Title
Transforming supervision: using video elicitation to support preservice teacher-directed reflective conversations

Permalink
https://escholarship.org/uc/item/84c4s76z

Author
Sewall, Marcia DeVore

Publication Date
2007

Peer reviewed|Thesis/dissertation
Transforming Supervision:
Using Video Elicitation to Support
Preservice Teacher-Directed Reflective Conversations

A Dissertation submitted in partial satisfaction of the requirement for the degree
Doctor of Education
in
Teaching and Learning
by
Marcia DeVore Sewall

Committee in Charge:
Tom Humphries, Chair
Janet Chrispeels
Hugh Mehan
Randall Souviney

2007
The Dissertation of Marcia DeVore Sewall is approved, and it is acceptable in quality and form for publication on microfilm:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Chair

University of California, San Diego

2007
DEDICATION

For my parents,

Annette McIntosh Sewall

and Samuel Swanton Sewall.

You taught me a love of life and learning.
TABLE OF CONTENTS

Signature Page ........................................................................................................ iii
Dedication ................................................................................................................ iv
Table of Contents ....................................................................................................... v
List of Graphs ........................................................................................................... viii
List of Tables ............................................................................................................. ix
Acknowledgements ................................................................................................ x
Vita ........................................................................................................................ xi
Abstract ................................................................................................................... xiii

Chapter 1: Teacher Preparation in the “Age of Accountability” ................ 1
  Finding and Preparing Future “Highly Qualified” Teachers ................. 2
  The Challenge of Building a New Teacher Force ................................. 4
  Supervisor/Novice Teacher Communication ........................................ 5

Chapter 2: Review of the Literature in Teacher Preparation
  and Professional Development ................................................................. 8
    The Nature of Research in Teacher Preparation .............................. 10
    Research in Teacher Preparation: An Ongoing Debate ................ 13
    Summary of the Teacher Preparation Debate ................................. 17
    Preparing Teachers for Working in Diverse Urban Settings .......... 18
      Teacher Preparedness ................................................................. 18
      The Impact of Teacher Attitudes and Perceptions .................. 20
      The Impact of Teaching Contexts ............................................. 21
      The Impact of Teacher Expectations ........................................ 23
    Summary of the Teacher Preparedness Issue ............................... 24
    Preparing Teachers for Working with English Learners ............ 25
      Perceptions and Attitudes About English Learners .................. 25
      Pedagogical Skills for Supporting English Learners ............... 26
    Summary of the English Learner Issue ...................................... 27
    Reflective Practice and Pedagogical Development in Teacher Preparation 29
      Evaluating Teacher Development ........................................... 30
      Defining Reflective Practice ..................................................... 30
      Reflective Practice and the Supervisor-Novice Teacher
        Relationship ................................................................. 32
      Cautionary Notes ................................................................... 34
    Expert-Novice Relationships ......................................................... 35
Chapter 6: Video-Elicitation and Teaching Performance Standards ........ 97
Comparing CSTP-Based Commentary in OBD and VER Interactions...... 98
The Nature of CSTP-Based Commentary: Comparing OBD and VER Debriefings......................................................... 100
The Impact of the “Artifact” on CSTP-Based Commentary................. 105
Summary of the Impact of the Artifacts on CSTP-Based Commentary.......................................................... 108
Quantity and Quality of CSTP-Based Commentary in OBD and VER Debriefings.......................................................... 109

Chapter 7: Video-Elicited Reflection and Supervisor-Novice Teacher Interaction ................................................................. 111
Supervisor Guidance and Supervisor Elicitation............................. 111
The Impact of the “Artifact” on Supervisor-Novice Teacher Interactions... 114
Video-Elicitation and “Double Reflection”................................. 115
Connections Between Descriptive-Explanatory and Reflective Commentary.................................................... 116
Summary of the Impact of the Artifact on Supervisor-Novice Teacher Interaction................................................... 121

Chapter 8: Summary of Video Elicitation in Teacher Preparation ........ 127
Initial Anticipated Outcomes......................................................... 127
Purpose, Hypotheses and Actual Outcomes.................................. 128
Specific Hypotheses and Actual Outcomes.................................. 129
Comparison and Contrast of VER and OBD from the NT’s Perspective.. 134

Chapter 9: Considerations for Future Research ......................... 137
Areas for Future Research............................................................... 137

Chapter 10: Reflection and the Artistry of Good Coaching ............... 142

Appendices .................................................................................... 145
Initial Interview Questions............................................................. 146
California Standards for the Teaching Profession: Teacher Performance Expectations....................................................... 148
Quantitative Results for OBD And VER Interactions With Focus Novice Teachers................................................ 158

References........................................................................................ 163
LIST OF GRAPHS

Graph 1: Comparison of Reflective Comments by Supervisor and Novice Teachers in OBD and VER Debriefings…………………………………… 82

Graph 2: Comparison of Novice Teacher Total Reflective Commentary and Reflective Commentary After Observational Notes Introduced……………… 90

Graph 3: Comparison of Novice Teachers’ Total OBD Reflective Commentary, OBD Reflective Commentary After Notes Introduced and VER Reflective Commentary………………………………………………… 92

Graph 4: Comparison of CSTP-Based Comments by Supervisor and Novice Teachers in OBD and VER Debriefings…………………………………… 99

Graph 5: Comparison of Novice Teacher Total CSTP-Based Commentary and CSTP-Based Commentary After Observational Notes Introduced in OBD Interaction…………………………………………………………… 106

Graph 6: Comparison of Novice Teachers’ Total OBD CSTP-Based Commentary, OBD CSTP-Based Commentary After Notes Introduced, and VER CSTP-Based Commentary………………………………………………………… 107

Graph 7: Comparison of Supervisor Comments in OBD and VER Debriefings… 113
# LIST OF TABLES

**Table 1:** Summary of Study Participants .................................................. 55

**Table 2:** California Standards for the Teaching Profession and Teacher Performance Expectations .................................................. 61

**Table 3:** Novice Teacher Lesson Debriefing Schedule .......................... 65

**Table 4:** Data Collection Timeline ......................................................... 67

**Table 5:** A Priori and Emergent Codes ..................................................... 72

**Table 6:** Focus NT Characteristics as Initially Determined by Supervisor (Fall) ................................................................................. 76

**Table 7:** Comparison of Novice Teacher Reflective Comments in OBD vs VER Debriefings ................................................................. 84

**Table 8:** Sample OBD Reflective Commentary from Novice Teachers .... 86

**Table 9:** Sample VER Reflective Commentary from Novice Teachers .... 87

**Table 10:** Comparison of Novice Teacher Reflective Commentary in VER and OBD After Observational Notes are Introduced ................ 94

**Table 11:** Comparison of Novice Teacher CSTP-Based Comments In OBD and VER Debriefings ............................................................... 100

**Table 12:** Comparison of Novice Teacher CSTP-Based Commentary In VER and OBD After Observational Notes Introduced .................... 108

**Table 13:** Patterns of Ginny’s Descriptive-Explanatory and Reflective Commentary in VER Debriefing ......................................................... 118

**Table 14:** Patterns of Ginny’s Descriptive-Explanatory and Reflective Commentary in OBD Debriefing ...................................................... 120
ACKNOWLEDGEMENTS

A project of this nature and duration relies on the support of so many people, unfortunately too numerous to name in this short section, but I hope to recognize at least to some extent the contributions of those who helped me refine and complete this study as well as a few of those who supported me in so many other ways as I took this journey.

First and foremost, I want to express my deep appreciation for my study participants—eight talented, articulate, and generous preservice teachers with whom I have been so fortunate to work and get to know this year. The teaching profession will definitely benefit from their added presence as fully credentialed teachers and colleagues. Each of you is the very definition of “highly qualified.”

The next group I would like to acknowledge is my doctoral committee—Tom Humphries, Randy Souviney, Bud Mehan, and Janet Chrispeels—each of whom offered advice and insights that helped improve this study in ways I could not have done alone. I am honored to have had you as my mentors; this project was definitely the better for your contributions.

Other faculty that have been instrumental in offering guidance, support, and collegiality, both as part of their teaching responsibilities but equally so as “volunteer mentors,” are Jim Levin, Claire Ramsey, Alison Wishard Guerra, and, in particular, Paula Levin, who for the past 16 years has always been willing to interrupt whatever she is doing to lend me an ear and the perfect dose of her trademark wisdom. I consider myself fortunate to be working with such generous and gifted people, both as a student and as a colleague.

My cohort must also be recognized for their patient and unwavering support the past three years. To Michael, Kathy, Joanne, Barbara, and Susan, your encouragement, camaraderie, and comic relief have helped more than you know.

Lastly, I must give special thanks to my good friends and wonderful family for providing love, laughter, pats on the back, shoulder rubs, hugs, and Kleenex at just the right times. In particular, a very special thanks goes to my brothers Sandy and Mark, each of whom has been essential in helping me travel this path, particularly this past year. I couldn’t have made it here without you.
VITA

EDUCATION

2007 Doctor of Education, University of California, San Diego
1991 Master of Arts, University of California, San Diego
1976 Single Subject Teaching Credential, University of California, Irvine
1975 Bachelor of Arts, University of California, Irvine

TEACHING EXPERIENCE

2000-2007 Lecturer/Supervisor, Secondary English and ESL Education
              Teacher Education Program, University of California, San Diego
2000 Instructor, Reading Across Content Areas (CLAD-emphasis)
              National University, San Diego, CA
1997-2000 Language Arts/Reading Resource Teacher
              Oceanside Unified School District, Oceanside, CA
1993-97 District Mentor, Language Arts
              Oceanside Unified School District, Oceanside, CA
1989-97 Teacher, Language Arts, Reading, Social Science
              Lincoln Middle School, Oceanside Unified School District
              Oceanside, CA
1988-89 Teacher, Language Arts
              Frisbee Junior High School, Rialto Unified School District
              Rialto, CA

PROFESSIONAL EXPERIENCE

1990-2007 Coordinator/Facilitator/Presenter
              Inservices/workshops through San Diego County Office
              of Education, San Diego Area Writing Project, California
              Association of Teachers of English, California Association for
              Supervision and Curriculum Development, and districts/conferences
              throughout California
2002-present  Trainer/Scorer, Performance Assessment for California Teachers
Universities of California, California State Universities, and Stanford
University

2002  Reviewer, AB1059 Review Panel
California Commission on Teacher Credentialing
California Department of Education

1999-2001  Coordinator, California Professional Development Institute
San Diego Area Writing Project, University of California, San Diego

1999-2000  Lead Coordinator, CREATE/San Diego Area Writing Project/San
Diego Unified School District
Partnership School Program (site: San Diego High School)
San Diego Area Writing Project, University of California, San Diego

1999-2000  Coordinator, Secondary Professional Development
San Diego Area Writing Project, University of California, San Diego

1999-2000  Co-author/Editor, K-8 Standards-Based Writing Assessment
Writing Standards Assessment Document Committee
San Diego County Office of Education

1996-2000  Consultant, North County Program Quality Review Consortium
San Diego County

1995-1999  Co-coordinator, Summer Open Institute, Year-Round Open Institute,
and Year-Round Young Writer’s Camp
San Diego Area Writing Project, University of California, San Diego

1992  Fellow, San Diego Area Writing Project Invitational Institute
University of California, San Diego
Recent legislation at both state and federal levels has resulted in increased scrutiny and accountability in K-12 public education and, consequently, increased concern by the educational community for how to better prepare and retain effective teachers and administrators in America’s public schools, particularly in the most underserved settings.
This study focuses on the issue of how teacher education programs may effectively prepare preservice, or novice, teachers for this new climate of increased accountability by looking at the ways in which reflective practice approaches and educational technology, in particular video-elicited reflective debriefings, may enhance teacher preparation programs. Specifically, this study examines how the use of video-elicited reflection impacts the pedagogical and reflective communication of four focus novice teachers with their university supervisor, as well as the effectiveness of the supervisor when working with these novice teachers, compared to traditional observation-based debriefing approaches.

The results indicate that video-elicited reflective debriefings not only encourage more reflective commentary on the part of the novice teacher in both depth and breadth, but that commentary related to state standards for evaluating teaching performance is also broadened and deepened with the use of video elicitation compared to that which occurs in traditional observation-based debriefings. Moreover, the results indicate that supervisor-novice teacher interactions are positively impacted when video elicitation is utilized in addition to traditional observation-based approaches.
CHAPTER 1:

TEACHER PREPARATION IN THE “AGE OF ACCOUNTABILITY”

The issue of how to better prepare prospective teachers for public school teaching has been an ongoing focus of educational research for many decades. Increased attention has been given to this area of inquiry in the last decade, however, as public schools have been impacted by two new and challenging situations.

During this time, classrooms in public schools have become much more racially, ethnically, culturally and linguistically diverse than at any time in history, and nowhere is this more true than in California. At the same time, federal and state mandates, such as the No Child Left Behind act (NCLB) and California’s Proposition 227, have increased the challenge of educating all students, particularly those in highly diverse settings. With the onset of “high stakes” assessments, performance mandates, and government sanctions for those schools failing to achieve to a certain level, based on indicators referred to as Average Yearly Progress and Academic Performance Index, this era in K-12 education has frequently been referred to as the “Age of Accountability.” Yet, with the pressures on administrators and teachers striving to meet the mandated governmental requirements coupled with serving students from such a variety of backgrounds and experiences, it might be more appropriate to refer to this time as the “Age of Accountability and Diversity.” Both topics are of prime concern at present; both involve very high stakes.

To add to this challenging educational climate, NCLB now requires that states employ only “highly qualified” teachers, an abstractly-defined and controversial
mandate that affects low-performing, diverse, urban public schools most of all. It is these schools that struggle to keep the most effective, experienced teachers on staff and instead typically resort to hiring the least experienced, least prepared novice teachers, especially in terms of being prepared to teach in mainstream classrooms with high numbers of underachieving students and students acquiring English.

Subsequently, these mandates and the reverberations caused by them have affected the teacher education programs that work to prepare novice teachers for the “real” world of teaching. Since it is common for novice teachers to be assigned to classrooms in the most impacted settings with large numbers of underachieving students and English Learners, the need for effective, well-prepared teachers is paramount toward addressing the expanding “achievement gap” in American schools. And since most of these new teachers are racially, ethnically, culturally, and often linguistically different than their students and have typically attended schools in more advantaged settings, teacher education is further called upon to prepare these new teachers for working in very different contexts from the ones with which they are familiar.

Finding and Preparing Future “Highly Qualified” Teachers

Added to the issues of teacher placement and teacher/student mismatch in both background and experience is the matter of finding and preparing adequate numbers of teachers to fill present and anticipated vacancies. In a recent report focusing on the status of the teaching profession in California, for example, the Center for Teaching and Learning (Esch et al, 2005) outlines a scenario that is troublesome at best and bleak at worst. In addition to citing the lack of adequate financial investment in K-12
education and the ongoing achievement gaps among the state’s six million students, the report provides additional data that adds another level of concern for an already problematic situation. Among their data are a number of points significant for the purposes of this study.

One of those points concerns what defines a “highly qualified” teacher in the first place. Given the implementation of NCLB and its mandate for all schools to provide “highly qualified” teachers, California and other states have focused on redefining teacher preparedness and regulating credentials in new ways. For example, to comply with federal law while at the same time supplying enough teachers for the state’s public schools, California now defines “practicing teachers who have demonstrated knowledge of subject matter and who have either a credential or a plan for getting one as ‘highly qualified,’ regardless of their actual capacity to teach” (p. 3).

California has long resorted to hiring underprepared teachers, providing them with “emergency” credentials in order to fill the need for teachers in public schools. With the implementation of NCLB, however, this practice is no longer allowed. In the 2004-05 school year, 20,000 underprepared teachers were serving in the state’s public schools, that number made up primarily of emergency credentialed teachers, with a smaller percentage consisting of “intern” teachers who passed subject knowledge tests and were enrolled in teacher preparation programs. Although that total number of 20,000 was down significantly from 28,000 the previous year and over 42,000 four years earlier, it remains a high percentage of underprepared teachers working in public schools, most of whom are assigned to the most diverse, lowest socioeconomic sites with high teacher turnover.
Under NCLB, teachers who previously worked under emergency credentials will still be allowed to teach—and now be considered “highly qualified”—simply by passing a test and being enrolled in some sort of a credential program. In that way, California is able to meet federal mandates under NCLB while at the same time maintaining an adequate number of teachers to fill public school needs, albeit with little change from the system previously in place.

The Challenge of Building a New Teacher Force

Meeting the need for a force of trained, effective, and fully prepared teachers promises to be an ongoing challenge in California. Although the state produced a record number of credentialed teachers in the 2003-04 school year, this trend is not expected to continue and, without that level of growth, “chances are slim that production will be sufficient to meet California’s demand for teachers” (p. 4).

Additionally, California’s rapidly aging workforce includes 97,000 teachers over the age of 50, and more than half of those are over 55. The report forecasts a “huge teacher shortage in less than a decade” due to increased retirements, attrition of more junior teachers, and estimates of new teacher production, at the exact time when state and federal laws expect all students to be “proficient” as determined by state and federal assessments.

Clearly, having large numbers of underprepared and/or newly prepared teachers attempting to meet these requirements, particularly in light of the fact that most of these new teachers will be placed in low-performing schools, is cause for concern. The CFTL report summarizes the California situation with a call for action:
What we really need now is a meaningful public discussion about quality teaching and the urgent need to expand California’s ranks of excellent teachers. We need to talk about how we attract our best and brightest to teaching, how we prepare them to be most effective, and how we support them and keep them teaching as professionals (p. 2).

The questions now become how to accomplish these goals and, for the purposes of this study, once a program has attracted candidates, how can the second goal be accomplished within the short duration of a typical teacher preparation program? How can a program best prepare these new teachers to be “most effective” in one or, at most, two years? One path may point to the communication processes between supervisors and novice teachers and how those relationships may inform and influence the preparation of new teachers.

**Supervisor/Novice Teacher Communication**

An essential, yet sometimes underplayed, factor in an effective teacher preparation program\(^1\) involves the quality of encounters that occur between supervisors and novice teachers throughout the field experience component (Feiman-Nemser, 2001, 2001a; Westerman & Smith, 1993; Whipp, 2003). When working with their assigned novice teachers (NTs), supervisors need to ensure that any approaches they choose to employ are relevant, effective, and efficient for both parties. Relevance and effectiveness are obvious considerations; anything less endangers progress.

---

\(^1\)For the purposes of this study, the term “teacher preparation” refers to activities and approaches used within a teacher credentialing program to provide experiences (required and/or desired by the state and credentialing program) deemed appropriate for assisting students in completing their coursework and fieldwork, receiving their teaching credentials, and being successful as fully credentialled teachers in the public school system. In the case of this study, this refers to candidates participating in a single subject credential internship program focusing on secondary level (grades 7-12) teaching and who are referred to in this study as novice teachers.
towards the dual goal of creating a “quality” teacher and achieving “quality” teaching. Efficiency, on the other hand, is rarely addressed in discussions concerning this relationship, yet is an equally important consideration and can even be the one element that constrains or compromises an otherwise successful supervisor/NT experience.

Supervisors are frequently involved in other endeavors as part of their work in a credentialing program, especially in a program that employs those supervisors in instructional and/or administrative roles in addition to their supervisory tasks; hence, their “free time” for supervision is often less open than one might assume. Similarly, NTs are also working under a variety of pressures, handling the multiple demands of their fieldwork placements along with the demands of university coursework required as part of both the credentialing program and state mandates.

Efficiency in use of time is not the only issue, however. The costs of commuting to observe assigned NTs at various school sites over a large distance—at times 50 to 100 or more miles per day—involves dealing with traffic congestion, parking restrictions, high fuel costs, and unexpected scheduling changes, to name a few, that can impede and even prevent a supervisor from observing the NT as planned. Although frequent site visits are the desired norm, the reality is that supervisors may often feel that they are not meeting the needs of their assigned NTs to the level they feel is most effective, yet are at a loss as to how to provide more successful supervision without being less effective elsewhere in their work demands.

Therefore, since constraints on time, resources, and even energy often come into play in finding opportunities for meaningful discussions about pedagogy between the NT and the supervisor, post-lesson conversations at the school site can often be
brief, superficial, lacking reflective self-analysis, narrow in focus, interrupted, or even impossible. Although traditional on-site supervisor observations and debriefings of lessons taught by the NT are certainly key in providing experienced mentorship and focused progress for the NT, based upon my experiences as well as those of supervisor colleagues, they are increasingly insufficient on their own toward improving the depth and breadth of pedagogical growth that can potentially be achieved through the addition of alternative forms of supplemental supervisory support.

This is particularly true in the era of NCLB, with its mandate for “highly qualified” teachers putting extra pressure on NTs and their teacher preparation programs alike. Although demands have increased, the timeframe remains the same for meeting them, which necessitates “thinking outside the box” to find meaningful supplementary approaches to supervision that may help in the quest for preparing highly-qualified teachers, as defined not only by NCLB, but by the state and the teacher preparation program as well. The study described here will look at one promising supplemental approach that may help remedy this situation.
CHAPTER 2:
REVIEW OF THE LITERATURE IN
TEACHER PREPARATION AND PROFESSIONAL DEVELOPMENT

This chapter will review current research in the field of teacher preparation, particularly in the area of preparing teachers for working with the kinds of students and in the kinds of settings many of them will likely encounter early in their careers: students who are low achieving, attending schools in low socioeconomic urban settings, and who come from culturally, racially, and linguistically diverse backgrounds—that is, students that have been historically underserved in our educational system.

In my attempt to uncover research findings in these areas, I kept one guiding question in mind: What do we know from current educational studies about effective approaches for preparing novice teachers to work with all students, including the most underserved students?

In preparation for this review, I first researched studies under the broad topic of Teacher Preparation, then narrowed my search further into more specific categories as they emerged related to my guiding question. These categories, each of which is discussed under the broader topic of Teacher Preparation, are:

1. Teaching in Diverse Urban Settings
1. Teaching English Learners
1. Reflective Practice
1. Expert-Novice Relationships, and
1. Educational Technology
In the following sections, research findings will first be discussed regarding the effectiveness of teacher preparation programs in general, followed by a discussion of each of the above named areas in particular.

It may also be helpful to note what will not be addressed as part of this review. Even though a number of current studies are closely related to the topics mentioned above, studies concerning language acquisition theory, English as a Second Language (ESL), bilingual education, or teacher preparation aimed at preparing teachers for such specialized classroom assignments are not included. Instead, in terms of language diversity, the focus will be on pedagogical issues surrounding English Learner (EL) teaching and learning, particularly in respect to EL students mainstreamed into “regular” classrooms in which English is the only language used for instruction, since such challenging teaching assignments are becoming increasingly common, and in some cases typical, for novice teachers.

Similarly, although a brief overview of the field of Educational Technology and its role in teacher preparation is included to provide background and context, the bulk of the research cited in this section focuses primarily upon the use of videotape as a technological support for professional development.

Another point of clarification concerns the use of the term “novice teacher.” For the purposes of this discussion, the term “novice teacher” is used synonymously with “preservice teacher” since a variety of teacher preparation formats are included in the research. For example, in addition to research conducted in student-teaching settings, internship programs may also be included in the discussion, in which the new
teacher is the “instructor of record” in his or her own classroom rather than under the supervision of a cooperating teacher and, in that sense, may be comparable to a beginning credentialed teacher. Additionally, although some research cited in this category includes studies involving fully credentialed inservice teachers, the primary focus is on studies addressing the preparation and professional development of novice teachers.

The Nature of Research in Teacher Preparation

The enactment of California’s Proposition 227—a proposition that requires English Learners to typically enter mainstream English-only classrooms after just one year in English as a Second Language classrooms—and No Child Left Behind (NCLB)—a federal mandate requiring districts to hire only “highly qualified” teachers and to demonstrate increasingly higher yearly performance—have had a tremendous impact on the field of education in recent years. Add to that the tremendous impact of changing demographics in California and across the nation over the past decade, and it is not surprising to find that the field of teacher preparation has also been strongly impacted as a result of these new realities affecting the public school system. In an effort to adapt to this new educational environment, teacher preparation programs have had to try new approaches in the quest to prepare teachers for the realities and challenges of today’s classrooms. Researchers have responded with a flurry of studies focusing on teacher preparation issues as well as teacher effectiveness as a whole. For example, recent studies have focused on the effect of changing demographics on teacher preparation, how teacher preparation (or the lack of it) impacts student learning and school performance, how English Learners are being served (or
underserved) by the changes in the educational system, how the special needs of particular subgroups of students are being addressed in this new climate, and how technology is impacting teacher preparation, to name just a few.

Building on the work of John Dewey (1933) and Donald Schön (1983; 1987), a number of researchers have also looked into the areas of mentoring, guided practice, and reflective practice and the role each plays in teacher development and effectiveness with both preservice and inservice teachers. Several studies have concentrated on how reflective practice might be enhanced in teacher preparation by using particular tools or approaches. One notable example is in the area of research on educational technology as a tool for teacher reflection in individual and collaborative contexts as well as in teaching and learning as a whole, an area of inquiry that has greatly increased in just the past decade.

Overwhelmingly, the researchers conducting these studies are practitioners themselves, working in schools of education at universities across the country and around the world and serving in teacher education programs as professors and supervisors as well as researchers, often conducting studies with their own students enrolled in their credential programs. Throughout the history of educational research in teacher preparation and effectiveness, those studying in these areas have predominately come from social science backgrounds—anthropology, psychology, and sociology, in particular—and have conducted those studies mostly as outside observers. In more recent years, however, practitioner-researchers appear to have become as prevalent as social scientists in these areas. As a result, much of the research uncovered in the process of researching for this review has been lacking in
longitudinal results; that is, because teacher education courses and field experiences are short in duration, so too are the studies that focus on these areas. The changing student population of these programs from year to year as well as the individualized nature of programs overall, even within a university system, appears to inhibit longitudinal studies that might lead to more generalizable findings and that might have broader implications. Studies that have considered longitudinal data from teacher education programs are often faced with challenges in drawing broad conclusions from that data. For example, Brouwer and Korthagen (2005), in their longitudinal study of 24 graduate teacher education programs covering nearly five years, noted an attrition rate of 59% among graduates, which they admit “may have limited the scope of our findings” (p. 215). This, coupled with great variation in quality and content of teacher training programs as a whole (Wilson, Floden, & Ferrini-Mundy, 2001), means that long-term effects of teacher preparation programs are difficult not only to determine but also to compare with one another.

However, as the impact of both NCLB and Proposition 227 have begun to be felt, a body of research is now beginning to look into the longitudinal effects of these mandates on such issues as student learning, teacher preparedness, teacher retention and, most of all, on the impact these mandates have in respect to serving the needs of traditionally underserved students and English Learners. Not surprisingly, the researchers conducting these studies are often vocal opponents of the legislation who appear to be conducting their research based on political stances as well as educational platforms. These “education activists,” as they might be called, are evidently seeking to affect policy as well as to inform teacher preparation and the educational system.
And, like most other researchers in this field, they typically hail from university schools of education and often work in teacher education programs themselves.

After looking into the type of current research being conducted in the field of teacher preparation as well as the type of researchers doing this work, one comes away with the clear sense that most of these studies are not based merely on detached and/or disinterested observations made by passive, uninvolved observers. Rather than simply reporting on what was observed, these studies instead appear to be designed for a dual purpose; they attempt to reform as well as inform.

Regardless of the focus of the study, the practitioner-researcher aspect appears to play a significant role in teacher preparation research. The impression is that those working in this area of inquiry seem to truly care about the state of the public education system as well as the effectiveness of those working within it, and are conducting their studies with the purpose of improving both.

**Research in Teacher Preparation: An Ongoing Debate**

Before one can look at what the research says about the role of teacher preparation in providing more effective novice teachers, especially for working in diverse settings with underserved students, it is necessary to provide a brief overview of the current state of teacher preparation research in general. Again, the issues of accountability and diversity come into play, but in a manner not heretofore addressed.

Within this new climate, a debate is raging over whether or not teacher preparation is effective or even necessary in preparing “highly qualified teachers” as required by NCLB, and that debate is having an effect on current research in this area. It could even be said that all current research cited in this paper circles around this
issue, that is, the issue of what constitutes a “qualified teacher” and whether teacher preparation programs are effective and/or necessary toward that creating that outcome.

A report from the National Commission on Teaching and America’s Future (1996) emphasizes the importance of “recruiting, preparing, and supporting excellent teachers in all of America’s schools,” referring to it as “the single most important strategy for achieving America’s educational goals” (p.3). In a poll conducted by the Education Testing Service (2002), it was found that 88% of the public favor eliminating the practice of hiring unqualified teachers, and 75% oppose allowing people with bachelor’s degrees to become teachers without preparation in the field of education.

On the other hand, NCLB in its mandate to provide “highly qualified” teachers for all children, allows alternate routes for teacher credentialing, meaning that some individuals are placed as instructors in public school classrooms without having taken any teacher preparation courses or, at best, having received speedy “boot camp” training. Instead they need only demonstrate content knowledge, which some policymakers believe is sufficient for effective teaching. According to Berry (2005), “deregulation advocates call for the dismantling of teacher education, to be replaced by an array of alternative certification programs (currently available in 43 states).” Citing research from Feistritzer (2004), he adds, “Although there is much ambiguity about what counts as an alternative program, it has been estimated that more than 200,000 persons have been licensed to teach through non-university-based programs” (p. 273).
Proponents of this approach (Thomas B. Fordham Foundation, 1991a; Ballou & Podgursky, 1999), claiming that traditional teacher preparation programs involve too many “hoops and hurdles” that unnecessarily delay the availability of new teachers for hiring, are accused of having ulterior motives to promote privatization of education, using school reform strategies such as school choice and vouchers in addition to alternative certification to further their cause (Cochran-Smith, 2001).

Although such alternative certification is defended as providing a much-needed teaching force across the nation, particularly given the high numbers of credentialed teachers expected to retire within a decade (Esch et al., 2005), a more skeptical view holds that, given such a high-stakes and heavily mandated environment as is currently the case in the educational field, the most struggling sites cannot possibly compete with more advantaged and less challenged schools and districts—those with far greater internal and external resources—and are therefore destined to eventually be deemed failures, thus subject to government takeover or other means of “reparation" for "broken" schools. It is these schools that typically have to resort to hiring the least prepared, experienced, and/or qualified teachers, those that often are participants in alternative certification programs such as Teach for America, non-university based intern programs, or other fast-track programs that quickly land them in public school classrooms, too often with little preparation or support for working in such settings (Darling-Hammond, 2006, 2007). Critics point out that even when novice teachers have the necessary content knowledge, they too often lack what Shulman (1986) describes as “pedagogical content knowledge”, that is, the ability to effectively impart
that content knowledge in the classroom in such a way as to promote the highest levels of engagement and learning across all students.

Cochran-Smith (2002) describes the types of school settings to which these alternatively certified teachers are often assigned: schools that are lacking in basic resources, that are overcrowded, that are poorly maintained and/or unsanitary, and that are overwhelmingly populated by children of color. Because such positions are the least attractive and/or most challenging and therefore hardest to fill, such schools have as few as 13% of their teachers working with full teaching credentials, have to frequently resort to using substitute teachers, and deal with consistently unstaffed vacancies (p. 99). For these reasons, the issue of educational equity in relation to quality teaching is often central in the teacher preparation debate, with the present situation being seen by some critics as a “recipe for failure.” Novice teachers often find themselves overwhelmed when given such positions and, not surprisingly, either leave such assignments for less challenging and/or more familiar types of school settings or leave the teaching field altogether (Darling-Hammond, 2006, 2007).

Additionally, the more capable novice teachers, once they are discovered, often have more options for more “desirable” teaching assignments and even leadership positions in schools with more resources, more experienced staff, better reputations, more stability, more support, and therefore less stress, but which also then take them away from the schools most in need of effective teachers and stable teaching environments. The neediest schools thus become revolving doors for novice teachers gaining their first teaching experiences and then simply moving on.
Despite these realities, the credentialing debate continues, but not without reason. In commenting on this ongoing argument, Berry (2005) notes that “more than anything else, the heated debate centers on whether teachers need preparation in pedagogy and if so, whether they need it before they begin teaching” and concludes that “neither side can prove their case convincingly, because evidence and data on teacher effectiveness are sorely lacking…the evidence that does exist is slim and not well defined and used” (p. 272).

In a report focusing on indicators of teacher quality, Goldhaber and Anthony (2003) looked at a variety of studies of traditional teacher preparation as well as alternative certification programs. They found that “there is no strong consensus about the value of pedagogical preparation for teachers” (p. 2) and that also lacking is “a strong enough research base from which to draw definitive conclusions about the value of state regulation of the teacher labor market” (p. 3).

**Summary of the Teacher Preparation Debate**

It became clear in the course of researching the area of teacher preparation and its relation to teacher effectiveness that the debate over how to best prepare novice teachers for the current educational system is far from over. Until a pattern of solid evidence shows more clearly that teacher preparation programs either are or are not more effective than other means of preparing novice teachers, it is doubtful a consensus will be reached anytime soon. One important point seems apparent, however; teacher preparation programs, if they hope to continue, must demonstrate that they can prepare the most effective teachers for public school classrooms, *all* classrooms, and that those teachers will remain in the profession once they are
credentialed. Indeed, in California and other states, the idea of merit pay for teachers and dissolution of tenure is currently a “hot topic” of discussion and is even being put up for a public vote in some cases, which cannot help but put more pressure on teacher preparation programs to prove their value and even their necessity in providing the best prepared and most qualified teachers that can excel in what may soon become an even more competitive and high-stakes teaching climate. Reform, in its many guises, therefore appears to be the educational issue at present, and it is the belief in a need for reform that appears to drive much of the educational research on teacher preparation that will be discussed in the following sections.

Preparing Teachers for Working in Diverse Urban Settings

The discussion in the previous section centered on teacher preparation in general and the debate surrounding whether or not it is necessary in preparing qualified teachers for public classrooms. Since it has been noted that the least qualified, least prepared teachers are the ones most often assigned to the most highly impacted school settings—those with students from low socioeconomic backgrounds, coming from increasingly diverse cultural, racial, ethnic, and linguistic backgrounds—this section focuses on research that addresses teacher preparation for those particular settings.

Teacher Preparedness

According to Oakes (2003), “Improving the quality of teaching in the classroom has the greatest impact on students who are most educationally at risk, and in some instances, the effects of well-prepared teachers on student achievement are stronger than the influences of student background factors, such as poverty, language
background, and minority status” (p.4). On a list of seven leading indicators, “quality teachers” is listed as one of the “critical conditions” for learning and successful college preparation for students, indicators that Oakes describes as routinely enjoyed by most middle and upper-middle class students but which are often lacking for students in educationally disadvantaged communities. “Knowledgeable, experienced, and fully certified teachers provide instruction that engages students in work of high intellectual quality,” she states, “mak(ing) valued knowledge accessible to students from diverse backgrounds” (p. 4). Noting the lack of qualified teachers, high teacher turnover, and other problems associated with schools serving low-income minority children, Perkins-Gough (2002) reports, “Research shows that far from getting the best of everything, low-income and minority students in the United States get less than their more affluent peers do.” Haycock (2004) provides a similar summary:

The fact is, we have organized our education system in this country so that we take children who have less to begin with and then turn around and give them less in school, too. Indeed, we give these children less of all the things that both research and experience tell us make a difference” (p. 1).

Efforts at addressing the issue of quality teachers for diverse urban settings have done little to resolve the problem. Berry (2005) reports that “although there are pockets of exemplary, specialized teacher preparation programs that prepare candidates for the needs of diverse students, there has been little fundamental change across the nation’s 1,200 university-based teacher education programs.” Because of this, he states, “teacher educators must recognize that the political resistance to their programs is built on the perception that teacher educators are not responsive to the academic and developmental needs of our nation’s most at-risk students” (p. 274).
Perhaps exacerbating this problem, according to Singer (1996), is the issue of preservice teaching programs rarely placing their novice teachers (predominately White, middle-class, and female) in urban settings. Even California, with its large and growing English Learner population, requires only coursework for preparing credential candidates to work with EL students. Field placements are not required to be in settings with English Learners nor with struggling students in general, nor are they required to be in diverse urban settings, although many teacher preparation programs try to provide such placements voluntarily and purposely to better prepare their students for the types of settings they are likely to be assigned once they are credentialed. Yet, referring to research in multicultural education by Ladson-Billings (1994), Singer asserts that, “Even when teacher education programs claim to prepare preservice teachers to work in ethnically, racially, and culturally diverse settings, the programs tend to be descriptive rather than critical, presenting generalizations that reinforce rather than challenge existing stereotypes” (p. 1).

The task of preparing novice teachers for being effective with these students is compounded by an issue commonly cited in the research that makes teacher preparation even more challenging: the negative perceptions and attitudes of novice teachers for working with students whose backgrounds and experiences are different than their own.

The Impact of Teacher Attitudes and Perceptions

In an extensive review focusing on teacher preparation for historically underserved children, Sleeter (2001) first outlines data on the growing cultural gap between teachers and children in the schools. Citing statistics from the National
Center for Education Statistics, she notes that today’s teaching force increasingly does not fit the demographic or cultural profile of the public school student population, and that studies of this widening cultural gap between teachers and students have been “small and very piecemeal” and focus mainly on measuring attitudes of preservice students. After reviewing 119 works of research in the areas of recruitment and selection of preservice students, preparation in the preservice curriculum, and broader institutional reform, she summarizes her findings as follows:

Regardless of which epistemological lens one uses…some themes emerge consistently. There is a strong mismatch between who chooses to go into teacher education and who is in the public schools. A large proportion of White, middle-class preservice students bring attitudes, beliefs, experiences, and knowledge bases that do not equip them to teach well in culturally diverse and urban classrooms. The research literature shows the huge struggles of faculty in trying to equip this population conceptually and attitudinally…One could say that the struggles of preparing White, middle-class preservice students are more central to the literature than are the successes (p. 238).

In a final statement, Sleeter recommends that research on teacher education…be longitudinal, beginning with students entering teacher education and following them on into the classroom after they are hired. It is very difficult to determine how effective teacher education practices are without seeing graduates enter the teaching profession, particularly in schools that serve historically underserved communities. Very little of the research reviewed here has directly connected teacher education with classroom practice; this connection is essential (p. 242).

**The Impact of Teaching Contexts**

One interesting study addressing the preparedness of teachers and the differing contexts in which they teach may shed some light on teacher attitudes as they relate to student performance. Ben-Peretz, Mendelson, and Kron (2003) studied 60 teachers in
Israeli vocational senior high schools, half of whom taught high-achieving students and the other half teaching low-achieving students. Although they were primarily concerned with teachers’ self-perceptions as professionals and how that impacted the learning and achievement of their students, some interesting findings related to teacher attitudes resulted.

The teachers in the study were shown seven different pictures of varying occupations: shopkeeper, judge, animal keeper in a zoo, entertainer, conductor of an orchestra, puppeteer, and animal trainer. Each participant was asked to choose the drawing that reflected to the highest degree his or her self-image as a teacher and to explain this choice.

The findings were clearly divided. The majority of the teachers of the high-achieving group (53%) chose “conductor of an orchestra” as their first choice whereas the majority of the teachers of the low-achieving group (64%) chose “animal keeper in a zoo” as their first choice. When asked to explain their choices, the teachers of low-achievers made comments such as, “We are taking care of them more than teaching them”; “I don’t feel that I am teaching, they made me into a nursemaid. I am supposed to solve their social problems...Instead of teaching I serve as a baby-sitter” (p. 284). In explaining the choice of “conductor of an orchestra”, the teachers of the high-achievers offered comments such as, “When I enter the high academic-level class, I am confident that this is a gifted ‘orchestra’ that is capable of doing everything. I have only to provide them with the leading note and they carry on” (p. 284).
Equally interesting in this study was the finding that most teachers in the high-achieving classes had an academic education, whereas most teachers in the low-achieving classes lacked an academic degree. The authors conclude:

Though the relationship between teacher education level and the impact of teaching context needs further study, our study shows that low-achieving students tend to find themselves in a teaching-learning situation that focuses on the caring function of teaching… This finding is cause for worry. Students who need their teachers’ attention to promote their academic progress and achievement are denied this help. Their teachers ‘give up’ and confine themselves to ‘caring’ activities. Though teachers in low-level classes might lack the necessary knowledge and skills to deal with the special problems those classes present, they also seem to lack a disposition to act as teachers who are committed to, and responsible for, the cognitive growth of their students (p. 285).

The Impact of Teacher Expectations

Tying in with the findings of the study by Ben-Peretz et al., a study by Oakes, Mendoza, and Silver (2004) found that, “Students’ learning is strongly tied to the expectations of those around them and the quality of their opportunities to learn. Minority students, in particular, perform poorly when their teachers do not believe in their abilities” (p. 11). Katz (1999) adds, “Students are highly sensitive to cues that teachers and adults give them about their potential for either success or failure…two essential elements of a productive teacher-student relationship are high expectations mixed with caring…Caring without high expectations can turn dangerously into paternalism in which teachers feel sorry for ‘underprivileged’ youth but never challenge them academically” (p. 811). Citing work by Goodlad (1990) and Paine (1990), Taylor and Sobel (2001) note:

The increasingly evident discontinuity between student and teacher populations is exacerbated by indicators of preservice teachers’
beliefs that students’ diversity is a problem, not a resource, and their belief that children of color cannot learn…Clearly, the discontinuity between teachers and students supports an urgency for teacher education programs to prepare preservice teachers with an adequate knowledge about diversity, the ability to use this knowledge effectively in order to address the educational needs of all learners, and the willingness to do so (p. 488).

However, the authors also note, “Currently, there is little consensus in the teacher education literature regarding a recommended approach for providing teachers training and for raising their understanding about learners with diverse backgrounds and abilities” (p. 489). To further complicate the issue, they point out that “a disproportionate number of the students whose backgrounds differ from the dominant U.S. culture are enrolled in special education, remedial, and/or ‘at-risk’ programs” (p. 487), the last two types of which are commonly staffed by the least experienced, least prepared teachers.

**Summary of the Teacher Preparedness Issue**

The relation between the degree of teacher preparedness, the low expectations of inexperienced, unprepared teachers towards students from diverse backgrounds, and the common practice of placing these teachers in classrooms of diverse, low-achieving, at-risk students appears to compound the problem exponentially; that is, each component on its own is problematic enough, but becomes even more problematic when combined with the other two, as evidenced by the literature in these areas. Given these realities, perhaps it should come as no surprise that “diversity-related burnout” has also become a topic in the field of research in teacher education in recent years. (Freeman, Brookhart, & Loadman, 1999; Tatar & Horenczyk, 2003).
Preparing Teachers for Working with English Learners

Related to the literature concerning issues of teacher perceptions, attitudes, and skills for working in diverse urban classrooms, particular concerns are also raised in meeting the needs of English learners, especially in the aftermath of the implementation of Proposition 227 and similar mandates that “immerse” English learners in mainstream classrooms much earlier than had previously been the custom in most public schools, in most cases, after just one year of ESL instruction.

Perceptions and Attitudes About English Learners

Tied to the issue of negative perceptions and attitudes and the lack of pedagogical skills of novice teachers for working in diverse, urban classrooms, Samway and McKeon (1999) found that many novice teachers also believe that a lack of proficiency in English signifies a lack of cognitive ability. This perception is of particular concern, given the tremendous increase in the number of English Learners since the early 1990’s. Presently in California, one in every four students is identified as an “English Language Learner” while nearly 75% of all K-12 teachers self-identify as “White” (California Department of Education, 2004).

According to Major and Brock (2003), the expanding mismatch between the largely monolingual, White, middle class teaching force and the increasing sociolinguistic diversity of the public school population is unlikely to change in the future, and complicating this reality is the perception of prospective teachers that learning how to teach in these settings is “an appendage to their lesson plans” and that these learners “are to be ‘treated’ through remediation” (p. 19).

In a study of tensions between “marginalized” Latino immigrant youth and
their teachers, Katz (1999) discovered some underlying contributors that served to further strain the relationships between these teachers and their students: “While listening to students describe how they have personally experienced being victims of racial or ethnic discrimination at school, it is easy to respond by wagging our fingers at the teachers and labeling them as racists. But this response does not probe deeply enough into the structural conditions that promote and perpetuate racist attitudes” (p. 811).

Due to a number of inequities she found in the school under study, in physical as well as programmatic components, an environment that Katz describes as “extreme discrimination” was produced (p. 814), which served to negatively affect the experiences of the Latino immigrant students attending the school. Acknowledging that these findings “may appear to be an extreme example…it is far too typical a school in the United States. The structural factors of tracking, resegregation, English-only curriculum, and reliance upon standardized test scores along with high teacher turnover …together contributed to an environment that greatly limited the Latino students’ opportunities for success. They also discouraged the establishment of productive teacher-student relationships” (p. 821).

**Pedagogical Skills for Supporting English Learners**

In addition to the concerns of negative teacher attitudes and structural inequities in serving the needs of English Learners, the issue of providing novice teachers with sufficient pedagogical skills to support EL students is also of critical consideration (Gonzalez & Darling-Hammond, 1997). A few of the skills and approaches espoused by researchers for effective instruction of English Learners are:
1. Scaffolded instruction (Montgomery, Roberts, & Growe, 2003)
1. Differentiated instruction (Goodwin, 2002)
1. Integration of theoretical and practical knowledge (Costa, McPhail, Smith, and Brisk, 2005)
1. Integrated and thematic curriculum (Garcia, 1991)
1. Vocabulary development (Bielenberg & Wong Fillmore, 2005; Dong, 2005; Gray & Fleischman, 2005; Short & Échevarría, 2005)
1. Informal diagnosis and assessment approaches (Goodwin, 2002)
1. Higher-order thinking skills (Scarcella, 2002)
1. High levels of collaboration and interaction (Garcia, 1991; Sobul, 1995)
1. Several years of intensive, high-quality instruction to become fully fluent in speaking, reading, and writing English (American Educational Research Association, 2004)

Given the varying requirements by teacher preparation programs, many of which do not integrate or even include preparation in their preservice programs for teaching in diverse classrooms (Costa, McPhail, Smith & Brisk, 2005; Montgomery, Roberts, & Growe, 2003;), especially those that include mainstreamed English Learners, it is highly questionable whether English Learners are presently receiving the type of instruction that best suits their developmental needs when assigned these novice teachers. Add to this concern the ongoing controversy over early “structured English immersion” imposed by Proposition 227, with its proponents (Porter, 2000; Rossell, 2005) and detractors (Felton, 1999; Gandara, Maxwell-Jolly, & Garcia, 2000; Krashen, 2005; Revilla & Asato, 2002), seemingly at an impasse. Coupled with the considerable number of alternatively certified teachers having no training in English Learner theory or practice, this concern becomes even more critical.

Summary of the English Learner Issue

Goodwin (2002) provides an effective summary of the issues novice teachers
will face in today’s more inclusive classrooms:

Today, non-ESL teachers can no longer assume that second-language-learning programs will be readily available or provided by someone else…it will be necessary to expect that teachers have basic understandings of the tools, materials, and techniques appropriate for second-language learning (p. 168).

Especially in light of such mandates as Proposition 227, combined with budget constraints for public education, it is indeed common for novice teachers to find themselves assigned to classrooms comprised of mainstreamed English Learners and low-performing students, with no paraprofessionals to aid them or their students, and often at sites on the NCLB “watchlist” for schools at risk of receiving government sanctions. Teacher education must therefore find ways to prepare these new teachers for these unfamiliar and challenging realities. In this regard, Goodwin concludes that, “Teacher preparation programs must therefore engage new teachers in a process of self-reflection and analysis” to improve their perceptions and attitudes towards working with linguistically diverse students along with having the skills to be effective in doing so. Although a wealth of research has been done in the area of reflection and teacher preparation in general over recent decades, and the results have been promising that reflective practice does indeed assist in preparing more effective teachers, given the realities of novice teachers often being assigned to classrooms and schools much different than those they have experienced in their own schooling, the question now becomes: How can teacher preparation programs effectively incorporate reflective practice approaches in order to create better prepared novice teachers for working in diverse classrooms? In fact, what evidence exists to show that reflective practice might even make a difference in this regard?
Reflective Practice and Pedagogical Development in Teacher Preparation

Perhaps no name is more cited in the research on reflective practice than that of Donald Schön (1983; 1987). Building on the work of John Dewey, Schön furthered the notion of “learning by doing” by proposing “an epistemology of practice which places technical problem solving within a broader context of reflective inquiry” (p. 69). In Schön’s view, professional development has traditionally centered too heavily on scientific theories and the idea that solving problems is a straightforward matter. This approach fails to equip professionals, such as novice teachers, with the skills they need to deal with the unexpected and challenging situations that will doubtlessly be encountered in the “real” world, what Schön describes as the “swampy lowlands” (p. 3). In his view, “reflection-in-action”, that is, the ability to reflect before taking action in cases where straightforward answers and scientific theories do not apply, and “reflection-on-action”, that is, critically reflecting upon the experience after the fact, should therefore be developed and enhanced throughout the professional career. With “freedom to learn by doing in a setting relatively low in risk, with access to coaches who…help (novices)...to see on their own behalf and in their own way what they need most to see,” Schön asserts that students will be better able to learn and practice the “art” of teaching. “We ought, then, to study the experience of learning by doing and the artistry of good coaching” (p. 17).

Reflective practice has been the focus of research for many years in a variety of settings, many involving teachers as learners (e.g.; Hatton & Smith, 1995; Kroll & Black, 1993; Jay & Johnson, 2002; Osterman, 1990; Zeichner & Liston, 1987).
According to this research, when reflection on one’s actions is lacking, progress towards expertise or mastery is compromised.

**Evaluating Teacher Development**

As evaluative tools for determining such progress, Fuller’s Stages of Concern Questionnaire (SocQ), based on her theory of developmental stages of teacher expertise, has been in use in either its original or adapted forms for nearly four decades, as has the Concerns-Based Adoption Model, or CBAM, (Hall, Wallace & Dossett, 1973). Both were developed to determine progress and growth of learners, in particular teachers, both novice and experienced. Each of these approaches has at its core a similar focus; that is, 1) how a novice progresses through the various stages of learning and concern, and 2) how those in the position of guiding them along that path can assist in that progress.

The idea that this progression can be accelerated, broadened, deepened, or even shortened and ultimately result in the creation of a more effective teacher has been a topic in the teacher preparation field for many years, and one that many have attempted to prove in a variety of ways and across a variety of educational settings (Ballou & Podgursky, 1999; Clarke, 1995; Mueller & Skamp, 2003; Thomas B. Fordham Foundation, 1991a; Wilson, Floden, & Ferrini-Mundy, 2001). It is upon this premise that the research cited in this section is discussed.

**Defining Reflective Practice**

“Reflection has become an integral part of teacher education, yet its elusive boundaries make it difficult to define and teach,” observe Jay and Johnson (2002, p. 73). According to Zeichner and Liston (1987), although “reflection” now plays a
central role in many teacher preparation programs, the use of the term does not always describe a consistent understanding among teacher practitioners and, because of its complexity and the different ways in which it is presented, the concept is often challenging for preservice teachers to grasp.

Evolving from the work of other researchers (see, for example, Kitchener & King, 1981 and Schön, 1983), Ross (1990) defines reflection in an educational context as “a way of thinking about educational matters that involves the ability to make rational choices and to assume responsibility for those choices” (p. 98) and outlines elements of the reflective process as a series of steps in treating “educational dilemmas” in which the teacher is capable of:

1. recognizing educational dilemmas
2. responding to a dilemma by recognizing both the similarities to other situations and the unique qualities of the particular situation
3. framing and reframing the dilemma
4. experimenting with the dilemma to discover the implications of various solutions, and examining the intended and unintended consequences of an implemented solution and evaluating it by determining whether the consequences are desirable (p. 98)

Related to Ross’ perspective, Smyth (1984) asserts that “when teachers themselves adopt a reflective attitude toward their teaching…they engage in a process of rendering problematic or questionable those aspects of teaching generally taken for granted” (p.60). Similarly, Byra (1994) looks at the reflective process as being based upon the act of problem-solving through inquiry and suggests that

…once preservice teachers complete their teacher preparation program and enter the ‘real’ world of teaching, they are often on their own. Any changes that they make to their teaching and/or have about their thoughts regarding what ought to be taught and why it ought to be taught will probably be the result of self-reflection. If preservice teachers do not experience tasks that necessitate them to reflect on the act of teaching
and the world in which they teach, they will likely make few changes as teachers (p. 11).

The question of whether or not reflective practice should be included in teacher preparation programs seems to be largely moot, but the ways in which the topic of reflective practice is approached in the research seem to vary greatly. Jay and Johnson note that studies focusing on reflective practice have viewed the topic through a variety of lenses: some have studied the content of reflection, or what teachers reflect upon (Liston & Zeichner, 1987; Valli, 1997), others look at the process of reflection, or how teachers think about their practice (Byra, 1994; Kruse, 1997; Richert, 1991), and others look at programmatic features of reflection in the context of various programs (Ladson-Billings, 1999; Ross, 1990). Another type of study concerns the ways in which support personnel play a role in the reflective process of novice teachers.

**Reflective Practice and the Supervisor-Novice Teacher Relationship**

The study that is the focus of this paper looks specifically at the development of reflective practice as demonstrated by novice teachers and, more specifically, how the process of becoming a reflective practitioner can be supported in the supervisor-novice teacher relationship.

Mueller and Skamp (2003), in a longitudinal study looking at reflection in teacher education through the lens of the supervisor/novice teacher relationship, conclude that the supervisor can learn along with the novice teacher in a “circular nature of learning.” “As teacher educators listen to how prospective and beginning teachers learn,” they note, “teacher educators learn how to improve teaching
education” (p. 439). Clarke (1995), studying the ways in which Schön’s notion of reflective practice applied to practicum settings of student teachers, also notes the importance of the relationship between novice teacher and supervisor in promoting higher levels of reflection: “Given the tendency for students to be more reflective about the issues they initially raise as opposed to those raised by their supervisors, it is critical that students be encouraged to be proactive, not merely interactive or reactive, in discussions with their school advisor about practice,” and also notes the importance of the school advisor “hold(ing) in abeyance their own agenda until the students have had the opportunity to table their own issues” (p. 256).

Feiman-Nemser (2001a) touches on the same concern, promoting the concept of the supervisor or mentor as an “educational companion” and “co-thinker,” noting that “a support teacher can help beginning teachers attend to pupil’s thinking and sense making even when they are concerned about their own adequacy and teaching performance” (p. 25).

Although some might argue that a supervisor or mentor is more than a “companion” or “co-thinker” and therefore needs to provide more structured guidance as opposed to the less experienced and less knowledgeable novice teacher determining the agenda, there is also the tendency for supervisors, like teachers, to act as the “sage on the stage” rather than the “guide on the side,” dominating discussions with top-down judgments or mandates for future action. Therefore, as preservice teachers are asked to reflect upon their practice, so must their supervisors or mentors reflect upon the ways in which they are supporting them. And, again similar to teachers, the more
capable and qualified supervisors are aware of that crucial balance: when to lead their students and when to follow their students’ lead.

Cautionary Notes

Jay and Johnson (2002) caution that reflection must be carefully scaffolded to avoid reducing the process to a “series of steps” and also note that different types of reflection may result depending upon individual and collaborative situations: “When we reflect alone, we risk reconstructing ideas with our bias. Yet when we reflect with others, we may be bound to the value-laden nature of language” (p. 84). Halliday (1998) argues that reflective practice is compromised by the lack of “opportunities for teachers to engage in the kind of theoretical and practical enquiries that might give reflection some depth” (p. 597) and warns that “once the notion of reflective practice is formalized within the assessment processes of teacher education, there is a danger that such practice may actually discourage good teaching… reflective practice may tend to skew power relations even further towards the assessor. That occurs when the teacher’s reflection serves as a further source of data for technicist analysis” (p. 598).

Loughran (2002) provides a distinction between reflection that in some cases is merely “rationalization” and what he refers to as “effective reflective practice.” “To teach about reflection requires contextual anchors to make learning episodes meaningful,” he argues. “Simply being encouraged to reflect is likely to be as meaningful as a lecture on cooperative group work” (p. 33). Citing Ecclestone (1996), Halliday suggests that reflective practice can be “a form of mantric theory which ‘will start—using the most learner-centered mantra of all—from where people are and leave them there’” (p. 597).
Loughran considers the effect of timing upon the depth of reflection, asserting that “the different demands associated with the time of reflection can influence student teachers’ learning through experience” (p. 35). Related to this last point, Williams & Watson (2004), in a study focusing on how the timing of reflective experiences affects the depth of reflection, compared the effectiveness of immediate or delayed conferencing after supervisor observation on student teacher reflective comments. Although other researchers believe that debriefing sessions are best conducted as soon as possible after the event (McConnell, 1985), the authors found evidence that delayed debriefings provided higher levels of reflective analysis by the novice teachers being observed.

Noting the limitations, misinterpretations, and misimplementations as those mentioned above, it is evident that the process of “reflecting” can end up being little more than “reviewing” or “retelling” unless novice teachers are provided appropriate and effective support by supervisors, mentors, or other support personnel. The study reported in this paper examines the ways in which support personnel, in this case supervisors, might promote more reflective commentary and practice with their novice teachers.

**Expert-Novice Relationships**

The concept of coupling an experienced veteran teacher with a novice teacher is certainly not new. Following an apprenticeship model, student teachers have long been placed with “master” or “cooperating” teachers to assist them in gradually learning the various aspects of how to manage a classroom of their own. However, broad, ongoing support for novice teachers, particularly in the early years of learning
how to teach, has generally been haphazard at best or totally lacking at worst.

Additionally, the quantity and quality of assistance provided by a mentor or guide, whether university personnel or a colleague at the site, has continually been a cause for concern.

**Induction Programs**

For many decades, those who are being prepared and then “inducted” into the field of teaching have traditionally been provided little formal support, and in some cases none. But as Feiman-Nemser (2001a) points out:

Induction happens with or without a formal program, and it is often an abrupt and lonely process. The problems with ‘sink or swim’ induction are well documented. In far too many places new teachers must learn the ropes on their own. The cost is high. Up to one third of new teachers leave the profession within the first 3 years, a fact that falls heaviest on urban schools. Even when teachers remain, they may lose their ideals and lower their expectations for student learning (p. 1030).

In recent years, beginning teacher “induction” programs, such as California’s Beginning Teacher Support and Assessment, or BTSA, program have been developed to meet the goal of improving the support and retention of newly credentialed teachers in the early years of their teaching careers through the pairing of experienced expert teachers with novices using the California Standards for the Teaching Profession (California Commission on Teacher Credentialing, 2005) as the focus for their discussions. Beginning in the 2008-2009 academic year, those same standards, known as the CSTPs, will ultimately be used to determine via a state-approved performance assessment instrument whether or not a candidate in a teacher preparation program will ultimately be awarded a teaching credential in the state of California.
The concepts of mentoring (Feiman-Nemser, 2001, 2001a; Norman & Feiman-Nemser, 2005) and guided practice (Feiman-Nemser & Rosean, 1997; Jennings, Peasley, & Rosaen, 1997) have provided approaches and models that have influenced the ways in which teacher preparation programs and school districts attempt to meet the needs of their teacher candidates as they progress through what Fuller (1969) describes as “stages of concern,” a predictable progression novices tend to follow over the course of their beginning teaching experiences from concerns about self to concerns about task and finally to concerns about students.

Although at least 27 states have adopted induction models to provide a supportive bridge from teacher preparation to the “real” world of classroom teaching, Feiman-Nemser notes, “Despite widespread interest…the overall picture is uneven. Most induction mandates do not rest on an understanding of teacher learning, a vision of good teaching or a broad view of the role formal induction can play in new teacher development” (p. 1030). In fact, Feiman-Nemser suggests that mentoring, the most popular induction strategy, may at times actually reinforce traditional norms and practices rather than promote more powerful teaching.

The Role of the Mentor

Tied to this point, one issue that strongly affects the success of a mentorship model concerns the quantity and quality of assistance provided by the mentor or guide, many of whom see their role as maternal or nurturing, focusing on the positive and avoiding the negative (Freidus, 2002). As Feiman-Nemser states,

While supporting new teachers is a humane response to the very real challenges of beginning teaching, it does not provide an adequate rationale. Unless we take new teachers seriously as learners and
frame induction around a vision of good teaching and compelling standards for student learning, we will end up with induction programs that reduce stress and address immediate problems without promoting teacher development and improving the quality of teaching and learning (p. 1031).

However, any guided practice framework, whether following models based on mentoring, peer coaching, clinical supervision, or other approaches, is influenced by a number of factors, some of which are within the control of the “expert” or “guide” and others not, shaped by such issues as “school culture, program goals, and other contextual factors” as well as “participants’ expectations and beliefs and their underlying visions of teaching and learning to teach” (Feiman-Nemser & Rosean, 1997, p. 13). The job is not simply one of training effective mentors; context also plays a significant role in the success of any expert-novice relationship.

Similarly, Grinberg, Harris, and Parker (1997) refer to a number of other such “dilemmas”, one in particular experienced by those given the charge of working in the field as advisors or supervisors for novice teachers. As opposed to the role of support providers serving beginning teachers in induction programs, field advisors or supervisors deal with an additional challenge in that they serve a dual role as mentors or guides as well as evaluators. Considering that the very term “supervisor” carries with it the connotation of a hierarchical relationship between the expert and novice, the relationship between advisor and advisee has the potential of being constrained in areas such as trust, openness, and willingness to be as honest and straightforward as possible.
The Issue of Trust

Ideally, the relationship between the two parties is one of mutual trust and caring as the novice progresses through various stages of teacher development. However, certain obstacles may compromise the expert-novice relationship, not only due to personality conflicts or differences in pedagogical stances, but also in such cases as when the advisor is put in the position of making a negative judgment regarding the novice’s performance, which may even serve to threaten the novice’s future in the profession. While working with the novice teacher, the supervisor therefore constantly walks a thin line between providing a trusting, caring environment that nurtures growth while at the same time keeping an appropriate professional distance and objectivity that may uncover more negative issues that must be confronted. As Grinsberg et al point out:

Given these power and status differentials, is it possible for a student teacher to share freely and candidly his views about teaching, learning, and learning to teach, even if he runs the risk of getting a poor evaluation if his views differ greatly from his field instructor’s? How can we as field instructors reconcile the often conflicting roles of helper and evaluator?… On the one hand, guides want to support novices’ right to speak about what they believe, to give them a “voice” in the work and validate their experiences and understandings; on the other hand, guides must still act upon sound and justifiable principles based on intellectual, moral, and political reasoning. (p. 85).

To further compound the issue of achieving success in any guided practice model is the fact that many expert-novice relationships are of such short duration that a truly solid, trusting relationship is barely given a chance of being formed much less enriched over time, “mak(ing) for few chances for novice and field instructor to
communicate about particular views, dispositions, and understandings about teaching and learning” (Grinberg, Harris & Parker, 1997, p. 87).

Friedus (2002) addresses this dichotomy, often not taken into consideration when one takes on the role of mentor:

It is oft repeated that supervisors and teachers, like coaches, support and scaffold the growth and development of the learners with whom they work. However, athletic coaches do one thing that few supervisors and few teachers do: they tell it like it is…We are discovering that effective supervisors/advisors, like effective coaches, help student teachers to recognize not only what they know but what they need to learn and/or to practice. This responsibility is particularly challenging for many advisors/supervisors. It involves giving close scrutiny to and challenging many of the beliefs and practices that have become safe and comfortable...(M)any advisors/supervisors pride themselves on being ‘nurturing’...(but) it is often difficult to be both nurturing and candid (p. 73).

Self-reflective tools have been one attempt to help novice teachers gain perspective and emotional distance regarding their own teaching, which can then also serve to help the advisor or supervisor caught in the precarious position of being both nurturing and candid. By viewing their own pedagogy through another lens, beyond only receiving feedback from an outside “expert”, novices are encouraged to analyze their teaching in a more objective light, potentially seeing their “teaching selves” as others see them. In recent years, technology has played an increasingly significant role in attempting to advance that process.

**Tools for Reflective Practice: The Advent of Technology**

The emergence of performance assessment in the 1990s, in particular portfolio assessment in which preservice teachers demonstrate proficiency in a variety of pedagogical areas by collecting and reflecting on “artifacts” illustrative of their
teaching abilities, propelled the topic of teacher reflection to the forefront of teacher preparation, and this approach has continued to the present. For this reason, a good deal of research exists on the subject of portfolios, whether formative, summative or both, and their positive effect on promoting deeper, more effective teacher reflection (Brown, 2002; Jay & Johnson, 2002; McFarland, 1998; Pool & Wessner, 2003). But many new and different approaches have been introduced in recent years as technology has become a more pervasive and increasingly sophisticated component in the field of education, approaches that align with, build upon, and in some cases, replace portfolio assessment in promoting reflective practice in teacher preparation.

Building on Fuller’s (1969) widely cited three-stage model of teacher development as heretofore described, a number of studies have focused on how to move novice teachers’ reflections and understandings from the first stage to the last in an efficient, manageable, and effective manner with the support of technology.

Computer-based approaches for promoting teacher reflection are increasingly common in teacher preparation and professional development. From the use of interactive CD-ROM programs (Bowers, Garrett, Sale, & Doerr, 2000), threaded discussions and e-mail correspondence on the internet (O’Neill, 1996; Otero et al., 2005; Whipp, 2003), software programs (Lin and Kinzer, 2003), and electronic portfolios (Norton-Meier, 2003), technology has certainly made its mark in the teacher preparation literature. Another area of technology that is prevalent in the research in this area uses videotaped lessons to encourage and deepen reflective practice.
Video Supported Reflection

One of the earliest studies incorporating video technology was completed by Moore (1988), using videotaped lessons of a student teacher’s classroom as a tool for debriefing between the teacher and supervisor. Moore concluded from this study that it is imperative that the lesson be cooperatively analyzed by the both parties—that is, viewed, analyzed, and reflected upon together—in order to be most effective. In addition to allowing for more focused discussion of the lesson implementation, since the novice teacher is able to actually view specific details of his or her teaching, Moore also notes that using videotaping for teaching and supervision allows the supervisor to observe more often than is feasible with site observations. Jensen, Shepston, Connor and Killmer (1994) also support “the use of audio-visual technology as a tool for reflection in teacher preparation” but note that “preservice teachers could benefit from more instruction and experience with videotaping, self-assessment and reflection in general, and with questioning strategies in particular” (p. 6) from those advising and supporting them.

Similarly, other studies using video-supported reflection, such as those by Beck, King, and Marshall (2002), Sherin (2000), Sherin and Van Es (2005), Van Es and Sherin (2002), Wang and Hartley (2003), and Westerman and Smith (1993), have concluded that when teachers, whether novice or experienced, observe and analyze videotaped lessons of their own or another’s teaching, they benefit. “The participants’ ability to identify, interpret, and analyze evidence of exemplary teaching” is enhanced (p. 345), claim Beck et al., producing responses from teachers that significantly outperform those who do not incorporate video observation in the reflective process.
The question of what constitutes an effective reflection—that is, whether it simply raises awareness or analytical abilities or actually results in measurable improvement in teaching performance as evidenced by higher test scores, higher grades, better evaluations, or other criteria—appears to vary according to the type and purpose of the study. Some would claim that simply raising awareness or improving analytical ability does not constitute “improvement.” One could argue, however, that improved teacher performance, however determined, is unlikely without a raised awareness of pedagogical decisions and their outcomes, nor without the ability to move beyond simple description of teaching episodes. Therefore, if reflective practice results “only” in raised awareness or better analysis of pedagogy, it can still be viewed as a positive outcome of incorporating reflective practice into the practice of teaching, enhancing the possibility of more effective teaching at the very least. The study described in this paper focuses on not only the occurrence of reflective commentary in supervisor-novice teacher interactions, particularly with the use of videotaped lessons, but also looks at the differences between description or explanation and more metacognitive or reflective commentary as well.

Cautionary Notes

As is the case with reflection in general, Van Es and Sherin (2002) cite the need for scaffolded support and analysis of videotaped episodes in order to promote more interpretative rather than descriptive responses in the reflective process. Gwyn-Paquette (2002), in her study of video-supported reflection in supervisor/student teacher conversations, cites the need for “knowledgeable supervisors…particularly if
the preservice teachers are to learn to teach in ways that are different from their observation-acquired preconceptions of teaching” (p. 209).

Westerman & Smith (1993) and Pirie (1996) note the logistical challenges often inherent in trying to use video technology in a teaching context (e.g. participant availability, consent of participants, equipment problems). Haertel (1993) discusses the question of whether or not video self-assessment leads to improvement in performance, noting that its “value depends in part on the capacity of the teachers to examine their own performance, using criteria that are valid” (p. 8), a point echoed by Wang and Hartley (2003) in their study of video technology as a support for teacher education reform. And Carroll (1981) makes an important point about the limitations of this approach:

One’s objectivity can rightfully be questioned when one’s own teaching career hangs in the balance. Although self-evaluation can contribute useful data for administrative decisions by providing additional information and perspectives that may be unavailable from other sources, its greatest value continues to be for self-understanding and instructional improvement (p. 180).

Summary of Reflective Practice, Expert-Novice Relationships, and Technology

A study of the literature in the area of reflective practice and educational technology, as this brief overview addresses, indicates that the incorporation of both approaches, especially in combination, will continue to impact the field of teacher education in even greater ways. Although reflective practice has been common in the process of promoting more effective teaching and professional development, the measure of its success depends on the quality of its implementation in the program. The same can be said about mentoring, guided practice, and the use of educational
technology as a tool for professional growth. All have their promising, and even impressive, attributes, but all must be handled with thought and a level of expertise if they are to prove valuable and worthwhile in the quest to develop much needed “highly qualified teachers.” It is these issues that informed the design of the study discussed in this paper.

Research Questions

This overview of research in the areas of teacher preparation, teaching in diverse settings, teaching English learners, reflective practice, expert-novice relationships, and educational technology has provided a brief glimpse into what is currently being addressed in these fields of inquiry, and it is those issues that form the basis of this study. Based upon the controversies, critiques, and considerations presented here, the following questions for the study outlined in this paper were formed.

Purpose of the Study and Focus Questions

The purpose of this study is to consider how different approaches to the preparation of novice teachers, in this case, using video-elicited reflection, may affect their development towards the goal of becoming qualified, effective reflective practitioners. Toward that end, I developed three research questions directed at more specific supervisor/NT issues that may serve to impact and/or influence the preparation of novice teachers in teacher preparation programs.

Focus Research Questions:

1. How does video-elicited reflective debriefing contribute to the reflective communication of novice teachers?
2. How does video-elicited reflective debriefing help novice teachers focus on pedagogical knowledge, abilities, and skills as described in the California Standards for the Teaching Profession and the Teacher Performance Expectations for California teachers?

3. In what ways does video-elicited reflective debriefing contribute to supervisor/novice teacher interactions?

The following chapter describes how these questions serve to guide the study described in the remainder of this paper in the quest to discover, at least to some extent, the ways in which video-elicited reflection might play a role in preparing more effective new teachers for all children, particularly given the realities of the current educational climate.
CHAPTER 3:
RESEARCH DESIGN AND METHODOLOGY

Research Design

This study utilized two approaches to supervisor-novice teacher interactions focusing on the novice teachers’ (NT’s) teaching knowledge, skills, and abilities: traditional observation-based debriefings and video-elicited reflective debriefings. The study was carried out with two groups of novice teachers using repeated measures over five months during the first semester of the academic year. The first approach used for these interactions was the traditional observation-based debriefing (OBD) format, in which the supervisor observes a lesson segment for approximately 30 to 45 minutes, takes notes, then meets with the novice teacher to discuss the lesson segment, using the observational notes as a tool or artifact to guide the debriefing. The second approach is referred to as video-elicitation or video-elicited reflection (VER), discussed in further detail below, which centers on the supervisor and novice teacher meeting to discuss a 15-minute videotaped lesson segment of the NT's classroom teaching for which the supervisor was not present. In this case, the videotape becomes the tool or artifact on which the discussion is based.

Pilot Work

The design of this study grew out of an earlier informal study I conducted using video-elicited reflective debriefings as a supplemental approach to supervisor-novice teacher interactions and piloted with the intern teachers with whom I worked at the time. The research design was then modified and formalized based upon these earlier experiences. My goal in designing this study was to determine how and in
Rationale for Utilizing Video-Elicited Reflective Debriefing

In this study, an alternative form of support for students in the credentialing program, in addition to traditional observation-based debriefing, was provided via the incorporation of video elicitation as a tool for reflection (Moore, 1988; Jensen, Shepston, Connor & Killmer, 1994; Sherin, 2000; Stockall, 2001), referred to here as Video Elicited Reflection (VER). VER was coupled with delayed post-lesson debriefing conversations (Williams & Watson, 2004) between the supervisor and NTs following a lesson segment designed, implemented, and videotaped by the NT.

Based upon my previous experiences using this approach, in addition to traditional observation-based debriefings (OBD), with several intern teachers whom I supervised, I found that VER-based debriefings showed promise in providing a broader, richer, and more personally relevant experience for the NT than the use of traditional OBDs alone. Although that finding was based on just an impression stemming from these prior experiences, I discovered through informally studying VER debriefings compared to traditional OBDs that the dynamics of the debriefing conversations appeared to shift from a typical supervisor-driven discussion, focusing on observation notes made by the supervisor, to a teacher-driven discussion, focusing on responses made by the NT while viewing a videotape of her own teaching. In that way, VER debriefings appeared to shift the “ownership” of the teaching episode and
ensuing debriefing from the supervisor to the NT. The supervisor thus played a role as more of a recipient and respondent in the conversation as opposed to the more traditional role of authoritarian figure dominating the discussion; that is, the relationship shifted from the supervisor telling the NT what she believed were the issues and concerns to be addressed to the NT pointing out to the supervisor particular issues or concerns that she noticed in the process of reviewing (literally re-viewing) and reflecting upon her teaching. The NT became an active agent in the reflection and debriefing process, thus reversing what Byra (1994) refers to as the traditional “teacher-tell/student listen” dynamic to a “student-tell/teacher listen” model.

The addition of VER to traditional OBD interactions also appeared to enhance what Schön (1983, 1987) refers to as a “feedback loop” of experience, learning and practice that can continually improve one’s work as well as development towards becoming a reflective practitioner. The debriefings I conducted with my own novice teachers reflected the findings of Moore (1988) regarding the use of supervisor’s observation notes as compared to videotape as tools for discussion between supervisor and novice teacher:

The taped lesson records many more details of the teaching-learning process than an “on the spot” supervisor with paper and pencil could manage to write. The student teacher might disagree with a report written by a supervisor who observed a lesson. With the lesson recorded on video tape, there is very little room for disagreement. What you see is what actually occurred during the lesson. Seeing oneself on a television monitor probably is as close to being objective about oneself as is possible. Many students will exclaim, “I didn’t know I did that!” or “Why did I say that?” (Moore, 1988, p. 47).

Additionally, VER debriefings showed promise for providing an effective and efficient approach to preparing these NTs for the demands of public school teaching at
the secondary level, while adding little if any extra cost in time or money for the program, the supervisor, or the NT. In fact, the pilot data provided evidence that this approach might actually prove to provide significant savings in both regards while at the same time expanding and improving the experience of all program participants.

Lastly, VER debriefings showed the promise of providing a new avenue, in addition to traditional OBDs, for determining the progress of NTs toward meeting the California Standards for the Teaching Profession and their subgroup, the Teacher Performance Expectations (California Commission on Teacher Credentialing, 2005), which are required components of the credentialing process for teacher candidates in the state of California, and which are discussed later in this study.

Given the research questions outlined in the previous chapter, a further discussion regarding technology-supported communication in the form of video-elicited reflection will serve to explain the reasons for choosing this particular form of debriefing as a focus for this study.

**Hypotheses**

Based upon my own experiences using both traditional OBD and alternative VER-supported supervision practices, coupled with my understandings of other studies using VER or similar approaches with both new and veteran teachers, I anticipated the following outcomes:

1. VER debriefing would provide both descriptive and reflective commentary by the novice teacher that expresses more self-awareness and understanding of pedagogical skills, knowledge, and approaches than traditional observation-based debriefing alone.
2. VER debriefing would provide the supervisor with more understanding of the novice teachers’s pedagogical skills, knowledge, and approaches above and beyond the understanding provided through traditional observation-based debriefing.

3. VER debriefings would provide a better opportunity for more novice teacher-driven conversation between supervisor and NT than traditional observation-based supervisor-driven debriefing.

Based upon the experiences and resulting hypotheses that arose during the pilot portion of my study, the research design was developed to serve a two-fold purpose; that is, one, to work as an integral component of the experience all incoming English interns in the secondary program would receive during their credentialing year, and two, to provide data for addressing the research questions and hypotheses described above using information gained from interactions with those interns agreeing to serve as participants in the study.

Participants, Settings, and Positionality

In order to understand the outcomes of this study, one must consider not only who the participants were and where they were teaching as possible contributing factors, but also the secondary teacher education program and the students enrolled in it.

Program Participants

With rare exceptions, all of the students enrolled in the credentialing program of the secondary teacher education program at the university in which this study was carried out share the following characteristics:
**Education.** All are highly educated, having attained at least a bachelor’s degree from an accredited four-year university.

**Prior Experience.** All of the students have prior experience in our teacher preparation program during the foundational, pre-credentialing year, which involves tutoring and apprentice teaching at secondary school sites around the county throughout the entire school year, in conjunction with a yearlong series of coursework introducing them to the field and nature of secondary teaching in California public schools. Prior to being admitted into the credential program, they have successfully completed all required tests and evaluations, including CBEST and other state required assessments.

**Current Graduate Training.** All have gained acceptance into the graduate teacher preparation intern program, which involves coursework and field experience resulting in the attainment of a California single subject teaching credential and Masters of Education degree. The credentialing/M.Ed. year begins in June following acceptance into the program, extends over the regular K-12 school year, and is completed in July of the following summer. During the credentialing year, students take courses at the university required by the state of California and the university teacher preparation program, including courses in secondary teaching methods, teaching English Learners, literacy across content areas, and a weekly intern seminar throughout the credentialing year.

**Employment.** These students are employed part-time as intern teachers at secondary schools around the county, teaching a minimum of 50% of the school day in
English, mathematics, or science classes, typically consisting of average to low performing students.

**Demographic Profile of Program Participants**

A typical demographic profile of students in the program over the past several years illustrates that they are predominately White, with a smaller percentage of Asian students (<20%), and a very small percentage of students (<10%) from other races or ethnicities. They are generally native English speakers, with a very small percentage of NTs for whom English is a second language (<10%), however, all NTs are fluent in English. These students are predominately female, especially in the content area of English. With few exceptions, the students are in their early-to-mid-20’s, coming from middle to upper income backgrounds. All students are experienced with working with students in a variety of academic settings (e.g. content area tutoring, AVID, apprentice teaching) and, in some cases, non-academic settings (e.g. after-school programs, Boys and Girls Club programs, private tutoring).

**Description of Study Participants**

The sampling method used in this study was cluster sampling, in that the participants were a subgroup of the larger secondary credential group. This cluster included eight novice intern teachers in the process of earning California single subject (secondary) teaching credentials in English, which entitles them to teach in content-specific classrooms from grades 6-12. Each of the novice teachers (NTs) had already completed a full year of foundational education courses at the university, as described above, with one returning after taking a year off between the foundations year and the credential year.
All eight of the NTs were in their early twenties and had graduated from the university the previous spring, except for the returning student mentioned above. All eight were involved and highly motivated students during their own secondary school experiences. Other than that, the group was fairly diverse, particularly in comparison with the typical whole-group demographic profile. Three of the eight came from Latino backgrounds, two came from Asian backgrounds (one being half-Chinese/half-White), and the remaining three were White. Seven of the NTs were female and one male. Socioeconomically, as reported in the initial interviews, three of the eight came from middle class backgrounds, four from lower middle class homes, and one self-described as poor. All eight grew up in the state, with six hailing from the Southern California area and three of those six growing up within the local area. Teaching assignments among the participants varied among middle and high school levels, with some NTs assigned to both, and from traditional English classes to supplemental English “workshop” classes designed primarily to provide extra instructional time in order for students to improve on standardized tests. An overview of the participants is shown in Table 1.
Table 1: Summary of Study Participants

<table>
<thead>
<tr>
<th>Participant</th>
<th>Ethnicity</th>
<th>Gender</th>
<th>SES Background</th>
<th>Teaching Assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Asian</td>
<td>Female</td>
<td>Middle class</td>
<td>8th gr English, 9th gr English</td>
</tr>
<tr>
<td>2</td>
<td>White</td>
<td>Female</td>
<td>Middle class</td>
<td>11th gr English (and PE)</td>
</tr>
<tr>
<td>3</td>
<td>White/Asian</td>
<td>Female</td>
<td>Lower middle class</td>
<td>8th gr English, 9th gr English</td>
</tr>
<tr>
<td>4</td>
<td>Latino</td>
<td>Female</td>
<td>Poor</td>
<td>8th gr English</td>
</tr>
<tr>
<td>5</td>
<td>Latino</td>
<td>Male</td>
<td>Lower middle class</td>
<td>8th gr Workshop (and science)</td>
</tr>
<tr>
<td>6</td>
<td>White</td>
<td>Female</td>
<td>Middle class</td>
<td>6th gr Workshop</td>
</tr>
<tr>
<td>7</td>
<td>White</td>
<td>Female</td>
<td>Middle class</td>
<td>6th, 7th, and 8th gr Workshops</td>
</tr>
<tr>
<td>8</td>
<td>Latino</td>
<td>Female</td>
<td>Lower middle class</td>
<td>6th gr Workshop (and Spanish)</td>
</tr>
</tbody>
</table>

Selection of Participants

Participants for this study were initially selected because they were already accepted into the single subject credential program at the university. Although a pool of 34 secondary interns were available for selection for this study, I intentionally chose for my cluster sample only those in the secondary English group in order to control the variable presented by varied teaching assignments across content areas. Since secondary English classrooms can be quite different in both format and function than mathematics and science classrooms, it was reasonable to limit those differences as much as possible. Even with such limitations, the variety of experiences among the NTs were wide, given that they taught in different programs, grade levels, and settings, even within the same school site.
Another reason I chose to use only the secondary English interns as participants was due to my position as secondary English supervisor. Although I taught a number of secondary education courses to the entire group of credential students, these eight NTs were the only credential students to whom I was assigned in a supervisory role. Had I chosen NTs from other content areas, in which I did not serve as a supervisor, I would be playing the roles of only instructor and researcher for those participants. By keeping the group within one content area, every participant in the study knew me in the same way; that is, they were familiar with me in my supervisory role as well as in my role of instructor and researcher. This also provided greater access to the participants, since I already met with them on a regular basis as part of my supervisory position. This was especially helpful over the course of the study, since the logistics and time constraints for meeting with the participants during the study were often complicated and limited.

Although there were a number of variables I could not control, my intent was to limit the variables to the greatest degree I could, such as those that would be introduced when participants worked with different supervisors or in other content areas. I realized that choosing to focus only on the NTs with whom I was otherwise involved could complicate the process of remaining objective, but as an “active-member-researcher” (Adler & Adler, 1994), I also knew that such a relationship in a naturalistic setting could provide richer data and understanding than had I been a total outsider. This role is discussed in more detail in the positionality section of this chapter.
Study Participant Teaching Settings

Each NT was assigned to one of two school sites in the county. Seven of the group were assigned to a small charter school serving grades 6-12 in a middle class suburban area of the county, and one was assigned to a new middle school, also a charter, in its second year of operation in a low socioeconomic urban area at the other end of the county.

The northern charter school, which I shall refer to as North County Academy (all names are fictitious) was relatively new as a grade 6-12 charter school but had been in existence for a number of years before that as a grade 6-8 school. The physical environment of the school is largely nontraditional, with small classrooms surrounding large computer areas in both the middle school and high school buildings and with each classroom shared by multiple teachers. Although the student population has become more diverse in the past two years, the students are primarily White, particularly at the high school level, coming mostly from middle to upper middle class homes in the surrounding area, with a small percentage coming from low socioeconomic areas near the school. The curriculum is mostly unstructured, as is the basic format for school operations, decided primarily in “houses”; that is, groups of faculty members led by “house leaders” to which a specific group of students are assigned. At the time of the study, some classes at the middle school level consisted of students from two different houses due to staffing and scheduling issues, and two of the NTs in this study were assigned such classes as part of their teaching assignments.

The southern school, which I will refer to as South County Academy, is also a charter, but of a very different type than North County Academy. The school is based
in one of the lowest socioeconomic areas of the city and county. Beginning as a
traditional secondary school, South County Academy changed to a charter status two
years before this study as a result of the school’s consistently low performance
spanning several years. The charter school staff consists of a primarily new
administration and faculty, all of whom operate within a tightly structured
environment. Students wear uniforms, the school day is extended, and teachers are
required to follow specific formats in classroom instruction. Like North County
Academy, the school is also based on “houses”, although these houses did not operate
in an autonomous manner. As opposed to North County Academy, teachers at South
County Academy were assigned their own classrooms and encouraged (and sometimes
mandated) to decorate the classroom with motivational posters, charts, word walls,
student work, and the like.

All NTs had previously interviewed and been offered contracts with their
respective charter schools following the same process as credentialed teachers. At the
time of this study, secondary English positions were in short supply and these two
charter sites were the only sites able to offer intern placements for these students prior
to the beginning of the school year. Placements in the year this study took place were
particularly limited, especially in the case of seven students being hired as intern
teachers at one site. This was the first year in the history of the teacher preparation
program that all English interns were placed at charter schools.

Otherwise, the conditions for interns at these two sites were typical of other
interns in the program, whether working at traditional or nontraditional schools. Each
worked on a 50-60% contract at the site, spending approximately one-half to two-
thirds of the day teaching, with the remaining 40-50% of the school day considered field experience for which they earned university credits toward their credential programs. Therefore, although they were technically considered part-time teachers, the NTs spent as much time at the site as fully credentialed teachers, and also participated in adjunct duties, faculty meetings, and school events as was expected of any full-time teacher.

The effect of all of the study participants being assigned to only charter schools was initially a concern as I designed this study in that I wondered how these particular settings, in what may be considered unique and atypical schools, might affect the type of data I collected compared to what I had found in my piloting experiences. However, since I was not studying novice teacher interactions with others at their school sites, such as students, staff, or administrators, I was able to maintain consistency in the debriefing process, regardless of setting or school climate, with those debriefings that were done prior to data collection and that informed the design of the study.

Positionality of the Researcher

My role in this study was as an “active member researcher” (Adler & Adler, 1994), sometimes referred to as participant-observer. In my role at the university as both lecturer of various teacher preparation courses as well as supervisor of interns, I am immersed in the development of novice teachers from the beginning to the end of the teacher preparation program. My job involves working with these novice teachers in the university classroom as well as the field, a role which differs markedly from more traditional programs in which the supervisor and instructor rarely if ever connect.
to discuss the progress of their credentialing students in any deep, reflective and/or structured manner.

I knew that my professional proximity and intimacy with the participants could present a degree of bias or subjectivity that I wanted to avoid in this study, and I planned to take great pains to skirt such occurrences in my research. In that pursuit, I took steps, both prior to and during my research, to ensure that my debriefings, interviews, transcriptions, and all other data collection and analysis procedures were as objective as possible. Outside reviewers were incorporated throughout the study to validate my objectivity throughout the process of collecting and analyzing data. It was my hope that the impressions that I held after compiling and analyzing this data would hold true when held up to the scrutiny of other reviewers who could not be considered stakeholders in the progress of these novice teachers.

Data Collection and Analysis

Data Collection Measures

This study relied on a mixed methods approach, using ethnographic data collection and quantitative and qualitative analysis methods, guided by the California Standards for the Teaching Profession (CSTPs) and their subcomponents, the Teaching Performance Expectations (TPEs) for California teachers, developed by the California Commission on Teacher Credentialing (2005), which form the standards by which teacher preparation programs assess the quality, preparedness, and expertise of their credential candidates. The CSTPs provided a basis for my data collection and analysis methods throughout the study. The CSTPs and TPEs (see Appendix) fall
under the six general domains of the California Standards of the Teaching Profession (CSTP), as outlined in Table 2.

**Table 2: California Standards for the Teaching Profession and Teacher Performance Expectations**

<table>
<thead>
<tr>
<th>CSTP A. Making Subject Matter Comprehensible to Students</th>
<th>TPE 1: Specific Pedagogical Skills for Subject Matter Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSTP B. Assessing Student Learning</td>
<td>TPE 2: Monitoring Student Learning During Instruction</td>
</tr>
<tr>
<td></td>
<td>TPE 3: Interpretation and Use of Assessments</td>
</tr>
<tr>
<td>CSTP C. Engaging and Supporting Students in Learning</td>
<td>TPE 4: Making Content Accessible</td>
</tr>
<tr>
<td></td>
<td>TPE 5: Student Engagement</td>
</tr>
<tr>
<td></td>
<td>TPE 6: Developmentally Appropriate Teaching Practices</td>
</tr>
<tr>
<td></td>
<td>TPE 7: Teaching English Learners</td>
</tr>
<tr>
<td>CSTP D. Planning Instruction and Designing Learning Experiences for Students</td>
<td>TPE 8: Learning about Students</td>
</tr>
<tr>
<td></td>
<td>TPE 9: Instructional Planning</td>
</tr>
<tr>
<td>CSTP E. Creating and Maintaining Effective Environments for Student Learning</td>
<td>TPE 10: Instructional Time</td>
</tr>
<tr>
<td></td>
<td>TPE 11: Social Environment</td>
</tr>
<tr>
<td>CSTP F. Developing as a Professional Educator</td>
<td>TPE 12: Professional, Legal, and Ethical Obligations</td>
</tr>
<tr>
<td></td>
<td>TPE 13: Professional Growth</td>
</tr>
</tbody>
</table>

Because demonstrating proficiency in meeting the CSTP/TPEs is a required component for credentialing of teacher candidates in the state of California, it made sense to incorporate these criteria in guiding the data analysis for this study. It was my hope that by using the following data collection and analysis methods, in particular the
audiotaped debriefings, I would be better able to ascertain each NT’s progress towards meeting the CSTPs/TPEs.

**Audiotaped Supervisor/Novice Teacher Debriefings**

Both traditional observation-based and VER-based debriefings were used to study the effect of VER on the supervisor-NT conversation during delayed debriefings. These debriefings were audiotaped and transcribed, then coded, categorized, and recoded using an approach based on grounded theory (Glaser & Strauss, 1967). As such, although the CSTP/TPEs informed the initial coding and categorizing process, patterns within the conversations were determined as they emerged and revised as needed over the course of the data collection process.

Each of the eight NTs participated in one audiotaped debriefing with the supervisor within a traditional observation-based structure—that is, the supervisor observed a lesson planned and implemented by the NT, with debriefing following the lesson segment, based primarily upon notes taken by the supervisor and recollections made by the NT.

The same NTs each participated in one audiotaped debriefing within a VER-based setting—that is, the supervisor and NT viewed a segment of a lesson planned, implemented, and videotaped by the NT without the supervisor present, and during the debriefing the NT started and stopped the tape as desired to comment on whatever he or she noticed in a “think-aloud” fashion. VER-based debriefings focused on 15-minute lesson segments chosen in advance by the NT, who had the option of deliberately or randomly choosing the segment to be viewed. It is important to note that in this study, not only had I no prior knowledge of the lesson being taught nor of
the lesson segment taped by the NT, but I also had not viewed these 15-minute video segments prior to the debriefing session, either as a supervisor or researcher.

My only directions to the NTs for the taping of the lesson was that they should make sure they could be seen and heard as clearly as possible, that the filming be done either by an adult or by placing the camera in a stationary position at the back of the room, and that the lesson segment they chose be in either videotape or compact disk form in order to facilitate the viewing by both of us during the VER interaction. Any students shown on the video needed to have authorized consent by both themselves and their parents or guardians; for that reason the NTs were required to take the seating of the students into account during the filming.

To maintain authenticity, observation-based debriefings were held as soon as possible after the lesson segment, which is the traditional method for debriefing, usually occurring immediately after the observed lesson but in some cases up to a day later. VER-based debriefings occurred at various moments after the teaching segment, in order to accommodate NT schedules as well as to allow the novice teacher the necessary time to convert the tape into reviewable form, usually a CD that could be viewed on my laptop computer. This also allowed the necessary time to schedule a quiet room on campus in which we could view the lesson segment without being disturbed. Although the original design was to have both debriefings delayed, it was determined that to do so with traditional OBDs would not be an authentic method for debriefings, since the focus of the study was to compare VER debriefings with traditional OBDs which, except in rare cases, are done as soon as possible after the observed lesson for reasons of both immediacy and convenience.
It should be noted that in both types of debriefings, whether VER or OBD, the novice teachers were first given an opportunity to offer their thoughts, observations, questions, or whatever might come to mind about the lesson under discussion before the debriefing continued and the supervisor took any role in the interaction. For example, I began both types of debriefing sessions with such questions as, “So is there anything you’d like to tell me about this lesson before we get started?” This approach allowed the NTs to offer commentary on their own, without any further prompting from me, which was taken into account during the data analysis process. Further elaboration concerning this point is included in the discussion of the findings included later in this paper.

Additionally, both types of debriefings occurred after an initial traditional observation-based debriefing at the onset of the school year, which was held approximately three to four weeks into the intern placement. This was the first traditional observation and debriefing for the interns; prior to this observation were informal visits to the interns’ school sites and classrooms, along with informal interactions in person and via email, which occurred regularly during the first weeks of school. Since novice teachers are often nervous at being judged by their supervisors, particularly so early in their teaching experience, the purpose of these informal visits and interactions was to allow the novice teachers to see me, as their supervisor, at the school site in a friendly, low-pressure situation in advance of the more structured, formal, and therefore higher-pressure traditional observational visit and debriefing that followed.
Following the informal visit and initial traditional observation and debriefing, the participants were randomly assigned for the type of debriefings that followed: one half of the novice teachers (Group A) experienced their first interaction with me as their supervisor in a traditional observation-based debriefing; the other half (Group B) experienced a video-elicited reflective debriefing for this interaction with the supervisor. For the next debriefing, this order was switched; that is, the traditional observation-based debriefings took place with Group B participants, and the VER-based debriefings took place with Group A participants. Table 3 illustrates the order of debriefings according to group assignment.

Table 3: Novice Teacher Lesson Debriefing Schedule

<table>
<thead>
<tr>
<th></th>
<th>Group A (n=4)</th>
<th>Traditional observation-based debriefing</th>
<th>Video-elicited reflective debriefing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Group B (n=4)</td>
<td>Video-elicited reflective debriefing</td>
<td>Traditional observation-based debriefing</td>
</tr>
</tbody>
</table>

Through this process, I hoped to ascertain how VER debriefings compared and contrasted with traditional observation-based debriefings in terms of novice teachers’ reflective abilities, pedagogical development, and interactions with the supervisor.

Initial and Exit Interviews

Individual interviews were conducted at the beginning of the study and again at the end to gain insight into the pedagogical concerns and levels of expertise of the NTs, again based upon the CSTP/TPEs. All of these interviews were audiotaped, and the interviews were qualitatively analyzed similar to the manner in which the debriefing sessions were qualitatively analyzed; however, neither the initial or exit interviews were transcribed or coded.
The purpose of including the interviews as a method in the data collection was primarily to see in what ways and/or to what extent they informed me as to the effectiveness of VER and observation-based debriefings for the novice teachers themselves. For example, would interview responses from the participants point to similar concerns and issues that arose in one type of debriefing rather than another? Would similar levels of reflection surface? Would similar patterns of self-awareness emerge? Would noticeable differences arise between pre and post interview responses and, if so, what might that tell me about the two approaches to debriefing? Patterns that emerged were categorized and recoded as needed, then compared with the categories and codes that emerged from the transcribed debriefings.

In addition, these interviews included opportunities for NT participants to express their views regarding their teaching perceptions and educational experiences as well as comment upon the two types of debriefings they experienced, both at the early stages of the study and again after their final audiotaped debriefing sessions. Their answers to questions in both the formal “Initial” interviews (see Appendix) and informal “Exit” interviews therefore provided additional qualitative data to assist in determining the effectiveness of the two approaches over time from the perspective of the NT. The progression of the data collection process over time, from initial interview through exit interview is illustrated in Table 4.
Table 4: Data Collection Timeline

<table>
<thead>
<tr>
<th>Phase</th>
<th>Time Frame</th>
<th>Group A Interaction (n=4)</th>
<th>Group B Interaction (n=4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Early fall</td>
<td>Initial Interview</td>
<td>Initial Interview</td>
</tr>
<tr>
<td>2</td>
<td>Mid fall</td>
<td>Video-elicited reflective debriefing</td>
<td>Observation-based debriefing</td>
</tr>
<tr>
<td>3</td>
<td>Late fall</td>
<td>Observation-based debriefing</td>
<td>Video-elicited reflective debriefing</td>
</tr>
<tr>
<td>4</td>
<td>Early winter</td>
<td>Exit Interview</td>
<td>Exit Interview</td>
</tr>
</tbody>
</table>

There were a total number of 16 audiotaped one-on-one: eight VER-based debriefings and eight observation-based debriefings which, coupled with the pre- and post-interviews for each participant (described in the next section), made a total of 32 audiotaped conversations, four per participant.

Field Notes

Field notes comprised the third qualitative data collection method and were compiled over the course of the study in order to keep track of impressions and events that might impact or expand upon the data collection methods described above. Insights, patterns or themes that arose from the analysis of these notes were compared to the analyses of debriefing sessions and/or interviews also using a combination of grounded theory (Glaser and Strauss, 1967) and the CSTP/TPEs, the results of which will be discussed later in this paper.

Considerations of the Study

The research component for this study was carried out over the course of the first half of the school year, just as the NTs were beginning their first experiences teaching in classrooms of their own. As such, although new teachers often progress
substantially in their pedagogy during this time, this study captures only the beginning portion of the total amount of growth each participant experienced over the course of the entire school year.

Additionally, the sample size for this study was small in order to control the variables and work within the time frame, as were the availability of settings, in which to carry out the research.

Another consideration concerns the supervisor’s relationship to the novice teachers. My acquaintance with the novice teachers begins as their instructor in three classes over the preceding nine months prior to my also becoming their supervisor. In contrast, many supervisors have little or no interaction with their supervisees prior to the beginning of the teaching experience.

Minimizing the Impact of Study Limitations

I realized that certain strategies might be helpful in minimizing certain aspects of the research design, such as the time frame and number of debriefings, the small sample of participants, and my serving in the role of researcher as well as lecturer/supervisor with the participants.

First and foremost, I wanted the participants to feel comfortable with me in my role as both supervisor and researcher, and toward that end I spent the late summer and early fall becoming better acquainted with them. This is a tack I often take as a supervisor, as I believe that building rapport and a sense of trust is conducive if not critical to the supervisor-supervisee relationship. However, serving in my additional role as researcher this year, I realized that an additional pressure might be felt by the interns as a result, so I made a point of connecting personally with each of the
participants in informal visitations and conversations, sitting down to chat with one or more of them during lunch or prep periods or via email, for example, with the aim of creating a climate of trust and openness as much as possible. The idea of conducting initial interviews grew out of this concern, as they served not only as a tool to be aware of background experiences, attitudes, and/or perceptions that might influence the results, but they also afforded an opportunity for “quality time” with each participant in order to become better acquainted and familiar with me as well as with being recorded during one of our conversations. This also was a factor in allowing VER debriefings to occur so early in the year; in my piloting, the earliest VER debriefing I had had was in the beginning of second semester, and most were toward the end of the credentialing year. I knew the idea of watching a self-videotaped lesson with the participants might be a cause for worry on their parts, and indeed several mentioned this concern in the Initial Interview, so I hoped that these prior conversations might allay some of those fears.

Although my sample was small by design, given that I wanted to include only English NTs to minimize the variables, I also wanted to keep as many potential participants as I could. Toward that end, I made sure I described my research and their potential part in it whenever the opportunity arose. Without revealing my research questions, hypotheses, or pilot results, I shared with each of them what information I could about the study and ensured their anonymity if they chose to be involved. Whether out of better familiarity, a sense of trust, curiosity about being a research subject, or all of the above, I succeeded in attaining the consent of all of the
eight NTs I supervised, which was the maximum number I could have hoped for in this study.

**Analytic Approach**

By triangulating the data through the use of similar coding and categorizing processes with each of these data collection methods, I hoped to uncover some consistently emerging themes and thus ultimately determine to what extent VER-based debriefings may impact the ways in which NTs view their teaching at the outset of their teaching experience as well as their progress towards becoming teachers, as judged by both the CSTP/TPEs and the teacher preparation program, compared to observation-based debriefings. I also hoped to determine whether or not VER-based debriefing provides a “wider window” through which the supervisor can view the progress of the NT in terms of desirable pedagogical skills, knowledge, and approaches as well as in terms of reflective practice.

**Data Reduction**

The eight audiotaped debriefings of four focus NTs—one VER and one OBD each—were transcribed and coded using HyperResearch, a qualitative software tool for data analysis of transcriptions such as these. Coded transcripts were compared between VER and OBD sessions using a constant comparison analysis to determine patterns of concern and focus within each type of conversation and how they were similar to or different from the conversations resulting from the alternate approach. Each participant’s recorded debriefings were coded individually, then compared with other similar debriefing methods; for example, after coding the first Group A participant’s observation-based debriefing, I next coded the second Group A
participant’s OBD and compared that with the first. This continued for each of the four focus participants in each group based on the debriefing method as shown in Table 4.

The CSTP/TPEs were used to inform the initial coding, but other codes were expected to emerge as these transcripts were analyzed based upon previous pilot data, such as responses that demonstrated reflective thinking or comments that resulted from prompting by the supervisor.

**Coding Categories**

*A Priori Codes.* As described earlier, novice teachers must demonstrate ability to meet or exceed the thirteen Teacher Performance Expectations (TPEs) in order to be awarded a teaching credential in the state of California. These TPEs are subgrouped under six domains known as the California Standards for the Teaching Profession, or CSTPs, as outlined in the earlier section describing data collection measures. Because these six CSTPs are mandated, it made sense for me to incorporate them as a priori codes for both types of debriefings. However, I realized that the sixth CSTP, Developing as a Professional Educator, did not apply to these debriefings, since it focuses on professional, legal, and ethical obligations and professional growth, such as teacher inservices, attendance at conferences, additional coursework, and other outside involvements and concerns. Therefore, I removed that CSTP from my a priori codes.

*Emergent Codes.* Additional codes were incorporated into my coding process as they emerged from the analysis of the transcripts. Based on my previous pilot studies of VER, I anticipated using codes for evidence of reflective practice and supervisor elicitation or prompting, but as I coded the OBDs, I realized that two
additional codes also emerged, which I entitled “Supervisor Guidance” and “Novice Teacher Elicitation”. The ten codes used for the coding of all debriefings and the definitions for each are shown in Table 5.

**Table 5: A Priori and Emergent Codes**

<table>
<thead>
<tr>
<th>A Priori Codes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessing Student Learning (CSTP A)</td>
</tr>
<tr>
<td>Formal or informal assessment of what students appear to understand and/or know how to do, or what they don’t understand/know how to do</td>
</tr>
<tr>
<td>Class Management-Environment (CSTP B)</td>
</tr>
<tr>
<td>Student behavior and management issues (individual, small group, whole group) and classroom environment (physical and/or emotional impact of classroom itself—e.g., class size, temperature, light, noise, room size, configuration)</td>
</tr>
<tr>
<td>Instructional Planning-Delivery (CSTP C)</td>
</tr>
<tr>
<td>Effectiveness of planning decisions and instructional delivery (e.g. pacing, materials, grouping decisions, appropriate scaffolding)</td>
</tr>
<tr>
<td>Making Subject Matter Comprehensible (CSTP D)</td>
</tr>
<tr>
<td>Strategies used in lesson to help “break down” academic material into manageable parts, using appropriate strategies to improve student comprehension for all levels of students (e.g. English Learners, students with special needs)</td>
</tr>
<tr>
<td>Student Engagement (CSTP E)</td>
</tr>
<tr>
<td>Level of student involvement in designated class activities, on-task behavior, attention to lesson and materials</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Emergent Codes:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description-Explanation</td>
</tr>
<tr>
<td>Speaker recounts event(s) to describe, explain, clarify, or elaborate on factual information to improve comprehension of listener (often who, what, when, where, how). Focuses on recollection of event.</td>
</tr>
<tr>
<td>Reflection</td>
</tr>
<tr>
<td>Speaker “rethinks” event(s) to consider such issues as why the event went as it did, reasons behind actions, what could have changed/improved event outcome, how event informs future decisions or awarenesses, connections to other experiences, etc. Focuses on looking at one’s actions from a distance (literally, to serve as a mirror for oneself). Relates to metacognitive thinking.</td>
</tr>
<tr>
<td>Supervisor Guidance</td>
</tr>
<tr>
<td>Supervisor offering pedagogical information designed to improve issues that arise during debriefing (e.g. advice, problem-solving ideas, teaching tips)</td>
</tr>
<tr>
<td>Supervisor Elicitation</td>
</tr>
<tr>
<td>Supervisor elicits information from novice teacher (e.g. questioning, using sentence starters, clarification prompts)</td>
</tr>
<tr>
<td>Novice Teacher Elicitation</td>
</tr>
<tr>
<td>Novice teacher elicits information from supervisor (e.g. asking for guidance or clarification)</td>
</tr>
</tbody>
</table>
It should be noted that the code of “Reflection” was used somewhat broadly in this study, tying into the notion of “reflection-on-action” (Schön, 1987), or reflecting on the teaching episode after the fact. The use of the term in this case includes a variety of metacognitive comments that involve more than simple description or explanation on the part of either the supervisor or the novice teacher.

For example, if the novice teacher pointed out a student in the videotape and said, “He is new to the class”, that comment would be coded as Descriptive-Explanatory. On the other hand, if the NT stated, “I don’t think he understood what I was trying to say even though I rephrased the directions”, that comment would be coded as Reflection. Because reflective commentary was coded in broader terms in this study, a variety of levels of reflection emerged, from superficial to much broader and deeper commentary, a distinction that will be discussed later in this paper.

Once the debriefings were transcribed, coded, and categorized, both qualitative and quantitative analysis of the data began, with particular attention paid to the four focus participants, the findings of which are discussed in the following chapters.
CHAPTER 4:
INTRODUCTION TO THE FINDINGS

As outlined in the previous chapter, data for this study was collected from four sources: initial interviews, fieldnotes, supervisor-novice teacher (NT) debriefings, and exit interviews. The following chapters will discuss the findings as related to each of my three focus research questions, with particular emphasis on information gathered and analyzed from the observation-based (OBD) and video-elicited reflective (VER) debriefings. Information gathered and analyzed from the fieldnotes, initial interviews, and exit interviews will be included and discussed where appropriate.

Data Analysis of Focus Novice Teacher Participants

Of the eight novice teachers (NTs) participating in this study, responses from a subgroup of four focus participants were selected for closer analysis, using both quantitative and qualitative analysis methods. Data gathered from the remaining four NTs were analyzed using qualitative analyses only.

The four focus NTs were selected from the two groups described in the previous chapter of this paper. Two were chosen from Group A and two from Group B, in order to be representative of the overall group composition. Each set of two was chosen to represent two levels of apparent skill and potential as initially determined by the supervisor at the beginning of the teaching year; one was selected because of apparent advanced development related to expectations for new teacher performance, and the other was selected because of apparent lesser development related to those expectations. Whereas the less advanced NTs could be considered at the “beginning”
stage of teacher performance, the more advanced NTs could be considered to be at the “developing” stage, that is, the next stage on a continuum from “beginning” to “developing” to “maturing” and ultimately to “experienced”. These labels are comparable to and based on the stages of new teacher development as described in the California Standards for the Teaching Profession (2005). Teachers at the earliest stages of their teaching experience are expected to be performing at the “beginning” level; only more advanced novice teachers fall into the “developing” category at the outset of the academic year. By the end of the academic year, novice teachers are expected to perform at the “mature” level or above on this continuum. The participants selected from Group A, each of whom experienced observation-based debriefings first and video-elicited reflective debriefings later, were Delia and Ginny (all names used throughout this paper are fictitious). Of these two, Delia was considered the more advanced “developing” NT and Ginny was considered the “beginning” NT, based on initial evaluations made by the supervisor at the outset of the year.

Representing Group B, each of whom first experienced VER and later OBD, were Connie and Emmett. Connie was initially considered the more advanced “developing” NT of the pair and Emmett the more “beginning” NT, again based on initial evaluations made by the supervisor at the outset of the year.

Initial Interviews

Interviews with all of the participants were held in the fall, prior to any observation, videotaping, or debriefing being conducted. All of the eight NTs were in the first weeks of their intern teaching assignments and just beginning to get a feeling
for the unique characteristics and culture of their sites, administration, colleagues, students, parents, curriculum, and individual teaching assignments.

The one-on-one, semi-structured interviews were audiotaped and later qualitatively analyzed for indicators that might provide insights into each NT’s responses during the debriefings and exit interviews. During the initial interviews, NTs were asked a number of predetermined questions about their prior classroom experiences, attitudes and perceptions, and expectations and/or concerns about working with their supervisor during the credentialing year (see Appendix).

Based on these initial interviews and other interactions between the supervisor and the four focus NTs, some unique characteristics were noticed that appear to have played a role in subsequent interactions, particularly in the OBD and VER debriefings. A selection of the most pertinent characteristics related to the findings of the study, drawn from initial interviews and field notes, is illustrated in Table 6.

**Table 6: Focus NT Characteristics as Initially Determined by Supervisor (Fall)**

<table>
<thead>
<tr>
<th></th>
<th>Connie</th>
<th>Delia</th>
<th>Emmett</th>
<th>Ginny</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Apparent Teaching Level</strong></td>
<td>High Developing</td>
<td>High Developing</td>
<td>Medium Beginning</td>
<td>Low Beginning</td>
</tr>
<tr>
<td><strong>Apparent Confidence</strong></td>
<td>Moderately High</td>
<td>Moderately High</td>
<td>Moderate</td>
<td>Moderately Low</td>
</tr>
<tr>
<td><strong>Verbal Tendency</strong></td>
<td>High</td>
<td>Medium</td>
<td>Medium</td>
<td>Low</td>
</tr>
<tr>
<td><strong>Supervisor’s Initial Impressions of NT</strong></td>
<td>Mature “Take charge” Positive attitude</td>
<td>Strong opinions, yet respectful “Social justice” stance Positive attitude</td>
<td>Idealistic Eager Somewhat nervous Positive attitude</td>
<td>Quiet Somewhat timid Nervous Conscientious Positive attitude</td>
</tr>
</tbody>
</table>
As Table 6 shows, all four of the focus NTs held positive attitudes about their teaching assignments, school sites, and colleagues as they entered into their intern experiences, although there were varying degrees of trepidation on each of their parts as they “ventured into the unknown.” However, of the four, Connie and Delia appeared to be the best prepared based on prior interactions with each of them as well as in their interview responses. Each had a clear idea of her reasons for wanting to become a teacher and a clear stance as she entered the intern teaching year. Delia in particular stood out for her “social justice” stance; having gone to school in a low-performing, high minority urban school in the area, she strongly related to the type of school and diverse mix of students with whom she would be spending her intern year at South County Academy and was anxious to get involved and “make a difference”.

Emmett and Ginny appeared, to varying degrees, to be less confident and pedagogically developed than Connie and Delia as they entered into their respective intern teaching experiences. Part of this apprehension was attributed to being at a school unlike any they had previously attended or worked in, since North County Academy was unique in its physical surroundings, administrative approach, student body, and lack of any stated or prescribed curriculum or even curricular approach. Although Emmett seemed quite idealistic about his assignment and the students with whom he would be working, he did indicate some anxiety about how well he would succeed and pictured himself ultimately working in a low performing diverse urban setting such as Delia’s site, South County Academy, once he obtained his credential. Still, Emmett was enthusiastic about having his own classroom and students and was looking forward to an exciting year ahead.
Of the four, Ginny gave the impression of being the most timid and nervous about her new role, yet her positive attitude and willingness to give it her best was obvious, and the support available to her seemed to reassure her. Ginny was a quiet, somewhat shy person in all previous interactions witnessed by the supervisor both in her previous field experience in secondary settings as well as in her university classes. Although she would speak her thoughts or ask questions, this occurred most often when given some sort of prompt rather than by her own inclination. Academically, Ginny was strong and equally prepared as the others to take on the teaching assignment she had been given.

On the other end of the spectrum, Connie was by far the most verbal of the four—in fact, she was the most verbal of all eight of the NTs—to the point of being apologetic about this tendency at times. She spoke her thoughts easily and without prompting, yet without overpowering others in the conversation. As with the other focus NTs, she was intelligent, capable, articulate, and had ample prior classroom experience to prepare her for her intern teaching assignment at North County Academy. However, Connie’s preparedness and strength as a teacher appeared to be particularly high compared to the others; only Delia came close to Connie in her apparent teaching capabilities at the outset of the year, with both being considered at the higher end of the “Developing” range as measured by the CSTP new teacher performance levels. Emmett was next in line, appearing to enter his intern experience at a mid-range point of the “Beginning” teacher performance level, and Ginny entered her internship at what appeared to be the lower end of the “Beginning” performance level.
Supervisor-Novice Teacher Debriefings

After the initial interviews and an initial observation-based debriefing with each of the NTs, the two types of debriefings under study commenced with four participants assigned to Group A (including Delia and Ginny) and the other four to Group B (including Emmett and Connie).

Each of the supervisor-novice teacher debriefings consisted of two approaches, video-elicited reflection (VER) involving a discussion focusing on a self-videotaped lesson of the NT not previously seen by the supervisor, and observation-based debriefing (OBD), which involved a traditional observation-based lesson, followed by a debriefing about the observed lesson focusing on observational notes taken by the supervisor. The sequence of these interactions was determined according to group; Group A experienced OBD first and VER next, and Group B experienced VER first, then OBD. The length of time between the two types of debriefing varied between one to two months, largely determined by intern schedules. Data was collected on each type of debriefing, one of each per participant, for a total of 16 audiotaped debriefings across the eight participants.

Of these 16 audiotaped debriefings, close analysis was conducted on the debriefings with the four focus NTs, one each for VER and OBD, for a total of eight audiotaped interactions that were analyzed in depth, both qualitatively and quantitatively. The quantitative analysis was based on transcribed and coded OBD and VER debriefings using HyperResearch, a qualitative analysis software program.

The following three chapters focus on these closely analyzed debriefings as they relate to each of my three focus research questions. Each of those chapters will
discuss quantitative and qualitative findings based on analyzed responses from the focus NTs, one chapter per research question, followed by a discussion of broader issues and implications for using the VER and OBD approaches in a teacher preparation program.
The first research question posed for this study was: How does video-elicited reflective debriefing contribute to the reflective communication of novice teachers? An analysis of each of the transcribed and coded debriefings of both OBD and VER interactions between the supervisor and four focus novice teachers provides data indicating that VER greatly increases the opportunities for NTs to communicate their reflective thoughts while also promoting more depth and breadth in the type of reflective comments they make. On the other hand, although reflective commentary by the NTs does occur in OBD, the data from the transcribed observation-based interactions indicate that reflective comments by the NTs are far fewer in number and also largely more superficial when compared to VER.

Another interesting finding based on the data indicates that the most reflective participant varies depending on the mode used for debriefing. In a VER debriefing, the novice teacher typically contributes the majority of the reflective commentary; however, in an OBD interaction, the majority of the reflective comments are typically made by the supervisor. In short, OBD actually appears to promote more reflective communication on the part of the supervisor more than for the novice teacher; in VER, the reverse is true.

In each of the following sections, these findings will be outlined in further detail, beginning with a discussion of how reflective communication plays a role in OBD and VER debriefings.
Comparing Reflective Commentary in OBD and VER Interactions

To demonstrate how OBD and VER differ in terms of occurrences of reflective communication as well as in who dominates the reflective commentary, Graph 1 compares the percentage of reflective comments made by the NT in an OBD debriefing to the percentage of reflective comments made by the NT in a VER debriefing, out of the total percentage of reflective comments made by both supervisor and NT in each debriefing interaction.

Graph 1: Comparison of Reflective Comments by Supervisor and Novice Teachers in OBD and VER Debriefings

As Graph 1 depicts, in all four cases with the focus NTs, the percentage of reflective comments made by the NT significantly increased in each of the VER interactions compared to the percentage of NT reflective comments made in each of the OBD interactions. In terms of supervisor reflective comments, the reverse was
true. Based on patterns that emerged across the focus NT debriefings (a total of eight interactions), during the OBD interaction the supervisor contributed approximately one-half to nearly two-thirds (51-63%) of the reflective comments during the OBD interaction. In turn, the percentage of reflective commentary by the supervisor in the VER debriefing dropped dramatically compared to the percentage that occurred by the supervisor in the OBD interaction, accounting for at most 24% of the total reflective comments and, in Emmett’s case, for none at all.

In contrast, as also illustrated in Graph 1, the percentage of reflective commentary made by the NT in each of the VER debriefings sharply increased when compared to the percentage of reflective commentary in each of the OBD interactions. In the OBD interactions, reflective comments made by the NTs accounted for 37% to 48% of the total reflective commentary; however, in the VER debriefings, NT reflective commentary accounted for 76% to 100% of the reflective commentary, comprising a reversal of the pattern seen in supervisor reflective commentary across all four cases.

When the OBD column in Graph 1 is compared to the VER column for each NT, this reversed dynamic is clearly seen. In OBD interactions, the supervisor is the dominant reflective voice, but in VER debriefings, the opposite is true and the NT becomes the more dominant reflective voice in the conversation. Whereas the focus NTs contributed only one-third to one-half of the total reflective comments in the OBD interactions, that dynamic was reversed in the VER debriefings and the NTs became the predominant contributors to the reflective commentary. Table 7 provides
further data to illustrate these reflective contributions on the part of the NTs, illustrated in both numerical and percentile terms.

**Table 7: Comparison of Novice Teacher Reflective Comments in OBD vs VER Debriefings**

<table>
<thead>
<tr>
<th>Novice Teacher</th>
<th>Group</th>
<th>Total OBD Reflective Comments</th>
<th>Total NT OBD Reflective Comments</th>
<th>NT % of Total Reflective Comments</th>
<th>Total VER Reflective Comments</th>
<th>Total NT VER Reflective Comments</th>
<th>NT % of Total Reflective Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ginny</td>
<td>A</td>
<td>55</td>
<td>27</td>
<td>49%</td>
<td>34</td>
<td>28</td>
<td>82%</td>
</tr>
<tr>
<td>Delia</td>
<td>A</td>
<td>36</td>
<td>14</td>
<td>38%</td>
<td>70</td>
<td>53</td>
<td>76%</td>
</tr>
<tr>
<td>Emmett</td>
<td>B</td>
<td>51</td>
<td>19</td>
<td>37%</td>
<td>47</td>
<td>47</td>
<td>100%</td>
</tr>
<tr>
<td>Connie</td>
<td>B</td>
<td>52</td>
<td>25</td>
<td>48%</td>
<td>43</td>
<td>33</td>
<td>77%</td>
</tr>
</tbody>
</table>

As shown in both Graph 1 and Table 7, the lowest percentage (76%) of NT reflective comments in the VER interactions with the focus NTs occurred with Delia, indicating that Delia contributed approximately three-quarters of the total reflective comments made by both her and the supervisor in her VER debriefing. This was an increase of 39% over her contributions to the total percentage of supervisor and NT reflective comments made in her OBD interaction.

This same pattern holds across the data from all four focus NTs concerning the percentage of the total reflective commentary they offered in their OBD interactions compared to their VER debriefings. Ginny’s percentage of reflective commentary rose from 49% of the total in her OBD to 82% of the total in her VER debriefing, for an increase of 33% between her OBD and VER reflective commentary percentages. Connie’s rose from 48% to 77% respectively, an increase of 29%, and Emmett’s percentage of the total reflective commentary rose an impressive 63% between his OBD and VER debriefings, from 38% to 100% respectively.
Numerical Comparison of Reflective Commentary

When comparing the reflective commentary in numerical terms, in both OBD and VER, Table 7 shows that in three out of four cases (Ginny, Emmett, and Connie), fewer total reflective comments (that is, supervisor and NT combined) were made overall in the VER debriefings compared to the OBD interactions, which might lead one to assume that VER actually inhibits reflection. However, when considering the number of reflective comments made by each of the NTs out of the total number made by both supervisor and NT in each VER interaction, in all but one instance (Ginny), the number of NT reflective comments increases, reflecting an increase of NT reflective commentary of 25% to more than 200% compared to their OBD reflective commentary. This suggests that the lower total number of reflective comments overall indicates that the supervisor is offering less reflective commentary in VER compared to OBD interactions, thus privileging the novice teacher as the dominant reflective participant.

In the case of Ginny, the number of reflective comments she made during the OBD and VER debriefings was almost the same (27 and 28 respectively); however, the total number of reflective comments was much higher in her OBD interaction, indicating that the supervisor contributed a large number of the reflective comments, in this case, 28 out of 55, or 51%. During Ginny’s VER debriefing, however, she clearly dominated the interaction in terms of reflective commentary, offering 28 of the 34 reflective comments made, or 82% of the total reflective commentary in that conversation. The supervisor, on the other hand, made only 6 reflective comments of the 34 in that VER interaction, accounting for only 18% of the total reflective
commentary, thus supporting the notion that VER privileges the novice teacher as the more reflective participant in the interaction.

The Nature of Reflective Commentary: Comparing OBD and VER Debriefings

Qualitative analyses of the comments in the OBD debriefings with the focus NTs shows those reflective comments made by the supervisor in that setting to be more substantive than those offered by the NT, which tended to be brief and often more superficial than those that arose in OBD. For example, responses such as those shown in Table 8 illustrate some typical reflective comments made by the four focus novice teachers in their observation-based debriefings.

Table 8: Sample OBD Reflective Commentary from Novice Teachers

<table>
<thead>
<tr>
<th>Reflective Commentary</th>
</tr>
</thead>
<tbody>
<tr>
<td>I skipped an essential step.</td>
</tr>
<tr>
<td>I also find that different activities work better in some classes than others… I feel like it’s a struggle.</td>
</tr>
<tr>
<td>What was strange is that I usually give them five minutes to clean up… I usually give too much time.</td>
</tr>
<tr>
<td>I’m tired of doing that (paired timed rereadings of text); it’s a mandated activity. The kids are so patient… but they may get tired of that.</td>
</tr>
<tr>
<td>I’m comfortable with that convention, but I need to explain why.</td>
</tr>
<tr>
<td>I think I gave up at that moment. They were refusing to listen to me.</td>
</tr>
<tr>
<td>I was thinking, “Oh, I just want to do the lesson”…I just wanted to get through it.</td>
</tr>
<tr>
<td>I love the kid. It broke my heart when he said today, “Your class is boring.”</td>
</tr>
</tbody>
</table>

In contrast, the nature of the reflective comments contributed by the focus NTs in their VER interactions differed significantly from those typically made in their
OBD sessions as outlined in Table 8 above. A sampling of reflective comments made by the focus NTs in their VER debriefings is illustrated in Table 9.

**Table 9: Sample VER Reflective Commentary from Novice Teachers**

I’ve noticed that it takes a lot of time to ask them to speak up louder, and some of the kids are just way too shy, and if I do that, it shuts them down. So even though I know certain kids are shy and I’ve been taught, people have taught me to try to make them be louder… I’ve noticed that it shuts them down. So I actually, now my thing is, when somebody says something…I’ll pick up the salient points and just restate it out loud again for the whole class to hear.

You know how when you (the supervisor) teach us, you point out, “Oh, you’re using your prior knowledge”… but I don’t know if in this situation that was something I should have been doing.

I’m trying really hard not to engage with him…because I remember reading that classroom management book (from one of the credential courses)… I love that book!

So Alan just asked (on the videotape), “What are we doing?” which is good, it made the class laugh. You know, in a way it’s like testing me, like you’re not explaining this in a way I can understand it, that’s what I got from it. And the class is like, yeah, you’re not explaining this in a way we can understand it… He (Alan) actually asked me, “What are we doing?” (and) to me that’s great. That tells me that he cares about what we’re doing. Before he wouldn’t have cared.

A lot of my behavior toward them is calculated, but why I joke with them… I think joking is fun and at the same time, I think I have a good sense about what’s crossing the line and what I shouldn’t be joking about… I need to honor their need to laugh and take a breather… we don’t cross the line in this classroom. I try to make it fun and hopefully it crosses over into their work… (I remember) on Inside the Actor’s Studio, how Martin Lawrence’s teacher allowed him to entertain the class for the last five minutes of class. I want to honor their need to laugh and stay engaged by laughing.

The examples quoted in Tables 8 and 9 represent a common phenomenon that occurred across all four focus novice teachers. The commentary they offered in the OBD interaction, which typically centered on a 30 to 45-minute lesson segment, was often very brief and could barely be considered reflection, certainly not the sort of reflection that allows much if any insight by the supervisor into the NT’s cognitive or
metacognitive thinking. At the opposite end of the spectrum was the commentary by the NTs that arose out of the VER debriefings, which centered on only a 15-minute excerpt of the videotaped lesson, and in some cases, the hour-long debriefing ended before the entire 15 minutes had been viewed. As Table 9 illustrates, with little prompting, the NTs verbalized their thoughts freely and at length, often making connections to outside topics or issues, such as course readings, experiences in their university classrooms, and instructional strategies they had tried or seen others implement. They also offered ample commentary reflecting upon pedagogical decisions or stances made by themselves or others in other situations as well as those included on the videotaped lesson segment.

The supervisor’s main role in the interaction, as evidenced in the transcripted debriefings, was to elicit commentary from the NTs for elaboration or clarification purposes, asking questions such as, “How much time were they given?”, “So what did you do?”, “So that was your intention?” or “Anything else you can think of?”. The novice teacher therefore provided not only the most dominant voice in the interaction, but also the most reflective.

The Impact of the “Artifact” on Reflective Commentary

Another difference between reflective commentary that arose in the OBD interactions compared to VER debriefings became apparent as the transcripted conversations were further analyzed. It appears that the tool or “artifact” upon which the discussion is based influences the nature of the reflective commentary in both quality and quantity. In the case of OBD, the artifact is the set of observational notes
taken by the supervisor; in VER, the artifact is the self-videotaped lesson segment by
the NT.

**Observational Notes and Reflective Commentary**

As discussed earlier, each OBD debriefing began with the supervisor asking
the NT what he or she thought or wanted to comment upon regarding the observed
lesson prior to reviewing the observational notes written by the supervisor.

An examination of Connie’s transcripted observation-based debriefing
indicates that the majority of Connie’s reflective comments were offered during that
initial sharing opportunity, prior to the observational notes being introduced.
Whereas Connie contributed 48% of the total reflective commentary by both the
supervisor and herself in the OBD interaction, as shown in Graph 1 and Table 7, as
soon as the observational notes were introduced into the discussion, Connie’s
contribution to the total reflective commentary fell dramatically, accounting for only
19% of the total reflective commentary made in that interaction. The introduction of
the notes to the conversation not only did not encourage more reflection in her case,
but may have actually served to discourage or even impede reflection on her part.

An analysis of the other three focus NTs’ OBD transcripts did not reflect as
strong of a pattern, however, which brought up the question as to why Connie was the
exception. By more closely analyzing her transcripted OBD debriefing, a possible
explanation emerged. Whereas the other focus NTs, and indeed all of the eight
participants, typically spent only a few minutes during this sharing out time to discuss
their thoughts on the observed lesson prior to introducing the supervisor’s
observational notes, Connie spent 28 minutes of the entire 50-minute debriefing
sharing her thoughts prior to the notes being introduced, comprising over half of the total debriefing time. In contrast, Ginny spent less than 8 minutes of her 63-minute debriefing sharing her thoughts prior to the introduction of the observational notes into the conversation.

A detailed analysis of the reflective commentary by the four focus NTs in the OBD debriefings, broken down into the total NT reflective commentary in each of their OBD interactions and that which occurred after the introduction of the observational notes to the conversation, is illustrated in Graph 2.

**Graph 2: Comparison of Novice Teacher Total Reflective Commentary and Reflective Commentary after Observational Notes Introduced**

As depicted in Graph 2, the amount of reflective commentary prior to the notes being introduced varies among the four focus NTs. Of Ginny’s 49% share of the total reflective commentary that occurred between her and the supervisor, only 7% of that
occurred prior to the observational notes being introduced. In other words, Ginny offered very little reflective commentary when given the opportunity, covering less than eight minutes of the 63-minute debriefing. Delia and Emmett also spent 7% of their reflective commentary in their respective OBD interactions prior to the observational notes being introduced. In contrast, Connie’s 28-minute sharing prior to the notes being introduced into the conversation accounted for nearly one-third (29%) of her 48% share of the total reflective commentary made by both her and the supervisor during the OBD interaction. Once the notes were introduced into the conversation, Connie’s contribution to the total reflective commentary dropped to just 19%. The notes, in effect, appear to have actually discouraged Connie from sharing her reflective thoughts, and instead the supervisor offered the most reflective commentary, comprising 81% of the total, once the notes were introduced into the conversation.

**Self-Videotaped Lessons and Reflective Commentary**

To more accurately compare OBD reflective commentary with VER in terms of the impact of the artifact on the interaction—that is, observational notes in OBD and self-videotaped lessons by the NT in VER— the percentages of each are shown in Graph 3, illustrating first the total reflective commentary by the NT and supervisor in OBD interactions, then changes that occur once observational notes are brought into the conversations (both of which are shown in Graph 2), and lastly comparing those percentages with reflective commentary that arose in the VER debriefings with the same participants.
Graph 3: Comparison of Novice Teachers’ Total OBD Reflective Commentary, OBD Reflective Commentary After Notes Introduced, and VER Reflective Commentary

As Graph 3 illustrates, the increase in reflective commentary on the part of the NT is even more dramatic when considered in terms of the impact of the artifact on the conversation between novice teacher and supervisor. In each of the four focus NT cases, the introduction of the observational notes had varying impacts on the OBD interaction; in Connie’s case, that impact was most significant. However, in all four of the VER interactions with the novice teachers, the NTs clearly dominated the reflective conversation, particularly when comparing VER with the OBD interactions after the observational notes were introduced into the conversation.

Since VER as used in this study begins with only a short contextual description of the lesson segment prior to beginning the videotape, in order to acquaint the supervisor with the lesson and classroom setting, virtually all reflective commentary
occurs with the introduction of the artifact, not prior to it. As Graph 3 illustrates, the reflective commentary by the NT in the VER interaction is far more substantial than in OBD, suggesting that the videotaped lesson encourages reflective commentary, and the supervisor’s reflective commentary becomes a much smaller percentage of the total. Conversely, in OBD interactions, the observational notes written by the supervisor appear to encourage reflection on the part of the supervisor, not the novice teacher.

**Summary of the Impact of Artifacts on Reflective Commentary**

It appears that, at least in some cases, the amount of reflection on the part of the novice teacher in an OBD interaction is not only not encouraged but actually discouraged and, in Connie’s case, even impeded with the addition of the observational notes. It cannot be determined here whether this is due to personality type, self-confidence, verbal tendency, or some other characteristic of the novice teacher; however, the data clearly indicates that the observational notes have an effect on the novice teacher’s contributions to the reflective commentary and, in some cases, that effect may actually be detrimental to the interaction. With a novice teacher like Connie so willing to share her reflective thoughts with very little prompting, it seems that the addition of the notes to the conversation actually “shut down” her reflective contributions and nearly silenced her reflective voice.

In the case of reflective commentary in VER, the self-videotaped lesson by the novice teacher serves as an artifact as well. Unlike OBD, however, the videotape appears to encourage reflective commentary on the part of the novice teacher rather than to discourage it, especially when compared to the percentage of reflective
commentary that occurred once observational notes were introduced into the OBD 
debriefings. Table 10 outlines the increases between reflective commentary 
percentages of the four focus NTs between the total reflective commentary in the VER 
debriefings and the OBD interactions once notes were introduced, illustrating an even 
greater difference than first depicted in Graph 1 earlier in this chapter.

Table 10: Comparison of Novice Teacher Reflective Commentary in VER and 
OBD After Observational Notes are Introduced

<table>
<thead>
<tr>
<th>Novice Teacher</th>
<th>OBD Reflective Commentary After Notes Introduced (%)</th>
<th>VER Reflective Commentary (%)</th>
<th>Increase in Reflective Commentary (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ginny</td>
<td>42</td>
<td>82</td>
<td>40</td>
</tr>
<tr>
<td>Delia</td>
<td>34</td>
<td>76</td>
<td>42</td>
</tr>
<tr>
<td>Emmett</td>
<td>24</td>
<td>100</td>
<td>76</td>
</tr>
<tr>
<td>Connie</td>
<td>19</td>
<td>77</td>
<td>58</td>
</tr>
</tbody>
</table>

To further investigate the hypothesis that VER supports reflective commentary 
by the NT more than OBD, a paired sample T-test was carried out using the data in 
Table 10. The results indicate a significant difference between the frequency of 
reflective commentary in OBD and VER, $t(3) = -6.45, p < .01$, with NT reflective 
commentary being significantly more frequent in VER.

**Quality and Quantity of Reflection in OBD and VER Debriefings**

Across all four focus novice teachers, the shift in the interactional dynamics 
from OBD to VER in terms of reflective commentary was clear. In OBD, the more 
apparent reflective participant is the supervisor; in VER, the more apparent reflective 
participant is the novice teacher. In each case, the reflective commentary by the NT in 
the VER interaction increased significantly and in some cases dramatically over the
reflective commentary made in the OBD interaction, particularly once observational
notes were introduced.

The quality of reflection also appears to shift from OBD to VER. In the OBD
interactions, reflective commentary by the NTs was typically brief and often
superficial, whereas in the VER debriefings the reflective commentary was broader
and more in depth. In VER, the novice teachers offered comments that spanned across
a wider array of experiences rather than drawing mainly from just the lesson itself,
which was more typical in the OBD interactions. More connections were made with
previous lessons, with conversations previously held with colleagues and classmates,
with assignments and activities that occurred in the university coursework, with
previous interactions with students, and with insights and awareness of personal
pedagogical growth.

Because this study was carried out with two groups experiencing OBD and
VER in a different order, those deeper and broader connections cannot be attributed to
the length of time they have spent in the program or the length of time they have spent
in the classroom. Neither can they be attributed to one type of debriefing preceding
another, since the order of those debriefing types was switched between groups. They
also cannot be attributed to a participant’s inherent verbal tendency, level of apparent
teaching ability, or level of apparent confidence, since the participants spanned all
levels in each of those categories. Whether the NT seemed eager or nervous and
timid, “take charge” or low-key and shy, the depth and breadth of the reflective
commentary that emerged in the VER interactions was notably enhanced across all
cases when compared to that which emerged in the observation-based debriefings.
Further, the descriptive and explanatory commentary made by the NTs in the VER debriefings often evolved into more reflective commentary on their part than that which occurred in the OBD interactions, an outcome that will be discussed in more detail in Chapter 7.

It should be noted that there definitely is merit in the supervisor providing guidance and support via reflective commentary when debriefing with novice teachers, and this study did not set out to discourage or condemn such commentary on the part of the supervisor. This study instead focused on the reflective contributions on the part of the novice teacher, since reflective practice is not only encouraged but even mandated for the purposes of credentialing in the state of California and, as such, the ability to effectively reflect on one’s practice is an attribute that must be evidenced by the novice teacher for the supervisor in order to fulfill this requirement.

Based on the results of this study, video-elicited reflective debriefings indeed appear to be an important and perhaps even essential tool towards promoting pedagogical reflective communication by novice teachers, one which appears to have a more positive impact in that regard than traditional observation-based debriefings. It seems safe to say that VER encourages reflective communication, OBD does not and, in fact, may actually serve to inhibit reflective communication in some novice teacher-supervisor interactions.
CHAPTER 6: VIDEO-ELICITATION AND TEACHING PERFORMANCE STANDARDS

Reflective ability is only one of the desired traits of a new teacher. In California, a number of standards are in place for gauging the performance of novice teachers, known as the California Standards for the Teaching Profession (California Commission on Teacher Credentialing, 2005) and their subcomponents, the Teaching Performance Expectations. A comparison and contrast of observation-based debriefing (OBD) and video-elicited reflective debriefing (VER) in relation to the California Standards for the Teaching Profession (CSTPs) is another area of concern in this study, since they are part of the evaluative process for ensuring that a new teacher is proficiently prepared to work in the state’s public schools.

The second question posed for this study was: How does video-elicited reflective debriefing help novice teachers focus on pedagogical knowledge, ability, and skills as described in the California Standards for the Teaching Profession and the Teacher Performance Expectations for California teachers? The findings presented in this chapter will focus on this issue in terms of how OBD and VER influence how novice teachers (NTs) demonstrate their competence in relation to these standards.

An analysis of each of the transcribed and coded debriefings of both OBD and VER interactions between the supervisor and the four focus teachers discussed in the previous chapter indicates that, similar to reflective commentary, VER greatly increases the opportunities for NTs to communicate their knowledge, skills, and
abilities as described in the CSTPs when compared to traditional observation-based debriefings. Additionally, similar to reflective commentary, when the NTs commented on any CSTP-related topic during the OBD interactions, the majority of their comments lacked the depth and breadth of those that were shared in their VER conversations with the supervisor.

A third finding regarding CSTPs in the VER and OBD interactions also reflects what was found in the analysis of participation in terms of reflective commentary, as outlined in the previous chapter. In OBD conversations, the supervisor is the more privileged speaker, whereas the reverse is true in the VER interactions, in which the NT is the more privileged speaker. Again, the artifact used as the focus of the discussion—the supervisor’s observational notes in OBD and the self-videotaped lesson in VER—appears to determine who will be the more privileged participant in the discussion.

Comparing CSTP-Based Commentary in OBD and VER Interactions

Graph 4 demonstrates how OBD and VER differ in terms of occurrences of CSTP-based references during the supervisor-novice teacher interaction. In this chart, as with Graph 1 in the previous chapter, the percentage of NT contributions to the conversation is compared to the percentage of supervisor contributions in both OBD and VER debriefings.
As Graph 4 depicts, in all four cases with the focus NTs, the percentage of CSTP-based commentary by the NTs increased in each of the VER interactions compared to the percentage of NT CSTP-based comments that arose in the OBD debriefings, and in every case other than with Connie, that increase was particularly significant. This parallels the trend that became apparent when analyzing the data in terms of reflective commentary. As with the reflective commentary in OBD and VER, the role of the supervisor in the interaction is reversed from dominant speaker in the OBD interaction to more of a recipient of information from the NT in the VER conversation; thus, the NT becomes the privileged speaker in the discussion. Table 11 outlines in more detail the contributions by the NTs to the CSTP-based
commentary for both OBD and VER interactions, presented in both numerical and percentile terms.

Table 11: Comparison of Novice Teacher CSTP-Based Comments in OBD and VER Debriefings

<table>
<thead>
<tr>
<th>Novice Teacher</th>
<th>Group</th>
<th>Total OBD CSTP-Based Comments</th>
<th>Total NT OBD CSTP-Based Comments</th>
<th>NT % of Total CSTP-Based Comments</th>
<th>Total VER CSTP-Based Comments</th>
<th>Total NT VER CSTP-Based Comments</th>
<th>NT % of Total CSTP-Based Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ginny</td>
<td>A</td>
<td>87</td>
<td>26</td>
<td>30%</td>
<td>94</td>
<td>85</td>
<td>90%</td>
</tr>
<tr>
<td>Delia</td>
<td>A</td>
<td>67</td>
<td>26</td>
<td>39</td>
<td>153</td>
<td>113</td>
<td>74</td>
</tr>
<tr>
<td>Emmett</td>
<td>B</td>
<td>109</td>
<td>30</td>
<td>27</td>
<td>77</td>
<td>72</td>
<td>94</td>
</tr>
<tr>
<td>Connie</td>
<td>B</td>
<td>156</td>
<td>78</td>
<td>50</td>
<td>131</td>
<td>82</td>
<td>63</td>
</tr>
</tbody>
</table>

As was the case with the analysis of reflective commentary, the data shows Ginny, Delia, and Emmett increasing their CSTP-based commentary by higher percentages than that which occurred with Connie. Ginny increased by 60%, Delia by 35%, and Emmett by 64% between the CSTP-based commentary they contributed in the OBD to VER interactions. Connie, however, increased her CSTP-based commentary between OBD and VER debriefings by only 13%, which prompted a closer analysis of her transcripted and coded interactions, discussed later in this chapter.

The Nature of CSTP-Based Commentary: Comparing OBD and VER

A similar qualitative analysis was carried out with CSTP-based commentary as was conducted with reflective commentary in Chapter 5, focusing on not only the quantity but also the quality of the commentary put forth by the focus NTs in both the OBD and VER debriefings.
Using some of the same NT commentary that was shown in Tables 8 and 9 (see Chapter 5) as examples, the same lack of depth and breadth can be seen in the OBD interactions in terms of CSTP-based commentary that is evident in the analysis of their OBD reflective commentary. For example, a comment such as, “I skipped an essential step” refers only to Instructional Planning and Delivery (CSTP C). The comment, “I love that kid. It broke my heart when he said today, ‘Your class is boring’” refers only to Student Engagement (CSTP E). The comment, “I think I gave up at that moment. They were refusing to listen to me” refers at best to Instructional Planning and Delivery (CSTP C) and Student Engagement (CSTP E), but clearly lacks the sort of depth and breadth a supervisor needs to understand the pedagogical thinking and understandings (or perhaps misunderstandings) behind the comment.

On the other hand, the commentary that was offered by the novice teachers in the VER interactions often covered a broader range of CSTPs not only in the entire debriefing but even within each comment, due at least in part to the elaboration each of the focus NTs provided in their VER debriefings. An example from Emmett, taken from Table 9 in Chapter 5, illustrates this point.

I’ve noticed that it takes a lot of time to ask them to speak up louder, and some of the kids are just way too shy, and if I do that, it shuts them down. So even though I know certain kids are shy and I’ve been taught, people have taught me to try to make them be louder… I’ve noticed that it shuts them down. So I actually, now my thing is, when somebody says something…I’ll pick up the salient points and just restate it out loud again for the whole class to hear.

In this response, Emmett includes commentary that primarily addresses Student Engagement (CSTP E) when he discusses how forcing shy or quiet students to
speak up may actually serve to “shut them down” instead. But he also addresses Instructional Planning and Delivery (CSTP B), Classroom Management and Environment (CSTP B), and Making Subject Matter Comprehensible (CSTP D) in this response when he discusses how he picks up the “salient points” offered by the quiet student and “restate(s) it out loud” for the other students to hear and learn from. In this manner, Emmett provides evidence to the supervisor that he is trying to respect the individual student’s needs (not to be the focus of attention) while ensuring that a good teaching point is not lost (paraphrasing and restating it out loud). By doing so, he is sending the message to the student that his statement has been honored and that taking the risk to offer a comment was worth it and, in the process, Emmett has built an even more positive classroom environment. To a lesser extent, Emmett has even addressed CSTP A, Assessing Student Learning. By restating the “salient points” made by the shy student, Emmett has informally assessed the student’s contribution and is acknowledging that the student has offered an appropriate response.

Impressively, in this one short response, Emmett has addressed all of the five CSTPs related to in-class teaching. Further, Emmett has given the supervisor a much clearer understanding of the thinking behind his actions in the videotaped lesson segment.

Similar results came from analyzing the VER transcripts of the other three focus NTs. Examples from their transcripts show the same pattern of multiple CSTPs being addressed in one elaboration segment, as illustrated in this response by Delia:

So I think for the most part on this video I hear their comments and then I just kind of reassert what they said and add to it …I want to
make sure that everybody heard that comment, I want to make sure that person feels encouraged and make sure that person feels that I understood… Sometimes I feel like if they said it but maybe it wasn’t adequate enough, maybe I’ll get their point but it wasn’t phrased in the best way, I’ll take it and kind of reword it. Usually I say, “Is that right?” or something like that… I think it’s a conscious effort of mine to increase their chances of comprehension… I’m hoping that if they’re not picking up on the language I’m using, especially for the ones that are really struggling, at least they’re picking up on the language of their peers and hearing it in a different way, so (it helps them if they are) hearing it on different levels from different people.

Delia’s response incorporates the same CSTPs as were found in Emmett’s response, which are the five CSTPs that relate to in-class teaching. In this short response, just a few minutes in length, she manages to discuss Instructional Planning and Delivery (how she “reasserts” what the student says), Making Subject Matter Comprehensible (rephrasing to “increase their chances at comprehension”), Student Engagement (“make sure that person feels encouraged”), Assessment (paraphrasing, adding to it, and asking “Is that right?”), and Classroom Management and Environment (honoring the contributions of the students even when their points weren’t “phrased in the best way”).

The same five standards are also addressed in this response from Connie:

I’ve had them do graphic organizers before… The reason I decided to model (this graphic organizer) on the board this time (was because) I knew this would be good for their recording (important information) as they go…I (also) found this group to have trouble doing groupwork… [discusses that one of her instructors had warned against doing that early in the year as a new teacher and she had been struggling with it]…I for sure have to assign them pairs, and then it’s still a struggle, because so many kids get off task and they abuse that time… normally I would give them (an activity like) this as a pair… (but this time) I was trying to come up with a different idea (of
how to present the activity)… and I (also) wanted them to all be on the same page for this.

Connie’s response includes references to Instructional Planning and Delivery (“The reason I decided to model…”; “I was trying to come up with a different idea…”) and Classroom Management and Environment (“I for sure have to assign them pairs…”; “Normally I would give them [an activity like this] as a pair”). She also addresses Student Engagement (“I knew this would be good for their recording as they go”; “I [also] wanted them to all be on the same page for this”) and Making Subject Matter Comprehensible (modeling the graphic organizer while students record the information as they follow along). At the same time, Connie is commenting on Assessment, in this case her informal assessment of how engaged or disengaged she has noticed students to be in various group configurations, and the steps she has taken to address those issues in her approach to this particular activity.

Lastly, an analysis of some of Ginny’s commentary during the VER interaction illustrates the ways in which the five CSTPs also surface in the conversation between her and the supervisor:

I want to work on engaging more of the class… (and learn how to) use different question techniques. As far as the lesson itself, I think it went fairly well, it’s something that’s useful. I’m looking for ways to build upon that. Scheduling time at the library may help build that up…Later in the tape they got into groups. I like collaboration but it’s interesting what the audio of the camera catches that I don’t catch while I’m circulating…students talking, off-task stuff, students talking about dreams…(I struggle with) how to keep them accountable for their talk. I worry about that when they’re given a task to do.

In this short passage, Ginny addresses issues of Student Engagement in such comments as wanting to work on engaging more of the class, scheduling library time
to help “build that up”, and struggling with keeping students accountable when they work in groups. Instructional Planning and Delivery also comes up in her comments about scheduling library time and how to keep students accountable “when they’re given a task to do”, which also brings in Classroom Management and Environment. Her comments about noticing certain student behaviors that “the audio of the camera catches that I don’t catch while I’m circulating” also relate to Classroom Management and Student Engagement concerns. Making Subject Matter Comprehensible and Assessment are both addressed in such comments as learning how to use “different question techniques” and building on the student learning that resulted in the previous lesson by scheduling time at the library to help extend the learning further.

Given the increase in the amount of commentary offered by the NTs in the VER debriefings, both in the total commentary offered as well as in individualized responses such as the examples from the four focus NTs above, it is not surprising to find that CSTP-based commentary, as well as reflective commentary, was far richer and more extensive in this study than that which occurred in the OBD interactions.

**The Impact of the “Artifact” on CSTP-Based Commentary**

The same process was carried out with the analysis of CSTP-based commentary that was done with reflective commentary; that is, the total CSTP-based commentary that occurred in the OBD interactions was compared with the same type of commentary in the OBD conversations after the supervisor’s notes were introduced into the interaction. As was found with reflective commentary, it is evident that the introduction of the notes had an impact on the amount of total CSTP-based
commentary by the NTs, with both Delia and Connie’s contributions to that commentary dropping dramatically, as depicted in Graph 5.

**Graph 5: Comparison of Novice Teacher Total CSTP-Based Commentary and CSTP-Based Commentary After Observational Notes Introduced in OBD Interaction**

Taking the analysis one step further, as was also done in the analysis of reflective commentary, a comparison was then made between total NT commentary related to the CSTPs that occurred in the OBD interactions, the OBD interactions after the supervisor’s notes were introduced into the discussion, and VER interactions, the results of which are outlined in Graph 6.
Graph 6: Comparison of Novice Teachers’ Total OBD CSTP-Based Commentary, OBD CSTP-Based Commentary After Notes Introduced, and VER CSTP-Based Commentary

The same trend that was found when looking at reflective commentary in the OBD interactions that occurred after the supervisor’s notes were introduced is also apparent when analyzing CSTP-based commentary. Once again, although Ginny offered most of her CSTP-based commentary after the notes were introduced approximately eight minutes into the debriefing, with the pre-note conversation accounting for only 2% of the CSTP-based commentary, the other three NTs had more dramatic decreases once the notes were introduced. Although Delia and Emmett’s pre-note conversations were also brief, beginning just a few minutes into their respective OBD debriefings, Graph 6 illustrates that the CSTP-based commentary dropped by 8% for Emmett and 20% for Delia once the notes were introduced into the OBD interaction. The most dramatic decrease occurred in the case of Connie, as it did with the reflective commentary, for a difference of 22%. Therefore, the apparently
slim difference between OBD and VER CSTP-based commentary for Connie, which first appeared to be just 13%, was actually a 35% difference. Table 12 illustrates the differences between OBD after notes were introduced and VER in terms of CSTP-based commentary for each of the focus NTs.

Table 12: Comparison of Novice Teacher CSTP-Based Commentary in VER and OBD After Observational Notes Introduced

<table>
<thead>
<tr>
<th>Novice Teacher</th>
<th>OBD CSTP-Based Commentary After Notes Introduced (%)</th>
<th>VER CSTP-Based Commentary (%)</th>
<th>Increase in CSTP-Based Commentary (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ginny</td>
<td>28</td>
<td>90</td>
<td>62</td>
</tr>
<tr>
<td>Delia</td>
<td>19</td>
<td>74</td>
<td>55</td>
</tr>
<tr>
<td>Emmett</td>
<td>18</td>
<td>94</td>
<td>76</td>
</tr>
<tr>
<td>Connie</td>
<td>28</td>
<td>63</td>
<td>35</td>
</tr>
</tbody>
</table>

Summary of the Impact of the Artifacts on CSTP-Based Commentary

Once again, the introduction of the supervisor’s observational notes not only did not serve to encourage CSTP-based commentary by the NT, but in three of the four cases, it greatly reduced what had been offered prior to the notes being introduced and, in Delia’s and Connie’s cases, the CSTP-based commentary was nearly silenced. Conversely, the VER approach appears to have enhanced the NT contributions to the CSTP-commentary, and in three of the four cases, that increase was particularly dramatic.

As was done with the analysis of NT reflective commentary, a paired sample T-test was conducted, this time using the data in Table 12, with the results revealing that there was a significant difference in CSTP-based commentary between OBD and
VER, \( t(3) = -6.68, p < .01 \), with CSTP-based NT commentary being significantly more frequent in VER.

**Quality and Quantity of CSTP-Based Commentary in OBD and VER Debriefings**

Across all cases with the NTs, the interactional dynamic in terms of addressing the California Standards for the Teaching Profession between the supervisor and novice teacher was affected by the type of approach used for debriefing. In OBD, the supervisor appears to be the one more likely to address the CSTPs; in the VER debriefing, the novice teacher appears to dominate the conversation in that regard. This contrast became even more significant once the supervisor’s notes were introduced into the conversation.

Also similar to the findings with reflective commentary, the NTs offered more depth and breadth in their CSTP-based commentary in the VER setting than in OBD, particularly in the areas of Instructional Planning and Delivery, Maintaining an Effective Classroom Environment (which includes management issues), and Engaging All Students. As illustrated in Tables 8 and 9, the NTs once again discussed more topics in greater depth and also made deeper connections between such issues as university coursework and classroom teaching experiences in VER than they did with OBD. As with the reflective commentary, their CSTP-based comments also covered a longer period of time, sometimes back to the beginning of the academic year, rather than a narrow timespan surrounding the lesson under discussion. It appears that the very nature of the VER approach as carried out in this study, which naturally
encourages more elaboration on the part of the NT, cannot help but bring up more
CSTPs by the NT than those that arise in the OBD approach.

As was mentioned in the previous chapter, those deeper and broader
connections cannot be attributed to a certain sequence of the OBD and VER
experiences, since Group A and Group B experienced those approaches in opposite
order. They also cannot be attributed to verbal tendency, level of confidence, or
perceived competence, since those factors varied widely across participants. And, as
was also discussed in the analysis of reflective commentary, VER appears to be an
important and perhaps even essential tool for determining the level of knowledge,
skills, and abilities of NTs towards meeting the standards of new teachers as set forth
in the California Standards for the Teaching Profession, offering what appears to be a
far better opportunity for the expression and communication of those understandings
by the novice teacher, and in a natural and nonthreatening manner, than that which
occurs in OBD. The next chapter focuses on that interaction between the novice
teacher and the supervisor in both OBD and VER settings.
CHAPTER 7:
VIDEO-ELICITED REFLECTION AND
SUPERVISOR-NOVICE TEACHER INTERACTION

The third research question in this study asked: In what ways does video-elicited reflective debriefing contribute to supervisor-novice teacher interactions? This chapter will discuss the ways in which the type of debriefing, whether observation-based (OBD) or video-elicited reflection (VER), impacts the ways in which novice teachers and supervisors discuss novice teacher pedagogical skills based on lessons taught by the novice teacher. In the observation-based debriefing, the novice teacher and supervisor use the supervisor’s observational notes as the focus of the discussion; in the video-elicited reflective debriefing, the focus of the discussion is a self-videotaped lesson segment not previously seen by the supervisor.

Based on the findings of this study, VER appears to affect the supervisor-novice teacher interaction in significant ways, tying into earlier findings discussed in previous chapters indicating that VER provides an effective mode for encouraging more pedagogical elaboration and reflection on the part of the novice teacher. In this way, VER provides “ownership” of the interaction for the novice teacher by allowing her to dominate the course of the conversation whereas, in OBD, that interaction is dominated by or “owned” by the supervisor.

Supervisor Guidance and Supervisor Elicitation

One of the best indicators for demonstrating how the interactional dynamic shifts between OBD and VER is by comparing two type of comments made by the
supervisor during each interaction. These two types of comments were among the 
emergent codes that arose during the analysis of the OBD and VER transcripted 
debriefings with the four focus novice teachers.

One of these types of comments is termed Supervisor Guidance, in which the 
supervisor provides commentary designed to improve pedagogical skills, knowledge 
and abilities for the novice teacher regarding issues that arise during the debriefing. 
This sort of guidance may include, for example, giving advice, helping problem-solve, 
or offering helpful teaching tips to the novice teacher.

The other type of comment analyzed here is termed Supervisor Elicitation. In 
this type of commentary, the supervisor elicits information from the novice teacher, 
which may consist of asking questions, using sentence starters (such as “And you 
chose to do that because…”), or prompting for clarification or elaboration.

Graph 7 illustrates the total number of comments for both Supervisor Guidance 
and Supervisor Elicitation offered by the supervisor in both OBD and VER 
debriefings with the four focus NTs.
Graph 7: Comparison of Supervisor Comments in OBD and VER Debriefings

As Graph 7 outlines, the type of commentary most offered by the supervisor in the OBD setting is primarily Supervisor Guidance, with 68 total comments among the four focus NT debriefings versus only 21 in the VER interactions, or approximately three times the guiding comments over elicitations. In contrast, the reverse is true in the VER setting, with Supervisor Elicitation far outweighing guiding commentary offered by the supervisor. Whereas the supervisor elicited information from the focus NTs a total of 62 times in the OBD interactions, the elicitations across the four VER interactions totaled 250, a four-fold increase over OBD.

As such, the supervisor’s role in the VER interaction becomes less that of a dominant “expert” and more of an inquisitive peer, whereas the reverse is true in the OBD setting. As witnessed in the analysis of reflective and CSTP-based commentary, the artifact used as the focus of the interaction appears to play a significant role in determining the ways in which the supervisor and novice teacher interact.
The Impact of the “Artifact” on Supervisor-Novice Teacher Interactions

As discussed in the previous two chapters, the set of observational notes appears to privilege the supervisor’s voice in the OBD interaction, and the self-videotaped lesson segment used in the VER debriefings appears to privilege the novice teacher as the dominant voice. The same holds true in terms of the ways in which the artifact impacts the supervisor-novice teacher interaction in the broader sense. Because the supervisor’s observational notes drive the discussion in OBD, the supervisor controls the conversation to a large degree. Since the supervisor created the notes, she “owns” and therefore becomes the “expert” for that artifact; since the novice teacher has not previously seen the notes nor knows of the thinking behind them, she can only play the part of the recipient in that conversation, assigning her a much lesser role in the interaction. As stated earlier in this paper, this study did not set out to discourage or condemn this type of interaction, since there is indeed a place for supervisor-driven conversations in the supervisor-novice teacher interaction.

However, in the VER setting, the artifact is the self-videotaped lesson by the NT, thus making her the “owner” of and therefore the “expert” for that artifact. Since the supervisor has not previously viewed the videotape or the lesson itself, she can only play the part of the recipient in the conversation and therefore the one most in control of the VER debriefing is the novice teacher. In VER, the novice teacher is given the opportunity to voice her thoughts as they come to her while watching the videotaped segment, allowing the supervisor to understand the NT’s pedagogical knowledge, skills, and abilities, as well the thinking behind them, in a natural and
nonthreatening manner. The supervisor-driven “top-down” dynamic found in traditional OBD interactions does not exist in VER conversations as implemented in this study, that is, without the supervisor being present during the videotaped lesson nor having viewed the videotape prior to the debriefing. The dynamic instead becomes “bottom up”, that is, constructed and driven by the novice teacher.

**Video-Elicitation and “Double Reflection”**

One more essential difference between OBD and VER approaches as carried out in this study, one that evidently affects the supervisor-novice teacher interaction as well as the supervisor’s awareness of the NT’s pedagogical knowledge, skills, and abilities, concerns the process of the NT preparing for the VER interaction. Although all participants were given the option of previewing the taped lesson segment prior to viewing it with the supervisor or simply choosing a segment at random when the VER interaction took place, all chose to preview the taped segment on their own prior to meeting for the video-elicitation. That choice evidently enhanced the interaction above and beyond the level of reflection that might otherwise occur.

Across all the NTs, the final reflections shared in the exit interviews provide evidence that, by previewing the tape first, an initial phase of reflection took place on their parts. Then, when meeting one-on-one with the supervisor and viewing the tape together, with the NT “controlling” the conversation through the think-aloud process, a second phase of reflection occurred—a “double reflection” as one participant termed it. By going through the reflective process twice over time, once independently and the second time in the VER interaction with the supervisor, the NTs
had time to process their thoughts about their respective lessons in a deeper fashion. By having that opportunity to “double reflect”, it appears that more of the NTs’ cognitive and metacognitive thoughts were able to take form and subsequently surface during the VER interaction.

In contrast, because of the immediacy of the OBD interaction, traditionally taking place as soon as the lesson was completed or shortly thereafter, that level of reflection is apparently compromised merely because it has not had the chance to form. When asked in the individual exit interviews if they thought it would be helpful to have more time between the observation of the lesson and the debriefing with the supervisor, all of the NTs agreed that such an approach would not be as helpful as the VER approach, since the visuals provided by the videotape would be absent. Each of the NTs believed that the act of seeing themselves in the act of teaching the lesson segment was instrumental in their recalling why they took certain actions. In that sense, the previewing of the videotaped lesson segment also served as a method for prompting those recollections. Then, by explaining those thoughts to the supervisor, recollections often evolved into reflections, as discussed in the next section.

**Connections Between Descriptive-Explanatory and Reflective Commentary**

The data from both types of debriefing with the focus NTs indicates that VER appears to promote what initially begins as descriptive or explanatory commentary into deeper reflective commentary via supervisor elicitation over the course of the debriefing. Whereas both OBD and VER debriefings include descriptive and explanatory comments by the NT throughout the debriefing, the supervisor elicitations
that are so predominate in a VER debriefing appear to play a significant role in promoting descriptive-explanatory commentary to evolve into reflective commentary more so than in OBD. Through the process of the supervisor prompting the NT for clarification or elaboration of descriptive or explanatory comments in a VER debriefing, the NT’s comments often begin to include more reflective commentary in combination with the descriptions or explanations given over the course of the conversation, and eventually become mostly if not entirely reflective in nature.

An example of this sort of interaction between the NT and supervisor is illustrated in Table 13, excerpted from the transcripted VER debriefing with Ginny. In this videotaped segment, Ginny is approximately eight minutes into the lesson. The classroom she teaches in is on the far edge of the campus, approximately a five-to-ten minute walk from the main campus, and she is required to walk her seventh graders from the main campus to her classroom each day. In this segment of the conversation, Ginny is explaining her start-up routine for the class as shown on the videotape.
Table 13: Patterns of Ginny’s Descriptive-Explanatory and Reflective Commentary in VER Debriefing

Supervisor: When do you take roll?

Ginny: Sometimes I don’t get to it (right away) because of the distance from the main campus. And I have the agenda on the board. I don’t do that always.

Supervisor: Why not?

Ginny: I would like to… unfortunately, mornings are kind of hectic.

Supervisor: And this class starts at 7:30?

Ginny: Yeah. But I do notice a difference when everything is done ahead of time. It definitely goes a lot more smoothly.

Supervisor: Why do you think that is?

Ginny: Because they see right away that we have specific things we’re going to be working on in class, it’s clear to them that I’ve come prepared, that even the lights being on in the classroom…

Supervisor: Isn’t it funny? …So you do notice a difference?

Ginny: I do notice a difference.

Supervisor: How often do you have the agenda up?

Ginny: About once a week [per class—she sees this class three times a week].

Supervisor: Is there any way you could have the agenda written up the night before?

Ginny: Possibly. Also having copies ready the day before would help… That’s one of my goals during the break (to get better prepared for the next semester). I’m thinking more that I want to introduce more units… I’m going to work on that over the break… portfolios, different strategies, writer’s workshop…

In this conversation, Ginny begins with a simple description of the challenge of taking roll while getting students settled after the walk from the main campus, which then becomes a larger discussion of how her hectic mornings make it difficult for her
to be completely prepared prior to walking the students down to class. She begins to discuss the difference it makes when the classroom is ready for the students and how that sends a message to them that she is fully prepared. Through only brief elicitation on the supervisor’s part, Ginny then begins to discuss her goals for being better prepared the next semester, not only in terms of having copies made ahead of time, but also in the type of curricular and instructional approaches she wants to implement after the winter break. What began as a simple explanation about taking roll became a much deeper and broader reflection on her own pedagogy that lasted nearly 10 minutes.

On the other hand, OBD interactions appear to inhibit elaboration and reflection on the part of the novice teacher, therefore negatively impacting communication between the supervisor and novice teacher and, as a result, compromising the supervisor’s understanding of the NT’s knowledge, skills, and abilities. Without the artifact of the self-videotaped lesson serving as a visual impetus for eliciting the NT’s thoughts, the task of surfacing reflective commentary on the part of the novice teacher becomes more challenging for the supervisor. As discussed in previous chapters, the supervisor’s observational notes as the only record of the lesson not only seem to impede reflection, but also inhibit even rudimentary description or explanation, as evidenced in the following interaction with Ginny in the OBD conversation. In this excerpt, the supervisor is explaining her notes about one student who was out of his seat and distracting others while Ginny was reading aloud from a text.
In this conversation, Ginny shares only two comments, one that explains what she thought the student was doing and another that explains and at best only superficially reflects on why he was allowed to be wandering around during the lesson (because she never saw him). Due to the brevity as well as the lack of depth of Ginny’s comments, the supervisor has nothing to build upon. Since Ginny didn’t notice anything, she has nothing upon which to elaborate, and any reflection that might have resulted from this interaction is restricted at best. The supervisor has little to work with at this point, so she offers guidance for how to deal with the student should a similar situation arise in the future. Therefore, the “ownership” of the conversation that begins with the supervisor and her notes stays there; Ginny is not in a position to take over the ownership or control of the conversation simply because the artifact created by the supervisor, that is, the supervisor’s notes, is driving the discussion.
On the other hand, had this same lesson segment been viewed on videotape, especially a lesson segment taped without the supervisor present, it would be difficult for Ginny not to notice this student out of his seat and distracting others, and she likely would have done so without the supervisor having to say anything. Then the supervisor could have built upon Ginny’s volunteered commentary by eliciting more information, as she did in the VER interaction, and she could have done so without putting Ginny on the defensive or causing her to feel embarrassed or insecure about her teaching development. In this way, Ginny would be taking charge not only of the conversation but also of her pedagogical development, another benefit that VER seems to promote.

**Summary of the Impact of the Artifact on Supervisor-Novice Teacher Interaction**

Because Ginny created and therefore “owned” the artifact presented in the VER debriefing, that is, her self-videotaped lesson segment not previously seen by the supervisor, she was in primary control of the conversation, and the supervisor’s role was simply to elicit more information to build upon topics *introduced by Ginny*. Even though Ginny was pointing out something in the videotape that she should have been doing, just as the supervisor was doing in the OBD interaction, her self-initiated comments based on what she saw in her VER debriefing built towards a broader and deeper discussion which ultimately encompassed instruction, curriculum, and planning for the following semester, and she did so without embarrassment or guilt.

However, in the OBD interaction, the supervisor’s comments did not help further the discussion and, since Ginny had no visual impetus to help her see the
distraction that was occurring while she was teaching, she had nothing further to offer. The supervisor’s notes not only did not lead to reflective commentary or even more elaboration on Ginny’s part, they actually could not lead to it to the extent offered by the VER approach.

As a result, the supervisor’s only recourse was to offer guidance, which in effect kept her in control of the conversation. Additionally, by voicing her awareness of Ginny’s oversight of the disruptive behavior, particularly since Ginny had not even seen it, the supervisor created a situation in which Ginny had to either defend her actions or admit to poor teaching, a predicament unlikely to nurture the supervisor-novice teacher relationship. The only other option the supervisor could choose would be to avoid mentioning the incident at all, which would not be helpful to Ginny’s pedagogical development and no more desirable than putting Ginny in a defensive position.

In the VER interaction, the supervisor’s questions as quoted in Table 13, some of which might seem critical in an OBD interaction, simply come across to the NT as elicitations, a desire for more information to help clarify what is being shown in the videotaped lesson segment. The affective filter (Krashen, 1982) that can be heightened and therefore intrude upon the supervisor-novice teacher interaction in an OBD setting is lowered in the VER setting, allowing for more discussion and elaboration by the NT and ultimately leading to more pedagogical insights for both the supervisor and the novice teacher.
An example of such insights can be found in the VER interaction with Emmett, in which the supervisor and he were viewing the videotape of his eighth grade class. In this segment, Emmett has assigned a “brainstorming quickwrite” in which his students were asked to write a response to a prompt provided by Emmett. While watching this segment of the lesson, Emmett points out in the video how he purposely gets in close proximity with one student, which leads to the following interchange:

Supervisor: And why did you do that?

Emmett: Because he was (pretending to be) playing drums. That area, I moved to that area and that calmed him down.

Supervisor: So you do that periodically?

Emmett: [points out a spot in the classroom] This area here, that’s my #1 position, and that [points to another spot], that’s my #2 position. Maybe here [pointing at another spot] is my #3 and here [pointing at another spot] by Joyce is my #4. Actually 3 and 4 are tied in terms of where I usually stand.

Supervisor: Okay, and why do you [stand at these spots]?

Emmett: #1 is the entrance of the class, it’s like the apex.

Supervisor: Like the front of the room?

Emmett: Exactly. Number 2 is by [names three students]. Amazing kids, but management is tougher with them.

Supervisor: And you have them sitting together?

Emmett: It just turned out that way...the first time I did seating charts, and I just haven’t changed them yet.

Supervisor: So do you feel the need to change them?
Emmett: No, not yet. I will when I really feel like I need to change it.

At this point in the conversation, a typical response from the supervisor might be to tell Emmett that he should separate those students who create challenging management situations for him. However, as the videotaped lesson continued, so did Emmett’s commentary about the reasons he was allowing those “challenging” students to remain seated together. Pointing to the screen, Emmett continues to describe the behavior issues with the three students he initially mentioned, then points out two other students at the table group next to theirs who also present management challenges for him. He then points out how he circulates to his “#2 position”, a position that is between these two groups.

Supervisor: So if you come over here [points to the #2 position], (the two groups) both settle down.

Emmett: Right.

Supervisor: So you’re finding that it’s helpful to have them kind of clustered where you can get at all of them all at once?

Emmett: I didn’t think of that! Yeah!

Emmett then points out two male students that he keeps seated apart, one of whom is intentionally seated with three high-achieving female students.

Emmett: I wouldn’t say he’s low performing, but he’s high management, so it’s good for him to be sitting with those girls. They really keep him on track.

Supervisor: And if he were sitting over here? [points to Emmett’s #2 position]

Emmett: Forget it!
Supervisor: If he were sitting over with this cluster [at the #2 position], it would be more than he could handle?

Emmett: Yeah, Alan and Josh are (sitting apart) and that’s good.

Supervisor: So Alan and Josh are far apart, and that’s good why?

Emmett: Because when they get together the house will blow!

Supervisor: Are they buddies?

Emmett: They’re buddies!

Supervisor: I see. So you have them [Alan and Josh] intentionally separated, you have these guys intentionally clustered [pointing at the three students initially mentioned], and you have them intentionally clustered [pointing to the second pair of students].

Emmett: It just turned out that way when I seated them, isn’t that crazy?

Supervisor: Yeah, but you noticed that it worked for you. So you decided to keep it that way.

Emmett: Exactly. Maybe I’ll split (the second pair of students) up, because I think there’s a friendship forming there—that’s not going to work. But I’m not sure, I’ll see.

Through the collaborative viewing of this videotaped lesson segment coupled with supervisor elicitation, which is almost entirely for clarification purposes in this particular interaction, both the supervisor and Emmett were able to gain some valuable insights into his pedagogical practice. Clearly, Emmett was not allowing his challenging students to sit together simply because that was how the randomized seating chart turned out, although that was what he first claimed. As the conversation continued, using the videotaped segment as the focus of the discussion, Emmett was
able to provide sound reasons into why certain students were seated together while others were intentionally separated. By articulating these reasons, he not only offered information that demonstrated to the supervisor that he was in charge of his classroom management and student learning, he also gained insights into his own pedagogy. Emmett realized that he was making important teaching and management decisions, in some cases apparently subconsciously, that improved the classroom climate for all of his students as well as himself, even when he hadn’t realized at the time that he was doing so.

By viewing and discussing the videotaped lesson with the supervisor, Emmett was empowered as he was given the opportunity to explain the thinking behind his actions and, in the process, took ownership of his own teaching. The supervisor was able to help Emmett articulate and ultimately realize what he was doing simply by asking questions and paraphrasing his comments, thus allowing Emmett’s pedagogical intentions to rise to the surface in a natural, nonthreatening, collegial manner. At the same time, the supervisor was able to see that Emmett was managing his class in an intentional and capable manner, providing logical explanations for allowing certain students to sit together whom the supervisor might have typically directed Emmett to separate had he not provided the rationale behind his less traditional approach.
CHAPTER 8:
SUMMARY OF VIDEO ELICITATION IN TEACHER PREPARATION

This study unveiled a variety of findings that may have implications for teacher education in particular and, in a larger sense, for mentoring, supervising, coaching or collaborating with teachers, whether novice or experienced. Some of these findings were expected, some were unexpected, and some were expected but not to the degree in which they appeared. Many of the patterns discovered in the analysis of the data can be effectively discussed by revisiting my initial hypotheses.

Initial Anticipated Outcomes

At the outset of this study, I had one main purpose in mind, that is, to find out whether and to what extent the addition of VER debriefings, when used as a supplemental approach to traditional observation-based supervisory debriefings, would be shown to be effective, relevant, and efficient in preparing novice teachers for teaching at the secondary level. Related to that, I anticipated three specific outcomes:

1. VER debriefing would provide both descriptive and reflective commentary by the NT that expresses more self-awareness and understanding of pedagogical skills, knowledge, and approaches than traditional observation-based debriefing alone.

2. VER debriefing would provide the supervisor with more understanding of the NT’s pedagogical skills, knowledge, and approaches above and beyond the understanding provided through traditional observation-based debriefing.
3. VER debriefings would provide a better opportunity for more novice teacher-driven conversation between supervisor and NT than traditional observation-based supervisor-driven debriefing.

As evidenced in the discussion of findings in the previous chapters, each of these hypotheses appears to be accurate. An itemized discussion of each hypothesis follows which serves to illustrate the ways in which the results of the study provide specific evidence to support each claim.

**Purpose, Hypotheses and Actual Outcomes**

The general purpose for this study was to determine if the addition of VER debriefings, when used as a supplemental approach to traditional observation-based supervisory debriefings, would prove to be effective, relevant, and efficient in preparing novice teachers for teaching at the secondary level.

Both the supervisor and the participating novice teachers in this study believed that VER was not only interesting and engaging, but also very relevant and effective in informing their pedagogical practice and understandings. In terms of efficiency, logistical considerations such as time, space, and equipment make VER a somewhat complex activity in which to engage at times, but little more than with traditional OBD. The only additional consideration VER adds beyond carrying out an observation-based debriefing concerns the issue of equipment, that is, having access to some means for taping and viewing the lesson segment. However, since video cameras were easily available (either at their site or the university) for the novice teachers to use, and since videotaped segments can easily be converted to computer
disks, which in turn can be easily viewed on a laptop computer, this issue proved to be a minor one for both NT and supervisor. Also, since self-videotaping of a lesson segment was already a standard component of the teacher preparation program in which these NTs were participating, it did not place any additional burden on their workload or course load.

All of the participants stated that VER added a different and effective way of viewing their teaching development, helping them pinpoint areas of strength and improvement, and each stated that both VER and OBD approaches should be included in a teacher preparation program. Given the choice, none of the NTs believed that OBD should be the only approach to supervisor-NT interaction for discussing pedagogical issues as compared to utilizing both VER and OBD approaches. VER was considered to be equally, and in some cases even more, helpful to the NT’s awareness and understanding of their pedagogical development.

Specific Hypotheses and Actual Outcomes

Three specific outcomes were anticipated in this study, as separately outlined below, including a discussion of the actual outcome for each.

Hypothesis 1

Hypothesis 1 states: VER debriefing provides both descriptive and reflective commentary by the NT that expresses more self-awareness and understanding of pedagogical skills, knowledge, and approaches than traditional observation-based debriefing alone.
Both quantitative and qualitative analysis of the data from both VER and OBD debriefings points to the accuracy of this statement. The analysis of both approaches with the four focus NTs, as discussed in the previous three chapters, provides evidence that VER contributes to a significant increase in the novice teacher’s participation in the interaction, increasing both descriptive and reflective commentary across all five focus CSTP areas, particularly in terms of the standards related to effective classroom environment, instructional planning and delivery, and student engagement. Qualitative analyses of the recorded debriefings, both VER and OBD, provide further evidence that VER expands the opportunities for NTs to articulate their knowledge, skills, and approaches in both descriptive and reflective ways.

Hypothesis 2

Hypothesis 2 states: VER debriefing provides the supervisor with more understanding of the NT’s pedagogical skills, knowledge, and approaches above and beyond the understanding provided through traditional observation-based debriefing.

Based upon the analysis of both quantitative and qualitative data gathered from all eight participants, particularly in the analysis of the VER and OBD debriefings of the four focus novice teachers, the results indicate that VER adds significant insights for the supervisor regarding the development of the novice teacher’s pedagogical knowledge, skills, and abilities above and beyond information and insights gained through traditional observation-based debriefings. This is particularly true in the area of NT development toward meeting the expectations of the California Standards for the Teaching Profession (CSTP), especially CSTPs A through E, the standards most
likely to be evidenced in the classroom. Further, the CSTPs related to effective classroom environment, instructional planning and delivery, and student engagement were particularly highlighted in the VER debriefings.

Additionally, compared to OBD, the nature of the VER debriefing approach appears to be much more conducive as a tool for assisting in the supervisor’s understanding of the cognitive and metacognitive processes of the novice teacher; that is, allowing for more insight into the “thinking behind the thinking” as well as the thinking behind the actions of the NT.

Moreover, with the VER approach, the articulation of the NT’s thinking and actions is attained in a very natural and non-threatening manner. Whereas in an OBD interaction, the supervisor may seem to be commanding the NT to “defend” or “justify” her actions when asked such questions as, “Why did you do that?” the same question asked in a VER interaction comes across to the NT as merely inquisitive, a request for elaboration or clarification. The difference for the NT is a sense of interrogation in the OBD interaction versus inquiry in the VER interaction.

By lowering the affective filter (Krashen, 1982) in this way, the NT tends to provide much more information to the supervisor in terms of describing, explaining, and/or reflecting on her actions and thoughts not only in the teaching situation being viewed, but also above and beyond the lesson segment itself. The supervisor thus gains significant awareness of the NT’s pedagogical knowledge, skills, and abilities through the NT’s descriptions and reflections based on the teaching event as well as in broader contexts before, during, and even after the segment is taped. In this way, both
the depth and breadth of the supervisor’s understandings of the NT’s pedagogical development is clearly enhanced when VER is employed.

Hypothesis 3

Lastly, Hypothesis 3 states: VER debriefings provide a better opportunity for more novice teacher-driven conversation between supervisor and NT than traditional observation-based supervisor-driven debriefing.

The best evidence to support this hypothesis can be found in the comparative quantitative analysis of the four focus participants, although a qualitative analysis of all 16 audiotaped debriefings and 8 exit interviews provides support for this conclusion as well. The tables and figures provided in the previous chapters are one way of illustrating just how dramatic the shift is from a supervisor-driven interaction to novice teacher-driven conversation when VER is utilized. Whereas the supervisor dominates the interaction in OBD debriefings to the point of the conversation being largely one-sided, the VER approach instead privileges the NT as the dominant speaker in the interaction. Furthermore, commentary by the supervisor in the VER interaction is largely in the form of prompting or eliciting more information from the NT, as shown in.

One explanation for this dramatic shift appears to be in the more conducive setting provided by VER, allowing the NT more control of the conversation and its direction, reducing anxiety and the affective filter that might impede the natural flow of conversation. As one participant put it, VER put him in the “driver’s seat” and the
supervisor became the “passenger”, whereas he saw the reverse as being true in an observation-based debriefing.

Another explanation for more novice teacher-driven conversation may lie in the form of the tool or artifact used as the basis of the interaction. With observation-based debriefings, the artifact upon which the discussion is based is the observational notes written by the supervisor. Therefore, in OBD, the supervisor—that is, the one who created and therefore “owns” the artifact and is presenting it to the receiver, in this case the novice teacher—tends to be the dominant speaker in the interaction. By being placed in the position of providing the thinking behind the artifact, in this case the notes, thereby making the artifact comprehensible for the recipient in the interaction, it should not be surprising that the supervisor dominates the debriefing.

On the other hand, in a VER setting, the artifact upon which the discussion is focused in the videotaped lesson segment, a lesson not previously seen either in person or on tape by the supervisor. Therefore, the “owner” of the artifact becomes the novice teacher, and the recipient becomes the supervisor. The same dynamic as found in the OBD interaction is present in the VER setting—that is, the one presenting the artifact and therefore explaining the thinking behind it becomes the dominant speaker in the interaction—but in the case of VER, that dominant speaker, by necessity, becomes the novice teacher. The supervisor’s main role is to gain a better understanding of the artifact, in this case the videotaped lesson and the pedagogical decisions behind it, which is done by prompting or eliciting more information.
Given the different dynamics of the settings and artifacts in which OBD and VER take place, particularly because VER as used in this study is based on lesson segments not previously seen by the supervisor, different speakers are therefore privileged in the interaction depending on the approach used. In order to provide more opportunities for novice teachers to better articulate the reasons and beliefs behind their teaching actions, the results of this study indicate that VER by its very nature offers an approach more conducive toward this end than OBD.

**Comparison and Contrast of VER and OBD from the NT’s Perspective**

Evidence from the data collected for this study, both qualitative and quantitative, suggests that VER, when combined with OBD, provides a richer and more varied interaction for both the novice teacher and supervisor than OBD alone. Articulated thought on the part of the NT is naturally promoted and far more evident in VER, the vehicle for the supervisor-NT interaction is less intimidating in VER than in OBD and, therefore, VER is more conducive to improved understandings on both the part of the supervisor and NT concerning the development of the NT’s pedagogical knowledge, skills, and abilities, as well as the underlying reasons behind the NT’s teaching actions. As Delia shared in her exit interview:

…(VER) gives me a chance to explain everything that I’m doing and everything that’s going on in my environment... I think that’s one thing we’re paranoid about when teachers come in and observe us; we don’t get a chance to say “Well that’s why this kid was out of his seat” or “That’s why this was going on”, whereas this way, it gives us the opportunity to explain that and justify, if need be, certain behaviors.
This is not to say that OBD does not play an important, perhaps even critical, role in the development of novice teachers and in their interactions with their supervisors. Although the supervisor clearly takes a much more dominant role in OBD, all participants agreed that there is an important place for OBD in teacher preparation, and an interaction of which they would not want to be deprived. When asked which, if either, approach was preferable, the participants consistently noted that both approaches were helpful, yet in different ways, providing insights into their teaching that they believed they would not be able to achieve otherwise. As Emmett put it, OBD is “from the outside in” and VER is “from the inside out”. He continued:

They’re both really helpful. And I’m not even going to say that the video is better or a better way to do it, but the video helped me because it gave me a chance to reflect before I brought it in to reflect with you. So a double reflection, whereas in the first one (OBD), … we get to reflect on it together after it already happened. And it’s like oh wow, she saw it this way, I didn’t see it that way at all, and I saw it that way and she didn’t see it that way.

Connie initially offered these comments in her exit interview:

Connie: The video was good ‘cause I was able to look at it myself. It was kind of embarrassing and weird and strange to see myself but it’s a really good experience, but I found that it’s better to do it this way (OBD) because you’re more experienced than I am so you kind of know what to look for and what to pick on and things to suggest. Whereas when I’m looking at a video of myself I’m kind of like well… I know the things you’ve talked about in our classes, like moving around the room or calling on different people, like I know those things but…

MS: So this (OBD) is good for guidance?

Connie: Yes, (OBD is good) for guidance and the video is good for reflection. They’re both helpful though.
Later in the interview, after discussing her VER experience in more detail, she offered more of her thoughts about VER:

Connie: It *was* helpful…

MS: Helpful? In what way?

Connie: Because I could control it and tell you what I felt like I needed to tell you; it wasn’t just you watching and (my) having no control over explaining what was going on. But it was good because you’re able to ask me the questions that get me thinking about what my motivations were. I don’t always think about those things.

Whereas OBD provides the NT an experience in which an “outsider”, in this case the supervisor, serves as knowledgeable advisor and the NT’s role is primarily to listen, the VER setting reverses that dynamic. In OBD, the thoughts of the “expert” are mostly heard; in VER, the thoughts of the novice are given voice, and the participants in this study believed both are important. The two approaches used in tandem provide a broader, more accurate understanding for the supervisor of the novice teacher’s development as an educator as well as who the NT is as an individual. At the same time, both approaches provide the NT with a broader and more accurate understanding of who the supervisor is as an educator, mentor, guide, colleague, and even human being. Based on the evidence in this study, it appears that VER allows the NTs a better venue for revealing their own skills, knowledge, and abilities, whereas OBD allows for a greater focus on the skills, knowledge, and abilities of the supervisor.
CHAPTER 9:
CONSIDERATIONS FOR FUTURE RESEARCH
IN VIDEO-ELICITED REFLECTION

Although the results of this study show definite promise for enhancing teacher preparation by incorporating video-elicited reflective debriefings into the traditional debriefing approaches used by supervisors with their novice teachers, it should be kept in mind that a number of components were unique to this study. More research needs to be conducted in these areas in order to determine the definitive use regarding the use of video-elicited reflective debriefing in teacher preparation programs.

Areas for Future Research

Several specific implications arise in terms of conducting and generalizing the study across a longer timeframe as well as a broader array of participants, school settings, and content areas. In order to determine conclusively the ways in which video-elicited reflection expands upon traditional methods for supporting teachers, more studies would need to be conducted that address the areas discussed below.

Timeframe. Data collection for this study was carried out over a five-month period at the beginning of the academic school year, with the bulk of the data collected within a two-month period prior to winter break. Thus, the novice teachers were not only very new to teaching in their own classrooms but also to the teaching field itself. As such, their firsthand knowledge of the ways in which schools work, and in particular their own school sites, was obviously limited; everything was new to them. They were learning daily a multitude of “do’s and don’ts” for working with students, administrators, peers, parents, and curriculum and, in addition, they were attending
evening classes twice a week, with all the demands of full-time graduate students. Had this study encompassed an entire school year, it is reasonable to believe that the NTs in this study would have become more accustomed to their new roles—which were, in a sense, a new identity for each of them—and the conversations around their teaching may well have become more varied and in depth. In order to ascertain if this hypothesis would prove true, a study based on this design could be conducted over an entire academic year, with more debriefings of both observation-based and video-based lesson segments.

School Settings. As described previously, the school settings for this study were determined by the intern placements given to the English intern teachers in the teacher education program, which meant that only two sites were included in this study as a result. Although the two sites were very different in many ways, as outlined previously, they were both charter schools. Future studies could be conducted across a variety of schools, including traditional public middle and high schools in a wider variety of socioeconomic, racial and ethnic settings, to determine similarities and differences with the outcomes of this study.

Participants. Generalizing the study to a larger population of teachers, including those new to the field as well as those who have worked in it many years, would possibly provide more substantive evidence for determining the extent to which the methods described here are more or less supportive for teachers at various points in their careers. Although this study deliberately focused on supervisor-supervisee interactions, it could well be studied in settings between mentors or support providers and those teachers for whom they are providing support, such as in induction
programs as described by Feiman-Nemser (1997, 2001a). It could also be studied in a student-teacher program, in which the novice teacher is supported by a master classroom teacher as well as a university supervisor, as opposed to an intern teacher program in which the NT spends the bulk of the time in the classroom on her own. Additionally, other non-university-based programs could be studied using this approach, such as Teach for America or district-intern programs, to determine its effectiveness across broader populations in less traditional programs. In that sense, VER might prove to offer the type of support necessary to create high quality alternative programs, such as those described by Darling-Hammond (2006; 2007).

*Experimental and Control Group.* This study intentionally included only an experimental group. Although there was some consideration of using a control group—that is, a group that would experience only the traditional observation and debriefing approach—it was determined that this would be unfair to those assigned to that group. Given that the pilot data showed promise of supporting NTs in new and different ways, as opposed to traditional OBDs alone, it would be unprofessional to deny any of the NTs the possibility of an enhanced experience in the program. For those who prefer experimental research designs, the study could therefore be broadened to include experimental and control groups, perhaps across teacher education programs, to determine more conclusively the effects of the VER approach as a supplement to traditional OBDs.

*Video-Elicitation Design.* This study focused the video-elicitation portion on videotaped lessons that were not observed by the supervisor, which may have brought about different results than had the supervisor been present at the time of the
videotaping. To generalize the findings of this study, two approaches to video-elicited reflective debriefings could be conducted; one in which the supervisor was present and the other without the supervisor seeing the lesson firsthand. Comparing the level of NT reflection as well as the dominant speaker between the two approaches might better determine which approach promotes the broadest and most in-depth reflection on the part of the NT.

Another design could build on the idea of “video clubs” as described by Sherin (2000; 2005), in which small groups of novice teachers would come together with their supervisor to view self-videotaped lessons of each other and, in that way, conduct collaborative VER sessions with their peers. However, in order for this approach to be conducive to improving the pedagogical content knowledge (Shulman, 1986) of each novice teacher, it would be imperative to provide a trusting and supportive climate among the novice teachers, as well as between the NTs and supervisor, to lower the affective filter (Krashen, 1982) that would likely be an issue for most if not all of the NTs, at least at the outset.

The approach to the taping of lessons taught by novice teachers could also take advantage of more sophisticated technology that is now more widely available and affordable than in the past. This study focused on taping lessons using only a video camera for the simple reason that video cameras are readily available and easily affordable to most any teacher preparation program, plus they take little technical mastery to use, meaning that the potential use of VER as described in this study would not be limited to only those programs that are well financed or technologically advantaged programs. However, future research could be conducted by programs with
access to such technology, studying whether the use of more advanced technology using the VER approach in supervisor-novice teacher interactions generates similar or different outcomes to those found in this study.

Researcher/Supervisor Role. As described earlier, I played a dual role as an active-member-researcher in this study, that is, I served as both supervisor and researcher with the participants. Another area to research, in addition to the ways outlined above, could focus on conducting the same sort of study using a researcher who has no role with the participants or the program in which they are enrolled. It would be informative to test the approaches used in this study across supervisors, which might also provide more evidence by incorporating other types of personalities and interactional styles than could be included here.

It is clear, given the possibilities described above, that the use of video-elicited reflection in supervisor-novice teacher interactions as conducted in this particular study is but one way to research this promising approach. Many other possibilities exist, even more than are outlined here, for incorporating VER in teacher preparation and development in order to promote what Feiman-Nemser (2001a) describes as a relationship in which the expert and novice are “educational companions” and “co-thinkers”, working toward the mutual goal of achieving effective, reflective pedagogical practice.
CHAPTER 10:

REFLECTION AND THE ARTISTRY OF GOOD COACHING

One definition of the word “reflect” is “to think seriously, carefully, and relatively calmly,” which is certainly a worthy goal as a teacher. But another definition strikes me as being even more apropos for the purposes of this discussion, that is, “to show a reverse image of somebody or something on a mirror or other reflective surface” (Microsoft, 1999). In this case, reflection provides an opportunity for novice teachers to be seen as others may see them, to examine their practice from a more distanced vantage point.

The process of reflection can be easily confused with the process of recollection. In recollection, one recalls an event—or typically an issue related to an event—and through that process of recalling, provides a description and perhaps an explanation about that event. Reflection goes a step further; it requires a looking back as well as a stepping back. Reflection takes the Who, What, When, and Where of a situation and looks at it through the broader lens of Why and How.

Reflection is not an easy thing to “teach”. It is more a matter of guiding one towards reflection. In my experience as a supervisor, some NTs are naturally more reflective than others, thinking back on and learning from events on their own without prodding or encouragement from outside, but the majority of NTs need a stimulus to get the reflective process going. Recollection is relatively easy for a novice teacher; reflection can be more challenging.
Given that the California Standards for the Teaching Profession promote the idea of teachers demonstrating reflective thinking in order to receive a teaching credential, and given that the state of California will actually mandate it as a credentialing requirement via the California teaching performance assessment (effective 2008-2009), this dichotomy poses the question of how to promote and build upon the reflective practice abilities of preservice teachers during the credentialing year, regardless of whether or not they have the natural inclination to do so. Mandating reflection, however, does not necessarily lead to reflection. What passes for reflection can instead be recollections based on descriptions and explanations of teaching experiences.

Schön’s work was based on the belief that, through a continual “feedback loop” of experience, learning and practice, we are better able to improve our own work and more likely to become reflective practitioners. The study outlined in this paper was an attempt to support and assist novice teachers by offering them a different tool for that feedback loop and thus expand upon their pedagogical recollections toward true reflective practice. To repeat a quote mentioned earlier in this discussion, Schön also believed that with “freedom to learn by doing in a setting relatively low in risk, with access to coaches who…help (novices)…to see on their own behalf and in their own way what they need most to see,” students will be better able to learn and practice the “art” of teaching. “We ought, then, to study the experience of learning by doing and the artistry of good coaching” (p. 17).
By all indications, video-elicited reflection appears to be an important and perhaps vital tool for teacher preparation, not only for the novice teacher, but for her mentors as well. Based on the findings of this study, VER appears to promote coaching as an art, not just a task, for the supervisors and support providers working with these new teachers, while also providing these new teachers a better opportunity to peer into the pedagogical mirror, to see their reverse teacher images, and to expedite their development towards becoming truly effective, reflective practitioners.
APPENDICES

Appendix A: Initial Interview Questions

Appendix B: California Standards for the Teaching Profession and Teacher Performance Expectations for Single Subject Teaching

Appendix C: Quantitative Analysis Charts for OBD and VER Interactions with Focus Novice Teachers
APPENDIX A

INITIAL INTERVIEW QUESTIONS

A. Background:
   1. What are your reasons for deciding to pursue a credential for teaching secondary English?

   2. Imagine that it’s now five years in the future. What do you imagine that you will be doing at that time?

   3. As of now (the beginning of the school year), you have one year of field experience in secondary classrooms in the San Diego area. Where and what were your field experiences? (e.g. AVID, content area tutoring, apprenticing). What were your experiences like?

   4. What other experiences, if any, have you had working with middle and/or high school aged students? (This can be in and/or outside of the school setting) What were your experiences like?

   5. What kind of secondary school did you attend? (Prompt if necessary—setting, demographics, SES, etc.)

   6. What kind of courses did you take in secondary school? (Prompt if necessary—advanced, honors, AP, IB, college prep, ”regular”, etc.)

   7. How familiar are you working:
      a. With struggling/low performing students?
      b. With advanced/high performing students?
      c. With English learners?
      d. In the kind of school to which you’re assigned this year (in this case, all charter schools—one low SES/high minority, the other middle to upper middle SES and mostly White)

B. Attitudes & Perceptions
   1. You’re just starting out on your first teaching experience in a classroom of your own. What are your concerns about being the “instructor of record”—that is, the only teacher in charge of the students in your classroom?

   2. Knowing what you know about your assigned school at this point, what are your initial impressions about
      a. The school itself?
      b. The staff?
      c. Your position as a teacher at that site?
      d. The students you are teaching?
3. When you think back to your own secondary school, and compare it to (name of current site), what similarities do you see? What differences? (ask for each separately). What are your thoughts about those similarities and differences?

4. You’re a new teacher. Tell me about that experience so far.

C. **Supervision**

1. Each intern in the credential program works with a supervisor. Would you talk about what you expect that interaction to be like? What concerns do you have about working with a supervisor? What questions do you have?

2. As you know, you will be participating in two different types of formal lesson debriefings (as well as informal interactions) with your supervisor (that is, me) this year. One will be based on a supervisor-observed lesson in which the supervisor will take notes as you teach the lesson; these notes will then be discussed with you after the lesson is over. The other form of debriefing will consist of your videotaping a lesson you are teaching without the supervisor present; the two of you will then meet to hear what you have to say about the lesson as you watch the videotape together. Which, if either, form of debriefing do you think you may prefer? Why do you think so?

3. Thanks for talking about your experiences and thoughts. Are there questions you'd like to ask me about the process of being supervised?
CSTP A: MAKING SUBJECT MATTER COMPREHENSIBLE TO STUDENTS

TPE 1: Specific Pedagogical Skills for Subject Matter Instruction

Background Information: TPE 1. TPE 1 is divided into two categories intended to take into account the differentiated teaching assignments of multiple subject and single subject teachers. Multiple subject credential holders work in self-contained classrooms and are responsible for instruction in several subject areas; single subject teachers work in departmentalized settings and have more specialized assignments. These categories are Subject-Specific Pedagogical Skills for Multiple Subject Teaching Assignments (1-A), and Subject-Specific Pedagogical Skills for Single Subject Teaching Assignments (1-B). (Only TPE 1-B is included here)

TPE 1B: Subject-Specific Pedagogical Skills for Single Subject Teaching Assignments

Teaching English-Language Arts in a Single Subject Assignment

Candidates for a Single Subject Teaching Credential demonstrate the ability to teach the state-adopted academic content standards for students in English-Language Arts (Grades 7-12). They understand how to deliver a comprehensive program of systematic instruction in word analysis, fluency, and systematic vocabulary development; reading comprehension; literary response and analysis; writing strategies and applications; written and oral English Language conventions; and listening and speaking strategies and applications. They know how to strategically plan and schedule instruction to ensure that students meet or exceed the standards. They understand how to make language (e.g., vocabulary, forms, uses) comprehensible to students and the need for students to master foundational skills as a gateway to using all forms of language as tools for thinking, learning and communicating. They understand how to teach the advanced skills of research-based discourse; incorporate technology into the language arts as a tool for conducting research or creating finished manuscripts and multimedia presentations; focus on analytical critique of text and of a variety of media; and provide a greater emphasis on the language arts as applied to work and careers. Candidates teach students how to...
comprehend and produce complex text, how to comprehend the complexity of writing forms, purposes, and organizational patterns, and how to have a command of written and oral English-language conventions. They know how to determine the skill level of students through the use of meaningful indicators of reading and language arts proficiency prior to instruction, how to determine whether students are making adequate progress on skills and concepts taught directly, and how to determine the effectiveness of instruction and students’ proficiency after instruction.

**Teaching Mathematics in a Single Subject Assignment**

Candidates for a Single Subject Teaching Credential in Mathematics demonstrate the ability to teach the state-adopted academic content standards for students in mathematics (Grades 7-12). They enable students to understand basic mathematical computations, concepts, and symbols, to use them to solve common problems, and to apply them to novel problems. They help students understand different mathematical topics and make connections among them. Candidates help students solve real-world problems using mathematical reasoning and concrete, verbal, symbolic, and graphic representations. They provide a secure environment for taking intellectual risks and approaching problems in multiple ways. Candidates model and encourage students to use multiple ways of approaching mathematical problems, and they encourage discussion of different solution strategies. They foster positive attitudes toward mathematics, and encourage student curiosity, flexibility, and persistence in solving mathematical problems.

Additionally, Single Subject Candidates help students in Grades 7-12 to understand mathematics as a logical system that includes definitions, axioms, and theorems, and to understand and use mathematical notation and advanced symbols. They assign and assess work through progress-monitoring and summative assessments that include illustrations of student thinking such as open-ended questions, investigations, and projects.

**Teaching Science in a Single Subject Assignment**

Candidates for a Single Subject Teaching Credential in Science demonstrate the ability to teach the state-adopted academic content standards for students in science (Grades 7-12). They balance the focus of instruction between science information, concepts, and principles. Their explanations, demonstrations, and class activities serve to illustrate science concepts, and principles, scientific investigation, and experimentation. Candidates emphasize the importance of accuracy, precision, and estimation. Candidates encourage students to pursue science interests, especially students from groups underrepresented in science careers. When live animals are present in the classroom, candidates teach students to provide ethical care. They
demonstrate sensitivity to students' cultural and ethnic backgrounds in designing science instruction.

Additionally, Single Subject Candidates guide, monitor and encourage students during investigations and experiments. They demonstrate and encourage use of multiple ways to measure and record scientific data, including the use of mathematical symbols. Single Subject Candidates structure and sequence science instruction to enhance students’ academic knowledge to meet or exceed the state-adopted academic content standards for students. They establish and monitor procedures for the care, safe use, and storage of equipment and materials, and for the disposal of potentially hazardous materials.

**Teaching History-Social Science in a Single Subject Assignment**

Candidates for a Single Subject Teaching Credential in History-Social Science demonstrate the ability to teach the state-adopted academic content standards for students in history-social science (Grades 7-12). They enable students to learn and use analytic thinking skills in history and social science while attaining the state-adopted academic content standards for students. They use timelines and maps to reinforce students’ sense of temporal and spatial scale. Candidates teach students how social science concepts and themes provide insights into historical periods and cultures. They help students understand events and periods from multiple perspectives by using simulations, case studies, cultural artifacts, works of art and literature, cooperative projects, and student research activities.

Additionally, History-Social Science Single Subject Candidates connect essential facts and information to broad themes, concepts and principles, and they relate history-social science content to current or future issues. They teach students how cultural perspectives inform and influence understandings of history. They select and use age-appropriate primary and secondary documents and artifacts to help students understand a historical period, event, region or culture. Candidates ask questions and structure academic instruction to help students recognize prejudices and stereotypes. They create classroom environments that support the discussion of sensitive issues (e.g., social, cultural, religious, race, and gender issues), and encourage students to reflect on and share their insights and values. They design activities to counter illustrate multiple viewpoints on issues. Candidates monitor the progress of students as they work to understand, debate, and critically analyze social science issues, data, and research conclusions from multiple perspectives.
CSTP B: ASSESSING STUDENT LEARNING

TPE 2: Monitoring Student Learning During Instruction

Candidates for a Teaching Credential use progress monitoring at key points during instruction to determine whether students are progressing adequately toward achieving the state-adopted academic content standards for students. They pace instruction and re-teach content based on evidence gathered using assessment strategies such as questioning students and examining student work and products. Candidates anticipate, check for, and address common student misconceptions and misunderstandings.

TPE 3: Interpretation and Use of Assessments

Candidates for a Teaching Credential understand and use a variety of informal and formal, as well as formative and summative assessments, to determine students’ progress and plan instruction. They know about and can appropriately implement the state-adopted student assessment program. Candidates understand the purposes and uses of different types of diagnostic instruments, including entry level, progress-monitoring and summative assessments. They use multiple measures, including information from families, to assess student knowledge, skills, and behaviors. They know when and how to use specialized assessments based on students' needs.

Candidates know about and can appropriately use informal classroom assessments and analyze student work. They teach students how to use self-assessment strategies. Candidates provide guidance and time for students to practice these strategies.

Candidates understand how to familiarize students with the format of standardized tests. They know how to appropriately administer standardized tests, including when to make accommodations for students with special needs. They know how to accurately interpret assessment results of individuals and groups in order to develop and modify instruction. Candidates interpret assessment data to identify the level of proficiency of English language learners in English as well as in the students’ primary language. They give students specific, timely feedback on their learning, and maintain accurate records summarizing student achievement. They are able to explain, to students and to their families, student academic and behavioral strengths, areas for academic growth, promotion and retention policies, and how a grade or progress report is derived. Candidates can clearly explain to families how to help students achieve the curriculum.
CSTP C: ENGAGING AND SUPPORTING STUDENTS IN LEARNING

TPE 4: Making Content Accessible

Candidates for Teaching Credentials incorporate specific strategies, teaching/instructional activities, procedures and experiences that address state-adopted academic content standards for students in order to provide a balanced and comprehensive curriculum. They use instructional materials to reinforce state-adopted academic content standards for students and they prioritize and sequence essential skills and strategies in a logical, coherent manner relative to students' current level of achievement. They vary instructional strategies according to purpose and lesson content. To meet student academic learning needs, candidates explain content clearly and reinforce content in multiple ways, such as the use of written and oral presentation, manipulatives, physical models, visual and performing arts, diagrams, non-verbal communication, and computer technology. They provide opportunities and adequate time for students to practice and apply what they have learned. They distinguish between conversational and academic language, and develop student skills in using and understanding academic language. They teach students strategies to read and comprehend a variety of texts and a variety of information sources, in the subject(s) taught. They model active listening in the classroom. Candidates encourage student creativity and imagination. They motivate students and encourage student effort. When students do not understand content, they take additional steps to foster access and comprehension for all learners. Candidates balance instruction by adjusting lesson designs relative to students’ current level of achievement.

TPE 5: Student Engagement

Candidates for Teaching Credentials clearly communicate instructional objectives to students. They ensure the active and equitable participation of all students. They ensure that students understand what they are to do during instruction and monitor student progress toward academic goals. If students are struggling and off-task, candidates examine why and use strategies to re-engage them. Candidates encourage students to share and examine points of view during lessons. They use community resources, student experiences, and applied learning activities to make instruction relevant. They extend the intellectual quality of student thinking by asking stimulating questions and challenging student ideas. Candidates teach students to respond to and frame meaningful questions.

TPE 6: Developmentally Appropriate Teaching Practices

Background information for TPE 6: TPEs describe knowledge, skills, and abilities for all credential candidates, and they underscore the importance of generically-effective strategies for teaching a broad range of students. The purpose of TPE 6 is to establish
additional expectations that are of greatest importance in teaching students at distinct stages of child and adolescent development. It is not the intent of TPE 6 to describe practices that are appropriate or effective only at one developmental level. This TPE describes professional practices that are most commonly used and needed for students in each major phase of schooling, grades K-3, 4-8, and 9-12.  

**TPE 6A: Developmentally Appropriate Practices in Grades K-3**

During teaching assignments in Grades K-3, candidates for a Multiple Subject Teaching Credential understand how to create a structured day with opportunities for movement. They design academic activities that suit the attention span of young learners. Their instructional activities connect with the children’s immediate world; draw on key content from more than one subject area; and include hands-on experiences and manipulatives that help students learn. Candidates teach and model norms of social interactions (e.g., consideration, cooperation, responsibility, empathy). They understand that some children hold naïve understandings of the world around them. Candidates provide educational experiences that help students develop more realistic expectations and understandings of their environment. They know how to make special plans for students who require extra help in exercising self-control among their peers or who have exceptional needs or abilities.

**TPE 6B: Developmentally Appropriate Practices in Grades 4-8**

During teaching assignments in Grades 4-8, candidates for a teaching credential build on students’ command of basic skills and understandings while providing intensive support for students who lack basic skills as defined in state-adopted academic content standards for students. They teach from grade-level texts. Candidates design learning activities to extend students’ concrete thinking and foster abstract reasoning and problem-solving skills. They help students develop learning strategies to cope with increasingly challenging academic curriculum. They assist students, as needed, in developing and practicing strategies for managing time and completing assignments. Candidates develop students’ skills for working in groups to maximize learning. They build on peer relationships and support students in trying new roles and responsibilities in the classroom. They support students’ taking of intellectual risks such as sharing ideas that may include errors. Candidates distinguish between misbehavior and over-enthusiasm, and they respond appropriately to students who are testing limits and students who alternatively assume and reject responsibility.

**TPE 6C: Developmentally Appropriate Practices in Grades 9-12**

---

2 TPE 6 does not represent a comprehensive strategy for teaching students at any particular stage; the elements of TPE 6 are intended merely to supplement and not replace the broader range of pedagogical skills and abilities described in the TPEs.
During teaching assignments in Grades 9-12, candidates for a Single Subject Teaching Credential establish intellectually challenging academic expectations and provide opportunities for students to develop advanced thinking and problem-solving skills. They frequently communicate course goals, requirements, and grading criteria to students and families. They help students to understand connections between the curriculum and life beyond high school, and they communicate the consequences of academic choices in terms of future career, school and life options. Candidates support students in assuming increasing responsibility for learning, and encourage behaviors important for work such as being on time and completing assignments. They understand adolescence as a period of intense social peer pressure to conform, and they support signs of students’ individuality while being sensitive to what being "different" means for high school students.

TPE 7: Teaching English Learners

Candidates for a Teaching Credential know and can apply pedagogical theories, principles, and instructional practices for comprehensive instruction of English learners. They know and can apply theories, principles, and instructional practices for English Language Development leading to comprehensive literacy in English. They are familiar with the philosophy, design, goals, and characteristics of programs for English language development, including structured English immersion. They implement an instructional program that facilitates English language development, including reading, writing, listening and speaking skills, that logically progresses to the grade level reading/language arts program for English speakers. They draw upon information about students’ backgrounds and prior learning, including students' assessed levels of literacy in English and their first languages, as well as their proficiency in English, to provide instruction differentiated to students’ language abilities. They understand how and when to collaborate with specialists and para-educators to support English language development. Based on appropriate assessment information, candidates select instructional materials and strategies, including activities in the area of visual and performing arts, to develop students’ abilities to comprehend and produce English. They use English that extends students’ current level of development yet is still comprehensible. They know how to analyze student errors in oral and written language in order to understand how to plan differentiated instruction.

Candidates for a Teaching Credential know and apply pedagogical theories, principles and practices for the development of academic language, comprehension, and knowledge in the subjects of the core curriculum. They use systematic instructional strategies, including contextualizing key concepts, to make grade-appropriate or advanced curriculum content comprehensible to English learners. They allow students to express meaning in a variety of ways, including in their first language, and, if
available, manage first language support such as para-educators, peers, and books. They use questioning strategies that model or represent familiar English grammatical constructions. They make learning strategies explicit.

Candidates understand how cognitive, pedagogical, and individual factors affect students’ language acquisition. They take these factors into account in planning lessons for English language development and for academic content.

**CSTP D: PLANNING INSTRUCTION AND DESIGNING LEARNING EXPERIENCES FOR STUDENTS**

**TPE 8: Learning about Students**

Candidates for a Teaching Credential draw upon an understanding of patterns of child and adolescent development to understand their students. Using formal and informal methods, they assess students’ prior mastery of academic language abilities, content knowledge, and skills, and maximize learning opportunities for all students. Through interpersonal interactions, they learn about students’ abilities, ideas, interests and aspirations. They encourage parents to become involved and support their efforts to improve student learning. They understand how multiple factors, including gender and health, can influence students’ behavior, and understand the connections between students’ health and their ability to learn. Based on assessment data, classroom observation, reflection and consultation, they identify students needing specialized instruction, including students whose physical disabilities, learning disabilities, or health status require instructional adaptations, and students who are gifted.

**TPE 9: Instructional Planning**

Candidates for a Teaching Credential plan instruction that is comprehensive in relation to the subject matter to be taught and in accordance with state-adopted academic content standards for students. They establish clear long-term and short-term goals for student learning, based on state and local standards for student achievement as well as on students’ current levels of achievement. They use explicit teaching methods such as direct instruction and inquiry to help students meet or exceed grade level expectations. They plan how to explain content clearly and make abstract concepts concrete and meaningful. They understand the purposes, strengths and limitations of a

---

3 Teachers are not expected to speak the students’ primary language, unless they hold an appropriate credential and teach in a bilingual classroom. The expectation is that they understand how to use available resources in the primary language, including students’ primary language skills, to support their learning of English and curriculum content.
variety of instructional strategies, including examining student work, and they improve their successive uses of the strategies based on experience and reflection. They sequence instruction so the content to be taught connects to preceding and subsequent content. In planning lessons, they select or adapt instructional strategies, grouping strategies, and instructional material to meet student learning goals and needs. Candidates connect the content to be learned with students’ linguistic and cultural backgrounds, experiences, interests, and developmental learning needs to ensure that instruction is comprehensible and meaningful. To accommodate varied student needs, they plan differentiated instruction. When support personnel, such as aides and volunteers are available, they plan how to use them to help students reach instructional goals.

CSTP E: CREATING AND MAINTAINING EFFECTIVE ENVIRONMENTS FOR STUDENT LEARNING

TPE 10: Instructional Time

Candidates for a Teaching Credential allocate instructional time to maximize student achievement in relation to state-adopted academic content standards for students, instructional goals and scheduled academic tasks. They establish procedures for routine tasks and manage transitions to maximize instructional time. Based on reflection and consultation, they adjust the use of instructional time to optimize the learning opportunities and outcomes for all students.

TPE 11: Social Environment

Candidates for a Teaching Credential develop and maintain clear expectations for academic and social behavior. The candidates promote student effort and engagement and create a positive climate for learning. They know how to write and implement a student discipline plan. They know how to establish rapport with all students and their families for supporting academic and personal success through caring, respect, and fairness. Candidates respond appropriately to sensitive issues and classroom discussions. They help students learn to work responsibly with others and independently. Based on observations of students and consultation with other teachers, the candidate recognizes how well the social environment maximizes academic achievement for all students and makes necessary changes.

CSTP F: DEVELOPING AS A PROFESSIONAL EDUCATOR

TPE 12: Professional, Legal, and Ethical Obligations

Candidates for a Teaching Credential take responsibility for student academic learning outcomes. They are aware of their own personal values and biases and recognize ways in which these values and biases affect the teaching and learning of students.
They resist racism and acts of intolerance. Candidates appropriately manage their professional time spent in teaching responsibilities to ensure that academic goals are met. They understand important elements of California and federal laws and procedures pertaining to the education of English learners, gifted students, and individuals with disabilities, including implications for their placement in classrooms. Candidates can identify suspected cases of child abuse, neglect, or sexual harassment. They maintain a non-hostile classroom environment. They carry out laws and district guidelines for reporting such cases. They understand and implement school and district policies and state and federal law in responding to inappropriate or violent student behavior.

Candidates for a Teaching Credential understand and honor legal and professional obligations to protect the privacy, health, and safety of students, families, and other school professionals. They are aware of and act in accordance with ethical considerations and they model ethical behaviors for students. Candidates understand and honor all laws relating to professional misconduct and moral fitness.

**TPE 13: Professional Growth**

Candidates for a Teaching Credential evaluate their own teaching practices and subject matter knowledge in light of information about the state-adopted academic content standards for students and student learning. They improve their teaching practices by soliciting feedback and engaging in cycles of planning, teaching, reflecting, discerning problems, and applying new strategies. Candidates use reflection and feedback to formulate and prioritize goals for increasing their subject matter knowledge and teaching effectiveness.
APPENDIX C

QUANTITATIVE RESULTS FOR OBD AND VER INTERACTIONS
WITH FOCUS NOVICE TEACHERS

Appendix C-1: Connie
Appendix C-2: Delia
Appendix C-3: Emmett
Appendix C-4: Ginny
## Appendix C-1
### Quantitative Analysis Chart for Connie’s OBD and VER Debriefings

<table>
<thead>
<tr>
<th>Code</th>
<th>Total OBD Comments</th>
<th>Total Connie OBD Comments</th>
<th>% of Total Comments</th>
<th>Total VER Comments</th>
<th>Total Connie VER Comments</th>
<th>% of Total Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSTP 1: Assessing Student Learning</td>
<td>9</td>
<td>7</td>
<td>77%</td>
<td>4</td>
<td>4</td>
<td>100%</td>
</tr>
<tr>
<td>CSTP 2: Classroom Environment</td>
<td>49</td>
<td>21</td>
<td>43%</td>
<td>28</td>
<td>19</td>
<td>68%</td>
</tr>
<tr>
<td>CSTP 3: Instructional Planning &amp; Delivery</td>
<td>41</td>
<td>21</td>
<td>51%</td>
<td>53</td>
<td>30</td>
<td>60%</td>
</tr>
<tr>
<td>CSTP 4: Making Subject Matter Comprehensible</td>
<td>12</td>
<td>5</td>
<td>42%</td>
<td>12</td>
<td>8</td>
<td>67%</td>
</tr>
<tr>
<td>CSTP 5: Student Engagement</td>
<td>45</td>
<td>24</td>
<td>53%</td>
<td>34</td>
<td>21</td>
<td>62%</td>
</tr>
<tr>
<td><strong>Total CSTP Comments</strong></td>
<td><strong>156</strong></td>
<td><strong>78</strong></td>
<td><strong>50%</strong></td>
<td><strong>131</strong></td>
<td><strong>82</strong></td>
<td><strong>63%</strong></td>
</tr>
<tr>
<td>Description/Explanation</td>
<td>70</td>
<td>42</td>
<td>60%</td>
<td>68</td>
<td>51</td>
<td>75%</td>
</tr>
<tr>
<td>Reflection</td>
<td>52</td>
<td>25</td>
<td>48%</td>
<td>43</td>
<td>33</td>
<td>77%</td>
</tr>
<tr>
<td>Novice Teacher Elicitation</td>
<td>7</td>
<td>7</td>
<td>(100)</td>
<td>1</td>
<td>1</td>
<td>(100)</td>
</tr>
<tr>
<td>Supervisor Elicitation</td>
<td>15</td>
<td>N/a</td>
<td>N/a</td>
<td>32</td>
<td>N/a</td>
<td>N/a</td>
</tr>
<tr>
<td>Supervisor Guidance</td>
<td>30</td>
<td>N/a</td>
<td>N/a</td>
<td>11</td>
<td>N/a</td>
<td>N/a</td>
</tr>
</tbody>
</table>
### Appendix C-2: Quantitative Analysis Chart for Delia’s OBD and VER Debriefings

<table>
<thead>
<tr>
<th>Code</th>
<th>Total OBD Comments</th>
<th>Total Delia OBD Comments</th>
<th>% of Total Comments</th>
<th>Total VER Comments</th>
<th>Total Delia VER Comments</th>
<th>% of Total Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSTP 1: Assessing Student Learning</td>
<td>8</td>
<td>2</td>
<td>25%</td>
<td>5</td>
<td>4</td>
<td>80%</td>
</tr>
<tr>
<td>CSTP 2: Classroom Environment</td>
<td>10</td>
<td>3</td>
<td>40</td>
<td>31</td>
<td>24</td>
<td>77</td>
</tr>
<tr>
<td>CSTP 3: Instructional Planning &amp; Delivery</td>
<td>15</td>
<td>6</td>
<td>40</td>
<td>64</td>
<td>47</td>
<td>73</td>
</tr>
<tr>
<td>CSTP 4: Making Subject Matter Comprehensible</td>
<td>5</td>
<td>1</td>
<td>20</td>
<td>6</td>
<td>4</td>
<td>66</td>
</tr>
<tr>
<td>CSTP 5: Student Engagement</td>
<td>29</td>
<td>14</td>
<td>48</td>
<td>47</td>
<td>34</td>
<td>72</td>
</tr>
<tr>
<td><strong>Total CSTP Comments</strong></td>
<td><strong>67</strong></td>
<td><strong>26</strong></td>
<td><strong>39%</strong></td>
<td><strong>153</strong></td>
<td><strong>113</strong></td>
<td><strong>74%</strong></td>
</tr>
<tr>
<td>Description/Explanation</td>
<td>34</td>
<td>20</td>
<td>58</td>
<td>92</td>
<td>83</td>
<td>90</td>
</tr>
<tr>
<td>Reflection</td>
<td>36</td>
<td>14</td>
<td>38</td>
<td>70</td>
<td>53</td>
<td>76</td>
</tr>
<tr>
<td>Novice Teacher Elicitation</td>
<td>1</td>
<td>1</td>
<td>(100)</td>
<td>2</td>
<td>2</td>
<td>(100)</td>
</tr>
<tr>
<td>Supervisor Elicitation</td>
<td>8</td>
<td>N/a</td>
<td>N/a</td>
<td>85</td>
<td>N/a</td>
<td>N/a</td>
</tr>
<tr>
<td>Supervisor Guidance</td>
<td>6</td>
<td>N/a</td>
<td>N/a</td>
<td>5</td>
<td>N/a</td>
<td>N/a</td>
</tr>
</tbody>
</table>
Appendix C-3:  
Quantitative Analysis Chart for Emmett’s OBD and VER Debriefings

<table>
<thead>
<tr>
<th>Code</th>
<th>Total OBD Comments</th>
<th>Total Emmett OBD Comments</th>
<th>% of Total Comments</th>
<th>Total VER Comments</th>
<th>Total Emmett VER Comments</th>
<th>% of Total Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSTP 1: Assessing Student Learning</td>
<td>3</td>
<td>1</td>
<td>33%</td>
<td>9</td>
<td>9</td>
<td>100%</td>
</tr>
<tr>
<td>CSTP 2: Classroom Environment</td>
<td>37</td>
<td>7</td>
<td>19</td>
<td>23</td>
<td>21</td>
<td>91</td>
</tr>
<tr>
<td>CSTP 3: Instructional Planning &amp; Delivery</td>
<td>33</td>
<td>13</td>
<td>40</td>
<td>22</td>
<td>20</td>
<td>91</td>
</tr>
<tr>
<td>CSTP 4: Making Subject Matter Comprehensible</td>
<td>10</td>
<td>3</td>
<td>30</td>
<td>4</td>
<td>3</td>
<td>75</td>
</tr>
<tr>
<td>CSTP 5: Student Engagement</td>
<td>26</td>
<td>6</td>
<td>23</td>
<td>19</td>
<td>19</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total CSTP Comments</strong></td>
<td><strong>109</strong></td>
<td><strong>30</strong></td>
<td><strong>27%</strong></td>
<td><strong>77</strong></td>
<td><strong>72</strong></td>
<td><strong>94%</strong></td>
</tr>
<tr>
<td>Description/Explanation</td>
<td>43</td>
<td>11</td>
<td>26</td>
<td>49</td>
<td>47</td>
<td>96</td>
</tr>
<tr>
<td>Reflection</td>
<td>51</td>
<td>19</td>
<td>37</td>
<td>47</td>
<td>47</td>
<td>100</td>
</tr>
<tr>
<td>Novice Teacher Elicitation</td>
<td>2</td>
<td>2</td>
<td>(100)</td>
<td>1</td>
<td>1</td>
<td>(100)</td>
</tr>
<tr>
<td>Supervisor Elicitation</td>
<td>17</td>
<td>N/a</td>
<td>N/a</td>
<td>78</td>
<td>N/a</td>
<td>N/a</td>
</tr>
<tr>
<td>Supervisor Guidance</td>
<td>23</td>
<td>N/a</td>
<td>N/a</td>
<td>0</td>
<td>N/a</td>
<td>N/a</td>
</tr>
</tbody>
</table>
## Appendix C-4: Quantitative Analysis Chart for Ginny’s OBD and VER Debriefings

<table>
<thead>
<tr>
<th>Code</th>
<th>Total OBD Comments</th>
<th>Total Ginny OBD Comments</th>
<th>% of Total Comments</th>
<th>Total VER Comments</th>
<th>Total Ginny VER Comments</th>
<th>% of Total Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSTP 1: Assessing Student Learning</td>
<td>3</td>
<td>1</td>
<td>33%</td>
<td>2</td>
<td>2</td>
<td>100%</td>
</tr>
<tr>
<td>CSTP 2: Classroom Environment</td>
<td>58</td>
<td>21</td>
<td>36</td>
<td>25</td>
<td>19</td>
<td>76</td>
</tr>
<tr>
<td>CSTP 3: Instructional Planning &amp; Delivery</td>
<td>15</td>
<td>4</td>
<td>27</td>
<td>35</td>
<td>29</td>
<td>88</td>
</tr>
<tr>
<td>CSTP 4: Making Subject Matter Comprehensible</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td>6</td>
<td>75</td>
</tr>
<tr>
<td>CSTP 5: Student Engagement</td>
<td>11</td>
<td>0</td>
<td>0</td>
<td>24</td>
<td>19</td>
<td>76</td>
</tr>
<tr>
<td>Total CSTP Comments</td>
<td>87</td>
<td>26</td>
<td>30%</td>
<td>94</td>
<td>85</td>
<td>90%</td>
</tr>
<tr>
<td>Description/Explanation</td>
<td>30</td>
<td>27</td>
<td>90</td>
<td>46</td>
<td>42</td>
<td>91</td>
</tr>
<tr>
<td>Reflection</td>
<td>55</td>
<td>27</td>
<td>49</td>
<td>34</td>
<td>28</td>
<td>82</td>
</tr>
<tr>
<td>Novice Teacher Elicitation</td>
<td>9</td>
<td>9</td>
<td>(100)</td>
<td>5</td>
<td>5</td>
<td>(100)</td>
</tr>
<tr>
<td>Supervisor Elicitation</td>
<td>22</td>
<td>N/a</td>
<td>N/a</td>
<td>55</td>
<td>N/a</td>
<td>N/a</td>
</tr>
<tr>
<td>Supervisor Guidance</td>
<td>9</td>
<td>N/a</td>
<td>N/a</td>
<td>5</td>
<td>N/a</td>
<td>N/a</td>
</tr>
</tbody>
</table>
REFERENCES


