips of them talking about using records of practice to improve their teaching).</p> <ol style="list-style-type: none"> <li>3. Reports and presentations on how faculty revised the curriculum and their teaching practices to support beginning teachers as they learned to document their teaching, annotate it, and share it with others.</li> <li>4. Protocols used with various activities (e.g., classroom discussions, development of lesson plans, work within small groups).</li> <li>5. Technology guides that supported beginning teachers' use of equipment, laptops, and software.</li> </ol> |
|--|--|---|

	access by others.	6. Creation of an archive of beginning teachers' products (e.g., e-Portfolios, RWTs, classroom activities, and other records of practice).
	5. Range, type, quality, and depth of the annotated student records.	

\*RWTs (Reflective Writing Tasks): A series of reflective essays in which beginning teachers engage in self-assessment and provide links to records of practice used to support claims about effective teaching.

\*\*e-Portfolio (Electronic-Portfolio): A document that serves as a Masters thesis and requires that beginning teachers produce a detailed assessment of the progress they have made toward becoming an effective teacher supported by data collected overtime and reported via electronic links to records of practice.

Note: the use of "e.g." identifies the types of activities and records of practice that might be (but not necessarily will be) collected.

### Use of Technology Question 1B

Focus	Question	Evidence	Evaluation	Product
<b>Use of Technology: Support</b>	Question 1B What curricular support must be in place to help beginning teachers learn how to use technology to communicate effectively, skillfully, and strategically with the variety of audiences (e.g., instructors, classmates, students, mentors, field	Sample records of practice and documents from courses will be used as evidence to help answer the question. These would include some of the following examples: 1. Documents from a variety of courses (EDUC 402, EDUC 490, EDUC 504,	Multiple sources will be used to determine the type, frequency, and quality of curricular support provided to beginning teachers in an effort to help them learn how to communicate in a professional manner. These would include some of the following examples:	A report that includes recommendations for how to develop a curriculum based on records of practice (e.g., a suggestion for which activities work best at particular points in the program, which activities work best in which particular courses: 402, 504, 606, teaching

instructors, and parents) they engage with in their capacity as a professional?	<p>EDUC 650, EDUC 655, EDUC 695, and teaching methods) that demonstrate curricular support (e.g., instructions on how to develop a Web site for parents; assignment expectations when using technology; and the type and kind of support provided by technology services to beginning teachers who are developing a repertoire of strategies for communicating with various audiences.</p> <p>2. Audio and video recordings, posted information, written, and live communication that takes place in a variety of contexts and forms (e.g., Web sites to communicate class expectations and assignments to parents; audio and</p>	<p>1. Students and instructors will evaluate the usefulness and effectiveness of the feedback provided on the various types of professional communication used throughout the program (e.g., class presentations, the RWTs, student conferences, e-Portfolio)</p> <p>2. Students and instructors will evaluate the usefulness and effectiveness of the support provided to them throughout the teacher education program to help them communicate in a professional manner through the use of technology</p>	methods; the type and amount of training required by students and faculty).
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video conferences among beginning teachers for the purpose of completing course assignments; conferences among mentors, field instructors and beginning teachers; the use of blogs and email to communicate with students and their parents, and culminating exhibitions where beginning teachers use records of practice to talk about what they have learned about their teaching in the program)

3. Reflections from beginning teachers that describe, analyze, and evaluate the efficacy of the variety of ways they used technology to communicate with different audiences (e.g., RWTs and e-

### Examining Records of Practice Question 2A

Focus	Question	Evidence	Evaluation	Product
<b>Examining Records of Practice</b>	Question 2A How do courses prepare beginning teachers to use records of practice to develop precision, language, and analytic capacity for examining and reflecting upon the layered nature of teaching (e.g., teaching moves, lesson planning, aligned assessment practices, and analysis of student work)?	Sample records of practice will be used as evidence to document beginning teachers' ability to learn from records of practice. These would include some of the following examples: 1. Reflections on videos and audio recordings that demonstrate their evolving proficiency over time (e.g. leading substantive conversations, responding to student questions, giving directions, providing useful feedback) 2. Reflections on artifacts of teaching collected over time (e.g. lesson plans,	Multiple sources will be used to determine the extent to which courses in the teacher education program help beginning teachers develop precision, language, and analytic capacity for examining and reflecting upon the layered nature of teaching. These would include some of the following examples: 1. Instructors will analyze and evaluate the precision, language, and analytic capacity of beginning teachers to document, interpret, and annotate, the use of records of practice in their RWTs and e-Portfolios	Report of lessons learned about examining records of practice (e.g., which scaffolding activities worked and which did not, the challenges faced by using various software, the variety of feedback used, the difficulty of using scoring protocols, the variety of artifacts used to provide feedback).



	<p>assessments, written feedback, instructional text, use of web sites in their instruction)</p> <p>3. Participation in collegial conversations with peers, mentors, and field instructors during which records of practice are analyzed and evaluated.</p>	<p>2. Beginning teachers and instructors will analyze and evaluate instructors' use of feedback as a scaffolding technique to help them unpack the multiple layers of their own practices (e.g., the depth and comprehensiveness of conversations about videos, audio recordings, and teaching artifacts)</p>
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### Examining Records of Practice Question 2B

Focus	Question	Evidence	Evaluation	Product
<b>Examining Records of Practice</b>	Question 2B How do courses provide beginning teachers with opportunities to improve their capacity to observe, study, and learn about their own students as well as students from demographically different settings by examining artifacts of	Sample records of practice from across the courses in the program will be used as evidence to document beginning teachers' opportunities to improve their capacity to observe, study, and learn about their own students as well as students from	Multiple sources will be used to determine the extent courses in the teacher education program provided beginning teachers the opportunities to improve their capacity to observe, study, and learn about their own students as well as students from	Presentation on the various examples of feedback used across the different disciplines, the difficulties in using various types of work samples, and what beginning teachers learned about working with demographically

practice?

demographically different settings. These would include some of the following examples:

1. Opportunities to observe, study, and learn about their own students as well as the students of others through the use of digital records.
2. Conversations that take place in various courses throughout the program that focus on the analysis of student work samples from students in various demographic settings
3. Reflections about beginning teachers' deepening understandings of the challenges and successes in learning their students face
4. Discussions and writings about the similarities and differences among work samples

demographically different settings by examining artifacts of practice. These would include some of the following examples:

1. Instructors will analyze and evaluate beginning teachers' ability to evaluate their progress in using work samples to understand the learning of their students when completing RWTs
2. Beginning teachers will analyze and evaluate instructors use of feedback as a scaffolding technique to help them improve the quality of the claims and evidence they use to document their practice (e.g., RWTs)
3. Instructors and students will analyze and evaluate the depth and

different settings.

produced by students from demographically different settings.

comprehensiveness of conversations about student work samples that occur in the program across the year.

4. Instructors and beginning teachers will analyze and evaluate mentor feedback to determine the extent to which beginning teachers' capacity to observe, study, and learn about their own students improved over the program

## Analyzing Program Challenges

### Question 3

Focus	Question	Evidence	Evaluation	Product
<b>3 Analyzing Program Challenges</b>	What challenges do the participants in the project face (e.g., the impact on the structure and content of courses, the type and amount of coordination required within and across courses in the program, the amount of technology training required of participants)?	Sample records of practice and documents from courses will be used as evidence. These would include some of the following examples: 1. Journals and recorded conversations of meetings documenting discussions about the use of digital technology in courses and across the program that focus on such topics as the adequacies of class syllabi, the quality and variety of class assignments, scaffolding within the courses that are related to the use of digital technology) 2. Notes from small focus group conversations (e.g., faculty, mentors, and	Multiple sources will be used to determine the various challenges participants in the project faced. These would include some of the following examples of the kind of analysis and evaluation that instructors would engage in: 1. Analysis and evaluation of journals and recorded conversations of meetings to determine recurring problems and issues related to coordinating the use of digital technology in courses and across the program 2. Analysis and evaluation of notes from small focus group conversations (e.g., faculty,	Report that includes recommendations and suggestions detailing the challenges participants faced during different phases of the project (i.e., summer, fall, winter, and spring terms).

beginning teachers  
study groups) about  
activities used in the  
program

3. Video and audio recordings of classroom activities modeling and scaffolding the use of digital technology
4. Reflection on the adequacy and appropriateness of instructors' lesson plans, descriptions of class sessions, and reflections about class activities

- mentors, and beginning teachers study groups) about activities used in the program to determine issues related to coordinating the use of digital technology in courses and across the program
3. Analysis and evaluation of video and audio recordings of classroom activities modeling and scaffolding the use of digital technology to determine their coherence and appropriateness

**Video Assignment 1  
(March 5-April 2, 2007)**

**Purpose**

The goal of this activity is to provide you with an opportunity to get feedback about your teaching practice and to engage in a collegial conversation with your peers about strategies for achieving teaching benchmarks. In this activity you are asked to produce a 25-30 minute edited DVD illustrating an area of teaching on which you would like to receive feedback from members of your field instruction group. You will provide your team members with a lesson plan prior to sharing and discussing your DVD. You will also provide your team members with guidance about areas of teaching for which you are seeking feedback; these identified areas are to be linked to specific benchmarks from our teaching standards. You will sign up for two sharing sessions that will last between 75 to 90 minutes.

**Components of the Assignment**

1. **Lesson Plan Framework:** The purpose of the lesson plan is to prepare viewers to better understand what they will see in your video. Use the Model Lesson Plan template that was distributed in class posted in the Winter Folder. In addition to the information that must be filled in on the Model Lesson Plan template, you should include a brief a statement about the learners (i.e., grade level, course level, composition of the class in relation to diversity and special needs, etc.).
2. **Focus for Feedback**
  - a. Write a statement clearly identifying two to three teaching benchmarks that you would like viewers to focus on as they view your video segment
  - b. Write two or three focus questions related to the benchmarks that you would like discussed during the feedback session (example: When I give directions, I find that although I think I have given clear and specific guidance, my students ask a lot of questions, and therefore, too much class time is taken up clarifying directions. Could you please listen to how I give directions for the assignment and how I respond to student questions, and then give me suggestions about how I might improve the process?) All of these questions are connected to Standard 3, Benchmark 1.
3. **Edited Videotape**
  - a. The edited tape should be approximately 25 to 30 minutes in length. You should eliminate unnecessary minutes such as when students are reading or writing or time when students are preparing to begin a task unless these activities are directly related to your focus benchmarks.
  - b. Select segments that illustrate the behaviors that address the benchmarks you have chosen as your focus for discussion—*Tech Services will address editing the video in ED 650 on Monday, January 29*)

4. **DVD Version of Edited Videotape:** The DVD will be handed in to an instructor following your discussion—Be sure to label the DVD with your name, the date, and the school and class in which the video is taped.
5. **Reflection:** You will also hand in a one to two page reflection describing what you have learned from the process of viewing your practice and from the discussion with your field team members. The reflection should include relevant feedback on your focus benchmarks and a statement about how the feedback will influence your teaching. Post your reflection in the Video Reflection Assignment 1 folder on CTools (EDUC 650) one week after your presentation.

### **Procedures**

1. Make arrangements to meet with Tech Services if you have concerns about videotaping or using the right equipment. (He has limited time available, but is willing to help you finalize your plan if needed.)
2. Select two or three teaching benchmarks that you would like to be the focus of the discussion feedback. For example, if you wanted feedback on how well you addressed diverse perspectives that were linked topics you were teaching in the lesson, then you would want to reference Benchmark 3.2. Or if you wanted feedback on your questioning techniques, you would reference Benchmark 3.4.
3. Develop focus questions based on benchmarks (See example above in 2b of “Components of the Assignment.” The focus questions should be submitted along with your lesson plan and posted on CTools.
4. Design your lesson using the Model Lesson Plan template. Make sure your lesson design affords opportunities to observe behaviors related to the lesson objectives and the benchmarks you have selected.
5. Set a date for videotaping. (Tape early in case you need to do it over).
6. Reserve camera well ahead of time; not having a camera is not an excuse for failing to complete the assignment on time.
7. Tape the lesson
8. Edit the lesson
9. Make a copy of your edited lesson on a DVD.
10. On the evening of your scheduled discussion, arrive early enough to test the equipment.

### **What needs to be posted before class**

There are two parts of the video assignment that needed to be posted on CTools (EDUC 650) before the class presentation and there is one part of the assignment that is to be posted one week after making your presentation.

1. Post lesson plan on CTools (EDUC 650) using the Model Lesson Plan one day before your scheduled discussion. For example, if your presentation on Monday, March 5, your information for assignment must be posted by 6:00 PM, Sunday, March 4.
2. Post the benchmarks and focus questions you would like discussed during the viewing of your lesson on CTools at the same time you post your lesson.
3. Post your reflections (See number 5, “Components of the Assessment” for a description) one week after your class presentation. For example, if your

presentation on Monday, March 5, your Reflection must be posted no later than Monday, March 12.

**What you need to bring to class**

1. DVD version of the videotaped lesson
2. A copy of your lesson plan

**Equipment**

1. Mini DV for recording
2. Digital Camera
3. Microphone
4. Tripod
5. DVD

**Evaluation**

The video assignments constitute a significant part of your student teaching grade and are required for EDUC 650. They will be evaluated as pass/fail. You will receive an incomplete for EDUC 650 if you do not satisfactorily complete both video assignments.



## APPENDIX D: VIDEO ASSIGNMENT, WINTER 2008 SYLLABUS

### **Assignments 5-8: Video Taping Your Instruction**

Date Assigned: January 14

Dates Due: February 11 & 18, March 10, 17 & 24, and April 16 & 23

Purposes: To gather records of practice that demonstrate your increasing skill in teaching and to use records to facilitate discussions of practice among colleagues

Description: Each month, you will share a short video clip of your instruction with a group of colleagues. You will select a clip that represents an area of your teaching on which you would like feedback – an intriguing moment, a puzzling situation, or a problem of practice. The ED 650 topics identified for each month on the syllabus should guide your thinking about and selection of the video clip. On the Sunday before the date on which you share your video, post it to Bluestream/ED-SMAC by 6:00 PM. The video should be edited so that it focuses your colleagues' attention on the area you wish them to discuss, and you should be prepared to describe the context for the clip.

## REFLECTIVE WRITING TASK

### RWT 4

***DUE DATE: MARCH 4, 2008***

**Topic:** Instruction

**Teaching e-Portfolio Standard 3:** Implementing Instruction

#### **Focus Benchmarks:**

##### **3.1—Adequate Instructions and Appropriate Language**

The teacher gives clear and adequate instructions, uses correct and expressive spoken and written language with well-chosen vocabulary that is appropriate to students' developmental levels, and anticipates possible student misunderstandings.

##### **3.2—Instructional Methods**

The teacher uses a variety of instructional methods (e.g., cooperative learning, interactive lectures, demonstrations, guided inquiry, simulation, and role playing) so students assume more responsibility for their own learning.

##### **3.3—Discussion Techniques**

The teacher uses a variety of discussion techniques (e.g. Socratic seminar and substantive conversation) that deepen subject area knowledge, encourage critical thinking, and build dialogue that promotes collective understanding.

##### **3.4—Questioning Techniques**

The teacher asks high quality questions that: span the various knowledge types and cognitive dimensions, are adapted to the language and ability levels of students, use a purposeful sequence, stimulate a wide range of student participation, probe initial student responses, and make use of appropriate wait time.

##### **3.5—Lesson Presentation and Adjustments During Instruction**

The teacher monitors and adjusts the flow of lessons in response to student feedback for the purpose of improving student learning (e.g. altering a task or activity, clarifying directions, summarizing, providing graphic organizers)

### **3.6—Different Viewpoints, Theories, and Ways of Knowing**

The teacher represents and uses different viewpoints, theories, “ways of knowing,” and methods of inquiry in the teaching of subject matter concepts in order to promote the development of critical thinking, problem solving, and performance capabilities.

### **3.7—Praise and Encouragement**

The teacher uses a variety of nonverbal techniques (e.g., eye contact, facial expressions, and body language) and verbal techniques (e.g., affirmation, verbal acknowledgements) with students to praise and encourage them.

#### **Overview**

The focus of RWT 4 is on how you think about and engage in instruction. As in RWT 3, you will respond to a broader focus question. The question you will address in RWT 4 is: **What important lessons have you learned thus far about your own teaching as you think about such factors as the various instructional methods you use, the discussion techniques you employ, or how you present and make adjustments to your lesson?** As you think about your response to this question, begin by identifying and analyzing what you consider to be rich records of practice (RoP) and ask yourself what these records reveal about how you approach teaching. In other words, we want you to examine your teaching through the lens of your RoP. Your analysis is also guided by the benchmarks that comprise Standard 3.

#### **Questions to Think About When Using RoP**

When thinking about the evidence you will gather to document your teaching, here are some questions to think about.

- Do you have examples of you giving instructions to your students? How do you know your instruction is clear? When students do not understand what you are teaching, how do you use their feedback to identify alternative methods and strategies? (Benchmark 3.1)
- Do you have examples of your teaching that demonstrate a variety of instructional methods and strategies you use to take advantage of the different experiences and different learning modes of your students? How do you know they are working? (Benchmark 3.2)
- Do you have examples of classroom discussions? How do you know that discussion techniques you use work in your classroom work? How do you know whether the quality of your discussions is improving? (Benchmark 3.3)

- What kinds of questions do you ask in class? How do you know that you are asking high quality questions that span the various knowledge levels and cognitive dimensions? (Benchmark 3.4)
- Do you have examples of your teaching that demonstrate how you make adjustments to goals and objectives of a lesson based on student input? (Benchmark 3.5)
- Do you have examples of your teaching that demonstrate how you ensure that diverse perspectives are promoted in a way that fosters the development of critical thinking, problem solving, and performance capabilities? (Benchmark 3.6)

RWT 4 is organized around a variety of RoP. One possible way to approach the assignment is by discussing each of your records of practice separately. For example, each RoP might be a separate subheading. Make sure that each RoP captures multiple benchmarks and the discussion reveals a connection to the focus question. When you have completed your RWT, it must include multiple references to each benchmark. In addition, make sure your response goes beyond merely illustrating your understanding of the benchmarks; it must also be a critical reflection on what the RoP demonstrates about what you have learned about instruction and how you applied that knowledge to your practice.

Remember, when you are discussing your RoP, you must clearly label the benchmarks you are referencing so it is evident to your RWT reader which ones you are focusing on within a particular RoP. For example if you are describing a particular teaching method, it should be labeled (short title, 3.1) within the text; and as your discussion continues, you might mention discussion techniques you engaged in. This portion of your discussion would be labeled (short title, 3.3). Think of this citation as similar to the ones you use with APA format: the short title is like the author's name and the benchmark number like the date.

### **Guidelines**

Below are the guidelines that your reader will use to evaluate RWT 4. You should use the guidelines below as you work on the assignment to make sure that you have addressed each one.

- The RWT must answer the focus question.
- The RWT must include multiple examples of each of the six benchmarks that comprise Standard 3.
- The RWT must contain a minimum of four records of practice. You can include more if you think you need to respond more thoroughly to the focus question.
- The RWT must be more than an explanation of each RoP. It must also include your analysis of how each RoP has contributed to a deeper understanding of instruction and its connection to practice. In other words, what does the RoP reveal about your what you have learned about instruction and its connection to your practice?

- The RWT must include an introduction that clearly sets up for the reader what you discuss in the paper.
- The RWT must use a variety of RoP to support your reflections and analysis. If possible, you should include different kinds of RoP (e.g., directions to an assignment, classroom discussions, questions you ask students to respond to, and video clips of your teaching that demonstrate how you modified your instruction based on feedback, a before and after clip).
- The RWT must include references to articles or other resources you have used to inform your understanding of instruction; all references are to be in APA style.
- The RWT must be uploaded to BlueStream on time. You must use the following title when uploading to BlueStream: **RWT4\_unique name**. There are no exceptions.
- There is no length requirement; however, it is helpful think about a range of 6 to 10 pages.

### **Grading**

A reminder: there are a total of five RWTs, two were completed in the fall and three will be completed during the winter term. Each RWT is worth 10% of your EDUC 655 grade. The other 50% is accounted for by your e-Portfolio. EDUC 655 is the course that you will register for in Spring Term 2008.

Do not forget that your reader can require you to rewrite the RWT if it is not up to the standard that we expect. Before starting RWT 4 make sure you understand the comments from RWT 3. Talk to your reader if you need more guidance.

**Teaching Video Clip Assignment**

**EDUC 650**

**Monday, March 10, 2008**

1. Post one video clip of your teaching that illustrates a problem, issue, question, or success you would like feedback on.
2. Post it on BlueStream by Monday, March 10 by 4:00 PM in ED-SMAC.
3. Use the following label: IN2\_unique name.
4. In the description part of BlueStream identify what it is your video clip focuses on.
5. The video clip should be no more than 5 minutes.
6. You will share your video clip in a small group.

## APPENDIX G: DISCUSSION OF KATIE'S VIDEO (FULL TRANSCRIPT)

March 31, 2008

Participants:

Rachel  
Katie  
Larry  
Peter  
Emily  
Ruth  
Andy  
Amy

00:03:12

- 1 Katie: So to explain this, the context of this clip and what I'm looking for. Am I still stuck to ten words?
- 2 Andy: You're still stuck to the ten words.
- 3 Katie: Well, I'll explain context in about seven hundred and then I'll do what I'm looking for in ten. But so it's women's lit, it's women's lit and the first book we did was *The Hours* [Emily: I love that book] and the kids loved it. Most of them. A few of them hated it. Especially the not strong readers hated it. But, or the people who don't like rambling hated it. Just kidding, I actually really like it. But when we went to do *Their Eyes Were Watching God*, we, or at least I felt that you had to bring up race. Because I don't think anyone taking a college level women's lit course would be able to discuss women's literature without discussing race and class and age and all those things. So we, and we do discuss all of those intersecting identities. And my mentor teacher and I decided to do the Peggy McIntosh Unpacking the White Knapsack, whatever it is. So I read off fifteen statements that had to do with privilege. And you stepped forward if it applied to you, you stayed back if it didn't. The kids generally separated out. It was pretty inten—like I think I knew it was going to be kind of intense, but it was more intense than I thought. Like not because anyone was saying anything, but it got so quiet, some of the kids definitely looked sad and yeah.
- 4 Amy: So what, I'm not familiar with the unpacking the white knapsack. What is the nature of the statements?
- 5 Katie: It's a series of statements. So for example it might be, If I am in a store and I, and I want to talk to the person in charge, there's a great likelihood it'll be a person of my race. [Amy: Mm-hm] Or, If I am late or dirty or whatever, it's unlikely that someone will identify it as having to do with my race. [Amy: Mm-hm] Like that. So, so it's, in general the way it breaks down, is that gen – not always, but generally, white students end up in a different place than most of the students of color. And so what I had them do when they came back was I had them journal about the experience. And then I had them give me, I didn't comment, I just, except to restate, but I just had them give me their feelings about the activity. And I typed it up. And

- they were very, I mean, it was across the, it was a whole range. Someone felt it was unfair, that it was highlighting race too much. Someone else thought that, so thought that it was black white. Another kid in the class who actually isn't, he's Arab American, he didn't feel like, he at that point said that I don't think it's about black and white because none of the statements specifically say anything related, I mean, he gave a few examples. He was like, that's not. This is a lot of context. But anyway, so they gave me their feedback but one thing that I noticed, and we were going to move onto discussion after this, but one thing that I noticed was that someone had said, Oh, well, people feel as if they can tell your race by looking at you, something something something. And that's not true for everyone. So, so what this clip is, begins with, is that after, after they had given me all their feedback, I just wanted to clarify for them the difference between race and ethnicity. Race being skin color, ethnicity being culture and sometimes skin color. I didn't consider that contentious. Anyway, I guess, I guess, I guess in this clip, what are we looking for? Ten words. How do I do at creating a safe environment? How's that?
- 6 Amy: How do I do at creating a safe environment?
- 7 Katie: Or how successfully do I create a safe environment? From what you see of the back of the classroom. But in
- 8 Peter: What is that? Is that a lamp?
- 9 Katie: Yeah.
- 10 Peter: It's kind of artistic. [Emily: It is] I like it.
- 11 Katie: What it is, is big at this point. Like normally I push it away and have them overhead, but just now it's, it's like half the screen. Sorry about that. So we can start it.
- 12 Amy: Everybody clear on the frame? Okay.
- 13 Rachel: Can you push play?
- 14 Amy: Can you reach it? I can't see enough to
- 15 Ruth: Oh, sorry.  
[Video adjustment: 00:08:01-00:08:58]  
[Video viewing: 00:08:58-00:12:48]
- 16 Katie: Do you feel like you've seen enough?
- 17 Amy: Do you feel like we've seen enough?
- 18 Katie: It's hard for me to judge because I know what's coming.
- 19 Amy: I mean, is something coming that's important to the questions?
- 20 Katie: I don't, I don't think so.
- 21 Amy: Okay then, let's stop it.
- 22 Amy: So I think I want to revisit the frame that you set for us. Right? What were we looking at here? Can you restate for us?
- 23 Katie: Do I create a safe environment. Though I'm going to note that this is not, or how do I do at creating a safe environment, this is not, this was not the discussion component of the class. Just so you're aware of like, I hadn't set this up as like let's, they were going to discuss and they had already had some chances to discuss but this, the particular segment was not. So in explaining, do I create, or seem to create based on student response and things like that, a safe environment?
- 24 Amy: So what are people noticing, given that frame for viewing?



- 25 Rachel: I know you just kind of answered this, but could you tell us like, because I know you write very detailed lesson plans, what was the objective in this discussion? What was, what should the students have taken away from the discussion? What did you want them to probe or discover?
- 26 Katie: The discussion or from this segment right here?
- 27 Rachel: What we just saw. Like what was, what was
- 28 Katie: Well, my intention in saying it was honestly like in my head, like this wasn't part of my lesson plan, to say, Okay, race is this, ethnicity is this. Like in this, that wasn't the goal of this. It was that, it was an observation that I had made in what they were talking about, that they didn't, they don't realize or know yet that there's a difference between those two concepts. [Rachel: Okay] And, and so I was just, I, what I was just saying was, in my head, I was like, Okay, let me just explain. Race is color. Ethnicity is culture. In my head, this is. And that, and that race is not genetic. That was, that was literally all, in my head I was going to say that and we were going to move straight into discussion. [Rachel: Okay. I see] Only because in my head, for me that's already a scientific fact. [Rachel: Mm-hm] Right, like for me, that's not something that
- 29 Rachel: So, so this was almost like a tangent. This discussion came [Katie: This is a tangent] So it's in your
- 30 Katie: This is, this is where we ended up. So maybe part of it is, is maybe that I should've just curtailed it and not let it become discussion.
- 31 Peter: With regard to safe environment, I don't think we're really addressing physical safety here or anything crazy going on. I think more sort of emotion safe, you know, you feel safe in an academic environment with your comments. And just very objectively, there were at least two students who seemed to have, I don't think they were necessarily contradicting, but they were at the very least clarifying some, some ideas that they had that were not really with what you were saying. So if the two of them felt comfortable enough to bring that up to you, I think that's, that's a good sign. You know, and always, I think whenever we have, we're knowledgeable about something, and I think you did this, you know, the, the, to sort of hold onto it and let them like finish, you know, and make sure they're fully express their idea because we're always, we always have that extra layer of knowledge that we want to share. But I think, I think you did like pause and let them sort of express instead of you know jumping in or something like that. So.
- 32 Amy: So Peter, where did you see that? Where was one of those moments where you felt like a student was kind of pushing back just a little or asking for clarification?
- 33 Peter: Oh I, in the sense of, not necessarily really pushing back, but just the one girl, I mean, I just remember the one girl starting her sentence by saying, you know, I don't, I'm not trying to [Amy: Attack you, or whatever, mm-hm] But the fact that she would say something that, you know, like that shows that she feels, she feels comfortable, you know. And so her point that she was, so one of them was questioning about the bone structure difference. She was really, wanted to dig into it and say, Okay, are we sure, you know? So I think that's cool to have an environment like that. Because a lot of times you have that question, they say, Are you sure about that? But they'll just hold it in, it's like, Well, I don't want to question what the teacher's saying. So that's what I think.

- 34 Amy: Mm-hm.
- 35 Rachel: Can I ask about the, I mean it's hard to even see, but what kind of races are represented in the classroom? I mean you said there was someone who's Arab American
- 36 Katie: I have about six black kids, one Arab American kid, and a few kids who are mixed, Mexican and, at least they have said that they're Mexican and something else. But in terms of who looks ethnic, probably about five. One of the girls who spoke, Sophie, is black, but she looks white.
- 37 Rachel: Okay. I was going to say, that name came up a lot.
- 38 Katie: Sophie?
- 39 Rachel: Yeah, Sophie.
- 40 Katie: Well, there's two. [Rachel: Oh] There's Sophie and Sophia. They're, yeah. And they constantly sit near one another and then I, Sophie was the girl who said, she was talking about the, about disease shaping, shaping [Rachel: Genetics] genetics. And she's the girl who's, she's black, I mean she really does look white. You know if you meet her mom, then it's, her mom clearly is mixed. But she looks white and so for her, this has been, I mean she actually really likes the class. But I think part of it for her is just that she has more opportunities to share experiences that let people know that she's black. Because that's certainly not the way other black kids treat her, not the way the white kids treat her either. Sorry, that's, I digress, but.
- 41 Andy: Let me ask why you selected the frame as a safe culture, as opposed to something else. For example, this could have been about discussion, questioning techniques. Why did you choose safe culture to frame it?
- 42 Katie: Well, I mean, this clip, this is not discussion, so if I was going to do discussion it would be a bad, I mean, I'm talking like two thirds of the time so it. And in terms of questioning, I think I chose that frame because it's been an interesting, I wanted to choose something that's relevant to me right now. And it's just been an interesting experience teaching women's lit, and I'm, until we started teaching *Their Eyes Were Watching God* and we had to talk about race, I didn't, I mean, I'm always aware that I'm black when other people are white. But that for them, I think it suddenly became clear that I was black. That's something that I don't think they had registered when I was teaching *The Hours* and we were talking about women as a very broad category. And I do think some of them feel, if I'm bringing up race, that it's because I am black. Not necessarily because that's relevant to a course in women's lit. And I've had a few of them, you know I mean, one of the girls who spoke, the one who said the bone structure, she's very resistant to the idea that race is not genetic. You know, and she came in the next day and she sat down and she wanted to talk to me and we had a long conversation. She felt that because of this experience that the class was biased. She wanted to know why we were discussing race in a women's lit class. And then on the surveys that I got back, because I gave an opinion survey to the kids last week, they, and like some of them really do enjoy these kinds of activities. Some of them said, I feel like this is, this is, even though we really other than this day didn't really specifically sit down and go, you know, what is race and what privileges, because the book is not set in a black-white context. The book is set almost entirely in a black community. And so we haven't really done much since then with how different races experience et cetera et cetera. But they said, you know, I feel like I took women's lit

- and I don't understand why we're spending so much time on it. So it's just, it kept coming up even after this had passed. And speaking of Amelia, Amelia's comment on her survey was, I just don't think she knows how to admit that she's been wrong.
- 43 Ruth: About you?
- 44 Katie: Yes. And, and so for me, that raises the question of, you can't determine how everyone feels. But you can create a more or less safe environment.
- 45 Ruth: Yeah.
- 46 Andy: Interesting.
- 47 Emily: I think, I think it's interesting because coming into a class like that, like you have, you have a lot of knowledge to bring, like you have a lot of experiences to bring that they don't necessarily have. Like you're the teacher. You are more knowledgeable, you are more experienced. And you want them, like I feel like we all struggle with this, you want them to like, you want to expose them to these topics. And like you teach English so you, you've got all this freedom to bring in all these different things. And I think it can be hard because kids are more sensitive than we are. Like they're still young, so they have these sensitivities that like they just have [Peter: Like on an emotional level?] and we have to be sensitive to that. Yeah, and, but it's difficult because you don't want them to keep like going on in their naïveté. You know, they're in high school, they need to start getting their eyes opened. But so I think like I'm sensitive, I'm sympathetic with your concern about wanting to make this safe, but at the same time, you know, we've got to get this stuff out there and it's just difficult because in the high school classroom you are just dealing with topics or like issues or learning or intellectualism, you're dealing with kids. And they're all over the map [Katie: Yeah] and so, I mean, I think you're doing a good, I think you did a nice job. But I can also see how some kids might feel like, like might feel like, Oh she thinks she knows everything or she, she's going to be mad at me if I disagree or something. But that's not because you're doing anything wrong, it's just, you're speaking from experience. You know, you really are passionate about it. You want them to know, and yet you know, you're walking a fine line because you're going to step on somebody's toes if you're talking about something like this. It's going to happen, especially in high school.
- 48 Rachel: Peter, you wanted to say something.
- 49 Peter: You know, what I was going to say, I mean, and I'll admit I'm a physics person, so my bio anthro knowledge, let's say, is rather minimal. So for me, when I hear that, it's a very specific and a very concrete statement. Like, you said, there is no difference genetically. That's, I mean, that's a really firm statement. Even though you are not saying it in a way that's like intimidating, it's a very big statement. There is no. And it's something that in their heads could have been building up for a very long time. So maybe what you do, like you know many times people, like when you're teaching, whatever subject you're teaching. They have this preconceived notion, like maybe it's physics. They think that heavy things fall faster, whatever. You kind of set up these, these hypothetical scenarios, or like you give, you almost can play devil's advocate to let them come to the conclusion to themselves. I know that you're not teaching a bio or anthro class but you know, I think when certain personalities, like with me, when I heard that I, that caught my attention.
- 50 Rachel: Why?

- 51 Peter: Because I know the idea of like race is a social constructed concept. I got that from the museum and stuff. But what are the questions that go through my head. Well, you know, if you have populations that are developing in different parts of the world in different conditions, aren't there going to be manifestations of that in their physiology, or in their, or I don't know what the word is, but in their structure. And so that's going through my head as a, you know, university student. So one way I think to go with the stuff is, is to sort of, depending on how much time you have, to sort of take them through that process of, okay, here's what people, here's what some people thought. Or here's how this debate, when it first started, here were some of the different competing philosophies. And then here's kind of some of the research that led us to this way, you know. So.
- 52 Ruth: I think that makes, it's kind of, it's hard though. Because that's not the point, you know? This was supposed to be like a clarification until it started to [Peter: Oh, yeah]
- 53 Rachel: What I wanted to say about this, and this is where I think you probably, the tangent even occurred in the first place, which even makes you pose a question, How am I doing at creating a safe environment, is race, because it pertains to all of us is something that even your students feel like they have some sort of expertise. [Several: Mm-hm] Whereas like if Peter got up and yeah, some kids are going to say that heavy things fall faster, but ultimately physics professor's going to like rattle off some equation and the kids are going to be like, Okay. [Peter: Right, right] You know, like there'll just be silence whereas you can't silence kids with a statement about race because they feel like they have ownership over the same topic. Which I think why what Peter said is probably right. Because it probably felt to them like a blanket statement [Ruth: Mm-hm] and to somebody like Amelia a statement that they'd never heard and all of a sudden they have this teacher who's supposed to be teaching about literature and she says something blah blah about race, right? And I think they probably were all taken for a loop. And I don't think that, I think that the intention in the discussion and the intention was right and I think they just weren't ready to hear it. And quite frankly, Ann Arbor is a diverse community but it is a typical American community. We have a lot of people who have never been exposed to that race dialogue before, even at XXXX High School. And they just weren't ready for it. I think you prefaced this and said it right, I mean, you are just so much further along in this. I mean, this is what you've been doing for a number of years now, and at the university and beyond the university level. And some of them are just hearing it for the first time. And they have very preconceived notions, so you know, western civilizations and whatever else they cited. So, so I think in terms of kind of in a pinch creating a safe environment, you did, because people, as Peter said, people did feel free to speak up and challenge what you said. [Ruth: Mm-hm, mm-hm] I just wonder what the rest of those felt that didn't say anything, you know what I mean, like? [Ruth: Mm-hm, mm-hm] And that's not something that you could've magically created because you didn't intend to have this discussion. You know what I mean? It's not like you could've set it up so that all the kids in the class knew that they could say something because you had no idea it was going there. You know? [Katie: Yeah.] That's, I think, for as strangely as this thing occurred, you did pretty well. [Ruth:

- Mm-hm] You know what I mean? And just the fact that like three or four kids said anything to you is pretty good.
- 54 Amy: I just wanted to jump in here and think about, what is the role of the examples that you offered? Kind of supporting evidence or whatever in the discussion. Because I was interested that at the beginning you said, Maybe I should've just curtailed it. Maybe I should've just said, Race is this, ethnicity is this and move on. Right? Because it seemed, as I was kind of tracking the conversation, that it's because you were offering evidence in the form of examples that that's what they were picking up on. That's what they were working on. [Peter: Mm-hm] Right? And so it was a clarification, but you were also being persuasive. Right? [Katie: Mm-hm] And so you say, It's not a blood factor. Somebody says, first example, Don't they have different bone structures in different, in different races? And you say, Actually, they don't. And then you give the example of sickle cell anemia. And somebody picks that up. Right? So it's these examples that are kind of moving the conversation forward. So I'd just be interested to hear a little bit about the, the, sort of the function of offering that kind of evidence in this case. What you thought about that.
- 55 Katie: In the moment or now?
- 56 Amy: Mm-hm. In the moment or now, either one.
- 57 Katie: I was just, in my mind at the time, all I was trying to do was clarify the statement that I had made. [Amy: Mm-hm] Which was that race is not genetic and that it is color. Honestly, that's all that was going through my head then. And as, I mean, too, there was one point where I was listening, and I'm listening to this and you know, Peter is saying like, You gave them a chance to speak. And listening to me, I'm like, but I am speaking right after these people, you know, which is easier to gauge when you're listening to yourself than when you're in the moment. So not a lot of pause time. But something that I responded to that seemed like I was responding to someone over here but I was responding to someone over there, what did I say? Oh, I can bring in a scientist. [Amy: Yeah] Oh, but that was because someone nearer to me had expressed doubt more quietly because she was right near me. [Amy: Mm-hm] And but in my head I was like, Maybe I'm not the right person to introduce this topic to them. Like because I, I thought maybe I'll bring in Courtney or Kristen who are there who are both science majors who could maybe just, and they would trust that more. That said, like I have to say, part of it, as I was dealing with it all, part of what was going through my head is surprise. Because my mentor teacher brings up race every time she teaches this novel. [Amy / Ruth: Mm-hm] You know? I watched Emily Eller give, do the Peggy McIntosh exercise with her students. The same one, in fact, it was watching her do it, I thought, Oh, this would be great for my classroom. Watching her, her kids didn't react at all like that. [Amy: Mm-hm] You know? And so, while I knew there would be some difference I think in the moment, part of what was going through my head was like something about the fact that I'm saying it is increasing their anxiety about talking about it. Or their doubt about what I'm saying. Because I don't think that I'm the first teacher that they've ever had. Marian, Marian, another teacher at the school, teaches a class on minority history that a lot of these kids have taken, you know? So, so I was trying to, I was trying to give good examples, I was trying to give good examples that would allow them to trust or at least they could trust the information more, even if they doubted the source. [Amy:

- Mm-hm, mm-hm] Does that make sense? That like maybe they feel that I'm motivated to bring it up for specific reasons, but that there really is scientific exam – there are scientific examples to support what I'm saying.
- 58 Larry: I have a question. Was there any follow up after this? Like was there any like
- 59 Katie: This goes on for twenty minutes.
- 60 Larry: Okay.
- 61 Ruth: This discussion?
- 62 Katie: Yes.
- 63 Larry: Was there any like, because I know in my class, whenever we have any sort of like random heated discussion, [Katie: Mm-hm] I'll have them write about it afterwards. So that way kids that may not have said anything, that may have thought important things, like processed it on their own, will have a way to, to voice it. And that could possibly go into the creating a safe environment for the future. [Katie: Mm-hm] Where the next time you approach something that is a little bit more heated, a little bit more controversial, that people will be a little bit more at ease with it.
- 64 Katie: We do reflection journals everyday and for *Their Eyes Were Watching God*, the first few related to what was your first memory of experiencing race, or you know. So but no, they didn't, what, I can't even remember what happened exactly immediately after this. We did something. It might have been a journal. It might not have been. I can't remember. But yeah, no, I definitely think that's valid. [inaudible]
- 65 Ruth: I was, it was interesting because I could understand. Like I was watching the kids and some of them were, you know like you could almost see them. Like some of them hackles rising, but most of them just like, I really don't want to be talking about this right now. [Larry: Or say the wrong thing] Yeah, and I think it's, it was more just I was like, Wow, this is a good topic to bring up and a hard topic for these kids to talk about, you know? I could totally sympathize and just like provocative, it was provocative, your statement, for a lot of them, you know? And so then like just watching them deal with it, I was very impressed with your, especially knowing you, you get very passionate about things. I was impressed by the way that you were just like trying to keep it, you know, casual. And, and then after one of the girls, you started to get a little bit more excited, like I think it was probably the girl who said I don't want to make you angry, but you know. And you started like talking a little bit louder, a little faster. And I thought, like I understood exactly what was going on, but then my other thought was that they could interpret this as like getting aggressive and defensive. And so I was impressed with how well you did but also aware of the need in talking about this type of thing. And especially unfortunately because they do say, Oh well, she's black, so like the need to be really careful to honestly to keep, almost to try to keep emotion out of it, I guess, which sounds, I mean on a lot of topics it's good to get emotional. But I think when it's so closely connected to something to us, you know, you need to kind of keep our emotions out of it to create that safe space.
- 66 Amy: And actually, what's interesting about that is that your examples became more personal as the, I mean as the clip sort of went on. So then you said, I was really angry when I saw on CSI. Right? And so then that, and you said, My mom is white. Are you going to find a half black half white skeleton? Right, so it's becoming even more personal. [Ruth: Mm-hm] I mean, it was, I mean, at least one could interpret that there was a little bit more emotion on your part.

- 67 Emily: I was thinking too, it just kind of came to my mind like, it might be something that like, like I know Larry was talking about follow up, which would be good. But I was thinking, What if you did this in a more like, I don't know how small group contexts work in your classroom. Like I know that works for some people and not for other people. [Katie: For?] I'm just thinking, if you wanted to have [Katie: Oh, for debriefing] like more of a discussion about this, or to follow, or even next time you bring up something a little bit more, like you know, a little bit more of a struggle to talk about. I was just thinking, maybe these kids, I think what often happens in a high school classroom is that you get the few brave people that are willing to speak up but everyone else just, even if they do have something to say, it's just they either the first person that spoke said something that they totally disagree with and so they don't want to come to that like for fear of getting in a fight. So I'm just thinking, I know it's really hard to like monitor small group discussions in a high school context because you don't have enough instructors and whatnot. But I just wonder if that would be something you could scaffold. Even raising up like student leaders to like lead groups like that. Because I think you could really, you could do great things with that in that classroom.
- 68 Katie: And they do a lot of small group discussion and their discussions about their journal entries have started out as small group. No, I, I mean, yeah. These are all good suggestions. I've been trying to, I've been trying to figure out because now we have to teach House on Mango Street. [laughs] And that brings in a different element of race [Emily: Mm-hm] and gender. Though again, I'm black so it might be that thing, you know, that I'm not Latina so what I say is actually more acceptable than if I were Latina saying it.
- 69 Amy: I'm still a little bit stuck on this, this was a somewhat impromptu kind of event. [Katie: Mm-hm] And so I wonder about how functional it was for like your, I mean, it's functional for life, right? Because kids need to start to conceptually understand race and ethnicity and so on. But was it functional in terms of your teaching of the book? I mean, did you see resonance?
- 70 Katie: I mean, I get their essays on Thursday. I can tell you, but. [Amy: Mm-hm] I think what's difficult about that is that, part of, I mean, this ties back to what Emily was saying. It's hard to gauge because honestly, if, if you miss the, the context of Their Eyes Were Watching God, which is that it takes place almost entirely in a black community, which is itself a statement. You know, things like Janey is in love with a dark skinned black man. That is a statement. That's a big statement for the book. You know? Her life, her life is almost entirely removed from white people and then at the end, her fate is decided by a jury of white men. You know what I mean? Race is the subtext of the novel. Do you have to discuss that? I don't know, you know? I guess I would say that, I mean, I guess I would say that I think that, I think that you would be doing an injustice to the kids if you taught a women's lit course and never mentioned anything except gender. And at that, femininity and not masculinity. [Ruth: Mm-hm] But I don't, I don't know yet how you, how best to bring. I mean, this is my first time teaching a course like this, you know? It's my first time with, you know, honestly it's my first time teaching mostly white kids.
- 71 Rachel: You know what? And I don't know how to say this without it sounding like you should have done this. But I think [Peter: It's big to give some constructive

- criticism, isn't it?] Exactly, and I'm terrible. But you know what I think went wrong, or even how it even got to this point? [Katie: Mm-hm] Because I think the kids probably accept you as the teacher and accept you as the expert and you have all this. But I was typing and I was quoting what you were saying, especially at the beginning, and my fingers were flying and by the end they weren't. But you asked them, What is race? Right? [Katie: Mm-hm] And then you took a couple answers and then you kind of corrected that. And I think, I know this sounds stupid, but I think you shouldn't have asked that question. Because [Katie: Sophia actually gave the right, the correct answer for the question that I asked but] Yeah. I think that that, because Amy was saying, every time that you came up with something, the kids felt like they could answer you. And actually, your point was to just tell them that race is a social construction. [Katie: Mm-hm] And I think that introducing it as a question [Peter: Ohh] that asked for their feedback just, it opened a huge can of worms. And I'm not saying it's the wrong can of worms, but that's probably what got you off track. [Katie: Yeah] Is that they felt like their voice counted all the sudden.
- 72 [Loud talking all at once]
- 73 Rachel [talking over]: Honestly, to the extent, it didn't count. Because you were trying to present it. [Amy: You were being very persuasive, yeah, mm-hm] In this novel, you were trying to present it as a social construct that you need to examine to understand this novel. And all the sudden, they take it as a whole racism thing, you know? Like, you know, genetics and blah blah blah. I think, I know that sounds terrible because you could have never known. And it's so great to introduce things by getting students to talk about prior knowledge and say, Hey, what do you know about this? But yeah, I think that that just encouraged them to keep talking back to you, so that's probably why you felt weird about how how
- 74 Katie: Well, I didn't mind them, you know, responding. I didn't. But I think you're right about if you, if you pose something as a question, someone's much more likely to think that there's going to be variance [Rachel: Mm-hm, in the answer] in the answer.
- 75 Peter: Yeah. You know, it's how do you, how do you present the whole topic, you know? Because if you treat race as a kind of personal, what's a person's personal perspective on it, you know, that's probably not the way you want to present race. You're interested in more of an objective aspect, which is what you're trying to, which is what you wanted to convey to them. [Rachel: Yeah] So I think that's a good idea.
- 76 Rachel: Also because I think the students hadn't prepped an answer to that question, that's why they felt like, She asked us, and then she has a right answer. I mean, just like we say sometimes our professors do in this program. They fish for answers and then don't get the right, not you, Amy, but they don't get the right answer and then they tell us what they wanted in the first place. And it's like, why ask? It's like, we couldn't have known that answer. You know? And we didn't get to, I don't know. It just, it's kind of one of those, it's one of those practices that students don't really understand.
- 77 Amy: So that's really interesting because that's a, a real teaching tension, is like, when do you just tell? [Peter: Yes] Right? We always want to have them construct and ask the question and get the prior knowledge, but are there moments when you



- just tell? And might this have been a moment when you put it out there and then we're back in the book or whatever your next move was? That's a good point, I think.
- 78 Emily: But I think with this, you can't just say that to them and then just move on. [Amy: Mm-hm] Just because the fact that, even like Peter said, I was even like, to be honest, a little blown away by that statement even though I like see where you're coming from, blah blah blah. It's just like that is a big statement to make. So I think with something like that, it's like, you have to allow for discussion or at least some kind of debriefing because it's like otherwise, they, people just don't know, they're just going to be thinking about that the whole time. They can't just, you know, go back because it's like
- 79 Amy: But there's still the tell, right? And then maybe you need to talk about what the tell is, right? Yeah.
- 80 Emily: Sure, sure.
- 81 Katie: I definitely, second go-round, [laughter] would approach it differently. I think, I think my real problem was that to me, I wasn't saying anything shocking. [Peter: Right] I mean before, I wouldn't have predicted beforehand of all the things I could say in a class, I wouldn't have predicted that that would be more pro, more provocative than saying, you know, I think in my mind, if I had asked, How much does race matter in experience? I think I would have in my mind been like, You got to give, you know, space. So I just, I know, I know now. And but it's really, I mean even just things like saying it as a statement, having room for reflection on it, having room for discussion on it, and then I, yeah.
- 82 Rachel: You know, god, I'm not good at this today. But you know what I would've done, just thinking about what you're saying? It's room for discussion, but if you present race as a social construct and they've already read part of this book, let's say. Then have them find examples of your statement in the book. And then it just stays totally factual, [Ruth: Objective] totally like with the book. It's still meeting your objective of them understanding that it's a social construct and how it pertains to the book. Do you know what I'm saying?
- 83 Katie: This is the, this is the one objection I have to that. If you tell, this is an opinion, this is not fact, this is an opinion. If you tell a group of white anyone, who has not spent much time talking about race, that race is a social construct, that is a fact, go and find examples in a book written by an African American person, they, they are not necessarily going to value that as valid evidence. They're going to see it as the bias of the author towards that idea.
- 84 Emily: That, that's very true. I think it's very true.
- 85 Katie: Like, I mean I, I think it'd be very different if I was able to point to a scientific book and say, Go in and find examples of how human beings are similar in ways that race isn't, you know, race is not a genetic concept. You know, I mean, but I think if you're pointing to something that a human being has constructed, there's much more room to be like, that's not evidence. That's opinion. That's something that someone, she put the novel together specifically because she already believes the construct, not, not whatever. [Rachel: Yeah, yeah]
- 86 Peter: I hope that we're, we're giving, that we are talking about stuff that we're supposed to be talking about or whatever. Because I, this is like, I had another comment on almost the same thing, but I hope we're not taking us on a tangent by, by

- [Amy: Totally not, no] okay. One, one of the things, and again with physics, how controversial can a ball rolling down a hill really be, so I don't really have a lot of experience with this stuff. [Some laughter]
- 87 Katie: Try teaching evolution. See how it goes.
- 88 Peter: Yeah, for physics, there's not really, I mean the only thing that could, maybe like the Big Bang or something, but even then. Whatever. [Laughter] It's like, wow, bang. But not [inaudible]. But one thing that I liked, I had a professor at U of M who was kind of very, a bit of like, she would kind of mess with us and be like, Well, I'm the professor. I'm not going to tell you what I believe, but I will tell you what the, what the ideas are. In other words, you present it as sort of like from a third person. Now granted, there are some things, like when I talk about physics, I don't say, Well, the view of mass is that [some laughter] some people believe it's matter. You know like sometimes you just say stuff because it's at that level where let's not dance around it. However, sometimes when you're presenting something, and I don't know whether race falls under this category, but a way, we're on this topic of people's perception of things, and especially when you're presenting information that it might be hard for them to take. Sometimes do you take the approach of, This is today how most, how sociologists view race. Or you try to tease it apart because a lot of it is I think sometimes is there are maybe cultural, they're mixing up these ideas of race and ethnicity and they're just not, which you've hit on, okay. But I just think that, if you almost attack it from the sense of like language. Like, I'm not, I'm not, you know, attacking your identity or your beliefs. I'm just saying the word race, the way that people really are using it today, is this way. And as you can see, you know, and then maybe introduce what you were saying about how genetically, you know, people used to think it actually corresponded to like these real genetic differences blah blah blah. I don't know if I contributed anything new just now about this. Your favorite person was the one that I think [inaudible].
- 89 Andy: You opened up an interesting topic of discussion. That is sort of the analysis of language and we were just talking about this earlier with a teacher interview. That there are largely three different ways that you can analyze someone's discourse. There are millions of ways, but very simple ways to look at what is said, how it was said, and why it was said. So what does it represent, what does it identify the speaker with, and why does the speaker say it as an action. So if we look at some of the examples that you had brought up, and then going back to something Amy had mentioned about the actual examples, you know, the bone, or the finding fossils, that's what was said. How it was said, in a very matter of fact way. Why it was said, to, you know, position yourself as the teacher who has more knowledge than other peoples to shut down the discussion? That's one why. I mean, if we use these three things and apply it to the different discourse moves that you made there, maybe we can tease apart some of the conflict that we, that we're seeing in the video.
- 90 Katie: Well, one thing, but one thing that I would say to the idea of presenting something like race that isn't just a scientific concept but is tied to people's emotions is that, to me, it's actually dangerous to say, Some people think that race is not genetic. [Peter: Uh huh, uh huh] Because it's not some people. I mean, science does not support the idea that there are different races. [Peter: Right] Right? And so my concern is that if you present that as a maybe, [Peter: Yeah / Emily: Go ahead] well, I

- was just going to say, if you present, you know, the Big Bang theory as a maybe, few people are going to be threatened by it so they'll be willing to go along with your, yes, [Peter: Yeah] it's fact or whatever. If you present, like if I were to say, I just think that things, things that are, things that are touchier topics, if I were to say, Some people say [Peter: right] that women are equal to men. [Peter: Right. That's a statement too. Why are you being so, yeah] You know? I don't know, I, yeah, I just worry about that.
- 91 Peter: Am I going to cut you off if I just say something quick, Emily?
- 92 Emily: No.
- 93 Peter: It may, you know, this may, did you do a little, are you like one of those English slash like anthro bio people? Or are you mostly English and you have like, you have science through your interests and stuff like sort of on the side?
- 94 Katie: Through my own interests, I have an interest in evolution.
- 95 Peter: Okay. Okay. I don't know if this is something [Katie: Not science, but evolution] It's just science in general, I think you know across the sciences, we talk about it in a matter of fact way but many times it's, it's meant to be talked about in terms of evidence. Like for example, physics. The theories have, are as good as the evidence. And it's not like sort of a contradicting way. But I think the way science, science is an experimental discipline, you know what I mean? So you kind of talk about how things are in the context of, well, this is the theory or framework that they have and this is why. So like, for example, scientists, you can even put, now you don't have to say, Some people believe. You could say, Scientists don't believe in evolution as a genetic, well, I see, maybe you want to broaden outside of scientists. Maybe that's what you're saying. But you could even just take the scientific community, like that's very credible and just say, Well, look, the scientists, the people who actually test the genetics, there's consensus among them that there's no difference, you know? And maybe that takes you out of the picture just enough. You can still keep that credibility, but it takes you out of the picture enough so that they, if they want to argue, they say, Well, what do the scientists, what are they doing? You know what I mean? Because then at that point, they're focusing their concerns in the right place. It's not, oh, my teacher, I'm going to question my teacher, you know what I'm saying?
- 96 Katie: Mm-hm. I mean, I don't mind saying scientists believe that. I wasn't saying like saying scientists, I just said, if I, I'm worried that if I said some people [Peter: Some people] may believe X, that that says [Peter: Yeah] some people have valid reasons for believing Y.
- 97 Peter: Right, right, right, right. Absolutely.
- 98 Rachel: Did you still want to say something?
- 99 Emily: Well, I was just going to say that I think, like, I was going to say this to Kate, but I'll say this to you. [facing Peter] I think like you have to be careful too though, when you say, when you make claims like scientists, there's a consensus among scientists that X, or there's a consensus among like, whatever. Because that's not even true. Because among scientists there's different schools of thought, and there's consensuses so you can't even say that to your class and have that even be a true statement. Do you know what I'm saying, Peter? [Peter: Oh yeah, scientists disagree all the time] Right, so that's why I'm thinking like

- 100Katie: But people, but here's my thing is, even if, even if, even if many scientists agree, for example, disagree on exactly how the universe expanded, I think you'd be hard pressed to find a scientist who supports the idea that race is genetic. I mean, I have never heard of a scientist in today's age being able to support the idea that race is genetic. Because someone who is, someone who is black in American society may not be black in Brazil. [Peter: Mm-hm] They may have a completely different racial category. I mean, race is arbitrary. Someone who is a certain, I mean, if you compare my skin color, like I remember being at a summer camp and picking up a little boy who was, you know, Korean American and I was like, Oh my god, we have the same skin color. Which didn't depress him, it depressed me because I didn't have enough sun. [laughs] But like that's not, people don't, people don't actually look at my, it's not as if there's a specific tie between whatever color I am, or whatever color my parents are and, I mean, and almost anything really. I mean, like, my parents dictate who I turn, you know, genetically can dictate who I turn out to be. But the fact that I'm considered black here and not somewhere else, and in Belize, you know, people called me clear. Which like, there's a lot more black people there, so I'm clear, someone else is red, yellow. [Peter: What word did they use?] Hmm?
- 101Peter: Did they call you batada or something?
- 102Katie: No.
- 103Peter: Oh wait, what language [Katie: It's an English speaking language, I mean country] do they speak there? Never mind.
- 104Katie: But like, I'm clear, I'm clear. Someone who's black is probably garafuna, you know, who's like really dark. But my dad is really dark, you know? But I guess that's what I'm saying is like, race which is the color of our skin is supported by science as being, because you should be able to make a prediction. If it's genetic, you should be able to predict black people will have X traits. White people will have X traits. And if you can't make a solid prediction, it's not scientific.
- 105Ruth: Can I say two things? The first is that it could, I think it could be helpful in dealing with topics that people find difficult, to make as many connections to their vocabulary as possible. So saying something like, Well, think about it, guys, the human race. What do we mean by that? And they'll be like, Oh, I've heard the human race. You know, and like try to make connections that way. I mean, I know this isn't science, this is dealing on the level of perceptions. [Katie: Yep] But then the other thing, and honestly, I don't know that much about this, but it seems like you're making a distinction between race and genetics and like culture and genetics. And maybe that's not true, but it seems to me, not that you're a different race or like whatever, but there are cultural genetic things that seem to go together, like some people or cultures tend to be shorter. And you were saying that's because of malnutrition but I, I would understand that there are some genetic differences. Like maybe you have a broader nose or maybe you have a steeper jaw or whatever and that [Peter: Features that are] features, right. Which doesn't mean you're a different species or a different race but I think if they, if you could acknowledge that yeah, there are differences. And what you're attributing to race actually belongs here. Like if you can find a place for their understandings then they're more likely to understand and accept what you're saying.

- 106Katie: And later I did, I did identify a better word, which is regional. [Ruth / Peter: Mm-hm] Like you can tell the region that someone is from by genetics. [Several: Mm-hm. Yeah] Right?
- 107Ruth: I think you get them to the point where like, yeah, there's one human race. But different people have different characteristics in different places.
- 108Andy: I think what was confusing was that you were saying there was almost no genetic differences. And you look around and you go, [Rachel: That's not true] there's tons of differences. There's a difference between what you were meaning by race and what the common sort of understanding of what race is. Now race as a category versus race as the actual genetic make up are two separate things. The category is a construction, but the genetics, genetics. You have different color skin than I do for not socially constructed reasons but for genetic reasons.
- 109Katie: But how we treat that, or what it predicts [Andy: Yeah] is different. [Rachel: Right but what]
- 110Andy: But that's a more subtle way, and you keep teasing this apart but with your initial statement that race is, you know, a social construction. [Rachel: Right, a social construction] There's all these other little nuances that are going on and that is
- 111Rachel: I think, I think Tracy caught your drift and she tried to, you know, jump in and explain to the kids. And they, it seemed like they sort of understood, you know? And because she said something like, Culture can indicate where like a skull comes from because it is geographically located.
- 112Ruth: But even that, she contradicted herself. She said, so you can, like I don't have my finger on it right now, but she basically said you can tell, sure, race doesn't exist and it's socially constructed but you can tell what someone's race is by their genetics. Like she contradicted herself within her own statement. [Emily: So it's terminology?] Exactly, the terminology was very confusing. [Rachel: Lacking]
- 113Emily: Which could be confusing to the kids.
- 114Ruth: Right.
- 115Amy: So we're running out of time and [laughs] could you summarize what you're taking away from this conversation? We were all over the place. [Laughter] So I'll be interested to hear.
- 116Katie: Honestly, I think some things are just, if I were to do it again, knowing that I need, if I'm going to bring in race that I actually need to set aside time to talk about what race is. Not even how people feel about race, but what race is, what really culture and ethnicity are. [Peter: Just define the terms] And so that I can have, I can have materials in advance that support that, that are not just me saying, Here's an example that I can think of right now on the spot. So having that preparation, knowing that it might be a more controversial statement for some kids more than others. Not introducing it with a question if what I am saying is that it's a definition, a very specific definition that they need to know. You know, giving them, even if I'm saying it's a concrete definition, giving them time to write about it or explore it or whatever else it is.
- 117Amy: Amen. I think that's good. [Several: Yay! Yeah. Mm-hm] Thanks, Katie.
- 118Peter: Yeah, thanks. It was good.

01:05:29

## APPENDIX H: DISCUSSION OF RUTH'S VIDEO (FULL TRANSCRIPT)

February 18, 2008

Participants:

Adrienne

Bob

Colleen

Lynne

Ruth

Sheila

Andy

Amy

00:49:12

1 Amy: Ruth, are you next?

2 Ruth: Sure. The context of my lesson is American history at [school name] with 11<sup>th</sup> graders. And we're doing a lesson on the Ku Klux Klan as part of the 1920s. So the way the lesson worked, first we read an article by the Imperial wizard of the Klan, basically giving his justification for the Klan's beliefs. And I had read it, but I didn't realize how much the students were going to have problems with just the vocabulary. I read and I just, so anyways, I did a lot of, in the middle of it, a lot of explaining, like trying to help them to understand certain vocabulary words or allusions or trying to help them connect with what they'd learned before. And so I guess what I want to focus, you to focus on is just that any reaction. I did, I would stop the student, first of all, I have the students read, which I think you'll see a little bit of, but not much of. But I had them each read the paragraph. Because if I just had them sit down and read it on their own, it wouldn't have really worked well. So they read out loud and I called on different students to read a paragraph. And then, but I would sometimes like stop in the middle of a paragraph and say, Hold on. Does everyone know what such-and-such means, or whatever? Because I could tell if I waited until the end of the paragraph, they wouldn't, like they would have lost it. You know, and they would have not understood that so they would've stopped listening. But it does break up the reading. So just that, how you, what you do when it turns out that it's harder than you expected it would be for them, and how you clarify or if those are, if I'm using good explanations or if I'm trying to explain something and not doing a very good job. That kind of thing is what I'm interested in.

3 Colleen: What grade is this?

4 Ruth: 11<sup>th</sup>. It's a, it's a regular American history and it's just got a real mix of students. Like some students could be in AP and some students can hardly read, and it's just a real range of

5 Amy: So what we're going to watch is the reading, and you inserting explanations

6 Ruth: Right. Mostly, I think a little bit of reading, but mostly it'll be me explaining to them. And also I do explain an activity that will be done after and I, yeah, I don't

think I did a very good job of that. But comments on how to clarify explanations. So like if we're doing standards, it's like number 1 and number, anyway, giving directions and clarifying vocabulary. And it's a short clip.

[Video viewing 51:57 – 55:40]

- 7 Bob: I thought you gave good explanations.
- 8 Sheila: I know. That was a good analogy.
- 9 Colleen: Is that what you were worried about?
- 10 Ruth: Yeah, I don't know, I was just, if it was, did I give them enough time to respond, should I, it's always that question of how long do you wait. And it wasn't part of the lesson; I wasn't planning on doing that and so it was off the cuff.
- 11 Amy: I don't think you were asking for their response. Were you?
- 12 Ruth: I guess, well, that's a good question then. Should I be? Should I wait and just clarify? Or do you, like I guess the one with the natural selection, I knew they'd learned that and I wanted them to connect it.
- 13 Lynne: Mm-hm. And they did a good job with that.
- 14 Bob: Did they know who Rudyard Kipling was?
- 15 Ruth: No, but I didn't leave them much time. But you do, you look around and you can see like everyone's going like that [shakes head], you know, you pretty much can.
- 16 Lynne: Well, I think to bring it back to your original statement, which is you certainly couldn't have let them read a whole bunch and then gone back and explained five different things that were. I think it's much better to stop and, you know, stop, so the only thing is, and maybe you did it, is to say, As you guys read, please don't feel offended if I'm going to interrupt you.
- 17 Ruth: Right.
- 18 Lynne: Because I'm going to stop it at a point where I think it needs some explanation. But the students know that's what you're going to do, because you're the teacher. (laughs) So.
- 19 Colleen: Well they, have they done a guided reading like this before?
- 20 Ruth: Not, this was the first time I've done it with them.
- 21 Colleen: But your mentor's done it with them?
- 22 Ruth: You know, I don't, not that, not when I was there. But again, I was only there Tuesday Thursday, so
- 23 Colleen: Oh, yeah.
- 24 Adrienne: The clarification was great. Like I really, really liked it.
- 25 Colleen, Sheila: Yeah, yeah
- 26 Adrienne: They were like, Oh okay, mongrel versus purebred. Dog, okay. And just whenever you like incorporated prior knowledge, like that was a really good, you know, reference for them. You know, you already know this, we're going to talk about natural selection or whatever the concept was. That was good.
- 27 Amy: But to me it seemed like there were two things going on at the same time. You said at the beginning, I want you to highlight the things that are important.
- 28 Ruth: Mm-hm.
- 29 Amy: Right, so the first level is they're like, Okay, I'm going to read along with whoever's reading and I'm going to highlight things. But the second level is, Wait, wait, I'm clarifying things for you as you go through. Right, mongrel, process, and all that kind of stuff. So I guess I wonder, from a student perspective, whether they can

- do both of those things. Whether they can highlight the things that are important and they can pay attention to, you know, this clarification. What was your sense?
- 30 Ruth: I, I guess they don't, it didn't seem like they were having any co—like they were at the same time. It seemed more sequential, like while someone else is reading you highlight, wait, pause, pay attention to me while I explain this, and we go back to highlighting.
- 31 Amy: Mm-hm, mm-hm.
- 32 Ruth: I can't remember if I explained it differently the second, the fourth hour, this was third hour. But again, I didn't expect to have to clarify. I was just looking around and thinking, Oh my goodness, mongrel, they're all glazing over, they have no idea what we're talking about. So it was reacting to that. So maybe, I don't know, what do you guys think? Do you think students can do that, can be
- 33 Colleen: In 11<sup>th</sup> grade? They should be able to.
- 34 Bob: Well, not only that, but if I'm highlighting something and you take the time to explain it, I think, Okay, I must be getting it because I thought it was important and she's explaining it, so I wouldn't have a problem with that at all.
- 35 Amy: Hmm, I think at 32 I would. (laughs) So that's why I pointed it out.
- 36 Lynne: Well, and I'm not sure if this is off topic, but another thought, because you were explaining mongrel. So you said, Well, you know, in the case of a dog, you could open it up to the class and say, Does anyone know? What is a mongrel?
- 37 Ruth: Yeah.
- 38 Bob: Good.
- 39 Lynne: You know, you weren't planning on maybe explaining it. Or maybe if you said, It's a reference to Rudyard Kipling. It says a leopard can't change its spots.
- 40 Ruth: What do you think it means?
- 41 Lynne: What do you think that means? Right? So if you sort of open it up. So you stop for the clarification and you say what you want to clarify and you let the students try to clarify. I think that would be an opportunity if you wanted to take it that way.
- 42 Ruth: Mm-hm.
- 43 Lynne: And you might get the same group of one or two students who have a good vocabulary changing, but maybe not. I mean.
- 44 Ruth: Yeah, you know, actually, in general during the lessons I ask a lot of questions and they're great about it. They're usually really good about it, so that would be good. Yeah.
- 45 Andy: Yeah, it was the way in which you phrased the questions. The tone was that you were looking for an answer. It wasn't a rhetorical advice, you know, does anybody know Kipling? You kind of have this smile and you move into your explanation of what, what is the leopard? And then it was, you immediately answered your own question. There is this question between how do you phrase it as well as its function in the give and take. Because the three about the allusions, the mongrel, seemed like open questions, where if I was a student, I'd be like this and then like this all the sudden because you had filled in the answers to that.
- 46 Ruth: Okay.
- 47 Amy: And actually, I wonder if engaging students in that way would actually lead to a discussion of, I highlighted this because it was important. Like if that would help them with that original task, you know, to sort of take that on differently.



- 48 Ruth: Yeah, and that gets at, are you clarifying just so that they'll understand, or are you clarifying really important points? I mean, ideally you'd, I mean, I guess you'd want to do both, but I can see them disengaging because they don't understand something. So you want to clarify that, but it might not, I mean, the mongrel wasn't a key, I mean it's involved in a key idea, but that's not a key point of the reading. And so it's that balance of, yeah.
- 49 Bob: You said this was third hour?
- 50 Ruth: Yes.
- 51 Bob: So you taught it again fourth hour.
- 52 Ruth: Mm-hm.
- 53 Bob: So were you able to incorporate those tweaks and changes?
- 54 Ruth: Yes. To an extent. They're very different classes, you know, so. Third hour's much easier. And so it's good, but then you try to implement them in fourth hour and it doesn't always work because (murmuring, laughter). But no, I think I knew what to expect so I was more prepared for it.
- 55 Bob: I would have still wanted to know not only who Rudyard Kipling was, but what poem or story did he have the leopard who can't change his spots?
- 56 Ruth: Yeah.
- 57 Bob: And I would've got you way off task. Well, read that for us. Where is it in? Tell it to us.
- 58 Ruth: And I would've said, Why don't you find out and tell us about it tomorrow? (laughter)
- 59 Bob: And I would've said, Is that extra credit?
- 60 Amy: Nice deflection!
- 61 Lynne: Extra credit.
- 62 Bob: How many extra credit points can I get?
- 63 Colleen: None.
- 64 Bob: Well, then, no.
- 65 Colleen: Okay, well, then you must not really care.
- 66 Bob: No, continue.
- 67 Lynne: I care enough to get you (inaudible).
- 68 Amy: So it sounds like the group is in agreement that your explanations are very clear and when you're bringing in examples, I mean for me as a listener they were very helpful. So from a clarity perspective I think that, you know, we all seem to think you're right on. But in terms of what you want from the students and how you engage the students, and things like that
- 69 Ruth: Right.
- 70 Amy: I think we're also coming back to this like, How long do we really want this to take? [Ruth, Lynne: Right, right]
- 71 Colleen: And also, I mean, if you were to open it up, Who knows what mongrel means? For some kids, it's just going to drive them nuts because you're all the sudden getting off topic [Ruth: Yeah] and they need to stay focused on what they're reading. If you go off in all these different directions, I can see that being a disengaging factor for certain kids.
- 72 Ruth: I think that's a hard thing. In general, I agree, let's get the kids involved. But since these were interjections and even like the middle of a paragraph, if you go too

- far afield it's hard to come back. Okay, what did, what was the sentence before where we just departed?
- 73 Amy: And what's important? What am I highlighting?
- 74 Lynne: The other thing that occurs to me too, if you had a class that had some behavioral issues, then like Colleen's saying, if go a little off target, you're going to lose them to some separate conversation about their do at home or something, you know?
- 75 Colleen: Exactly.
- 76 Lynne: So you as their teacher have to decide what's the purpose and at what point do you, you know
- 77 Adrienne: If it's crucial to the understanding of the content or if it's something that you just kind of glaze over with an interjection to yourself.
- 78 Andy: Well, even if it's not crucial to the content, the skill of being an active reader, where you're trying to piece these things together, like I could've put the leopard thing together without knowing Kipling. I kind of go, well, leopard, something about leopard changing spots, I'll throw it out there. So it's just that kind of way that you engage a text. You don't need to know maybe the nuance of it, but you can get at some of these things. You can play with mongrel without knowing mongrelize in this very specific context of social Darwinism. So there, it is the act of reading that you want to get them into. So it is, to play the devil's advocate of you know, maybe engaging them in this way, you're working with these types of skills.
- 79 Ruth: That's very interesting, I don't know what your guys' experience has been but I would've said that last semester. But now, working with these kids, some of them, they don't know what a moral life is. Like when they're reading it. Like they're just, they are so abysmally ignorant, a lot of them. I just, I don't know if they can do that. I mean, they have to be taught to do that, and I guess, I mean, I did an exercise where I, with the highlighting where I, What did you highlight here? What did you highlight? So trying to teach them the skills. But I did come with the expectation that they should be able to do x, y and z and a lot, some of them just can't. And so how do you deal with the skills and the content and all that?
- 80 Lynne: And especially when you set the context, you said this is a very broad class. Right? You have broadness in the skill levels here.
- 81 Bob: Well, I don't assume prior knowledge because I've even had AP kids ask me questions that kind of like took me by surprise. Like, oh I would've thought AP kids would've understood that. Vocabulary especially, but some concepts. Friday, and this was not an AP class, but I had a kid ask me, What does this mean? And the word was moral. And so I thought, Okay.
- 82 Ruth: Yeah, I had a kid ask me about moral too.
- 83 Bob: Yeah. So I don't assume any prior knowledge and so when it comes to explaining things, I go over it very quickly, and I don't do it in a way to be kind of condescending, like, Wow, you should know this, but if you don't, this is what it means. But I want to make sure that I'm also getting to those who really want to know what does this mean or what is that concept? I had somebody ask me what a diplomat was, in an AP class, AP government class. Well, what is a diplomat? Well, if you don't know and you are legitimately asking me in all honesty, I'm going to

- answer the question honestly. I'm not going to make you feel like you don't know, you should know this but
- 84 Lynne: But don't you think also a student could be asking you because perhaps the idea they have of the word might be wrong? Like, I can see going to a teacher and saying, What do they mean by diplomat? Because maybe what I thought it was wasn't what you think. You know, clarification almost. But you think he was asking like the definition.
- 85 Bob: Yeah, he was. Because it wasn't during the middle of the class, he came up kind of after they were working on things on their own and said, Okay, I don't get this. What is a diplomat?
- 86 Amy: I'm so sorry, but we need to, I at least want to watch Colleen's video so that we can carry the conversation, you know, with us.
- 87 Colleen: Okay. [setting up]
- 88 Amy: That was terrific, Ruth, thanks. I feel like with each person showing and the discussion, we're sort of growing ideas and that's really nice.

01:07:45

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