UNDERSTANDING LEARNING TO TEACH FOR UNDERSTANDING: AN ORDINARY TALE

By

Loucia D. Constantinou

A DISSERTATION

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

Curriculum, Instruction, and Teacher Education – Doctor of Philosophy

2015

ABSTRACT

UNDERSTANDING LEARNING TO TEACH FOR UNDERSTANDING: AN ORDINARY TALE

By

Loucia D. Constantinou

This study chronicles a Teacher Candidate's (Sara) journey of learning to teach for understanding during her internship year, the fifth year of a five-year teacher preparation program at Great State University, a large University situated in the Midwestern United States.

The traditional literature on learning to teach introduced stages of development that novice teachers need to follow and to "graduate from" before they are able to engage in intellectually demanding teaching. Critics of the learning to teach literature have disputed the above assumption of linearity in teacher development, and have drawn attention to the monolithic way in which novice teachers have been portrayed, underlining the importance of taking context into account in order to understand how learning to teach takes place. Similar to the traditional learning to teach literature, the teaching for understanding literature does not consider novice teachers as capable of engaging in constructivist-oriented teaching as early as their pre-service level exposure to the profession.

To bring these two lines of literature together, I developed the conceptual framework of "paying attention to students' thinking and reasoning," in order to investigate how Sara learned to grow out of an orientation toward herself and her performance as a teacher into an orientation of active attention to students' thinking and reasoning. I studied how she changed in that regard; how that change influenced her teaching; and how she herself perceived that change in her practice and developed tacit knowledge of it.

I spent a year journeying with Sara in her teacher preparation program at Great State University (GSU) and in her internship placement at Ordinary Elementary School—an urban, K-5 public elementary school located in a mid-sized Midwestern city. Sara taught fifth grade in an ethnically, racially, and economically diverse classroom. To capture the evolving life of learning to teach in a school setting, I employed ethnographic methods for crafting a qualitative case study of Sara. I videotaped Sara's teaching daily, using that as content for conversations with her. Her videotaped teaching became "data" and an object of systematic study, as well as text which we dissected daily. Triangulated data consisted of interviews with cooperating teachers, the school principal, and course and field instructors; field notes, which I recorded daily; reflective journal writing (mine and Sara's); and various artifacts (GSU coursework assignments and other documents, Sara's coursework papers and portfolio, and students' journaling and other work).

Grounded theory (Strauss & Corbin, 1990) and the constant comparative method (Glaser & Strauss, 1967; Strauss and Corbin, 1990) were the main methods of data analysis. To present the study's findings, I used Erickson's (1986) notion of the vignette. From one vignette to the next, Sara's story unfolds: a story of rise and fall; of roller coaster rides; of demanding respect from and expecting to be listened to by students; and of arriving at new understandings of respect for and listening to students. Sara's story, an "ordinary tale," is about the intricate story of teacher education. It is essentially about the story of democracy, a story in the making, and a story far away from ordinary.

Copyright By LOUCIA D. CONSTANTINOU 2015 In Loving Memory of my Mother and Father, whose work ethic and love for learning, have taught me φρόνηση (phronesis) και αρετή (and virtue)

And

In Loving Memory of my Grandparents, my Guardian Angels.

ACKNOWLEDGEMENTS

Arriving at the acknowledgement section is a daunting task: who might I forget? Writing it is an impossible act: how do I fit half a century into a few pages? These pages are the product of great emotional labor: translating feelings into thoughts; aligning thoughts with moments. The acknowledgement section of any piece of writing is the place in which private thoughts and feelings are made public, and where various aspects of one's life—personal, professional, public, and private—are inevitably blended and intertwined. In my case, thanks to extensive travelling and long-term studying, various spectrums of my life blended together smoothly and created new places for me to grow and to flourish. Friends became family and family became friends; people became ideas and ideas became commitments; faraway places became home, and up close and personal evolved into unfamiliar and strange: a post-structural act (and gift).

For this unexpected but wonderful blending of the public and private spheres of my life, over the course of a thirty-year period of higher education learning, I owe many thanks to many people from many countries, for a million reasons. It is impossible to list them all. I can mention by name but a few, hoping that the rest will know they have been, and still are, as important to my growth—personal and professional, public and private.

From my early childhood years, I still have very vivid memories of my Grandparents.

Grandfather Loucas was always holding a book, reading and telling me stories. Grandma Agathe was always there, cooking and caring for me. They both taught me, by example, patience, humility, and love: the foundations of a good life. THANK YOU!

During my formal schooling in Cyprus I had the good fortune to be in classrooms where teachers were truly committed to students—an idea, and a stance, I did not understand and appreciate until many years later, while attending graduate school. Many thanks to my many committed teachers! Special thanks to the late Richard Staley, my American teacher of English, who taught me how to pronounce the word "transcript" and that GRE and TOEFL do actually stand for something.

My early studies to become a teacher at the Pedagogical Academy of Cyprus helped me realize the necessity of teacher education, and both how and why this particular field of study would become so important to me. My sense of wonder urged me to travel to faraway places quite early in life. It was then that I made the familiar strange and the strange familiar and close to home: an incredible intellectual gift. Attending the Graduate School of Education at Harvard University offered me some even more important intellectual gifts that shaped my subsequent course of development in significant ways. As a young graduate student in education, I learned about "giving children reason," about "listening to a different voice," and about the importance of foundations (social, psychological, philosophical) upon understanding education. I am deeply indebted to Professors Eleanor Duckworth, Howard Gardner, Carol Gilligan, Israel Scheffler, and my Academic Advisor Catherine Krupnick. They all taught me about the importance of listening well to students—the ones who speak and the ones who do not. It was at Harvard, and through Catherine Krupnick, that I was exposed to the methodology I employed in my study. And it was at Harvard that the intellectual commitments of my work were shaped. Eleanor Duckworth is in the beginning of this study, at the end, and everywhere in between. She taught me, early on, about the notion of "giving children reason" (and not an excuse): an important

intellectual virtue, and an essential quality of every teacher and of every human being. THANK YOU!

My graduate studies were furthered and advanced at the University at Albany-SUNY, in the Department of Educational Theory and Practice (ETAP). I am greatly indebted to many people there, both Professors and academic staff, as well as fellow graduate students, who pushed my thinking about Curriculum, Instruction and Assessment, and around their complex and multidimensional relationships. Through both studying and teaching at Albany, I came to appreciate, once again, the importance of preparing teachers well. I am very grateful for the guidance, the exemplary mentoring and all the professional opportunities offered to me by the former Dean of the School of Education Judy L. Genshaft (currently University of South Florida's President), and by Professors Audrey B. Champagne, David Champagne, the late Alan Purves, Sandra Mathison, Diana Newman, David Chapman, Paul Wallace, the late Donald Biggs, the late David Martin, and many others. Special thanks also to Steve Thompson—former Director of International Student and Scholar Services (ISSS), John Pomeroy—Chief International Admissions Officer, Dee Warner—Director of Academy for Initial Teacher Preparation, and Joan Hughes—ETAP Department Secretary. Many, many thanks!

It was time for me to move to the Midwest, to Michigan State University and the Department of Teacher Education, my home away from home. I had no idea at the time, that my doctoral work at this place would have had such a profound impact on me as a person, as a professional and as a citizen. It was at Michigan State that I understood even further why it is worth devoting one's academic career (and one's life) to teacher education, and why the field needs such serious attention. In the company of an incredible group of individuals—Professors, academic staff, graduate secretaries, fellow graduate students, teacher candidates, and retired

professionals from various fields—I marveled at the ideas of democracy in education, diversity as a strength, and teaching for understanding. Through many valuable professional opportunities (teaching and research assistantships, field instruction, professional conferences, service on various committees) I learned to welcome uncertainty, and that forming good questions is more important than any answer. I learned to value *puzzlement* as a good state of mind, and that any understanding is but provisional and partial waiting to be reconstructed while in the company, and through the collective wisdom, of critical friends. Over a long period of graduate study at Michigan State University, I worked with many Professors, gaining a lot as both a scholar and a person. Some of my Professors helped me built a solid theoretical foundation for my evolving scholarship, either through courses or joint research work. Others provided for me "a laboratory" to study my own practice. I am grateful to all of them for their wisdom and good grace, and I list them alphabetically:

Drs. Janet Alleman, Dorothea Anagnostopoulos, Linda Anderson, Laura Apol, Ann Austin, Maenette Benham, Tom Bird, Roger Bresnahan, the late Jerry Brophy, Margaret Buchmann, Doug Campbell, the late Cleo Cherryholmes, Christopher Clark, Sandra Crespo, Brian DeLany, Corey Drake, Christopher Dunbar, Patricia Edwards, Carol Sue Englert, Sharon Feiman-Nemser, Helen Featherstone, Jay Featherstone, Lynn Fendler, Robert Floden, Susan Florio-Ruane, James Gallagher, Elizabeth Heilman, Mary Kennedy, David Labaree, Judith Lanier, Reitumetse Mabokela, Wanda May, Susan Melnick, Lynn Paine, P.David Pearson, Gail Richmond, Cheryl Rosaen, Jack Schwille, Avner Segall, Jack Smith, Rand Spiro, Randi Stanulis, Maria Teresa Tatto, Steven Weiland, Lauren Young, Peter Youngs, Yong Zhao.

Many other people at MSU, whom I worked with in various positions, have been as important to my development as have faculty members. Thank you to Paul Kurf, Margo Glew,

Sally Labadie, Sharon Schwille, Trudy Sykes, and Philippa Webb for our conversations about how to run such a big teacher preparation program. I benefitted from your deep insights and grounded understanding of teacher preparation. Big thanks to Anne Schneller, Chery Moran, Marlene Green, Todd Drummond, and Christine Caster for always being of service on the fifth floor: outstanding, humbling service. Many others made sure things kept running by processing tedious paperwork with a smile and a lot of grace. Thank you to Terry Edwards, Kristi Lowrie, Kathy Lessard, Karla Bellingar, Tena Harrington, Karen Gray, Kathy Dimoff, Tracy Abbott, Terri Gustafson, David Dai, and Eric Mulvany. Amy Peebles was my angel in the building. Sharon Mills was my mother away from home. Angela Penner in the Registrar's Office always cheered for me. And Linda Brandau was the captain of the ship. My graduate school journey was turbulent and long. Linda made sure everything was in place. She was always on top of every form, always ahead of any trouble. I had fewer sleepless nights knowing that Linda was there. THANK YOU! It also made a difference knowing that every time I came back to the building, the "big office" was open to me, with a warm welcome and genuine curiosity about my whereabouts, academic and otherwise. Thank you to the Teacher Education Department Chairs Drs. Henrietta Barnes, Steven Koziol, and Margaret Crocco.

During my doctoral years at MSU, I had the good fortune to meet and study with the most incredible group *extraordinaire* of fellow graduate students from all over the world. Our *parea* (companionship) took us from heavenly potlucks to exquisite conversations about each other's lived experience(s) regarding democracy and education. I feel very fortunate that my teacher education make up is founded as much on informal interaction with my colleagues from abroad as on my formal education within the Department. Michigan State University, and the Department of Teacher Education in particular, attracts an unusually large and very talented

group of international and internationally minded students, scholars and faculty, from whom I benefited greatly in all respects. A very big, heartfelt salute to Ailing Kong and Jian Wang of China; Rajendran Nagappan, Suseela Malakolunthu, Kurnia Yahya, and Kaliamma Ponnan of Malaysia; Vibha Bhalla of India; Oumatie Marajh of Trinidad; Magane Koshimura and Takayo Ogisu of Japan; Isabella Turtowalujo and Wenda Nofera of Indonesia; Anne Mungai and Rachel Ayieko of Kenya; Lillian Muofhe, Thidziambi Phendla, Manelisi Genge, and Thoko Mpumlwana of South Africa; Marie Mayoya of Burundi; Gaston Dembele and Martial Dembele of Burkina Faso; Tangeni Iijambo of Namimbia; Leaps Malete of Botswana; the late Robert Chimedza, Kedmon Hungwe, and Letina Ngwenya of Zimbabwe; Olga Kristkaya and Olena Aydarova of Russia; Paul Conway of Ireland; and Carolyn O' Mahony of New Zealand. I would like them all to know that they have brought MSU, and its community, closer to the world, making the place even more special. For their priceless international care and concern, I am eternally grateful to my international colleagues, friends and family! Σας ευγαριστώ!

The Department of Teacher Education at Michigan State has very strong programs on New Teacher Induction and Mentoring. It also has a strong tradition on some other, just as precious kind of mentoring—that of senior graduate students serving as mentors for incoming students. I had the very good fortune to have three incredible individuals as mentor graduate students: Elaine Howes, Bill Rosenthal, and Don Duggan-Haas. All three took me under their wing the minute I arrived on campus. They nurtured my body, my mind, and my soul. I will always treasure their friendship, their care and concern, and their love.

A land-grant University second to none, Michigan State University offered me a window to the country and showed me the reasons that the US is worth my love and respect. MSU's commitment to working closely with schools, and its care for their improvement, taught me

valuable lessons on how research and practice can work for each other productively. My years as a field instructor in local schools led me to my dissertation work. Multiple opportunities to advance professionally were offered to me very strategically, and in abundance, through the University's Graduate School. I am very grateful to University President Lou Anna K. Simon and to the Dean of the Graduate School Professor Karen Klomparens for exhibiting a unique example of female leadership: always there, always attending, always pioneering new paths. Thank you to both of you for being such powerful role models! Thank you, also, to Associate Dean for Academic Affairs Dr. Tony Nunez and to support staff Deanne Hubbell for always being there, always open to questions, and ready to give answers.

The Office for International Student and Scholars (OISS) always had the magic stick to make it all happen. Very few people in the University understand the complexities of coming to study from a far-away place. Even fewer know how to handle complicated documents and the maze of deadlines with Washington. Many of us would have been lost without OISS on campus. I am very indebted to Drs. David Horner and Peter Briggs (OISS directors during my years at MSU) and their impeccable staff: Dr. Rudie Altamirano, Chris Bangerstock, and Nancy Rademacher I could not have done it without you. THANKS!

MSU extended itself beyond its own campus, engaging students and scholars with the local community through innovative programs and initiatives like LATTICE (Linking All Types of Teachers to International Cross-cultural Education). I have been very, very fortunate to be part of the LATTICE family for many years. Through LATTICE I learned about the United States and its make up, both physical and human, in ways that I could not have predicted when I first entered MSU, and in ways that MSU alone could not have offered me. A seemingly simple demonstration on American tapestry untangled precious threads, which brought about new

understandings of school and society. So many people from LATTICE and beyond became literally "Bed, Bath and Beyond," hosting, clothing and feeding us, essentially *adopting* so many of us. I am a better person because of the many families who adopted me, during my years at MSU and beyond: cheers to the families of Jack Schwillie, John Metzler, Doug Campbell, Lynn Paine, Maria Teresa Tatto, Reitu Mabokela, Chris Clark, Anne Schneller, Chery Moran, Marlene Green, the late Sally McClintock, Lynn Bartley, Karen Schultz, Margaret Holtschlag, Jean Frentz, Judy Huynh, Chris Worland, Patti Roth, Chris Schaffer, Carol Gould, Gail O'Leksy, and Peter Skinner. To all these families, who made me—and my friends—part of their families, I THANK YOU and I LOVE YOU!

The Greek-American community in Michigan surrounded me with a very stable and sustaining environment so that I could feel I never left home. Special thanks to the community of the Holy Trinity Greek Orthodox Church in Lansing for its support and Greek hospitality. Particular individuals have been, for decades, angels on earth and pillars to lean on in so many ways and for so much. I am deeply, unendingly grateful to have met, and to be part of the families of Professor Elias Strangas (the Godfather), Sophia Koufopoulou (the fairy Godmother), and Frances Katsiris (the red-nosed reindeer): Σας ευχαριστώ πολύ και σας αγαπώ, σας αγαπώ, σας αγαπώ!

A University in its own merit, the local community always welcomed me and wanted to learn from me, offering me love and care in ways that were quiet, least expected and ordinary, but so very special and humane. In the many communities I lived, there were always the kindest people waiting to be of service to me: Kyria Eleftheria expected my visit to her restaurant to offer me her most special piece of feta cheese; Presvytera Athanasia took off her special perideraio (necklace) to give to me as a gift for my departure; Agape P. helped load a container,

despite an injured leg; Peter S. stayed home from work to ship my boxes through the Post Office; and Alina had coffee ready for me at her 711 Store, to warm me up at the end of an exhausting fieldwork day. So many ordinary people, in so many ordinary ways, have made my lived experience in my multiple sites so very extraordinary. Their kindred spirits taught me lessons, rare in conventional institutions, about human care. I am humbled by and very grateful to all of them!

Many years of studying and paying for school in the US brought about some financial challenges and hardships. During those difficult years, I have many people to thank for their generous financial support, without which I could not have completed my American higher education. I am very grateful, and quite honored, to have been awarded a Fulbright Grant twice: once to fund my graduate work at Harvard, and once again to fund my work as a Visiting Research Scholar at Michigan State. Enormous thanks to the Fulbright people in Cyprus and to the Fulbright people in Washington, DC. They made it all happen with so much patience and grace. The Cyprus Ministry of Education and Culture funded my graduate work at Albany for one whole year. The Bank of Cyprus offered me a loan, in the form of a scholarship, for many years. I am grateful to both of these institutions. At the School of Education of The University at Albany-SUNY, I am thankful to Professor Audrey B. Champagne for the honor of working for and with her. Thank you to both the School of Education, as well as to the Department of Educational Theory and Practice, for the "Arvid Burke" and "Initiatives for Women" Awards and for the various graduate assistanships. At Michigan State, I am grateful for all the generous financial support: University Graduate Recruiting Fellowship, University Graduate Continuing Scholarship, Teacher Education Endowed Scholarships, Global Young Scholars Travel Grant, Dissertation Completion Fellowship, and various graduate and research assistanships.

Thank you to Dr. Michael Sedlak, Associate Dean for Academic Affairs at the College of Education, and to his staff, for always finding solutions to any problem, financial or otherwise, and for taking care of business so effectively. Big thanks also to Dr. Cassandra Book, Associate Dean for External Relations and Student Affairs at the College of Education, now Emeritus, for always supporting my academic pursuits.

During my time away from my regular job as a public school teacher in Cyprus, I had to rely on a number of people to approve my lengthy leaves of absence. I am grateful to many people at both the Cyprus Ministry of Education and Culture (MOEC) and the Educational Service Committee (EEY) for processing forms and acquiring signatures in a timely fashion. I am also grateful for the many professional opportunities afforded to me by the Cyprus Ministry of Education and Culture, via fellowships to attend seminars and conferences abroad. Those experiences complemented my American higher education significantly. Many thanks to superintendents (inspectors) of schools and Heads of Elementary Education, Andreas Damianos, Alecos Kouratos, Nicos Leontiou, Savvas Nicolaides, Nicos Pentaras, and the late Michael Stavrides. You always cheered for me and my goals, never questioning, never raising obstacles, always encouraging, always supporting, always loving.

An unending group of individuals, not only at MSU but also in local University libraries in Cyprus, now all good friends, provided precious assistance by allowing me to use their space for extended periods of time and by finding references for me at the snap of a finger. Thank you to my library friends at MSU, at the University of Cyprus, and at the Frederick University in Cyprus.

Two individuals, associated with Cyprus and its affairs, educational and others, have always cheered for me as well, seeking me out every time they visited Cyprus, and wanting to hear my news. Dr. Andreas Kazamias, Professor Emeritus of Educational Policy Studies and Professor Emeritus of Comparative Education, and I spent many hours over delicious food and good laughter, musing about educational reform both for Cyprus and the US. Professor Kazamias' understanding of teacher education is historical, comparative, and very deep. My work has benefitted greatly from his sharp and uncommon take on teacher education, educational reform, and education for democracy. I first met Dr. Evangelos Coufoudakis, Professor Emeritus of Political Science, at a CIES Conference in the Midwest. He left his important business as Dean of the School of Arts and Sciences at IPFW (Indiana University Purdue University at Fort Wayne), to come and listen to my presentation about growing up in my torn-apart island. An expert on US foreign policy on Cyprus, and an Honorary Consul of the Republic of Cyprus, Professor Coufoudakis taught me about my country a whole lot I did not know. Above all, he taught me what it is like to love a country that much to make it your academic career. It has been my privilege and great honor to share intellectual companionship with these two individuals, who both showed care and concern for my well-being and for my scholarship, and who both have so much love for my country, our country.

I am very grateful for all the professional opportunities offered to me at the Hellenic College and Holy Cross Greek Orthodox School of Theology in Boston, where I served as Assistant Professor of Teacher Education and Director of Elementary Education. My students there, and all of my colleagues and the Administration were amazing: thank you to Father Nicholas Triantafilou, and to Drs. James Skedros, Aristotle Michopoulos, Anton Vrame, Demetrios Katos, and Ellen Lanzano.

I would not have been where I am today had it not been for my students. Day in and day out, over decades of teaching elementary school, the children gave me perspective and *the* reason to "keep at it," and they shaped and reshaped my craft in ways that no one else ever did—or could. Σας αγαπώ πολύ και το ξέρετε!!!

Likewise, this study would not have come alive without the gracious participation of Teacher Candidates, my research participants. I am humbled and greatly indebted to them for welcoming me into their lives and for letting me ride with them on the roller coaster ride called "the internship year"—a year full of excitement and frustration, of rise and fall, of confusion and clarity, of getting it right and of getting it wrong, everything that learning to teach is really all about. A particular thank you to Sara, who taught me about humility, resilience, and other diversions in the intricate story of teacher education, which I did not—I could not—learn as a field or course instructor, or even as a veteran classroom teacher.

I would like to thank the course and field Instructors, as well as the Team Leaders and School Liaisons at Great State University, for all the trust they showed in me and for always welcoming me in their courses and seminars. For one whole year I shadowed with my camera their every move. They always made time for me to talk about any question I had, and offered great insights on my work. Particular thanks to Eliot Singer, Philip Bailey, and Rachel Lander for their non-territorial attitude, and for their deep insights about learning to teach intellectually demanding subject matter in school settings.

Special thanks to the principal, the cooperating teachers, the students, and the parents and guardians, as well as to the supporting staff of Ordinary Elementary School, the school in which I have conducted my study. You have always been very kind and welcoming to me, a stranger,

researching in your classrooms and not telling you much. You taught me about US schooling as much as you taught me about schooling in my country. Thank you!

At Michigan State University, I understood the importance of situating arguments in context, and how and why it matters upon educating children, *all children*, other people's children. For all of these ideas, which became commitments, I am grateful to a special group of individuals, past and current members of my guidance committee: Dr. Margaret Buchmann took me under her wing the minute I arrived in East Lansing and taught me that "love can blind and bind and that love without care is not love at all." Dr. Gail Richmond, as my first Academic Advisor at MSU, carefully designed a wonderful doctoral program for me. Drs. Steve Weiland and more recently Elizabeth Heilman taught me important lessons about qualitative research. Drs. Linda Anderson and Cheryl Rosaen offered their expertise on approaching the literature on learning to teach and on teaching for understanding with a critical eye, and on crafting research questions and designing a doable study.

My current doctoral dissertation committee members offered me their time and advice endlessly and generously. Words are very poor to express my gratitude to my doctoral dissertation committee members, with whom I worked more closely from the initial stages of my coursework through the final stages of my dissertation writing. I am endlessly indebted to all of them.

Dr. Rand J. Spiro has kept the ball rolling. Practical as he is, he always gave me sound advice as to how to use my time productively, and he served as the person behind the scenes, the "silent hero," pushing and pulling where needed. He wanted to make sure we all enjoyed the

work, an important Dewean stance. Dr. Rand Spiro insisted that I find joy in my puzzlement and in my work, the essence of all learning.

Dr. John (Jack) R. Schwille, now Professor Emeritus of International Studies in Education, taught me to be skeptical about things, to question my assumptions (cultural, conceptual, and methodological), to pay attention to detail, and to shake my comfort zones. Jack was always happy to see that the world puzzled me and wanted to make sure I understood that puzzlement *is* the prerequisite and the spice of all academic pursuits. He taught me to go after puzzlement, an intellectual virtue he is a master of, and to enjoy it! Apart from many other roles, Professor Schwille dutifully served as the Assistant Dean of International Studies in Education in the College of Education at Michigan State University for thirty years. Through his work with international and internationally-oriented faculty, students and scholars, he pioneered in the College of Education a kind of hidden (although very visible) curriculum, and an intellectual culture found nowhere else. My doctoral education at MSU was advanced and enriched because of Dr. Jack Schwille's legacy in the College of Education.

A special salute to Professor Joseph (Jay) Featherstone: the poet, the scholar, the penetrating writer, the democrat, the visionary, the humorist, the survivor, the friend. What an incredible life-lasting gift to have met this timeless figure who walks and talks Dewey and Freire, Paley and Duckworth, Deborah Meier and himself! Just like good nutrition, Jay gave me solid courses, sound advice, resilience, and humor to help me last through graduate school and beyond. Jay urged me to not resolve, but to rather make human, literary sense of the data and beyond: the best academic advice of all time. A great admirer and true embodiment himself of Cavafy's poetry, Jay exemplifies Ithaca's legacy: "As you set out for Ithaca, wish that your road is a long one, full of adventure, full of discovery. Wish that your road is a long one. Do not hurry

the journey at all. Better if it lasts for years; old already, you will settle on the island, wealthy with all you've gained on the way, not expecting Ithaka to make you rich. Ithaka gave you the marvelous journey." $H I\theta\acute{\alpha}\kappa\eta$ $\sigma'\acute{\epsilon}\delta\omega\sigma\epsilon$ τo $\omega\rho\alpha\acute{l}o$ $\tau\alpha\acute{\xi}\acute{l}\delta\iota$. For that marvelous journey, I am, with breadth and depth, grateful to Jay Featherstone, the "Mother Teresa" of the building.

Dr. Lynn W. Paine has been one of my first and most important mentors since I entered the College of Education some years ago. I consider myself very lucky to have run into this woman, who never stops asking questions—all sorts of questions, questions that other people do not think to ask. She is the one who taught me to pay attention to the way I draw inferences, to look for various kinds of evidence, to develop "peripheral vision" and a "listening eye." To always ask *how and why* and to know when and how to complexify. A researcher and a teacher of researchers second to none, Lynn Paine taught me, mostly by example, that good research is first and foremost humane. If not looking for shortcuts, everyone should have a Lynn Paine on their committee!

Dr. Douglas R. Campbell has served as my Academic Advisor, the Chair of my Guidance Committee, and the Director of my Doctoral Dissertation for more years he could have wished for. When he agreed to serve as my Academic Advisor, he could not foresee what a "big project" I would turn out to be. Apart from providing academic advisement on so much and for so long, Doug found himself serving as a kind of a US Diplomat, dealing with US Customs, different types of visas, foreign Departments of Education, frequent financial challenges, family losses, extensive international travel and much, much more. Through all of these various and difficult roles, Doug never lost his sense of hope, his sense of humor, and his respect for me and my unending needs. He never lost faith in me and my potential: the *essence* of pedagogy. Doug Campbell taught me, with his rare diplomatic stance and skills and by his example, so many

phroneses: that there is a solution to every problem; that humility and patience always pay off; and that humbleness eventually ensures us respect. Doug understood my project early on, guided me through several months of fieldwork and the maze that comes with it, and provided deep ethnographic insights that shaped my writing. Doug never looked at the clock (or at his phone bills for that matter); he was always available, always supportive, always working very hard for me and my case. Everyone should have a Doug Campbell on their committee, and certainly a Doug Campbell in their lives!

I am thankful to Dr. Sharon Senk, Professor of Mathematics and Mathematics Education, for offering me "a room of my own" at the outskirts of nature. During the last stages of my dissertation writing, I was lucky to have seclusion in the country. The lilies and the hummingbirds joined forces, used their magic to pull strings together, and it all came back and became alive.

During my many years of studying in the US, many people and their family members have provided ample support to me and to my family members. During these very many years, and despite the multiple goodbyes, my friends were always there, becoming family to me, always welcoming me back, saving my place in their lives, and having dinner ready for me at their tables. To all these people and their families, a big thank you for never asking "why so far away? Why so many years? Why so much money?" Thank you for always having faith in me and never doubting my choices. Thank you to the Monasteries of Amasgou and Exarchia in Cyprus for their constant prayers for me. A big thank you to the families of Aphrodite Kyriakidou-Iosif, Eleni Stavrou-Kostea, Panayiota Klokkari-Loukaidou, Maro Mavrogiorgou, Morfo Nicolaou-Stavrou, Kiki Chini-Pofaides, Stelios Ioannides, Andreas Theodorides, Anastasia Zambakidou, Eleni Sea, Marios Lysandrou, Loucas Prastites, Yiannis Miralis, Stelios

Smyrillis, Andreas Smyrillis, Elena Papanastasiou, Maria Hadjipavlou, and Michalinos Zembylas of Cyprus; Helen Phtiaka, Anastasia Nikolopoulou, and Leda Stamou of Greece; Calla Grabish and Ann Burland of Canada; Diane Chessen of New York; Irene Messina of Connecticut; Peter Skinner of Albany; the late Tony and Joan Michaels of Cambridge; Sharmon Davis of San Diego; Cindy Hartzler-Miller of Indiana; Missy Soto of California; Athena Mclean of Pennsylvania; and Susan Blake, Theda Gibbs, Carolyn Schein, Peter Hafner, the late Sally McClintock, and the Bartleys of Michigan. I would like you all to know that I saw your tears, even though you veiled them from me. I heard your prayers, even though you never shared them with me. I felt your agony for me, even though we were continents apart. You are all part of this work, its driving force, and I am as proud of you as you are of me. There are no words to thank you. I love you all dearly, and I am greatly indebted to all and each one of you!

Last but not least, my late parents, Demetrakis and Elli, taught me about the power of setting goals, of working hard to achieve them, of being fair to people, of bolstering roots before spreading out wings. My late grandparents, Loucas and Agathe, told me stories and fairy tales and taught me love— "love above all!" Four ordinary people, very extraordinary to me! I dedicate this work to their loving memory.

PRELUDIO

They may just be whispers, small voices tacked deep inside the pockets of our hearts.

The whispers of our lives

want us to take notice.

But we must hold their possibilities close to our chests and allow them to step into the light.

Kelly Rae Roberts

TABLE OF CONTENTS

LIST OF TABLES	xxvi
CHAPTER I: INTRODUCTION	1
How It All Began	1
The Context and the "Phenomenon"	2
CHAPTER II: SUPPORTING LITERATURE	9
Teaching for Understanding	9
Vulnerabilities/Criticisms of Constructivism and Where Teaching for Understanding Is Falling Short	14
Why Study Teacher Candidates' Learning to Teach for Understanding During the Internship Year?	17
CHAPTER III: METHODOLOGY	24
Research Questions.	
Why Qualitative Research Methodology?	
Why Engage In Qualitative Case Study Research?	
What Is Triangulation, and Why Triangulate at All?	28
The Site and the Participants	
Research Design.	
Obtaining Informed Consent and Spiraling Into Data Collection	
Data Analysis: An On-Going Process	
CHAPTER IV: FINDINGS – THE CASE OF SARA	40
Who Is and Why Sara?	40
Vignette One	42
Great State University's Opening Day	42
"What's It Like Up There?": Attending GSU's Coursework	44
Getting Our Feet Wet	46
Vignette Two	47
Sara Entering New Found Land	47
What Is the Matter with Them?	51
Learning to Think, to Know, and to Act Like a Teacher	54
Vignette Three	60
Learning to Question One's Questions	60
"The First Thanksgiving Feast"	62
The Power of Reflection	66
Vignette Four	69
Diving in Deep Waters: Lead Teaching 2	69
Sara Noticing Her Inattention	73
Vignette Five	77
Figuring Out a New Life	77

Roll of Thunder, Hear My Cry: "Hear My Roller Coaster Ride"	81
"You Did Not Talk Much"	91
Vignette Six	94
"Earning Moral and Intellectual Authority to Teach"	94
When the Possibilities Become the Focus	100
Coming Full Circle	103
CHAPTER V: DISCUSSION	107
Sara's Bridging Two Lines of Literature: Learning to Teach and Teaching for	
Understanding	107
CHAPTER VI: IMPLICATIONS	115
Implications for Teacher Education	115
Implications for Research	118
EPILOGUE	123
The Story of Teacher Education	123
CODA	127
APPENDICES	128
APPENDIX I: Summary Chart of Data Collection	129
APPENDIX II: Consent Forms	132
RIRI IOGRAPHY	144

LIST OF TABLES

Table 1: SUMMARY CHART OF DATA COLLECTION	130

CHAPTER I: INTRODUCTION

How It All Began

This dissertation is about a true story, a tale¹, of a Teacher Candidate's journey into her internship year, the fifth year of a five-year teacher preparation program at Great State University², a large University located in the Mid-western United States. This story was witnessed and recorded by myself, a veteran elementary public school teacher from another country located in Southern Europe. I trained and worked as an elementary classroom teacher in my home country before moving to the United States to study and work (I elaborate on my positionality later in the implications chapter of my dissertation). As a Teacher Education graduate student at Great State University, I had the opportunity to assume various roles in the teacher preparation program, such as research assistant, course instructor and course evaluator, and field instructor (this is the person who oversees teacher candidates' teaching in their school placement, and who leads a graduate seminar throughout the internship year).

Before conducting my study, I spent four years as both a course and field instructor at GSU, and I worked with many teacher candidates (TCs), cooperating teachers (CTs), other course and field instructors (CIs, FIs), school principals, and other key players involved with teacher candidates' process of learning to teach. I learned very much about how schools in the same district can be very different but also how they can be very much alike. I learned how curriculum can be very flexible, but also very rigid. And I learned that teacher candidates do learn many things, being for an entire year in real classrooms with teachers and students, but that

¹ I use the term "tale" the way J. Van Maanen (1988) used it in his book *Tales of the field: On writing Ethnography*, in order to convey to multiple audiences knowledge gained in the field.

²A pseudonym used in place of the University's real name.

they also have a whole lot to learn. I remember that what struck me at first was seeing how nervous the teacher candidates were as they began their internship year. Being a teacher for a long time, I must have forgotten how hard it was for me as well: I, too, was worried if my CT would like me, if the kids would listen to me, and if I would remember to recite "all that I had prepared for them to learn." Trivialities, such as "Is my CT going to give me a desk next to hers?" and "Will the kids treat me like their teacher?" become central concerns for teacher candidates, concerns that are not resolved in a trivial manner, concerns that sometimes do not get resolved at all.

The fifth year of the five-year teacher preparation program at GSU, the *internship year* as it is known, is indeed an intense experience (for all players involved). It is, however, a very fruitful year: teacher candidates (interns) eventually learn how a thirty-minute session differs from a fifty-minute session, and how that affects what they do with kids. They learn that five minutes in their lives as teacher candidates can make a lot of difference, something that was not the case in their lives as undergraduates. They learn that raising their voice affects certain children in ways that it does not affect others, and that this is not effective classroom management in the first place. They learn to wake up early, and they learn what it is like to live the life of a teacher. They even learn to form meaningful conversations with children, by discovering their thinking and reasoning, and by using these discoveries as a source for their learning to teach.

The latter does not happen for quite some time, a phenomenon that fascinated me, and one I set out to study for my dissertation.

The Context and the "Phenomenon"

Great State University admits teacher education students in their junior year, during which

they take foundation courses including the psychology of learning, the social aspects of schools, and a course on how to conduct teaching in classrooms (i.e. learning about classroom management and lesson planning). In their senior year, teacher education students take their methods courses (i.e. how to teach language arts, math, science, and social studies). During their internship year (the fifth year of their program), teacher candidates are placed in a school for an entire year, beginning in late August and ending the following May, teaching and participating in all activities of their school. The teacher candidates start their internship year by mostly observing teaching in their classrooms, and they gradually assume full responsibility for the teaching. During the fall semester, their program requires that they teach for most of the day for a total of three weeks during the month of November (Lead Teaching 1). During the spring semester, which starts in January, teacher candidates need to take the lead in teaching for a much longer period: a total of seven to eight weeks, beginning in February (Lead Teaching 2). Throughout their internship year, teacher candidates attend a field placement seminar (a 500-level seminar in the fall and another 500-level seminar in the spring), in which they meet weekly with their field instructor (FI) and other fellow teacher candidates, in order to discuss what is going on in their school placement.

Because the five-year program at GSU is a post BA program, teacher candidates attend, during their fifth year, two graduate 800-level courses in the fall semester, and another two 800-level courses in the spring semester, all four of which can count later towards a Master's degree. During these five years in the program, teacher candidates pay tuition and fees to the University. They do not get any reimbursement, from either the University or the school district, for their internship teaching for an entire year in a classroom. Aside from being expensive, however, Great State University runs a great teacher preparation program, offering great experiences to teacher candidates, and expecting great accomplishments from them!

As a field instructor at Great State University, I had to observe teacher candidates' teaching throughout the internship year, and more intensively during the two Lead Teaching periods, one in the fall (three weeks beginning in November-Lead Teaching 1) and one in the spring (seven to eight weeks beginning in February-Lead Teaching 2). What I saw as more of an initial norm was what I identified as a "body orientation." Teacher candidates were, in the beginning of their internship, more concerned and occupied with their physical self: what to do with their hands; whether to stand in front of the class or move around, or both, and how much; how close to get to children or not; whether to smile or to maintain an expressionless face. I observed some very good lessons, some of which were very thoughtfully planned and went according to the plan, and some that wonderfully escaped the plan and flourished anyway. I did not see, however, anything resembling active listening to their students. There was always that one kid who would "mess up..." He just had to ask that one, difficult, "out of the blue question."

The above is an unarticulated fear among teacher candidates, certainly more so during Lead Teaching 1. They worried that things would not go smoothly if someone was to "mess up," especially so when they knew that they would be observed. I do not recall seeing any of the teacher candidates I worked with, at least in the beginning of the internship, paying any serious attention to what the children were saying, even when children were actively invited to say what they thought. Paley's (1988) notion of "listening with curiosity" was totally absent from their interactions with children, and so was any notion of constructing knowledge with children, taking seriously what they brought to the classroom, and doing something with it.

Come to think of it, however, why should they? Lortie's (1975) research on teacher socialization revealed, fact, that during formal teacher preparation prospective teachers activate

models of teaching which they have internalized earlier in their careers as students³. Their teaching is not the outcome of learning in academic environments; it is, rather, a reaffirmation of the profession as they have experienced it: "What students learn about teaching is intuitive and imitative, rather than explicit and analytical; it is based on individual personalities rather than pedagogical principles." (Lortie, 1975, p. 62) The following is an excerpt from an interview I conducted early in my Teacher Education program with one of the teacher candidates under my supervision:

...One thing I try to do is move myself around the class, position in different places in the classroom, make sure everybody is on task and that they can hear my instructions and that they are doing their work. Students would be sitting in their desks, but I won't mind if they get up and do something related, like sharpen their pencils, they can do that, as long as they can make responsible choices. There will be movement in the classroom. I like to ask questions, I'll be asking a lot of questions to the students. I try to call on everybody, use a lot of visuals. I try to bring things to them to become more engaged. (John, GSU teacher candidate, end of October)

In the fall, John had a view about children's participation and engagement that was very much self-directed, initiating from him: he started his internship year thinking that if he brought into the classroom the right material, students would "become more engaged." There was, then, an absence in John's talk as to using children's ideas which they brought into the classroom, ideas that might have served as the very source of engagement in learning, his students' learning as well as his own. During the fall, John was still within this "body orientation."

Miraculously⁴, a few months later, during Lead Teaching 2 in the spring, teacher candidates develop a really meaningful relationship with children, one which goes beyond the standard social

³Lortie's research on teacher socialization has grown to be very influential in teacher education, but it also grows older and older. We do not know, for example, if teacher candidates who went to school ten years after Lortie published his work had, in fact, no experience in constructivist classrooms. Other work on teacher socialization by Zeichner and Gore (1989) is discussed in a later section of the dissertation.

⁴Things do not, of course, happen miraculously. Nor is the fall vs the spring lead teaching periods a dichotomy. During the fall Lead Teaching period, teacher candidates reveal behaviors that may constitute active listening to children's thinking, but this happens more sporadically, with less intensity, and very differently according to each person's particular disposition.

jargon of the "learning community" and moves into an authentic intellectual relationship with children who have ideas that matter, whose ideas we "better listen to and take seriously," because they constitute our very curriculum. Children often come to school with ideas that are idiosyncratic, ideas that do not make much sense, and ideas that oftentimes are even "false." It seems easier and more practical to disregard those ideas and move along according to one's lesson plan. It is harder to take those ideas seriously and to treat children as though they are reasonable.

Eleanor Duckworth (1987) called this notion "giving children reason" (p. 83), which happens upon probing children's thinking, in order to "appreciate how they are making sense of a situation, and to understand their understanding." (Duckworth, 1987, p. 84) Teacher candidates gradually learn how to ask students questions, such as "what do you think about X?" They also learn to actually wait to hear what students have to say. They learn to take those answers seriously, by trying to understand them and to "give them reason."

The way I understand Duckworth is that "giving children reason" is different from "giving children an excuse." Merely to listen to students, even with the greatest curiosity, just for the sake of it, is not enough at all. To give children reason for those odd ideas that they have is different from offering them an excuse (i.e., they are just young, they do not know much, etc.). To give children reason, rather, is to be engaged in the act of stepping out of one's reality and the way in which one makes sense of it, and try to enter into children's reality in order to understand why they might be saying what they are saying. I have seen this happening with some teacher candidates who were confident enough to let students' ideas "teach them," and who happened to be with thoughtful CTs who were interested in taking those ideas seriously. The following is an excerpt from an interview with a different teacher candidate under my supervision the same year that John (the previous teacher candidate) was interviewed. The following interview with Ellen took place in the spring, at

the end of the Lead Teaching 2 period:

L: Ellen, what did you learn this year in your internship? What do you think you have accomplished?

E: At first, it was scary and also confusing because I wasn't sure what I would become. Now that I look back, I cannot believe how much I've learned and how much more comfortable and confident I am.

L: How do you remember yourself being in the beginning of the year?

E: I remember how frustrated I was when students didn't know what I thought they should know. I was not as patient, and also a little bit more afraid of situations of children who I couldn't figure out, like Eric who told me in the beginning of the year "I hate you." Now I know him, I know his personality, and what kind of learner he is.

L: When do you know that you know a kid? How do you get to know someone else? What does that knowledge mean for you as a teacher, and what does it do to your teaching?

E: I think it is anticipating...I can predict what a lot of the kids in the classroom will do, or say, at a given point in the day. I am a real visual person and I am always looking and watching, not so much listening, but that goes along with that...I spent a lot of time this year learning about the kids and their ages. (Ellen, GSU teacher candidate, end of March)

Although Ellen's point about prediction is a bit alarming because it shadows the unexpected, what was present in her talk was a stance of active listening to students that, as she admitted, had evolved over her internship year. Ellen had learned during her internship year to pay attention to students' thinking and reasoning. She learned to "seek to understand the way in which what children say or do could be construed to be making sense." (Duckworth, 1987, p. 86)

My dissertation is an ethnographic study, in which I systematically researched how the process of learning to pay attention to students' thinking and reasoning, as a central element/feature of learning to teach for understanding⁵, develops among elementary teacher candidates during their year-long internship, and in the context of the GSU teacher preparation program. In the following

⁵I use the term "teaching for understanding" to mean the kind of teaching that takes place when constructivist theories of learning serve as the underlying ideological orientation. I discuss constructivist theories of learning, as well as how the term "teaching for understanding" has been used by others, later on in the literature review section of the dissertation.

chapter, I review literature relevant to the study that aims to inform the "learning to teach for understanding" process, as well as literature that points to the importance of studying this process among elementary teacher candidates, as it takes place during their year-long internship in schools.

CHAPTER II: SUPPORTING LITERATURE

Teaching for Understanding

The term "Teaching for Understanding" has been used by various researchers in the past (Prawat, 1989; Perkins, 1994; Stone Wiske, 1994; Simmons, 1994), and it is closely associated with the idea of constructivist teaching, an approach to teaching based on constructivism, which is a theory about how people learn and how knowledge is constructed. According to this theory, knowledge is a matter of interpretation, deconstruction, and reconstruction, and it is a process of transformation of already existing prior knowledge. Constructivists take into account the individual's prior knowledge and understanding of an idea/concept, because they believe it is crucial to how new knowledge will be constructed. Learning, according to constructivists, results from the reorganization of one's old mind structures, and it is a life-long phenomenon. Lauren Resnick (1989) argued, for example, that "learning is a process of knowledge construction, it is situated in context, and it is knowledge-dependent on current knowledge" (p.1). Leinhardt (1992) further supported that knowledge is of multiple kinds (i.e. both skills and concepts); it is a socially constructed cultural artifact; and it is based on prior knowledge. Developmental psychologist Jean Piaget, whose name is, perhaps, the one most often cited in relation to constructivism, saw knowledge construction as a process of the individual (whom he called the "epistemic subject") reorganizing already existing conceptual structures (i.e. "schemata").

That the individual is, eventually, the one responsible for such a reorganization of knowledge is really at the core of constructivist theories of learning, a stance which sets these theories apart from other learning theories (i.e. behaviorist oriented), which placed no emphasis on either the role of the individual in the construction of knowledge, or the role of the individual's prior

knowledge in the development of new learning. While constructivism, as a theory of learning, and its implications for classroom teaching and teacher education have been developed to the extent that they have been only recently (during the 1980s and 1990s, with the writings of Duckworth, 1987; Shulman, 1987; Paley, 1988; Brophy, 1988; Cohen, 1988; Prawat, 1992; and Fosnot, 1996, among many others), its theoretical orientation dates back much further. Bruner (1960/1977) urged us to start where the learner IS, and Dewey (1902/1990) wanted us to "psychologize" the curriculum—to see it in a continuum along with the child's needs and interests at the time.

The above assumptions underlying constructivist teaching suggest a number of implications for the work in classrooms. According to Brooks and Brooks (1993), in such classrooms the student has a crucial role, as an individual, in his/her construction of knowledge. Learning in these classrooms is an active process, and it is an outcome of interaction with the physical and social environment. The curriculum draws, mostly, from students' current understandings of various concepts and ideas, since "students are viewed as thinkers with emerging theories about the world." (p. 17) Assessment becomes an on-going process, in which the students' point of view is actively sought out by the teacher, and it becomes the basis for subsequent planning.

In constructivist classrooms, the role of the teacher changes quite a bit from earlier, more traditional notions of teaching. The teacher is not the authority on knowledge any more, but rather a co-investigator of knowledge, along with students⁶. The teacher becomes a facilitator of knowledge construction by listening carefully to students' current understandings; by probing them to articulate further their "wonderful ideas" (Duckworth, 1987); and by providing rich in material learning environments, which offer ample opportunities for interaction and engagement, and which lead to further intellectual development.

⁶Later in this section, I refer to a number of criticisms generated by misinterpretation of the role of the teacher in constructivist teaching.

Building on students' current understandings, creating opportunities for intellectual development, and negotiating knowledge are at the center of talk about teaching for understanding in contemporary literature. For Gardner (1994), teaching for understanding is being able to figure out students' current understandings and to advance them. Teaching for understanding, according to Gardner (1994), aims to "enable students to take knowledge, skills, and other apparent attainments and apply them successfully in new situations." (p. 564) The teacher knows that teaching for understanding is taking place when there is specific evidence that students are able to use their knowledge in new situations, something that Perkins (1994) identified as "performances of understanding." (p. 6)

Perrone (1994) had a view on understanding quite similar to Gardner's and to Perkin's. For Perrone (1994), "understanding is about making connections among and between things, about deep and not surface knowledge, and about greater complexity, not simplicity." (p. 13) Perrone associated teaching for understanding with having students intellectually engaged in subject matter, and he made a few recommendations to teachers interested to teach for understanding. Finding the "overarching goals" (p. 12) (i.e. what do I want students to come to understand through this particular lesson, what are the long-term goals) and outlining them is, according to Perrone, what the teacher who teaches for understanding needs to do first. Second, the teacher needs to figure out the essentials: what topics are worth pursuing, what concepts must be addressed, what ideas help students develop significant understandings? Perrone recommended that teachers focus on fewer topics in order to get to more in-depth understandings, and on topics that have a generative quality: "the topic invites questions that students have about the world around them and taps the issues that students confront." (p. 13)

On-going assessment is another key feature in the teaching for understanding framework

that Perrone (1994) used. On-going assessment, for Perrone (1994), had to do with longer term projects that produce real works (i.e. regular writing from students in a variety of styles, across a variety of topics, and for diverse purposes). On-going assessment is, ultimately and according to Perrone, performance oriented.

Prawat (1989) also discussed the idea of on-going assessment as an essential element in teaching for understanding. Teachers who teach for understanding, according to Prawat (1989), have a conceptual orientation in their teaching, which is characterized by three key attributes. These three key attributes are: focus and coherence in their selected topics for instruction; negotiation which is informed and skilled around structuring classroom discourse in dialogic ways that promote and advance knowledge among students; and an analytic/diagnostic nature in their interactions with students.

Prawat's view of the analytic/diagnostic nature of teaching for understanding resembles very much the element of "on-going assessment," one of four elements in a framework for "Teaching for Understanding" (TfU) developed by a group of researchers (Wiske et al., 1998) at the Harvard Graduate School of Education. Prawat (1989) considered the analytic/diagnostic attribute of teaching for understanding to have an assessment function, and he recommended that it be performed interactively:

...conjectures about student thinking should be part of the lesson planning process. Knowing what sorts of concepts or understandings are likely to be troublesome for students is important data for teachers to have when setting content priorities. Because the focus in this approach to assessment is less on the production of correct responses and more on the process of reasoning that underlies the responses, student learning is best analyzed in an interactive context. (p. 326)

Similarly, the "Teaching for Understanding" (Wiske, 1998) framework used the concept of "on-going assessment" to portray the importance of both the formative and summative purposes of assessment. On-going assessment was one of four elements in the "Teaching for Understanding"

framework that addressed the question: "How can we tell what students understand?" On-going assessment provides, primarily, access to students' thinking; it occurs frequently; it takes multiple formats; and it informs planning: "These formats of on-going assessment remind students to monitor their work and provide the teacher with more insight into the students' thinking than the product alone may offer." (Wiske, 1998, p. 80)

Duckworth's (1987) work takes us, I believe, one step further into understanding *learning to teach for understanding*. Duckworth wrote about teaching for understanding from the perspective of "understanding children's understanding" that happens upon "giving children reason." For Duckworth, "giving children reason" is a mental stance, in which the teacher is involved in close observation of students' behaviors and actions, and is trying to figure out the meanings that their talk and work might bear, even though those meanings may not be immediately obvious. Giving children reason, essentially, is about "seeking to understand the way in which what a child says or does could be construed to make sense." (Duckworth, 1987, p. 87)

The above three contributors (Prawat,1989; Wiske,1998; and Duckworth, 1987) to the Teaching for Understanding literature see as central to the process of teaching for understanding the active stance of what I conceptually framed as *paying attention to students' thinking and reasoning*, and as the latter takes place within an interactive classroom environment. Duckworth (1987) was, perhaps, the most explicit in laying out the process of listening to children as a teacher quality that involves other important personal qualities as well: curiosity about other people's thinking; generosity in being willing to accept their contributions; and tolerance for ambiguity and messiness. However, while all of the above three contributors underscored the challenges and difficulties involved in the process of learning to teach for understanding, none has researched what this process might look like among novice teachers. In fact, novices attention to students thinking has

been examined only in more recent literature (i.e. Levin, et al. 2009), as have been the inherent challenges of constructivism in practice and its implementation(s) by teachers. (Windschitl, 2002)

Thus, I decided to study for my dissertation what the process of learning to pay attention to students' thinking and reasoning might look like among teacher candidates, given that this process is part of their curriculum and assessment in teacher education as well (i.e. GSU's program standards⁷), and keeping in mind that the context in which this learning evolves (i.e. a school placement) is not always an ideal place⁸. Before introducing the study's research questions, I address, in the next section, some vulnerabilities of constructivism as a theory of learning, and I discuss where I see teaching for understanding to have fallen short.

Vulnerabilities/Criticisms of Constructivism and Where Teaching for Understanding Is Falling Short

Constructivism, essentially, opens possibilities for knowledge to be tentative and open to "...reinterpretation, reconstruction, reformulation." (Cherryholmes, 1994, p. 211) It allows for knowledge to be more personal and subjective, more situated, and more meaningful.

Constructivism, however, as a theory of learning, also carries with it some problems and dilemmas: is all knowledge good and valid? Who decides? What are its consequences for our work in institutions and organizations, such as schools and schools of education, if everyone is allowed their own time to construct their own knowledge that makes sense to them at the time, which will later deconstruct anyway?

⁷TCs were held accountable toward four program standards, which aimed to guide their progress, as well as assess their performance during the internship year: a) knowing subject matters and how to teach them; b) working with students; c) creating and managing a classroom learning community; and d) working and learning in a school and profession.

⁸Please note that my aim was not to study or evaluate the GSU teacher preparation program by any means, nor was I trying to determine the effect of context on the participants' learning. For further discussion on the way context becomes relevant in this study, please refer to pages 21-23 of the dissertation.

Constructivist teaching's activity-oriented nature also makes constructivism quite vulnerable and prone to misinterpretation. Dewey (1938) was one of the first critics of such misinterpretations, especially found in progressive schools at the beginning of the twentieth century. Dewey (1938) argued that activity alone and experience not designed to lead to further experiences were miseducative. Prawat (1992), in critiquing the naive way constructivist theories of learning were being interpreted by practitioners, pointed to various tendencies evident among teachers in classrooms, such as the tendency to see learners and curriculum in a dichotomous way, and their job as reconciling the two; the tendency to think that activity alone will lead to learning (i.e. "hands-on" learning); and the tendency to think of learning as hierarchical. D. C. Phillips (1995) further critiqued naive interpretations of constructivism, calling some of it "ugly" in that it had become like a secular religion.

Constructivist teaching has also received various criticisms, mainly from social constructivists (i.e. Vygotsky, 1978; Rogoff, 1990; Lave & Wenger, 1991; Gredler, 1997; Ernest, 1999), who claimed that constructivism has disregarded knowledge's capacity to be socially constructed among a group of people. Constructivist teaching has also been characterized as raceless, gender-less and social class-less, because of the lack of attention it has given to the "epistemic subject's" inherent and socially acquired characteristics (Richardson, 1997). For example, constructivist teachers, in their attempt to be curious as to what children are saying, end up paying little or no attention to their silence. When is it, for example, that children are silent, which particular children are these, and what happens (or does not happen) when particular children remain silent? Constructivism seems to be paying more attention to the conditions that we, as educators, need to create so that children are engaged with phenomena and are articulate about their "wonderful ideas," but it does not explicitly handle the issues of silence and voice that feminist

theorists (i.e. Belenky, 1986) have widely explored.

In regards to the literature on teaching for understanding, despite the heavy emphasis on the teacher being a learner, there is absence of talk about the teacher actually learning about subject matter from students. While there is talk about "sharing intellectual authority" (Wiske, 1994) with students, the teacher is still the one who decides in what ways that authority is going to be shared, and who is going to take which piece. When charging the teacher with intellectual authority to begin with, the teacher is appointed as the source of intellect. Wideen, et al. (1998), in reviewing research on learning to teach, have pointed to this problem as well: "the influence of pupils in classrooms on the student teaching experience remains virtually unexplored." (p. 153)

Another problem with the teaching for understanding literature lies with the conceptual tilt that characterizes its language. While the talk about how to structure dialogic discourse in the classroom, in order to promote more sophisticated understandings among students, is quite advanced, there is lack of talk regarding the influence of either the affective or the kinesthetic components on the nature of such understandings. What does it feel like, for example, to debate with the teacher? What does it feel like to talk about racism in a multiracial class? In what ways does such talk make people act?

Other problems with the teaching for understanding literature have to do with the hegemonic nature of its talk:

If we are to teach for understanding, new and better curricula have to be developed in mathematics and science. Tests need to be altered, schools must be changed. Without changes in schools, it is unlikely that fundamental change will occur at the classroom level. (Prawat, 1989, p. 326)

A self-defeating literature, one might think, setting up hierarchies and conditions upon which change may occur: change schools *before* attempting any change in the classroom? In my study, that was not the case. I observed teacher candidates accomplishing wonderful, reform-

minded teaching, despite deeply rooted conventional practices in their school placements.

There is, indeed, not enough literature on how novices learn to teach for understanding at the pre-service level. The newly developed literature on teaching for understanding, in other words, does not intersect sufficiently with the already existing literature on learning to teach. In the following section, I examine the learning to teach literature, I address its problems, and I introduce my study in light of bringing together these two lines of literature: teaching for understanding and learning to teach. I also explore the notion of understanding context as an integral part of understanding the process of learning to teach for understanding, as it develops among elementary teacher candidates during their internship year in schools.

Why Study Teacher Candidates' Learning to Teach for Understanding During the Internship Year?

The year-long internship, which takes place during the fifth year of GSU's five-year teacher preparation program, is a time during which teacher candidates are socialized into the profession, since they learn to live with other teachers and children in schools, apart from the work in which they are involved with for their graduate level seminars at the University. The teacher candidates' learning during the internship year is multifaceted, involving intellectual, psychological, and even physical lessons. Various researchers have studied the nature of the learning that takes place during the internship year (some call it the teaching practicum, student teaching, etc.), which may vary considerably in nature, purpose, and length from one program to another. There is general agreement that this time has an enormous impact on novices' learning to teach. Some researchers report how much teacher candidates manage to learn during this extended time in the field (Hollingsworth, 1989), and yet some others report how much they do not manage to learn, and how

much they let their assumptions go unexamined. (Feiman-Nemser & Buchmann, 1987) Others, such as anthropologically-oriented researchers, study the influence of context (i.e. the school) on novices' learning to teach during their extended time in the field. Head (1992), for example, suggested that the "liminal" (threshold) nature of student teaching, because of its rigidity in myths and cultures, may sometimes determine the future of student teachers in the profession: "Some decide not to teach as a result of their experiences during their student-teaching practicum" (p.97).

The bulk of the learning to teach literature, in any case, originates mainly from the traditions of cognitive psychology. This literature has been, traditionally, condescending to its participants, hegemonic in its nature, and positivistic in its assumptions. Wideen, at al. (1998) commented to that effect:

As we indicated earlier, the implicit theory underlying traditional teacher education was based on a training model in which the university provides the theory, methods, and skills; the schools provide the setting in which that knowledge is practiced; and the beginning teacher provides the individual effort to apply such knowledge. (p. 167)

Wideen, et al. (1998), upon reviewing 93 empirical studies of learning to teach, pointed to the positivistic assumptions underlying this work, and to the condescending manner with which participants were treated. In these studies, teacher candidates were portrayed as naive recipients of some sort of an intervention. Their prior lives were treated as incomplete and shortchanged, and prior influences on their learning to teach were seen as obstacles (i.e. Lortie's, 1975, famous "apprenticeship of observation"), and as bad influences. These studies, essentially, showcased that whatever the intervention, it will always be weak, because the change intended is neither as powerful nor as apparent. Studies of learning to teach, in other words, operate from the assumption that the what and the how of learning to teach is, or should be, clear and the same for all teacher candidates, whom they treat and talk about as naive, unintelligent, and monolithic. These studies have portrayed teacher candidates as naive and inexperienced, and they have made assumptions

about their race, gender, and social class that put them all into one big category: white, middle-class, female.

On the contrary, Rosaen and Schram's (1998) study of two interns developing a teaching identity through discourse that an inquiry group provided, is a strong counter example to the pessimistic literature reviewed by Wideen, et al. (1998). In this study, Rosaen and Schram (1998) explored the process of two interns developing a "language of possibility" in believing, thinking, talking about, and enacting a kind of practice during their beginning years of teaching, which their work environment might not support. Rosaen and Schram (1998) trusted the inquiry group to have a life of its own, and they invested in the process of learning to talk a language of possibility, rather than in producing specific products:

When we let go of our initial agenda of engaging in action research and were open to the idea that the interns could "rewrite" our plans, the experience evolved into something the interns could value rather than being merely a requirement to meet. (p. 301)

Rosaen and Schram (1998) demonstrated a faith in interns as capable of mapping the route of their own development, and thinking about teaching practice in much more complicated ways than the previous literature on beginning teacher's concerns has demonstrated. Veenman (1984), for example, upon reviewing studies of perceived problems of beginning teachers, showed that classroom discipline appeared first on the list. Valli (1992) talked about the problems of imitation, isolation, transfer, and technique as dominant problems among pre-service teachers. Rogan, et al. (1992) replicated and validated the stages of concern questionnaire first developed by Fuller (1970). In Rogan, et al.'s (1992) study, approximately 1,000 participants, ranging from early admits into a teacher preparation program to having two or more years of teaching experience, responded to the questionnaire. The results supported Fuller's (1970) three-phase model of concerns that pre-service teachers experience: (a)self-concerns (having to do with coping with kids in the classroom; (b)task

concerns (having to do with the logistics of teaching); and (c)impact concerns (having to do with students' learning).

Fuller's (1970) model, and other related literature on pre-service and beginning teachers' concerns, is based on linear assumptions regarding the process of novices' learning to teach:

Fuller went on to propose that this progression from self to task to impact concerns could serve as a key factor in developing and sequencing relevant teacher education programs. (Fuller, 1970, as quoted in Rogan, et al., 1992)

Fuller's model is, like the early literature on learning to teach, deficit-oriented: it presents novices as moving into higher stages of thinking, after having first "graduated" from lower ones; it categorizes a complex process, such as learning to teach, into three nice and neat little categories; and it conveys a message of inattention to students as an inevitable norm during the beginning years of teaching.

More recent studies have attempted to show that teachers do pay attention to what students bring to the classroom, and they do so much earlier in their careers than previous literature has suggested. Beck (1998), for example, studied how Mrs. Z., a six-year experienced teacher, used students' questions as an opportunity to think of their potential for learning, hers and her students. Beck's study showed how a teacher skillfully made use of her students questions to help them form better questions, and to understand what students did and did not understand. Beck (1998) was quite hopeful and optimistic for what the future would bring, and recommended that researchers continue researching along the same lines:

As I attend closely to Mrs. Z. and the ways in which she takes students questions seriously, I see a different vision of the future. Mrs. Z.'s practice gives me hope that working with and through student questions is possible for any teacher. Her practice can inform the practice of teachers, teacher educators, and administrators interested in encouraging education that takes the experience and meanings of students seriously. Mrs. Z.'s case provides significant clues into what researchers may find if they continue to explore the ways in which students' questions are used by teachers. (p. 885)

Beck's (1998) work is exemplary, because it systematically studied teachers who paid close attention to students' input. It also created a need for such work across a wider range of teacher development: what might it look like, for example, for teacher candidates to pay attention to students and their thinking, when the literature supports that they are at a stage in their development far away from that? In fact, a recent study by Levin, et al. (2009) examined how novices (teacher candidates), during their internship year, were able to attend to students' thinking, given that they were assisted to do so from both their University instructors and their school environment. The authors challenged the traditional stage-based literature on learning to teach (Kagan, 1992; Berliner, 1988; Fuller & Brown, 1975; Fuller, 1969), which claimed that novices are not able to attend to students' thinking until they are well into the profession. Levin, et al. (2009) discussed more recent literature in the field of teacher learning (Loughran, 2006), which takes into account contextual influences in assisting novices to pay attention to students' thinking. Levin, et al. (2009), in other words, disputed the widely established notion of linearity in teacher development:

We do not dispute the evidence that novices *typically* focus on themselves and their behavior. Rather, we dispute the notion that they *must* focus on themselves before they are ready to focus on student thinking. (p.144, emphasis in the original)

According to Levin, et al. (2009), teacher preparation and learning to teach remain "teacher centered" (p. 143), focusing on classroom management strategies and developing curriculum units, at the expense of paying attention to students' thinking. In fact, the authors are explicit about the pedagogy that teacher education courses need to adopt, such as asking novices to videotape themselves and analyze their teaching, with a focus on how they pay attention to and promote students' thinking.

Eventually, one way to bridge learning to teach and teaching for understanding is to use the notion of *paying attention to students' thinking* as early as the pre-service years, a disposition that

must guide and drive all other program components, and one which should not come last as a capstone experience on a number of other prerequisites. Levin, et al. (2009) went a step further and alerted us to what might happen if this "orderly" approach to teacher development is adopted (i.e. put classroom management skills in order before seriously engaging with students thinking):

The point is that routines should be learned from within a framing of teaching as attention to student thinking. We argue that if attention to student thinking is prioritized until after novices begin to construct routines (as suggested by Kagan, 1992), then novices may construct routines that distract from attention to student thinking. (p. 152)

Other researchers (Grossman, 1992; Darling-Hammond & Snyder, 2000; Davis, et al. 2006) have similarly challenged the stage-based views of teacher development, and they have highlighted the importance of studying the surrounding context of the internship year. Understanding context is essential for understanding the way teacher candidates' learning to teach for understanding takes place during the internship year, a time in teacher candidates' development which can afford them opportunities to stop and reflect on their learning to teach. The internship year provides a sophisticated socialization process into the profession, a process that Zeichner and Gore (1989) suggested needs more careful and systematic attention:

More studies are needed which attend to the complex set of interactions that exist among program features, dimensions of school contexts and individual classrooms as settings for learning to teach, and the characteristics and dispositions that individual students bring to the experience. The currently dominant practice of attempting to explain the socializing role of field experiences in general has not been very productive to date, nor is it likely to become more so in the future. (p. 21)

Zeichner and Gore (1989), in other words, are critical that the study of the internship, as a process of socialization into the teaching profession, has virtually neglected the influence of culture, such as the ecological environment of the classroom, and the characteristic localities of the surroundings to the school population. Wideen, et al. (1998), in their review of research on learning to teach, identified the same problem: that the surrounding context of pre-service teachers has not

been studied enough, and they recommended that "more attention is directed at in-depth study of how other players affect the landscape and process of learning to teach." (p. 169)

CHAPTER III: METHODOLOGY

Research Questions

My research questions evolved out of a need to better understand my practice as a teacher educator of teacher candidates who work with students. Understanding how teacher candidates come to appreciate and understand students' thinking and reasoning constituted the core of what I was interested to understand. Why does paying attention to students' thinking and reasoning matter? Because students are intellectual beings with ideas that often go unnoticed. To learn to acknowledge students' ideas and to be committed to their learning are among the National Board of Professional Teaching Standards (NBPTS, 1994), which GSU has highly invested in, and which are the start for more democratic practices. To be consistent with what I preach, I started from the assumption that teacher candidates do pay attention to students, in ways that I myself needed to pay attention to and understand. I needed them to help me see those ways, and so their talk in conversations with me, as to how they interacted with students, as well as how they perceived their attention to students as having to do with students' thinking and reasoning, mattered. I was also curious as to how talk regarding paying attention to students' thinking and reasoning might be changing over time, as well as how the practices themselves might look different over time. In my study I used extensive videotaping, a method I describe later in the research design section. Consequently, the research questions, which guided my inquiry, were the following:

- I. a)What do elementary teacher candidates pay attention to during their interaction with students?b)What do they say about what they pay attention to in their interactions with students when they see themselves on videotape?
- II. a)What does it look like for elementary teacher candidates to pay attention to how students think and reason?
 - b) What do they say that has to do with paying attention to students' thinking and reasoning when they see themselves on videotape?
- III. a)How do ways that elementary teacher candidates pay attention to students' thinking and reasoning change over time?
 - b)How does their talk about their paying attention to students' thinking and reasoning change over time?

The above three questions, each one consisting of two parts, were the main research questions in this study. They were not criteria questions (a more specific level of guiding questions), nor were they interview questions, which were yet another, even more specific level of questioning. Since the latter questions took the form of conversational interviews, they emerged from the field.

GSU teacher candidates, during their internship year in the schools, learn to teach through interactions they develop in the context(s) they continually find themselves negotiating in. These interactions involve multiple players and layers, such as field and course instructors, cooperating teachers and teacher liaisons, cluster leaders and team leaders, 500 and 800-level seminars, a professional dress code and language, a busing system for children's transportation, and so much more.

By bringing together two lines of literature (teaching for understanding and learning to teach) I sought to create an "intellectual space" in order to explore how teacher candidates learn to

listen well to students and to pay attention to their thinking and reasoning, as a process which takes place in the context of the internship year. I, thus, conducted ethnographic research on novices' learning to teach for understanding during their internship year, the fifth year of a five-year post B.A. teacher preparation program. In the following section I give the rationale for the methodology I chose in order to situate my study in the particular "intellectual space" I identified above.

Why Qualitative Research Methodology?

Sherman and Reid (1994) defined qualitative methods as "procedures for identifying the presence or absence of something," and quantitative methods as "those procedures which measure numerically the degree to which some feature is present." (p.498) Qualitative and quantitative methods differ in their philosophy (e.g., phenomenology vs. positivism); in their method of design (e.g., fieldwork interpretation vs. cause and effect attribution); and in their method of data analysis (e.g., ethnographic methods vs. statistical measures). They originate, essentially, from two opposing paradigms, one of induction and one of deduction. Simon (1969) supported that each paradigm exists only artificially and not as an independently existing natural entity. Toseland (1994) agreed and talked about how the two approaches to research can enhance one another if viewed as inextricably interwoven. Harrison (1994) considered the integration of the two inevitable. Loneck (1994) viewed this integration as both useful and necessary: "Qualitative methodology ensures that research is relevant to practice and the quantitative one supports its validity." (p.445)

In this study I engaged in qualitative research methodology only, which took the form of qualitative case study research, the rationale for which I explain below. But first, what is a case study?

Merriam (1998) defined it as "...an intensive, holistic description and analysis of a bounded

phenomenon such as a program, an institution, a person, *a process*, or a social unit" (p. xiii, emphasis added). According to Merriam (1998), case studies can also be quantitative in their methodology, and even set out to test a theory. In education, and in this study in particular, the case-study design is qualitative in that it is:

...employed to gain an in-depth understanding of the situation and meaning for those involved. The interest is in process rather than outcomes, in context rather than a specific variable, in discovery rather than confirmation. (p. 19)

Cronbach (1975) differentiated the case study research design as a particular mode of qualitative research because it offers "interpretation in context." (p. 123) Yin (1994) observed that a case study is a qualitative research design suitable for situations in which it is impossible (and undesirable) to separate the variables of the phenomenon from their context. The particular context in which the phenomenon under investigation takes place, in other words, is of great importance, and it also **is** under investigation. In this particular study, teacher candidates' learning to teach for understanding happens within classrooms that have lives of their own; they keep evolving throughout the year; and they differ from grade to grade, from school to school, from district to district. Thus, understanding the particulars of teacher candidates' context is essential in understanding their evolving learning to teach for understanding in that particular context.

Why Engage In Qualitative Case Study Research?

According to Sanders (1981), "case studies help us to understand processes of events, projects, and programs and to discover context characteristics that will shed light on an issue or object" (p. 44). In this study, I aimed to understand a process (teacher candidates' learning to teach for understanding) as it happens within the particulars of elementary school classrooms, and through specific program expectations (i.e., GSU's Program Standards). Furthermore, the particularistic nature of a case study research design served the purposes of this study because it "captured" a

process in context: "it can examine a specific instance but illuminate a general problem." (Olson, 1992, p.138)

Each one of the research participants involved in this study revealed "specific instances" and encounters in their journey of learning to teach for understanding which were very different for each one of them, and quite idiosyncratic due to a combination of factors (different personalities, different learning styles, different contexts). In fact, "tolerance for ambiguity" is one of the virtues qualitative researchers need to be constantly cultivating. According to Merriam (1998), "It takes time and patience to search for clues, to follow up leads, to find the missing pieces, to put the puzzle together." (p. 21) The descriptive nature of the case study research design served my purposes of illustrating the complexities of a situation, such as the way this process evolves in context overtime. In qualitative research, it is important that information is presented in a variety of ways and from different points of view. (Olson, 1992)

In this study, I made an effort to take into account various players' point of view on the phenomenon under investigation, such as cooperating teachers' accounts of their teacher candidates' process of learning to teach for understanding, as well as the accounts on this issue from field and course instructors. I did that by interviewing them, by being a participant observer during their practices, and by having informal conversations with them during lunch breaks at a local cafeteria, or by talking with them on the phone. While these various players' accounts were not the focus of this study, they did constitute important information that has served both the purposes of "thick description" in my findings and the purposes of triangulation of the study's data.

What Is Triangulation, and Why Triangulate At All?

Knaft and Breimayer (1991) defined triangulation as a navigation technique of plotting the

location of an unknown point from two known visible points. Social scientists were the first to use triangulation metaphorically, in order to designate the use of multiple methods upon measuring a single construct.

Mathison (1988) addressed the inadequacies of previous definitions of triangulation as a process of gathering data via various independent measures that aim to *support* a finding. Although she agreed that the above happens, which she referred to as "convergence," ("data from different sources, methods, investigation...providing evidence that will result in a single proposition about some social phenomenon," p.15), she also argued for a more expansive perspective on triangulation, as providing inconsistent and even contradictory results of the same phenomenon under study. Therefore, when a range of perspectives or data does not confirm a single proposition about a social phenomenon, then we have a case of "inconsistency," which questions the validity of the claims. When several methods of gathering data result in opposing views of the social phenomenon under study, the case is one of "contradiction," calling the researcher, according to Mathison (1988), to construct meaningful propositions about the social world.

In this study, I shadowed teacher candidates during their 500-level and 800-level seminars with the "suspicion" in mind that their evolving talk about learning to teach for understanding might be convergent, inconsistent, or even contradictory to the talk they engaged in during watching with me their videotaped teaching. I knew that my field notes would be a good place to look for such pieces of evidence, and so would my journal (a more personal, more inference-driven source of data collection), both of which served me well during my data analysis.

The Site and the Participants

My study was situated in an urban, K-5 public elementary school, located in a mid-sized

Midwestern city. The student population was quite diverse, consisting of African Americans, Caucasians, Hispanics, and Hmongs. Ordinary Elementary⁹ was a Title 1 school, meaning that a high percentage of the student population qualified for receiving federal lunch support. Ordinary Elementary was not a Professional Development School (PDS), or a school involved in any research project with GSU. It was a neighborhood school, just like any other, and for that reason I named it "Ordinary Elementary."

At Ordinary Elementary, I systematically shadowed three elementary teacher candidates, Sara, Mai, and Juniper¹⁰, who all gave their consent to participate in my study without any hesitation. Sara, a white, middle-class returning adult in her mid-forties, was placed in a fifth grade classroom. Mai, a middle-class Hmong minority student, was placed in a first grade classroom. And Juniper, a white, middle-class traditional student, was placed in a split fourth and fifth grade classroom (half the students in the classroom were fourth graders and the other half were fifth graders). I spent a year sharing with them their journey into the internship year, starting from their Teacher Preparation Opening Day (August orientation at their school), all the way until their exit interview (late June), to understand how they learned to pay attention to students' thinking and reasoning. To capture the evolving life of learning to teach in a classroom, I daily videotaped teacher candidates' teaching, and I used that as content for conversations with them. Their videotaped teaching became "data" and an object of systematic study, as well as text which we dissected daily. Throughout this journey, the teacher candidates and I were involved in a variety of data collection modes: apart from audio and videotaping their teaching (Level 1 Data) and audio and videotaping their reflections on their teaching (Level 2 Data), we also dwelt in journal writing, field notes, examining the work of their students, and debriefing about the 800-level courses they were

⁹A pseudonym used in place of the school's real name.

¹⁰Pseudonyms used in place of the participants' real names.

attending at the University, as part of their five-year teacher preparation program.

Triangulation of data was equally important to my study, as it is in any good qualitative research. I followed the teacher candidates throughout their 800-level courses, their 500-level student-teaching seminars, and their various school activities. I also interviewed various other "keyplayers," such as their cooperating teachers (CTs), their principal, and their field and course instructors (I interviewed course and field instructors twice, once at the beginning and once at the end of the spring semester, apart from also having informal conversations with them). I also collected and read some of the teacher candidates' coursework papers, as well as some of the work they assigned to their students. I asked for and obtained copies of the teacher candidates' assessments which they completed for their mid-term and final three-way conferences¹¹. I also asked for and obtained copies of the teacher candidates' portfolios. At the end of the study, I brought all three teacher candidates together to review their videotapes from the year, and to ask them to share with each other and with myself their insights as to how their learning to teach had evolved and taken shape throughout the internship year (focus group exit interview)¹².

Research Design

Videotaping was crucial in this study, since both non-verbal and verbal interactions with children are indicators of the kind of discourse that takes place over time. Videotaping, as a tool for examining teaching practice, has become very popular and has been used by various researchers (Merseth & Lacey, 1993; Frederiksen, et al., 1998; Tochon,, 1999; Goldberg & Pesko, 2000; Sherin, 2000; Hiebert, et al., 2002; Sherin & Han, 2003; Voithofer, 2005; and Wilson & I' Anson,

¹¹ The three-way conferences take place twice during each semester, in which the teacher candidates, along with their cooperating teachers and field instructor, meet to discuss the teacher candidates' progress in regards to GSU'S program standards.

¹²For a comprehensive overview of the various sources/modes of data collection, please refer to the Summary Chart of Data Collection on Appendix I.

2006). Teaching is a public performance, analysis of which requires capturing it visually. I, thus, videotaped teacher candidates' teaching, in different subject matter areas, in order to provide variation of the data in context. This "raw data" (teacher candidates' unedited teaching as it happened daily) constituted the "Level 1 Data" of the study. The first "harvest" of Level 1 Data occurred in November, when the teacher candidates embarked on their Lead Teaching 1 period. During that same period, the teacher candidates and I allocated some time during the day (usually during their lunch break) to sit and watch what I had videotaped earlier in the day and to reflect upon. The teacher candidates were not aware of my research questions, or what I had set out to investigate. We had a shared understanding that our joint inquiry was about examining their teaching. Consequently, in the fall semester, and during the month of November in particular when Lead Teaching 1 was unfolding, I started viewing segments of these videotaped lessons with each one of the teacher candidates, in order to understand how they thought and reasoned about their teaching when they saw it on videotape. My focus was always on the kind of attention they were paying to children's thinking and reasoning, how that evolved over time, and how eventually learning to teach for understanding during the internship year took place. As each teacher candidate and I watched and talked over the videotaped teaching I recorded (Level 1 Data), we also were being videotaped. This second level of videotaping constituted the "Level 2 Data" for this study, since it was a meta-level of data collection.

For my videotaping in the classrooms in which the teacher candidates taught, I used a camcorder, which I placed on a tripod. I also used an external microphone, which I plugged into my camcorder. I tried to place the external microphone in the middle of the classroom, to be able to capture sound as best as possible. I usually stood with my camcorder at the back or in a corner of the classroom (to be as least intrusive as possible), although I was able to "catch" closer snapshots

of life in classrooms, by simply using a button on my camcorder to zoom in and out, every time I thought I saw some "action" happening somewhere. This "action" could be an intrusive student wandering around completely unnoticed, or it could be a group of students being deeply engaged with subject matter. During my videotaped talk with each one of the teacher candidates, I also used a microphone, which I plugged into the audio-recorder, to ensure better sound. The teacher candidates and I used a room in the school (usually during lunch hour) to watch videotapes from Level 1 Data (a TV was available in the room). We used the big table in the room across from the TV to lay out various artifacts that we utilized in our conversations (lesson plans, students' work, journal writing, course assignments, etc.). Our conversations were videotaped by my camcorder, which I had already set at an angle so that a viewer could see both the teacher candidate and myself talk, as well as what the two of us watched on the TV screen. This second level of videotaping (i.e. videotaping our conversations over watching videotapes) was, again, what I called "Level 2 Data." Inevitably, Level 2 Data interacted over Level 1 Data, and the other way around, in ways that I discuss later on. The kinds of conversation, in other words, that took place during watching the videotaped teaching (Level 2 Data), that is, the teaching which took place earlier in the day (Level 1 Data), affected the way teaching unfolded the following day.

My joint inquiry with the teacher candidates relied heavily on these conversations, which constituted the bulk of the research data. These conversations, although systematic, were at times long and rich, and at some other times short and simple. They were at times heavily emotional, at other times less so. They began as less structured and proceeded as more focused around students' thinking and reasoning. In November, during Lead Teaching 1, for example, the TCs started talking about how they thought they "looked and sounded" on videotape, as well as about their performance in the classroom. Their talk was more "egocentric." During this time, I probed the TCs by asking

them to talk about whatever they noticed in their interactions with students, and whatever they were interested in talking about. I wanted to start from where they were, to help surface and articulate their own hidden agendas and vocabularies. Occasionally, I would ask them to think about what they were paying attention to during their interactions with students, in an attempt to create text which we could use to build from.

When it was time for Lead Teaching 2 (eight weeks during spring semester), I gradually directed our inquiry a bit more toward their attention to students' thinking and reasoning. I avoided doing that right from the beginning, in order not to "contaminate" the inquiry. After Lead Teaching 2 ended, and while the TCs were still in their school placements, I shared with them some of my interpretation as to how I thought they learned to pay attention to students' thinking and reasoning, and I asked them to do the same about themselves: to think about their growth over time in regards to paying attention to students' thinking and reasoning, and to write about it in their journals.

At the end of the year, after their portfolio and other 800-level projects were completed, and after the convocation activities were over, I conducted a longer "exit" interview with each one of the three interns (as well as a focus group interview with all of them in a room), during which I sought their interpretation of their development over the year, in regards to their learning to teach for understanding, and I offered my own interpretation of their development for them to critique. This latter data collection mode aimed to strengthen the study's validity in regards to inferences, as well as to indicate that the participants' point of view on their development, for the purposes of this study and as a stance in qualitative research, was very much valued. In all instances, even during difficult or intense moments when the TCs revealed complex emotions, I considered *our* conversations to be deeply engaging and highly intellectual. I was not, in other words, there to interview. I was there to build a relationship from the "bottom up," which would get me from my insider's view (a veteran

classroom teacher and an experienced field instructor) to an outsider's view (a researcher of a process in context) and, with that, to a newfound insider's view of looking into classrooms, teacher candidates, their learning to teach for understanding, and teacher education. I was more in need of the TCs than they were of me, to help me make the familiar strange.

Obtaining Informed Consent and Spiraling Into Data Collection

All of this videotaping meant getting involved in a complicated and rather long process of obtaining informed consent from both school and University players (teacher candidates, cooperating teachers, school principal, children's parents, course and field instructors—see Appendix II). Some other instances of data collection (i.e. mid-term and final three-way conferences with TCs, CTs and field instructors), in which I was present as a participant observer, did not call for a need of video recording, and thus only audio recording occurred.

During the spring semester, videotaping was intensified, as teacher candidates took the lead in teaching in their classrooms. During the months of February and March, the teacher candidates' Lead Teaching 2 period, I was in the school videotaping daily. This period was very intense for the teacher candidates. They were overwhelmed and completely exhausted by the end of the day. It was not always possible to "produce" Level 2 data with them (watching their videotaped teaching and talk with them about it). We all agreed that when watching videotapes together was not possible, it would be more productive if I gave them each a videotape when the day ended, to take home with them and watch. In some instances that happened every few days, in which case I wrote them a note as to where to focus their viewing. We had already watched enough videotapes together, so I was not worried that they might get caught in the 20/20 trap (thinking they were 20 years older, 20 pounds heavier) or in other traps. The teacher candidates recorded in a journal their thoughts about

their evolving teaching as they watched it, over a school year, on videotape. The teacher candidates brought their journals and quoted from them during our conversations. At the end of the year, they agreed to give me copies of what they had recorded in their journals. The teacher candidates' journals, then, ended up becoming valuable data for the study.

Throughout the year, I was a participant observer at both the school and the University. Although I was already an experienced field instructor at the time (knowing the program and its components, and its expectations quite well), therefore being an "insider" in the field, I tried my hardest to adopt the eyes and ears of the "outsider," as though it would be my first encounter with the process of learning to teach. For that reason, I maintained a very detailed journal myself, recording all that puzzled me, whatever made me wonder about the how and why of things, or anything else that I thought was worthwhile for further investigation. In a way, I had started a conversation with myself on paper about my on-going sense making of what I was experiencing in the field. Without realizing it at the time, that was already a form of on-going data analysis. Whatever puzzled me at one given time, and whatever I wanted to know more about, became my source of inquiry on the following day.

How did I take field notes? During the day that task was not possible, because I was videotaping in the classrooms. Nor was it possible at any other time during the day, because I was shadowing the teacher candidates' every move—in the school, and in their courses and seminars. So, as I left the research participants and went home, I virtually "repeated" the day later in the evening by watching what I had videotaped earlier that day. I developed notebooks for each one of the teacher candidates, in which I kept jotting down what I saw, by dividing the page in two: on the left side of the page I *recorded* what I saw happening in front of me (i.e. field notes), and on the right side of the page I *reflected* on what I thought the data was telling me (or not). This kind of

reflection was my commentary on the field notes, a kind of on-going data analysis which kept informing my inquiry throughout the study. These reflections (my commentary on the field notes, recorded in my notebook) were different from the reflections I was recording in my journal. The latter were more elaborate and theory-driven. All of my reflections (in my journal, alongside the field notes, or in other places) were "haunted" by my research questions. I kept asking myself: "How does this data inform my research questions?" This constant interrogation of the data was a form of data analysis, on which I elaborate in the following section.

Data Analysis: An On-Going Process

Data analysis in qualitative research is a process of thinking about how the data collected starts to make sense. Thinking about and around data analysis starts to take form during journal writing, a place in which the researcher tries to make sense of field notes on any given day, reflects after an interview, records puzzles and illuminations on the data as they occur, and starts "seeing" through the data for what they reveal. This "thinking about the data" manifested itself through my conversations with the research participants. Our conversations, apart from generating data, became a "mental place," and a platform for data analysis. The research participants and I, in other words, were involved in the process of data analysis before we had even realized such was the case. It was an on-going process, evident in journal writing, during which they and I had already started developing themes and storylines.

Throughout my time in the field I had constant debriefings of the data, and of my research experience, with my doctoral dissertation committee members at the University. Each time I had a meeting with each one of my committee members, I went back to my journal and reflected on what we discussed regarding what the data revealed. They all provided very thoughtful guidance as to

how to proceed with further data collection, by giving me more questions to think about. My committee members, like the research participants, were very involved in the process of data analysis and in making sure I remained focused on the study's research questions, as well as open to other "news" emerging from my experience in the field.

Analyzing data while the study is in process, and not at the end of data collection, is a method that was developed by Glazer & Strauss (1967) and came to be known as the "constant comparative method":

The basic strategy of the method is to do just what its name implies-constantly compare. The researcher begins with a particular incident from an interview, field notes, or document and compares it with another incident in the same set of data or in another set. These comparisons lead to tentative categories that are then compared to each other and to other instances. Comparisons are constantly made within and between levels of conceptualization until a theory can be formulated. (Glaser & Strauss, as quoted in Merriam, 1998, p. 159)

For the purposes of this dissertation, I chose to focus on one case only, the case of Sara. I explain how and why in the following chapter, and I expand more on how I went about analyzing "her" data and crafting her case. To present her story, I used Erickson's (1986) notion of the "narrative vignette." A vignette (i.e., a small vine) aims to portray not only a story but also an atmosphere. According to Erickson (1986),

The narrative vignette is a vivid portrayal of the conduct of an event of everyday life, in which the sights and sounds of what was being said and done are described in the natural sequence of their occurrence in real time. The moment-to-moment style of description in a narrative vignette gives the sense of being there in the scene. (p.150)

Sara's daily scenes contained, to use Erickson's words, "tremendous complexity," because of the multiple players and layers involved in her development. Apart from a number of school and University players, I too was present in Sara's life, adding yet one more layer in her busy, daily routine. To think, then, that it is possible to convey such tremendous complexity is a delusion, and any attempt to portray it can only be futile. Erickson (1986) explained this reality in detail:

Even the most richly detailed vignette is a reduced account, clearer than life. Some features are selected in from the tremendous complexity of the original event... and other features are selected out of the narrative report. Thus the vignette does not represent the original *event itself*, for this is impossible. The vignette is an abstraction; an analytic caricature (of a friendly sort) in which some details are sketched in and others are left out; some features are sharpened and heightened in their portrayal and other features are softened, or left to merge with the background.(p. 150, emphasis in the original)

It is important, nevertheless, to "stimulate analysis early on in the organization of the data" (Erickson, 1986, p.151), by providing interpretive commentary. Sara's story comes alive through a number of vignettes in which concrete particulars intertwined with meaning making. Apart from describing the scenes and social actions, by drawing from journals and field notes and by using direct quotes from conversations, I also made meaning of social life and its actors (in this case of Sara's development) by intersecting analytic commentary based on my on-going interpretation of the data during and after my time in the field. According to Erickson (1986), in order to strengthen the interpretive validity of the narrative vignettes, it is important to continue the interpretive commentary, in the same fashion, in other parts of the report. I engage, then, in more interpretive commentary in both the discussion and implications sections of my dissertation, by returning to the two lines of literature discussed my study.

CHAPTER IV: FINDINGS –

THE CASE OF SARA

Who Is and Why Sara?

I worked with Sara from the beginning of the school year (late August) until its end (late May). I spent that year sharing Sara's journey during her internship year, starting from her Teacher Preparation Opening Day (August orientation at her school), all the way until her exit interview (late June). Sara gave her consent to participate in my study with a lot of enthusiasm. Of medium height and weight, a congenial dark-haired woman, Sara was different from the other two research participants in a number of ways. She was well into her forties at the time, having children already graduating from College, and with some prior work experience in the private sector. She had also served as a "helping mom" in classrooms when her children were attending elementary school. Unlike other teacher candidates in her program, she was quite experienced in working with other adults in a professional setting, and she carried with her a professional demeanor as well. She was kind, and rather shy, and she was deeply interested in her learning to teach. Although she had spent a lot of time in classrooms being a helping mom, and had seen her own three children go through elementary school, she was still bringing in her inquiry questions that were similar to those that other teacher candidates raised. According to Brown (2005), nontraditional, second career, "older" teacher candidates becoming part of teacher education cohorts is a trend which first appeared in the 1990s, but one which has received very little attention in the teacher education literature. I was, then, right from the start quite pleased that Sara, the nontraditional, "older" teacher candidate, was one of the research participants in my study. She was very thoughtful and articulate right from the beginning of the internship year, being very explicit

about what she saw her learning trajectory to be: "...I want to be able to learn how to really help kids think, how to question... I want to have good questions to ask kids, so that they start asking more questions themselves..." (November 10, initial conversation)

Sara's case was appealing to me right from the start: unlike what the literature on novices suggests, Sara was interested in helping kids develop their thinking, from the very beginning days of her internship year. As I saw her develop throughout the internship year, she was really the most articulate of all the research participants; she wrote more in her journal about her professional journey; and she even theorized about her "shifts" in learning to teach. Sara never gave up her original agenda of helping students think and reason. All three of the research participants in my study worked very hard during their internship year, and even harder by participating in my study— I asked them to do much more than what other teacher candidates had to do. I learned many lessons from all three about researching the process of learning to teach for understanding, and about "the goodness of qualitative research." (Peshkin, 1993, p.23) I enjoyed our joint inquiry beyond words, and I am grateful for all the important lessons all three of them have taught me. Sara's case, however, was really the one that informed the findings of my study in deeper and broader ways. In addition, Sara felt more confident to share with me other background information regarding her school placement (something that the other two TCs did not do until the end of the year), and in that sense she also served as a key informant. So, why Sara? Sara was, indeed, a dream come true as a research participant for my research study!

I, thus, went ahead and transcribed word by word every recorded conversation I had with Sara (a total of eleven audiotapes). As I was transcribing her talk, I wrote in another column more commentary with the research questions in mind, essentially providing my on-going interpretation of the data. This was one level/stage of data analysis. Once I completed writing this commentary, I

re-read it and grouped it by theme, with the research questions in mind just as before. This was another level/stage of data analysis, which also built on the previous one. I, in other words, began inductively synthesizing Sara's case, and building her storyline about learning to teach from the bottom up, utilizing "grounded theory." (Strauss & Corbin, 1990) I also started looking at various other sources of data (her journal, my journal, students' work, Sara's coursework assignments, her portfolio items) for both confirming and disconfirming evidence. Here is, then, Sara's story: a true story, as witnessed, recorded, and interpreted by me.

Vignette One

Great State University's Opening Day

It was the end of August and it was time for the Teacher Preparation "Opening Day" at Great State University, the day that GSU brings together cooperating teachers and other school personnel with teacher candidates and various key University players. The Opening Day started early and ended in late afternoon. People met in an assembly room in one of the schools. There were round tables around the room, and coffee and donuts in the corner for people to serve themselves. Each school was assigned a roundtable, around which CTs and TCs from that school were seated together. When people took their seats, the Team Leader welcomed everyone and asked, "What are we here for today?" There was talk about developing "collective wisdom," talk about how "one engages in the process of inquiry," and a lot of document sharing: the GSU Guide for the Internship Year, the GSU Intern Handbook, various coursework guidelines, the agenda for the day, and an evaluation sheet.

It did not look like the CTs and TCs knew each other from before. They greeted and smiled at each other as they got comfortable around the tables. People seemed excited

anticipating the year. Some CTs, however, expressed concern whether the TCs were ready for a year-long internship. One of the 800-level course instructors seized the opportunity to introduce a poem meant for first graders. He modeled the inquiry he was looking for. Other GSU people reinforced the message that TCs need help to engage in that kind of inquiry. The course instructor elaborated on what it looks like to "be keen with inferences, interaction, response, and conversation strategies while working with kids and from text." (August 25, field notes) It was break time already and one of the CTs, who knew me from my previous years as a field instructor, approached me and expressed a concern: "Remember how complicated and overwhelming the role of the CT is?" This was a CT with whom I had an excellent relationship, and who is one of the best CTs in the GSU teacher preparation program. During break time, people mingled with each other, with excitement and some anxiety, over coffee and donuts.

The Team Leader started the second part of the morning by asking the CTs to think about mentoring as a form of teaching: "What does it mean to be a teacher of a college student who is learning to teach? How do we develop a vision about the internship year?" After watching a videotaped segment of a CT and a TC having a conversation about a lesson taught by a TC, all people in the room discussed at their tables what may be going on during the internship year. At the table where I was sitting, there was talk about establishing a relationship of trust early on, what "stepping in" may look—and feel—like, and how the relationship will be negotiated when the teaching practice begins.

While these discussions were taking place, I was moving around the tables looking for articulate, thoughtful, insightful, learner-oriented people. Sara and her CT stood out: an unusual couple, since Sara was an older TC. As already mentioned in the previous section, Sara carried with her a congenial and mature demeanor, and yet also communicating a genuine interest in

learning a lot from her placement and her CT about teaching. Sara's CT, Mrs. T., knew she was about to mentor a non-traditional student. As I was watching them interact, I saw a conversation evolving around two mature adults. Although timid and shy, Sara was more talkative than her peers. Mrs. T., although an experienced teacher, did less talking and more listening than her colleagues. I knew they were a couple I would like to work with. That day I made mention of this wish of mine in my journal.

During lunch time, the TCs and CTs started getting to know each other and on building "a relationship of trust." The afternoon session evolved around studying the GSU guidebook and the GSU Program Standards. The Team Leader introduced the Program Standards as a tool for learning during the internship year, and explained how the GSU coursework connects with the internship year. I went home thinking, "Quite a day, eight hours of participant observation, field note taking, journal writing." I knew, from that first day, the "Great State University Opening Day" in August, that a great year was ahead for me.

"What's It Like Up There?": Attending GSU's Coursework

"What's it like up there?" asked Paul, one of the 800-level course instructors. Paul had a reputation, a good reputation, among TCs and the whole GSU community, of being a professed constructivist. A veteran science teacher himself, he was in charge of the 800-level science course instructors for elementary TCs. He was interested in pursuing good questions and in helping TCs to do the same. As the fall semester started in early September, so did my shadowing of the TCs everywhere they went. I started the year by attending the Teacher Preparation Opening Day, and I obtained the TCs' schedule of courses and periods of Lead Teaching. In his 800-level course, Paul, the science course instructor, gave TCs an assignment

early on. The TCs were to analyze, in three to four pages, a unit they had already taught in their classrooms. Paul was interested in students' learning, and thus the assignment he gave to the TCs centered on the question: "What did different students learn or understand? What evidence do you have?" Paul, essentially, sent out through his assignment an invitation to TCs to start paying attention to students and their talk. As various TCs were presenting their assignment, one TC commented, "When you constantly ask them questions, it feels like it is not going anywhere" (field notes, November 6). Paul stepped in and asked a question which created a very heated but also rich and engaging discussion: "What's it like up there to wait for them when you ask a question? What is your fear when you wait for kids to answer?"

GSU was quite serious about providing opportunities for TCs to think about students' learning and its assessment. Through the program's standards, their coursework, and their field instruction seminar, I started seeing parallel threads when it came to on-going assessment of students' learning.

That same day I followed the TCs to their other 800-level course, taught in the afternoon by Eisner. Eisner, an experienced course instructor and a scholar in his field, was in charge of the literacy 800-level course for elementary TCs. Eisner started the course by laying out his expectations: "I want you to be learning to do good teaching of literature" (field notes, November 6). Eisner assigned to TCs a novel (*The Long Winter*, by Laura Ingalls Wilder), along with some questions to think about upon teaching it in their classrooms. One of the questions Eisner asked TCs to think about was assessment. As Eisner was assisting TCs to generate ideas, Sara brought up a wonderful point, concerning the difficulty of paying attention to all students: "With some kids you know how they do because they talk. With the ones they don't talk how can you know?" (field notes, November 6)

I approached Sara at the end of her 800-level course that afternoon. I knew, from her thoughtful questions, that she was someone with whom I wanted to pursue my study. I asked if and when I could come in her classroom to videotape her teaching. She happily accepted, and so I went in for my first videotaping of her teaching on November 10, during the Lead Teaching 1 period. During the fall semester, Lead Teaching 1 is a period which lasts for three weeks in November, and the TCs take the lead in teaching, meaning they teach for most of the day.

Getting Our Feet Wet

As I was new in the business of videotaping in classrooms, I, too, along with the TCs, was "getting my feet wet." My biggest challenge upon entering the TCs classrooms (during the fall I was videotaping several TCs) was to find (for my camcorder) the right plug, at the right place, at the right time. I was worried I would walk into a classroom at the wrong moment; that I would interrupt "the flow;" and that I would be in people's way. Because I chose to place myself in the corner or at the back of the room, for most of the day people barely noticed me.

My first videotaped encounter with Sara was on November 10. When I walked into Sara's classroom that morning, she had already started with an editing lesson. She was standing behind an overhead projector (OHP), showing to the students a passage with some errors they were to edit. Sara barely moved from the OHP during that lesson. She appeared to be stiff and unbending, as though she was "glued" to the OHP. When a student offered an idea, she turned her head towards that student only, appearing to have "tunnel vision." During her editing lesson and while students offered ideas, she never asked anyone to clarify or justify what they were saying. In fact, at one point she responded to a student's input by saying "no, that would be wrong," without explaining why or giving that student the opportunity to revise or to offer some

alternative input. That same morning Sara also taught some math, following the same pattern as before: not asking students to clarify and/or justify their answers. During lunch break, Sara and I had our first conversation in our designated room. We spent close to one hour talking both about her teaching that I had videotaped earlier that morning and about questions I had prepared for her to introduce herself to me. I was worried Sara would get very defensive watching herself on videotape for the first time and talking about her teaching with me, a total stranger. She did not. On the contrary, I found her to be very interested in the task, quite courageous to investigate her teaching with a critical eye, even enjoying the experience of analyzing her practice, and very articulate in expressing her surprises and concerns.

Vignette Two

Sara Entering New Found Land

Upon introducing herself to me, Sara wanted to make sure I knew she was a different, non-traditional Teacher Candidate:

S: I am a wife and a mother of three children. I always helped as the room mother and I got interested in. I would like to be a teacher, I thought. So after my kids were a little older I went back to work. I had gone to school to be a nurse when I graduated from high school but I only went for a couple of years and then I quit. And I got married and had a family and became a room mom, so that's how I got interested in teaching.

L: What was it that interested you?

S.: I like kids, I really like kids. And I wanted to do some kind of work that I felt was meaningful. I love learning myself. And I want to impart that to children. And I really like 5th grade. I always just thought that I would enjoy working with 5th grade 'cause I liked my own 3 children all separately at that age. They were just so smart and they were thinking, and yet they were able to zip their own coats and button, and do all those things that kindergartners have a little trouble with. I enjoy the minds of 5th graders, I like that age a lot. So that's what I'm hoping to do.

L.: I would like to hear some more about this. What is it about this particular age group that you find interesting?

S.: Well, they still respect their parents and their teachers. They are not, they don't have the attitude that comes with the hormones usually a little bit later. And they are soo intelligent and they are able, they're starting to think on higher-level thinking. And it's just so much fun to watch and learn with them and see how they think and I enjoy that.

Sara gave me the impression of someone who did not have to spend time learning about children of that age. She sounded as though she already knew enough. Despite all the knowledge and prior work and experience with that age group, however, she still was worried about lasting through her internship year. Her concerns were very similar to the ones of other novice teachers. In that respect, she was very similar to her fellow Teacher Candidates in her program. In asking her to share with me her goals for the year, Sara talked about wanting to develop good classroom management skills, to have a strong presence in the classroom like the one of her CT, and to learn how to help students think. I wanted her to look back at the beginning of the internship year in August and to talk about whether she had readjusted her goals since then. I wanted to see if the evolving life in her classroom had an effect on her goals, and how she predicted now her development would evolve as time went by. Sara was very articulate and courageous in unfolding her thinking for me:

S.: My main goal for this year is to learn classroom management skills. And the teacher that I am working with is excellent at classroom management. She is very good at it. That was my main goal and I found that that's probably my main problem as well. I thought it would just be a natural thing that kids would respect the teacher, just because you are the teacher and I have since learned in the few months that I have been here, that you really have to have strategies, in order to control the class. And then you can go on from there and have learning and fun activities and things like that. But I've seen that this is really a lot harder for me than I thought it would be. But working with a handful of kids is a lot easier than 28, like we have in our room.

L.: It is a lot harder than you thought because...

S.: Um, there are some behavior problems in the room and those at first really caught me off guard. And when there's a lot of the kids misbehaving. I see that you have to be aware of what's going on all sides of the classroom, not just the people that you might be helping right now. And that is really tricky. So I have a new appreciation for teachers that can do that. Because it really is a skill, you know. I'm thinking that experience will help with a lot of the little things. But I

definitely have a really good person to observe and to learn from.

L.: What else would you like to improve on this year?

S.: Um, *I want to learn how to really help kids think*, you know. Ah, how to question, that's another thing, I think, it's really, some of it will be experience and some of it I think you can learn, you know. *Having great questions to ask kids so that they start asking more questions*, this type of thinking is what I'm..., inquiry, I guess is what, I think, the educated word for it is. (emphasis added)

Sara was clear from the beginning of our conversations about her learning trajectory: she wanted to learn how to ask good questions to students in order to help them think and to be able to form their own questions. She saw the need for monitoring her directions to students and that transitioning from one activity to the next could be very tricky. Thankfully, she realized early on the importance of preparing well for teaching.

L.: Have you seen a change so far in you since September and especially during Lead Teaching 1? What happened there that you could tell, "Oh! here's what I learned, here's what I didn't know how to do before and I've learned it now, and here's why."

S.: Okay. One thing that comes to mind immediately is I give too many directions at one time and I've learned, I'm still learning. I mean, I obviously some of these things are habits and I just do it without thinking. But I have to start giving one simple direction. Then, when that's carried out, go on to the second one. 'Cause that way the classroom isn't overwhelmed and they don't tune you out. They do put the one paper away, get out the next book, get out a pencil, that type of thing.

L.: That's interesting. It sounds like you've discovered, there's only so much they could take.

S.: Right!

L.: What about the speed that you are talking with them. Have you discovered anything about that?

S.: I think that goes along with too many directions and getting it all out really quickly. Yes, that's true.

L.: Does the day of the week make any difference?

S.: Yes, 'cause Friday they are ready to go. I'm getting a little more confident too. And I really think that it takes a long time because I don't have enough experience to know what to expect or how to deal with certain situations so they still, I still am a little tentative, when I come in the

morning. I'm a little bit leery of what might happen and how I am going to deal with it. Whereas I think in other past jobs that I've had you learn with experience, and after a year of doing it you pretty well know.

L.: Can you give an example of a day that you were sort of leery, like you said?

S.: Ok. Uh,...when you see the science tape that I taped. I wasn't planning on teaching science that day. But I had not taped a lesson for Paul (the science field instructor). So I asked the teacher before school started if I could teach the first lesson for the next unit, which I wasn't really prepared for, so I looked it over really quickly to get ready to do it and I really would, you know..., it was not an ideal situation. So, right then I knew it was, you know, there could be a lot of trouble. 'Cause I wasn't really organized with what I was going to do. Also it was the same day that the kids had their Halloween party, so they were really excited and it was, so... When I first went in it's not on this tape, because I edited it. But I passed out papers and it was the wrong thing to do. Because while I'm going around trying to find people to give the papers to, they are getting more and more restless and acting up. And so I learned, just from watching the tape, "oh, that set the wrong tone. I should get them doing something and then hand back the tests." So, that... you know. And to me, my original thought was, the test was from the previous unit so I should do that at the beginning, to see if they had any questions about it. And then move on to the next unit. But I could see from watching the tape that, "Uh hum! That doesn't work with 5th graders."

It was very courageous of Sara to share with me, at our very first conversation, the fact that going in the classroom unprepared was not a good idea in the first place. Sara was a hardworking, conscientious teacher candidate who knew all too well what her responsibilities were. She realized how important management skills were for a teacher, and she talked about those skills without losing sight of her important goal for the year: "help kids think."

S.: A lot of it right now is management for me. Because if there's 28 boys and girls mostly boys in the room and if you don't have management under control, no learning is going to take place. At least that is what I've seen right now. And I don't want management to be my number one thing all the time. But I think when you are new, it probably has to be. And a lot of times my teacher will have to step in and do something for management, to get them under control, and then, you know, like you probably saw this morning, during the morning greeting. Um, you know, she steps in quite a bit. And...

L.: Sort of sets them up?

S.: Right. And, you know, I want to be able to do that on my own. I really, I want to get to that point where I'm confident enough and the kids know I mean what I say. *And I feel sort of wishywashy. That really bugs me.* Like I come across wishy-washy. Like maybe I don't really mean it. I feel that way sometimes when I'm even as my voice, when I'm hearing myself, I think.

There, I have to have a way to present myself that says I mean business (emphasis added).

Sara was ambivalent about a number of issues in the beginning of her internship year. She knew she wanted to be listened to by students the way her CT was, but she was not all that happy with her CT's classroom management style. She saw the importance of good classroom management, but she did not want that to dominate her learning to teach during her internship journey. She was adamant about "helping kids think," but she wanted to be listened to by students and to present a self that proclaimed that she "meant business." Sara's tinkering movement between copying her CT and developing her own teaching self was occupying her thinking a lot. She could not foresee (nor did I) at the time how bad her relationship with her CT would turn out to be. Thankfully, she did maintain a good relationship with her field and course instructors at GSU, and she was, in fact, one of the most diligent and articulate TCs in the seminars. She had well-developed notions on some key teaching and learning ideas (the importance of lesson planning, keeping students engaged, understanding subject matter well and making it accessible to students) but she had less well-developed notions on some other teaching and learning ideas, such as how she thought about respect in the classroom, for example. In the following section, Sara reveals this tinkering movement in her thinking and talks about her learning trajectory during her internship year.

What Is the Matter with Them?

Sara entered her internship year expecting that students would just listen to her. Every time she talked and there was any inattention on the students' part, Sara interpreted that to mean lack of respect towards her. She was perplexed about it, and she communicated that to me early on: "What is the matter with them? Don't they know respect?" Respect was an idea which was

prevalent in Sara's thinking during her internship year. I thought I could use that idea as a way to uncover Sara's thoughts about other important teaching and learning ideas, such as classroom discourse, student engagement, and teaching for understanding. I remembered an activity her field instructor, Rita, had asked them to engage in during a field instruction seminar earlier on in the semester. I framed my inquiry with Sara based on that activity:

L.: You know, something I wanted to ask you from last time, I thought it was very interesting. A couple of weeks ago when I came to your seminar with Rita, remember she did three columns on the board and she put on the one, "expectations." She asked you to think of your expectations, sort of what you took for granted. In the second column she put "reality." What you found to be reality, so to speak. And in the third column she wrote "concern." What's a concern that you have, because of the first two being different? And I remember you said something like, "I walked in thinking I would be respected."

S.: Right. You have a good memory!

L.: And then you said, "I realized that the case wasn't as such, so I realized that I have to ask for kids to respect me." I don't remember what the concern was that you said. Did you say you had a concern?

S.: Probably, how to develop that demanding nature somehow.

L.: So I wanted to hear more about that. I'd like to hear more about your notion of respect, and what exactly it is that you mean. It also sounds like you had a surprise.

S.: Well, I guess from my own experience, I went to Catholic schools when I was a child and there was a lot of discipline and you never, you just went in the classroom automatically respecting your teacher. At least that's the way that I was raised. And that was a long time ago. Then when my children were in school, it still was sort of an attitude and kids today, and I sort of knew that in a way, but never having seen it in a total classroom environment with so many kids. I realized that they just don't automatically respect you. Just because you're coming in as the teacher. You have to earn that respect, but first of all, I think you have to demand it in a way, and that is a certain stance that Rita talks about sometimes. And I see that in my teacher. She has this attitude, "of course they'll respect me. I will expect no less." That's kind of her attitude. And you have to have that in order to survive, I think, in there.

L.: When you say respect, what do you mean? What would they do that shows that they respect you, what would they not do...

S.: Okay, if they do respect you, I think they will listen to you. That's the number one thing. Listening.

L.: Paying attention?

S.: Um hum, and paying attention, yes, attend to you, the teacher, when she's talking. Um, and my teacher gets that, and I don't. Even at the same, right now, you know. Um, because I think part of it is, when you're the intern, kids know these things. They definitely know. And my teacher is the one who is in control of that classroom. She has been since day one, and she can see, we're partners, but it's not really true. It's not true at this time. It can't be true. I'm not, I'm not experienced enough to be able to really do it.

L.: The notion of respect is very interesting. Maybe we'll go more into that throughout the year.

S.: I think I have to respect the kids too. But I feel that I do. I, I probably can grow in that, but I, you know, I feel that I'm coming in there with a respect for them that they are not reciprocating to me. But, I do believe the experience is part of the problem.

Sara's understanding of respect was evidently quite unsophisticated at this point in the year. She thought that she was entitled to respect from students merely because she was their teacher, and that respect from students meant listening to her when she talked. She thought that her CT was getting more respect than she did because when her CT talked, students always listened. She also thought that more experience can get someone more respect from students. Sara believed she was respectful enough to students because, in her mind, she listened to them. However, more prevalent in Sara's talk in November was the notion of respect coming one way from the students towards her. I found this tinkering stance around respect and the way she related the concept of listening (she to the students and the students to her), to be a good place to start inquiring about Sara's understanding of subject matter, as well as students' understanding of subject matter. Sara's minors were English and history (her major was Elementary Education), and she had a particular preference for social studies and literature over mathematics and science. Sara, as before, was quite articulate about her subject matter goals, as well as about her goals for the year in order to reach and further students' understanding. She started weaving her internship journey with a lot of excitement, but also with some agony, using very important teaching and learning threads, like making subject matter meaningful to students, developing a

strong teaching stance in the classroom, and finding her place next to her CT. Unlike what the literature on novices suggests, Sara started her learning to teach journey with some "ambitious" goals in mind.

Learning to Think, to Know, and to Act Like a Teacher

The above is terminology borrowed from Carroll et al.'s (2007) book, *Transforming Teacher Education: Reflections from the Field.* The authors described a five-year teacher preparation program in which teacher candidates went through stages of learning to relate with students and their thinking (junior year), of learning to make subject matter accessible to students (senior year), and of learning to bring together thinking, knowing, and doing in supervised practice (internship year, p. 20). Sara demonstrated the above stance to me during our very first conversation on November 10. She was deeply interested in making subject matter accessible to students and keeping them engaged; in students' thinking and understanding of their ideas; and in gaining a valid presence as a teacher in her classroom placement. She was puzzled early on about the set realities of the classroom, like limited time and students' inattention.

L.: Let's talk about subject matter. Do you have any preference as to the subject matter, like you do with the age group I guess? Is there any subject matter that you're more attached to?

- S.: I especially like literature, and writing in those areas. And of course, social studies is partly history, so I like that a lot. I like history, because they're learning about people and you can relate it to your own life. Literature just because I personally love literature, and I learn a lot about myself from the literature, in reading other people's thoughts and feelings and then you can question your own life or your own attitudes and things.
- L.: When you teach this subject this year to these students, 5th grade students, what are some of your goals for them? What's something you would like them to understand when it comes to this subject matter?
- S.: In social studies? Um...well, one thing, I just right now am thinking of the Native American unit. I was really hoping that the children would make connections between the way Native American people lived in the past, and that they, also to connect that yes they still live today and

yeah, they still carry on the same traditions, the same customs, although they live in the same world that we live in. So they live in both societies really. And not so much what's happened to their people, since Columbus has come to the North American continent yet. Because we're not to that point yet. But um, how would, that these people are real and that the diversity is to be treasured, and...just to find ways that they could connect how their lives are similar and different and yet that these people are also valid human beings. That type of thing is really important to me.

L.: That's very interesting. It sounds like you want them to understand something about time.

S.: Hm, true.

L.: How can we relate with how this group of people used to live back then and how can we understand that these people live right now. And how do they live that's different from the way we live, and how can we gain an appreciation of different people living in different ways in the same period of time? That's complex, isn't it?

S.: Right, um hum, it is.

L.: To understand. How would you know, by the way, if kids understand something? How would you know if they don't? Say, in this particular example with Native Americans and time.

S.: Well, I read this one picture book that Eisner had that's about a girl who's having a potlatch. And she is a member of a tribe in Canada, and she still, her family and her tribe carry on the same traditions as what they studied about in the long ago days of the Native Americans. But also, she lives now, and you could tell that, 'cause I asked how they could tell, when they thought the story took place. And they could tell by the clothing, by..., there's a last picture in the book where the little girl is with two friends and they're drinking a Big Gulp from 711, so, of course they knew that was now, because it had the 711. And um, at first they, they did snicker at the differences in the story, they were a little uncomfortable. But, and I was sort of disappointed in their response to tell you the truth. So, I told Rita about it and she said that she felt that, that sometimes is the first, um, awakening of knowing, you know. And then I got thinking about that and I thought that was probably really true. Because they're recognizing that this is someone other than the way they know life to be. And so, when I talked with her, then I felt like, "Oh! Well okay that was better than not having any response." So, I felt a little bit better about that. That was about the only way I really could tie it into the now.

L.: It sounds like you follow up with them. You ask them to show you in different ways how it is that they're grasping what it is they're grasping.

S.: I am learning to do that. You know with literature and writing, I am just starting to see that you, I was talking with my husband this morning, as a matter of fact, you have to tell kids, you have to express everything to them.. 'Cause they don't necessarily know and if they do know, maybe they've never put it into words. And this is something new for me because usually I'm thinking it to myself. And I'm learning now that I'm going to have to be expressing my thoughts to the class, so that they can see that's one of the ways they're going to learn about, you know,

words, and language and how you put words together and, it's kind of overwhelming, but it's also pretty exciting too. 'Cause it's starting to become, you know, steps, that you can see, that, you know...

Sara communicated early on to me that she was someone who would problem solve. She brought a question she had from one of her 800-level courses to her field instruction seminar to discuss with Rita, her field instructor. Because Sara was not worried about appearing naïve or inexperienced, she did not hesitate to reveal a stance of not-knowing. In fact, she revealed her emotions of being overwhelmed with the task of teaching: learning to make subject matter accessible to students and to keep them engaged. Sara was very disappointed that her CT would not sit down with her to help her with planning, a problem Sara could not solve by herself. As we kept talking, I introduced to her the importance of watching one's teaching on videotape and making it an object of study. I wanted her to get familiar and to develop a concrete relationship with her practice early on. My goal, in that first conversation with Sara, was, without imposing it, to help her realize the importance of reflecting in and on action (her practice), as a way to advance her learning to teach.

L.: It's a learning process, I guess, and the way I see it is, it cannot be a learning experience unless we think about it, sort of examine it, almost dissect it. What has happened, why, what we would we have done differently? What would have happened if I had done this differently? How if I try this next time? In other words, I guess experience alone is not going to do the job. Right? Do you want to go to the tape now and see what's going on?

S.: Sure.

L.: Do you think you look stiff?

S.: Probably, because I know that I am being taped and I am going "yikes..."

Sara's initial reaction to watching herself on videotape was not far from typical: she did not like her voice or the way she looked, and she was puzzled about how her CT's many interventions (which she conceived as interruptions) affected her relationship with the class.

After a few minutes of watching herself on videotape, she wanted to talk about her physical presence and the fact that her CT "got in the way a lot":

S.: Phew...It was like a rolling...I don't talk loud enough, I think, because you can't even hear me. When, like, I had said "Okay, boys and girls everybody needs to stand up," you can't even hear me. But then, when Mrs. T. talks you can hear her. How can I develop that? A louder voice?

L.: You think that is what you need to do?

S.: Well, or...maybe not, maybe I just need to get their attention. But somehow I, 'cause you can be soft-spoken and still be a teacher that has the class under control. I also point a lot..., I do. I can't think of the name quick enough and, you know...

L.: Let's watch some more tape. What is happening here?

S.: I was thinking more in the beginning. I seem..., I don't seem as sure as I would like to, about what I am doing. And I think that is important to have that, come across with that confidence, that presence. Which, I'm still in the process of developing it I believe.

L.: Think about the classroom setting for a minute. You were standing behind the OHP, they were all seated, you were doing editing and talking to them one at a time. Might the kind of setting make a difference in your interaction with them?

S.: It might.

L.: I've noticed that you remain in the overhead projector, right, you don't move around.

S.: Right, because I'm correcting on that overhead as they're telling me what to write.

L.: So, you think you're a little more confident here than before?

S.: I think so.

L.: That's interesting, let's just keep watching and depending on what the setting is like, let's watch how you change.

During my initial conversation with Sara (November 10), I aimed at letting her draft her own course of action. I wanted to see, upon watching herself on videotape, what caught her attention. Since she had no prior experience analyzing her teaching over videotape, naturally she wanted to talk about how she sounded and looked and to comment on the many times her CT came into the picture. I gradually introduced questions for her to think about regarding the way

she interacted with students, as well as which factors may come into play for those interactions.

At the same time I tried to help her uncover her many strengths and qualities as a novice, non-traditional teacher. I wanted Sara to start an interaction with watching herself and her practice on videotape that was deeply reflective and educative:

- L.: Remember when someone said something and you said, "No." Can we watch that again, I wasn't sure I caught it. I didn't know what that was.
- S.: Um...she said something that didn't need to be changed in the editing lesson. And so I said, "No". And I wonder if I could do that in a kinder way. I don't know... A comma where it didn't need a comma, so I just said, hm, I looked at it and I said, "No."
- L.: How would you have done it differently?
- S.: I guess I could say something like, "nice try, but we don't need a comma," or something like that. It's a compliment that she, she tried. And plus, she has trouble with English and so, you know, that she's making her attempt and I should recognize that.
- L.: Let's watch you teaching math. Was this your first time teaching math?
- S.: Right. I taught it to first graders last year, but that was it.
- L.: Was your presence here different, do you think than when you were doing the editing? Do you see you being different?
- S.: Um...probably, just because I'm not as sure about it, but um, I think I'm doing pretty well for being handed something I wasn't clear about.
- L.: You look very comfortable there, considering this was your first time, very comfortable I think. Actually, I think you were more comfortable than before when you were doing the editing lesson.
- S.: I think that's so interesting to see that maybe as you go along and do it, there's a comfort level that comes with the time involved, and maybe as I, I'm curious to see with Lead Teaching if the morning will be really comfortable because I've just finished the afternoon and that will be interesting, we need to see that. And I had never, I never would have noticed that, if you hadn't taped me.
- L.: When you were talking about presence, what was in your mind?
- S.: Well, I sort of compare it to my teacher, and she definitely has a presence. And, when she speaks the kids listen to her, um, she can direct their activities. It seems like very easily, you know. And for me, just getting their attention sometimes is really a big deal.

L.: So it sounds like you're saying, when she steps in, they know it.

S.: Well, right. But even if I wasn't in the room, um, she just has it, you know, she, she, she... Okay, if I'm having a hard time getting their attention, she can step in and get it immediately. And I admire it, really, I want to have that too. But I'm a different person. My personality is very different. And so I'm not as commanding as a presence. I'm more of a laid back person, you know, easy to, I'm easy-going, kind of, a nice person. And that gets in my way, at times. It can get in my way. 'Cause I'm too nice, I think. I'm seeing that about myself. I need to also have that side that has a little bit more demand to it.

L.: That's very interesting... I did not get a sense that they weren't paying attention.

S.: You didn't notice?

L.: I didn't. I actually thought they were very attentive, especially during math. Remember one kid corrected you about something? I thought it was very interesting because he wouldn't have had, if he felt threatened.

S.: That's true, that's true!

L.: So, I thought that was very, very good to see, and then I thought it was interesting when the teacher, your CT, said to him, "What would have been a nicer way to say that?" So then I kept paying attention to him and I thought that he was sort of shutting down. I guess he was trying to understand, "What did I say?"

S.: Right, 'cause I didn't find any problem. Uh, because the time was important and you have to point that out quickly because you're correcting papers. And yeah, that's true. And I was gonna just stand up there and go, "Thank you so much." And just as I was going to say that, then this other thing came up. 'Cause I appreciated that he had pointed out the mistake to me. So...

L.: Did it bother you that that kid sort of jumped in and corrected you?

S.: No, not at all. At first I thought he was talking about number eight so I looked in the book and then I realized, "Well, I didn't see..." and then he said, "No, number nine." So then when I looked at number nine, that's when I went, "Oh, my goodness!" 'Cause then I could see, oh I did write it down wrong, you know.

L.: Since you talk about presence a lot, let us try to watch you teach on different parts of the day, different subject matters, and see if that makes any difference.

S.: Yes, it would be kind of curious to see.

After our first initial conversation, I felt like Sara was very good news: she was articulate, committed to her teaching and her development, and interested to examine her practice.

Although she had a long way to go in regards to her paying attention to students' thinking and reasoning (she hardly asked any student to clarify or justify anything), she was quite receptive to my probes to look towards different dimensions in her practice other than her teaching presence, and to give alternative interpretations for life in the classroom. Her relationship with her CT was very prevalent in her mind at this point in time, and I was worried that it would dominate her learning to teach during her internship year. Her CT practiced a kind of teaching far away from the one Sara's program advocated. Sara was expected to develop a kind of teaching she did not see modeled in her classroom placement. Furthermore, Sara had a very different personality than her CT's. Sara perceived her CT to be an authoritarian person, which, in her view, made it easier for the CT to get students' attention and respect. In our initial conversation in November, I saw Sara making associations in her head (like the more authoritarian you are, the more students listen to you) that were quick and uninformed. As my goal at this particular point in time was not to lead Sara towards any particular direction, I kept my probes to a minimum. I stayed away from commenting on or interfering with the relationship Sara had started forming with her CT. My role as a researcher was not to intervene and make things smoother. I kept following Sara in her field instruction seminar and in her courses at GSU, which gave me a broader perspective on how Sara made sense of her program and how she negotiated her way in her classroom placement. My goal remained the same: how it was that Sara paid attention, if at all, to students' thinking and reasoning, how that took shape and form, and how it was likely to change overtime.

Vignette Three

Learning to Question One's Questions

Lead Teaching period 1, which lasted for about three weeks in November, was almost

over, and the teacher candidates went back to their 800-level courses at GSU; one course was on science, which they attended in the morning, and the other was on literature, which they attended in the afternoon. Paul, their science course instructor, kept introducing the world of constructivism to them, with a lot of emphasis on assessment and who the primary player is (field notes, November 20). Eisner, their literature course instructor, asked them to think about the teaching of persuasive arguments. He gave them an assignment in class on writing a persuasive argument about "Thanksgiving and Indians": "Is Thanksgiving a good time to teach about Indians or not?" (field notes, November 20) Eisner, a scholar in the field and a veteran course instructor, wanted them to think about what constitutes evidence and what may count as evidence for a persuasive argument, as well as about the difference between a fact and a reason. Eisner asked them to teach a picture book in their classroom placements and then to reflect on it: "Think about what struck you. What surprises did you encounter? Think about your questions." What questions did you ask that opened things up? What questions did you ask that closed things down? What would you have done differently? To what extent are things coming from you or from the kids?" (field notes, November 20, emphasis added)

The above assignment, and Eisner's question on the TCs' nature of questioning ("What questions do you ask that open things up? What questions do you ask that close things down?"), took a life of its own among the TCs, and even was caricatured to be called "one of those Eisner questions." During the internship year, I kept hearing TCs say, "today I asked one of those Eisner questions." Early on in their internship year, then, TCs got the message that the way they ask questions may make a difference in their teaching and in their students' learning, and that they were charged with noticing this difference. Did they get the message, however, that students' questions also mattered? I wondered if, during their coursework, anyone alerted them

to how important that was—apart from asking good questions, also to listen well to students and to their questions. During that day, when I was observing the TCs in their courses, and as I was moving from one group to the other following their conversations on their assignments, I realized that although they were missing some important factual information about the history of Thanksgiving, they had some very good questions to ask about subject matter and how to make it accessible to students. I had expected that they would only be interested in talking about classroom management and about their confidence level. I was happily surprised to hear how some people were very articulate and thoughtful, and eager to learn about how to think and reason about their teaching in advanced ways. I, of course, had to wonder: "Did TCs, in their thinking about teaching in advanced ways, include their listening well to students, and their paying attention to their thinking and reasoning?" (my journal, November 21)

"The First Thanksgiving Feast"

Sara decided, after her class with Eisner, to teach a social studies lesson on Thanksgiving. Her main goal was to help students make connections between how Native Americans lived back then, and how they still carry on their traditions today. Sara, in her initial conversation with me on November 10, wanted me to understand where she was coming from: "I want to learn how to really help kids think. How to question... Having great questions to ask kids so that they start asking more questions. This kind of thinking, inquiry, I guess, is the educated word for it." (November 10 conversation with Sara)

I went in to videotape Sara's social studies lesson on Thanksgiving on November 24. She taught social studies for about twenty-five minutes before and for about twenty-five minutes after the one-hour lunch break—a total of about fifty minutes. For her social studies lesson, Sara

decided to use a picture book, following Eisner's advice, titled *The First Thanksgiving Feast*, by Joan Anderson. The lesson started at 12:30 pm that day. Sara sat on a stool, and the students sat, some on the floor around her, and some at their desks. She read to students from the picture book for a total of twenty minutes. She held the book so that students could see the pictures, but she looked at the book more than she looked at the students. Although still glued to her position in front of the classroom, Sara appeared a bit less stiff than the last time I videotaped her on November 10. At about 12:51 pm, a bit of conversation started on a question Sara presented to class: "Why do you think they were dressed that way?" The conversation lasted for about three to four minutes. At about 12:55 pm, it was time for lunch break. (field notes, November 24)

During lunch break Sara and I had another conversation. We talked for about forty minutes, mainly about her physical presence, about the importance of lesson planning, and about what constitutes a good question. I started our November 24 conversation by reminding Sara of her goals for the year, as she shared them with me in our last conversation on November 10:

L.: Remember how you said to me last time, when I asked you what it is you want to concentrate on this year, you said: "I want to learn how to really help kids think. How to question, having great questions to ask kids so that they start asking more questions." You also talked a lot about respect, but that is another issue. On the issue of questions, I would like you to talk more about. What do you mean great questions, what is a great question? And maybe later we can go watch how you ask questions and think about that.

S.: I think a great question makes a person think "Wow! I never thought of it that way" and then it brings out something that they've never considered before. And they learn something, as well as they express something they've never probably given words to before. But I think it's a learning process, to learn how to do that. Because it's very difficult to think of questions that really work that way. I don't know, I find that hard.

L.: Why?

S.: Probably because I am thinking too much of what I want the outcome to be, than realizing what the question should be. So, and it's a different kind of thinking.

L.: Let's talk about your lesson. You were reading to them from the book, and they were sitting and listening to you. That took some time, right? And then you started asking them questions,

but then it was time to go. So, let's see what happens here.

- S.: See, I'm starting to want to cry (she laughs as she is watching herself reading from the picture book). But I'm learning how to, like, just keep going. I get emotional, reading about the Indians, it makes me sad.
- L.: Do you think they understood about the Indians and what they say?
- S.: Nooo, but it might be something that later, I always think that sometimes they'll hear something later and go, "Oh! I've heard that before." You know, and then say, "Let me think about that." 'Cause yeah, I don't think, I don't think they've ever been presented with that idea before, you know. I mean Squanto was a..., they couldn't have lived without Squanto's help, learning how to plant. And yet, he had been a slave. And then he came back when all his people were dead.
- L.: So, your social studies is more about social issues. All sorts of things can be social studies? Thanksgiving, reading, economics, all of these are part of social studies then?
- S.: Well, I guess so, because if you're thinking of the Pilgrims that could be social studies. Then she's (her CT) doing this law and order theme right now, and... economics is kind of math, but it's still social studies, yes.
- L.: Notice now how you interact with them, as opposed to the last time we saw you on tape. Do you see any difference? With everything. Like the way you hold the book, the way you move yourself around, the way you sort of....
- S.: A little more confidence... I feel a little more confident.
- L.: I think you're a little different than last time I taped you. We can see that again. I mean the way you move your head, your hands. Your whole physical presence, like we talked about presence last time. How you keep moving back and forth and picking up things and moving. Even your voice. What do you think?
- S.: It always amazes me when you find out they really listened to you (she laughs), you know. I like it! I look more comfortable now than before.
- L.: Do you think what made the change might have been the fact that you went across the hall and saw how other people teach?
- S.: And maybe it was because the lesson was something that I had taken time planning. That probably makes a lot of difference.
- L.: Do you think they listen to you more now?
- S.: Yes. I think I sort of, well, they still play. I'm still working on that. But I think I just expect that they will now in a way that I didn't before. I was really tentative, "Oh, are they going to

listen to me." Now I don't even think about that so much.

Upon asking Sara to compare her physical presence between her November 10 and her November 24 lesson, she talked about seeing a difference, becoming more flexible and moving away from the "uptight looking, kind of jerky movement sort of." (November 24 conversation with Sara) She was more comfortable thinking on her feet, and her questions moved from being recall kind of questions to more inquiry-like questions. Sara was happily surprised to hear me say that to her. We watched the part where she asked the students, "Why do you think they were dressed that way?" One student said, "That's all they had." Through our conversation, Sara realized that how she phrases a question makes a difference into how students understand it:

S.: 'Cause what I was trying to get at was, why do you think these people would choose, I probably should have said it that way. "Would you choose to wear these hot clothes that are uncomfortable, they're old fashioned," you know. *You have to have good questions to really pull them into what you are talking about.* And I missed that, I missed her there, I lost her. Because she was thinking that I meant, "Why would the Pilgrims have worn clothing like this?" And of course her answer should be, "well, that's all they had. They didn't have choices. They wore what they had." You know what I mean? (November 24 conversation with Sara, emphasis added)

L.: What did you mean?

S.: What I really meant was "why do these people now in the modern day choose to wear these costumes every day, and act like the Pilgrims?" You know, that's what I really meant. It's right there, I learned, it's the way you word a question, is how they're going to... it's very important, see it's so difficult though, to do it and to think "Now,how are they going to take this question?" You do not think of all the ways they may perceive your question, you know. (November 24 conversation with Sara)

The above was the first instance in which I saw Sara thinking hard about why it was that students might be saying what they were saying. I started feeling very excited that this could be the beginning of her "giving children reason." (Duckworth, 1987, p. 86) I asked her to clarify whether she was worried about phrasing her questions in a way so that students would know exactly what she had in mind. Through my probing I tried to make Sara realize that the way she

was thinking about answering a question might not be the way students would go about it. Not because her question was not clear enough, but because students might not have the prior knowledge that we, as their teachers, do. Having clear questions, in other words, was not enough in getting us to students' understanding. I tried repeatedly, early on in our joint inquiry, to help Sara break away from simplistic associations in her thinking about how students understand subject matter.

Because lunch break time was limited and rushed, I realized that Sara needed time to think about my questions in her own private time at home. I, thus, decided to write to her a letter about what she could start looking for and thinking about when she watched and analyzed her teaching later on by herself at home. I suggested this idea to Sara, and she was very receptive about it. We had to leave the room, since lunch break was about to end. Sara, as early as our second conversation, started liking our joint inquiry already, and she was willing even to do some "homework." I was feeling very good that my research participant turned out to be "such good news."

The Power of Reflection

Sara and I walked back to her class, and she continued her social studies lesson on Thanksgiving where she left it before lunch break. She continued asking questions about why the Pilgrims were dressed the way they were, and she entertained students' ideas, sometimes by probing the students to explain why, sometimes not. Sara's assignment for her 800-level literature course was to reflect on this particular social studies lesson on Thanksgiving. I prepared some written probes for Sara to think about, which I put in the form of a letter. I gave that letter to Sara three days after our November 24 conversation. Some of these written probes

to Sara were the following:

- a) Notice your physical posture/physical presence throughout your lesson that day. Is it the same like the last time I was there? If different, in what ways? (We have already talked a bit about this during lunch break).
- b) When you read to them, you do so from 12:30 until 12:50 pm. I remember you said to me on our way out, "I should not have read to them for so long." Do you still think that? If yes, what would you have changed?
- c) By 12:50 pm a bit of discussion started. What happened there, do you think? Compare your approach in handling students' commentary at the beginning and towards the end of that discussion. How did you handle the first couple of students, and how did you handle the last couple of them?
- d) What did it feel like when it was time to go for lunch break?
- e) At about 1:50 pm, right after lunch break, you started a wonderful discussion with the students. Do you think so too? If yes, can you tell what made it happen?
- f) At about 1:54 pm Michelle (a student) responded to your question, "Why do you think they were dressed up like that?" Remember, we have already talked about this during lunch break. Think about that interaction there a bit more and write about it.

My goal for giving written probes to Sara was to make her notice educative moments in her teaching that she may had missed. With probe b), for example, I wanted her to notice that she got progressively better in handling students' commentary. With probe f), I wanted her to think hard about understanding where students were coming from.

For one of her 800-level courses, Sara prepared a reflection paper which she handed in on December 11, along with her November 24 social studies lesson plan on Thanksgiving. She gave me a copy of both her lesson plan and her reflection paper. I saw that, in her reflection paper, Sara incorporated a lot of thinking derived from my written probes to her. Throughout her five-page reflection paper, she wrote about how she could have stopped and checked out students' prior knowledge on the topic of Thanksgiving by asking them some more questions. She discovered factual information about Thanksgiving which she was not aware of, and she realized the need to do some research to advance her own subject matter knowledge on the topic. Sara realized how difficult it is to handle students' commentary, despite all the hard work a teacher may put into planning, on which she elaborated beautifully in her reflection paper:

There was quite a bit of discussion after lunch about whether or not it is important to study history and why. One student mentioned that we would probably be here even without the Pilgrims, because someone else "would probably would have discovered it." I missed the opportunity to question whether North America was "discovered" by the Europeans when so many Native Americans were already here. I realized anew how important it is to be alert to what is being said by the kids, and to use opportunities for learning that present themselves. Another student stated that studying history helps us understand ourselves better because we can see where we have come from. This is a very profound insight. (Sara's December 11 reflection paper, emphasis added)

It is evident, from Sara's December 11 reflection paper, that she was interested in preparing good questions for the class to elicit students' thinking. She realized the importance of on-going assessment in gaining insight into students' thinking about and understanding of subject matter, in order to engage the class in "meaningful discussion":

Next time, I would like to be prepared with more excellent questions to encourage the thinking of the students. They have so many ideas, and getting them to verbalize their thoughts helps them build new concepts and also works to get the other class members thinking about new ideas and making connections they had not thought of before. I find it very interesting also, and their responses make me rethink the way I present information or introduce a lesson or word a question or statement. (Sara's December 11 reflection paper)

Thinking about what different students learn or understand was a big part of the learning culture that Paul (the 800-level course instructor) aimed to set up among TCs. In his syllabus,

which he handed to the TCs early in the fall semester, he provided guidelines for the science unit the TCs were expected to plan, assess, and present in class. An important section in the guidelines was about "analyzing and reflecting on student learning." (800-level course on science, syllabus, fall semester) Paul wanted the TCs to think about how different students learn in different ways, and that each TC had to be prepared to assess those ways and to plan accordingly. Sara, like any other TC, was exposed to what it was like to take students' learning seriously. In her mind, at this point in time and as it became evident from our conversations so far, having good questions on her part was key in promoting students' thinking and reasoning. Through her writing in her class projects and her thoughtful reflections on watching her videotaped teaching, it also became evident that Sara started on an intellectual journey of learning to teach and paying attention to what students were saying, a journey that the learning to teach literature suggests does not start until later on in novices' development.

Vignette Four

Diving in Deep Waters: Lead Teaching 2

After the winter break, the Teacher Candidates came back to the University rejuvenated, but also frantic as to how much there was to be done during the spring semester in very little time. This was the semester in which the TCs had to take the lead in teaching in their classrooms (teaching for most of the day) for eight whole weeks (during February and March), something that scared them a lot. During the month of January, the TCs kept busy preparing their units in their graduate courses at the University, as well as observing in their classroom placements, for three of the five days of the week, and co-planning with their CTs for the months to come.

Sara kept having a communication problem with her CT. All along, she kept complaining

to me about how her CT had a very different view than she did about how students learn. Sara did not like the idea of modeling after her CT, whom she perceived to be an authoritarian person. Although Sara envied the "respect" that her CT enjoyed from the students, she did not want to earn it that way. Mrs. T., Sara's CT, on the other hand, thought that Sara was having classroom management problems which were not improving. Mrs. T. saw it as her role to intervene regularly and to ask the class to be attentive to Sara. What Mrs. T. considered an intervention to save the day, Sara interpreted as an interruption, which messed up her day. Sara was very much bothered that her CT "was getting in her way a lot." She felt her CT could not trust her to work alone with the students.

In the beginning of February, Lead Teaching 2 had started, and life at Ordinary

Elementary became very hectic. Sara and I could not find the time, like we used to in the fall, to
sit and talk over her videotaped teaching. She was teaching practically all day, and she had to
stay after school to plan for the following day, most of the time without any help from her CT or
from anyone else. Because there was no time for us to sit and talk about her teaching like before,
I came up with the idea of the notebook. I bought Sara a notebook, which I asked her to use as a
journal to record her thoughts and feelings during her Lead Teaching 2 period. At the end of each
week, usually on Fridays, I gave Sara a videotape from her teaching that week (the edited parts
that I had put together), asked her to watch it over the weekend, and to reflect on and write about
it in her notebook. She was supposed to share her writing and her other reflections with me on
Monday afternoon, our set aside time to talk.

I asked Sara, in the beginning of her Lead Teaching 2 period, to observe carefully her interactions with her students, and to record what she noticed she paid attention to. I wrote to her and asked her to look for what it was that students said that caught her attention, and if that

varied from one subject matter to another. I wanted her also to notice what she thought got in her way of paying attention to students, and think about how she would pay attention to students differently next time. During the spring semester, in other words, I had taken "the lead" in guiding Sara's inquiry around paying attention to students, and gradually around paying attention to students' thinking and reasoning. The following is a letter I wrote to Sara on February 5, as a cover page on her notebook:

Dear Sara,

HAPPY LEAD TEACHING 2!!!

I am very excited to be working with you, your students, and our learning. Thank you, once again, for participating in the study. I got this notebook for you, which I hope you will like. It is yours to keep. Please, record in it any thoughts and feelings in regards to your interactions with your students.

Each Friday, I will be bringing you an edited videotape from your teaching during the week. You are to take it home, look at it at your own time, and record in this notebook anything that comes to mind when you see yourself interacting with your students. What is it that you notice, what do you pay attention to? Who and what gets your attention, who and what does not? What do you do that makes you say you have paid attention to something? What would you have paid attention to now that you see yourself on videotape? Check whether you may be paying attention to different things and to different people at different subject-matters.

We will be talking every Monday afternoon about things that you notice and you want us to talk about. We will be talking about your goals for your Lead Teaching 2 period, your lesson plans, your students, and whatever else you would like us to talk about.

I am very much looking forward to our conversations, and I thank you in advance for your time, your efforts, and our learning together! (February 5 letter to Sara)

Sara was very receptive to my giving her a notebook. She wrote in it regularly, although the length of her writing and the depth of her reflection varied: sometimes she wrote a lot in it, other times she wrote only a few lines. Sometimes she was very deep in her reflections, other times she was not. During the two very intensive months of Lead Teaching 2, I communicated

with Sara in writing, in the form of a letter, a few more times. We kept having recorded conversations over her videotaped teaching, as I kept videotaping her teaching daily.

When Sara started her Lead Teaching 2 in early February, she was very excited, enthusiastic, and quite committed to understanding students' thinking and reasoning. In mathematics, for example, although her CT was teaching long division the traditional way, Sara came up with the idea of having students write a math journal in order to surface their thinking about how they figure out the math problems she was giving them. She introduced the math journal activity on February 1, during her math lesson that day, by saying, "We will do something different in math. This is for me to notice how you think." (field notes, February 1) Sara collected students' math journals at the end of each week, read and commented on them, and returned them to students the following Monday morning, sharing with the whole class how she saw their thinking progressing.

Sara presented, on the morning of February 1, a division problem to the class; she asked students to discuss it in their groups, to come up with a solution, and to write about it in their journals. They had to write at least one mathematical sentence to show how they figured out the problem. As I was videotaping and observing in the room that morning, I saw a lot of engagement on the part of the students when they were writing in their journals. There was no resistance at all on their part, despite the fact that this was extra work for them, and an activity quite new to them. Sara kept moving from table to table, checking out how students worked in groups, and how they remained engaged. As she was moving around the room, I thought of the long way that Sara had come regarding her physical presence. However, she still had a long way to go regarding her giving directions to students. She started giving directions to them, for example, as to how to proceed to the next activity, when they were busy discussing the math

problem in their groups. Nobody could hear her, so she started raising her voice. (field notes, February 1) In her notebook that same day, Sara reflected on the way she gave directions to students, in an astonishingly honest way:

Directions unclear. Did not make sure I had attention of class before explaining directions. Katelyn is running around the room. Mike not attending. I am trying to talk over the noise level of the students—ineffective. (Sara's notebook, February 1)

Math was not what Sara perceived to be her strength. She was, however, always prepared for her math lessons, always trying to engage students in mathematics, and always interested in understanding how they thought about it, by systematically asking, "How come you think that way? What about you?" During that first week in February, I had videotaped several of Sara's math lessons, which were still about long division and having students write in their math journals. Sara kept reflecting in her notebook about the way she was giving directions to students, and on how she could go about monitoring students' writing in their math journals, as well as on realizing what got her attention and what did not:

Greg got a lot of my attention and Jim was in need of some direction in the back of the room. I didn't even notice him or check back there. I need to be aware of all the students and what they are doing. Facing one direction means my back is turned to the rest of the class. Jim and Josh both had their hands up and I didn't notice. That must have been frustrating. *Although misbehavior got my attention, but not Jim and Josh*. My directions are still very unclear. I am trying to talk over them... (Sara's notebook, February 2, emphasis added)

Sara Noticing Her Inattention

Sara and I started viewing her teaching again in the beginning of February. We had our first post-winter break recorded conversation on February 8, during her lunch break hour. I asked her to talk about any differences she saw in her teaching in February, compared to her teaching during the fall semester. She found herself to be more relaxed, but did not like her voice still. She

realized, and also wrote about it in her notebook, that she had to be clearer with her directions.

She also started opening up her tunnel vision of seeing the classroom, by realizing how she missed paying attention to certain students sitting in the back of the classroom.

S.: When I was done watching the tape I felt encouraged. Because I could see change and growth. But I still see a lot of things that I need to work on. I realized I need to make sure I have their attention, and my CT has talked to me about that. But seeing it is different than hearing it. At first I thought that I looked like an idiot, somewhat. You know, just because I say, "Okay" way too many times. I've got to use different words like, "All right, very good, good idea," something besides okay. I say it thousands of times.

L.: Is it possible that you may be overly critical on yourself?

S.: Right, at first I was. But that's how you feel about watching yourself. But I also, see I didn't notice, I felt really bad at one point. There were two boys trying to get my attention, they raised their hands, they were being so good. They didn't yell out my name, and I paid no attention to them. I didn't even notice them. And that made me feel bad. I could see, you've got to be aware of what's going on at every angle. It's hard to be working with one child and seeing a need over here, and not just get done with this one. (emphasis added)

L.: Do you find this helpful, watching the tape?

S.: I found it so helpful, yes. And I actually looked more confident as the week went on. 'Cause this was my first week with math and I, and Friday if you would have seen it, I felt the most organized yet. And my instructions were clear 'cause I noticed that too, my directions were very unclear. I didn't explain well, you know, I saw a lot of failure. And at first that's how I felt. But then as I kept, I'd turn it off and go do some laundry or something and come back when I got my courage back up again. Well, you know at first it was looking pretty bad. It's like, "oh my!" But then I, as I watched the last two days, and the day that we thought was terrible, I know that we didn't capture all the behavior but it wasn't as bad as it was in my memory and if I had just corrected Mike early on, I could've solved a lot of that. And I didn't even pay attention to Mike. Isn't that weird? (emphasis added)

L.: So, the tape makes you see things?

S.: Yes! Like explaining things. I saw a lot of problem explaining things. If I would explain things first and then do them, I'd cut out a lot of the chaos. Very much, like passing out the notebooks, telling them what to do before I give those to them, instead of passing them out and telling them what to do at the same time. Totally wrong.

L.: You start seeing how sequencing makes a difference. Also, I hear you talk a lot about what you did not notice? Let's talk a bit more about that.

S.: Katelyn was running around the room and I didn't even notice that until I watched the tape.

She's often, you know I think she has struggles to keep her mind attending to the lesson. I like to know what they think, you see. So I give them as much, and it's different for Katelyn, and I think she probably has a hard time with it. I don't really know how to think about that. It's something I'm going to have to think about though.

L.: I see that you keep asking them a lot of "what do you think?" questions.

S.: Yes, because I think they get in the habit of asking the teacher for the information. I want to know what they, how they figure that out, you know. Whether it's right or wrong, it's still valid. It's a thinking process and I'm trying to get at that. Rather than just going through these steps of doing division. I mean, there's a place for that, but it's not the only thing to think about.

As I was probing Sara to look for ways she may be paying attention to students' thinking and reasoning, she found herself comparing her teaching now with her teaching in the fall:

S.: I was much more nervous about what I was saying. And I still see that I'm not as articulate as I'd like to be. But I think it's because I'm unclear how to, you can put it down on paper but then, giving it to the kids... I mean you know what you want to teach but the way you do it, that's something you have to develop and I'm learning.

L.: How and why are you interested to learn about students' thinking and reasoning?

S.: I'm trying to get them to come at math, for example, by being able to express how they think. That's why I have the journals and all that. How they think, what they see, how they use it, and so that's why I am concentrating on that. I don't think they ever really discuss math. They just do it, you know? I want them to think about talking about it. I'm curious. It also helps me to see what they think because then it helps me change, go in a different direction or whatever to meet certain needs. (February 8 conversation with Sara)

As busy and exhausted Sara was, preparing for and reflecting on her teaching, she could not get over the fact that she had missed some students who were trying to get her attention. She kept referring back to her February 2 math lesson, in which she had missed Jim and Josh, who were sitting in the back of the classroom. Through my probes, I asked her to think about factors that could be affecting her being attentive to some students and not to some others. She talked to me about how the seating arrangement makes a difference, about how the loud students can easily dominate a teacher's attention, and about how she needs to broaden up her vision: "You got to have eyes in the back of your head. I had my back to the kids that had their hands raised,

but I never bothered to turn around just to make sure to see what was going on back there."
(February 8 conversation with Sara)

As I was taping Sara on different days of the week teaching different lessons, I noticed that her commitment in understanding students' thinking and reasoning was the same in all subject matter areas, but her wait time and her perseverance in probing with deeper questions increased when she was teaching reading and social studies. She was more comfortable in those subjects than she was in math, in which I saw her doing a lot of repeating and paraphrasing of students' statements, without checking back with them on whether the way she restated their statements was what they actually meant. Sara also tended to think that because students were doing whichever activity she asked them to do, and just because they looked "engaged and involved" in doing it, that must have meant, in her mind, that the students were making sense of subject matter just fine. Such was the case, for example, when Sara gave the class some math problems to solve, and to use their math journals to express their thinking about how they went about solving the math problems.

On February 11, in particular, I was in Sara's class videotaping yet another math lesson. Sara asked them to read a number of problems from their books, decide in their groups which operation they needed to use, explain their thinking in their math journals, and solve the problems by using calculators. Sara kept walking around the tables to check on students' thinking and work. I walked around some of the tables too, and I asked a student to explain to me what he was doing. He revealed to me that every time he saw the word "each," he knew he had to do division. I wondered if Sara realized that, and whether she could tell when the students really understood what the problem was about or when the students simply used some buzz word mechanically to do an operation. I wrote a note in my journal to talk about this with Sara later

on. Sara also reflected and wrote in her notebook that same day about her February 11 math lesson:

Although having the kids work in groups requires a lot of attention from me, I think the students are very engaged in their math work. I am having them work on problem solving—they have to figure out what operations the problems require. This has more real connections in their lives than paper and pencil figuring alone I feel. I love to see them really involved in math, and truly thinking about what, why, how they are doing. (Sara's notebook, February 11)

Sara sounded content seeing the classroom "involved in math," thinking involvement alone leads to understanding. She was approaching the second week of her Lead Teaching 2 period (an eight-week long period), and I could see that she was already very tired. She had a lot on her mind, like getting ready to start teaching a novel during reading time, quite an ambitious endeavor. She had just started realizing how easy it was to miss a whole group of students in class, by simply "not bothering to turn around." Sara was well ahead in knowing each student's personal circumstances and special needs. Each time she and I had a conversation about her teaching, she talked to me about her students by name, and as though she had an individual learning plan every day for each one of them. Some students occasionally exhibited disrespect towards her, something that Sara was unprepared for. One student, for example, wrote in his journal that, in her response to lay out his thinking about math, "none of your business." Sara's bad relationship with her CT kept escalating. At times, the two of them had a confrontation, which made Sara very upset. Thus, keeping the students involved and writing, just as she was expected to do by her program at GSU, kept Sara happy enough for now.

Vignette Five

Figuring Out a New Life

By mid-February Sara decided to start with the class, during reading time, the novel Roll

of Thunder, Hear My Cry, by Mildred D. Taylor. This was a novel having to do with an African-American family trying to make sense of life in the deep South during the 1930s Great

Depression period. Sara was not happy with using basal textbooks during reading. She found them to be very boring, and she was looking to find "a new life" for the classroom. Sara, as I later found out from her field instructor, was very passionate about racial and social justice issues. Rita, her field instructor, told me that Sara was also very influenced by one of her previous instructors at GSU, whose course on Human Diversity she attended as a sophomore.

Sara was an older student than the rest of her cohort (in her mid-forties already), and although herself a "white, middle-class female," she was a mature woman who had thought about human diversity and social justice in more sophisticated ways than any other typical, traditional Teacher Candidate. Sara's CT, as well as Sara's field and course instructor at GSU, were not in favor of Sara teaching this particular novel in class. They all thought it would be too difficult for students at this age, and that the time available was not enough.

Sara was very determined to go ahead with the novel, despite advice to the contrary. She introduced it that same day, on February 11, when I was in her classroom videotaping, right after her math lesson. She started by asking the students to think about "free enterprise." "Who knows anything about free enterprise?" she asked. Quite a bit of discussion took place among the students, and then Sara started asking the class some "get-down-to-business" questions: "Think about this: what if you were a parent and your children were sold away? How do you think that would make you feel? How do some people become enslaved?"

The discussion went on for about forty five minutes. The class was very engaged in discussion, and Sara, interestingly, did not do a lot of paraphrasing of students' input, like she was in the habit of doing during math. She just let students express themselves. I wrote in my

journal later that day how I saw an almost different Sara, very comfortable and relaxed, and quite enthusiastic about teaching that novel. The way she sustained the inquiry that day was more authentic. She appeared to be more genuinely interested in students' thinking and reasoning. She let students elaborate themselves, and she did a better job coordinating the class.

Sara continued watching her teaching on videotape and writing about it in her notebook throughout her Lead Teaching 2 period. She progressively started noticing students who did not talk much. She probed them more, and she tried to find ways to elicit those students' thinking and reasoning as well. In one of our conversations, Sara admitted to me that her focus when watching the videotape shifted from paying attention to herself to paying attention to students:

I think I am paying more attention to what they are doing than what I am doing, you know, kind of. Just 'cause that's more my focus now. You know, how they are interacting. I mean, are they actually engaged in what I'm trying to teach? Do I need to do something different? I don't know if that's what you mean, but that's kind of what I was thinking as I'm watching it. I'm not so much caring about what I look like or, you know, being embarrassed about my voice. (she laughs, February 18 conversation with Sara)

Sara was still holding on to the idea that good questions on her part would get students' thinking going. As she was preparing for her lessons, she gave a lot of thought to how she formed questions for students. It was important to her to have her questions ready and well-thought through beforehand, as though that would save her from extra work (and unnecessary trouble) later on, almost like a pre-cooked meal. One of Sara's course instructors at GSU asked TCs to pay close attention to the questions they ask students: "What questions do you ask that open up more questions from kids? What questions do you ask that close down questions from them?" (participant observation notes, Eisner's 800-level course, fall semester)

I thought the above could be a useful frame to work with Sara's questions. I asked her to work on her questions by giving her some more questions of my own which were particular to

our joint inquiry. I noticed, for example, that she was asking a lot of "do you think that..." questions, and less of "what do you think about that..." questions. I asked Sara to look for what happened when she asked different types of questions, how it affected the way students talked, and how it affected the way she was paying attention to students' thinking and reasoning. Sara wrote in her notebook,

Some questions seem to imply a particular response is 'correct' while the open-ended questions produce more discussion. The best discussion happens when the kids build of each other-what to do when they get off track though?" (Sara's notebook, March 11, emphasis added)

Any teacher, novice or not, struggles with how much to let the discussion go, as well as about how to handle students who may "sidetrack the train." In Eisner's words, "What you are saying is interesting, but I do not really want to hear about your Grandmother." Eisner, one of the 800-level course instructors, was someone Sara trusted and respected a lot, and she even met with him outside of class to discuss the novel she chose to teach during reading time. Neither Sara nor Eisner minded that I was present, so I joined them at a local cafeteria on the afternoon of March 23. I kept quiet for most of the time. Eisner had wonderful probes for Sara, who came very prepared with all the activities she had designed for the novel. Sara admitted, for the first time, she was "scared" to teach it, realizing how big and difficult a text it was in the limited Lead Teaching 2 time left. She was preoccupied with sidetracking, and she kept asking Eisner, "What do you do when you lose kids?" Eisner said, "That's when you use that as a teachable moment." I am not sure what sense Sara made out of Eisner's reply to her implicit fear. I thought it was not my role, or the right place and time for that matter, for me to "intervene" and offer my prior field instruction expertise, especially when I was not asked for it. That moment was one of many in which I found myself being caught in the midst of conflicting roles: researcher or field instructor? Student of learning to teach or teacher educator? Experienced classroom teacher or

junior scholar? I rushed home and wrote a lot in my journal that same day, as though I was trying to find some asylum from all that haunted me:

...She has a lot of ideas as to how she will structure activities about the novel. I think her preoccupation is with coming up with good questions to ask kids. At some point she asked Eisner how many questions he thought were good enough. That scared me... I wasn't sure what to make of it. Does she think it is possible to know beforehand how many questions we can ask? Is she thinking quantity? Does she think the teacher is the only one responsible for generating questions? What role does she think, if at all, the students play in generating questions for her, for themselves and for each other? (my journal, February 23)

I went to sleep that night, hoping there would be no nightmares, and realizing that, in Sara's words, we both had to "figure out a new life": a new life for Sara in the classroom, a new way for her thinking about her questions, and a new trajectory for our upcoming conversations.

Roll of Thunder, Hear My Cry: "Hear My Roller Coaster Ride"

Sara thought long and hard about how to do the novel she chose for her reading time. During our conversations she entertained various ideas as to how to go about the seating arrangement. She figured that when she read to students from the novel, it would be nice to bring them all up front, seated in a semi-circle. When it was time for silent reading or group work, she would do a different seating arrangement. When it was time for debate, she could do yet another seating arrangement. I alerted Sara about the practicality of things and whether changing the seating arrangement all the time may affect students' focusing on the work and/or whether it would make them uneasy and inattentive. Sara was impressively prepared for her reading time unit. She talked to me at length about how she envisioned her group activities to take place over time:

Like group one is going to have one certain thing they're going to answer. Group two will do another thing. And then the next day, we'll share it so everybody keeps on comprehending the story by what everybody else is sharing. You know like one person,

one group will be writing about "summarize the chapter." This group will be saying, "character map." So they'll all be different and I think that'll keep interest up, and then everyday they'll all do something different than they've done the day before so it won't be the same every day, you know. And then they'll all share so they all have like done all of it, really, if they listen. Which I'm seeing that they don't. They don't all listen. I'm amazed at the things they miss. Like we warmed up for the test by going over what each county did as industry. And then when the question came on the test some of the kids were like, "I don't know." And you just talked about it, so.... (February 18 conversation with Sara)

Roll of Thunder, Hear My Cry, the novel Sara chose for reading time, gave her classroom "a new life," indeed. Reading took place usually in the afternoon, right after the lunch break, and for about one hour, between 2:00 to 3:00 pm. I videotaped a series of Sara's reading lessons teaching this particular novel, which she started in mid-February and went with all the way until mid-April. Sara first introduced the novel on February 11. She asked the class at that time to do some research on distinguished African-American people, and she kept preparing her lesson plans diligently and thoroughly. She met with her 800-level course instructor on February 23 to debrief her ideas with him, and then she went back to class on February 26 to start, a bit worried but quite energized, teaching the novel. Sara was very passionate about racial and social justice issues, and teaching Roll of Thunder, Hear My Cry, by Mildred Taylor, was very important to her.

Although rushed for time (the novel consisted of twelve chapters), Sara appeared to be much more relaxed during her reading time than she was during teaching math. I saw that she started asking a lot of "Why do you think that..." questions. Her inquiry with students became a joint endeavor, and her wait time increased dramatically. She worried less about sharing with students what she thought was going on in the novel, and she invested more in probing their thinking and reasoning. She used students' talk as text for further inquiry. Sara was increasingly becoming less of a protagonist and more of a facilitator in classroom discussions. She started

asking questions, such as "What might have happened if...," and "What do you think might be the reasons for...," that set the students in many different directions and helped them in building up from each other's thinking and reasoning.

New life in the classroom was evident in many different ways: Sara was different, the students were different, and I could barely catch up with any of them. Sara came to class always prepared and on the top of things, or so she thought. Her carefully planned questions could not always save the day. Because she kept changing the seating arrangements (from circle to group work and back) to serve the way she had planned for reading, students became uneasy.

Sometimes, during movement from one seating arrangement to the other, there was a lot of "disorder" on the part of the students, and some "yelling" on the part of Sara. The whole situation made Mrs. T., Sara's CT, very unhappy. Mrs. T. kept commenting on Sara's need to improve with her classroom management skills, but also on how Sara "did not have the personality it takes to teach fifth grade."

Although comments like the above made Sara uneasy and sometimes very upset, she kept teaching the novel she was passionate about, with the same focus and commitment as when she started it in mid-February. In one of her reading lessons (February 26), she asked the students to take their chairs, go in the front of the class, and form a circle so that she could do a simulation with them. Sara first made sure she had good eye-contact with all students in the circle, and she introduced a hypothetical scenario: "Anyone who has white color on their shirt cannot attend Ordinary Elementary." The students reacted quite dramatically. Sara kept the tension going: "What if that was really to happen, something that you could have no control over?" The simulation started off a wonderful and very engaged conversation among students, who all had something to say. Their discussion evolved around ways of channeling one's anger. Some

students were very angry with this hypothetical scenario. "What if you could not even get violent?" Sara asked, and thereby complicated the discussion even more. Just before reading time was about to come to an end, Sara explained to students that she did this simulation to help them realize what the book was going to be about. She introduced the concepts of depression, segregation, non-violent revolution. One of the students talked about how the great depression affected his grandfather. Sara wanted the students to put themselves back in those times: "What do you think it would feel like to be a black child back those days?" I thought that was a wonderful question to end the class, a question which generated a lot of discussion among students, for which, however, there was not much time left. Dave said, "I would be very confused and scared." Makayla (an African-American girl) said, "I would be sad because I would know that everybody thinks bad about you." Another student said, "I want to know this. I want to know who brought slavery to America."

Sara, during her February 26 reading lesson, demonstrated a kind of teaching not typical of novice teachers: she had indeed prepared wonderful questions for students, she succeeded in getting all students involved in relevant to the topic discussion, and she orchestrated students' talk—emotionally heated talk—masterfully. Sara knew what she wanted students to come out of class thinking about that day, and she gave the impression that she had a good grasp in her mind of which ideas in the novel were important to teach. Just about when the class was ready to move from the circle seating arrangement back to their desks, one student kicked another and a fight started. Some other students got involved. Sara was caught by surprise and started yelling to students: "STOP! Everybody STOP! We must have order. Please! Order in the court!" (field notes, February 26)

I kept videotaping Sara's reading lessons every day. She kept coming in well-prepared,

scaffolding the activities and having good questions to sparkle students in engaged conversations. The routine was usually to ask all students to take their chairs and form a circle in front of the class, and for her to read aloud to them from the novel for about ten minutes. Although each student had a copy of the novel, school policy did not allow students to take books home with them. Sara, therefore, could not assign any reading from the novel for homework. She had to, every day, designate some of her reading time to read a chapter or two in class with students, which made her feel even more rushed for time. The seating arrangement and students' back and forth movement made her anxious and uneasy, and at times even rude: "Act like fifth graders. Knock it off! It is going to take us ten years to get through this book. It is not funny; it is very sad." (field notes, March 1)

During her March 1 reading lesson, Sara introduced to students the 12-inch versus the 6-inch voice, and she asked them to think about their noise level as they moved from one activity to the next, and from the circle seating arrangement back to their desks. That same day, Sara also introduced the reading notebooks which students would use for their novel-related assignments, similar to how they used their math journals.

As the week progressed, students started identifying characters from the novel, describing them, and developing a storyline, which Sara had set out for them on the bulletin board. She made sure there was time in the lesson for students to ask clarification questions on words or anything else from the novel that they did not understand. During her March 5 lesson, Sara appeared calmer and much more relaxed than her lessons earlier in the week. She had prepared questions for the class ("Why do you think Papa tells the children to not shop at the White people's store?" and "Do you think the Wallaces were Black or White people?"), which opened up a lot of discussion. Sara progressively became very attentive to students' input, and she

systematically probed them to elaborate on and to support their answers by going back to the novel. She incorporated productively what students wrote in their reading notebooks. She made sure that class movement (students going from their desks to present to the OHP and back) remained smooth and, in her CT's words, "orderly." (field notes, March 5)

Sara became incredibly busy during the first week of March, trying to make visible progress with the novel, whilst also teaching other subject matters all day, and trying to keep the class "under control." I pushed her to make time for us to talk. We met at a local cafeteria on the afternoon of March 7. I gave her some edited segments of her teaching that week, and some guidelines, in the form of a letter, to help guide her inquiry. I warned her that some of the edited segments I had prepared for her to watch might be unpleasant to see. I also mentioned that later in the week she had made some breakthrough progress. My March 7 letter to Sara was the following:

Dear Sara.

A lot has happened since we talked. We are all keeping busy: you with planning, preparing, teaching and exhausting yourself. Me with taping, re-taping, editing tapes, and exhausting myself. But let us see, what is there to learn?

In your notebook last time you wrote that "reading time needs some new life!" I think we have got that. Let us, then, look at reading, you, the students, and your interaction with them. I think since you started the novel a lot of "ups and downs" have been happening. You are introducing new structures to students. A lot of this is new to them, and it is new to you as well. How is this "new life" (the partner reading, journal writing and sharing, changes in seating arrangements) affecting you and your interaction with the students?

I would like you to watch carefully the segments I marked for you on the left (a total of 65 minutes). When was it, do you think, that you had to raise your voice and why? What, in your opinion, did not work out and why? What could you have done differently?

There is a change between your first few reading lessons this week (3/1, 3/2, 3/3) and your last few (3/4 and 3/5). Towards the end of the week you are in a very inquiry-oriented mode, asking a lot of "why do you think" questions. Look and write about what you think happens when you ask those kinds of questions.

I am looking forward to our conversation tomorrow. Thanks! (March 7 letter to Sara)

To my big surprise, Sara came to school the next day without having watched her tapes or written anything about them in her notebook. At first she said there was no time, but soon admitted to me that she was "scared" to watch herself on tape, so she decided not to. Could it be the fact that I warned Sara, through my March 7 letter to her, that there would be some unpleasant things to watch this week? Could it be that she already knew about it herself? Could it also be that she was, indeed, one very tired novice teacher who could not take any more watching, analyzing, reflecting, and talking about her teaching?

On the afternoon of that same day (March 8), and after teaching for about six long hours, Sara and I had a long conversation, which lasted for about eighty minutes, our longest one so far. Sara demonstrated in this conversation, some breakthrough progress in talking about her paying attention to students' thinking and reasoning. She noticed and commented on the depth and level of her curiosity during classroom discourse. Her passion about racial and social justice issues and her conscious choice of teaching *Roll of Thunder*, *Hear My Cry* were the driving forces in how Sara planned for and enacted her teaching during reading time.

S.: Since I haven't watched the tapes I'd like to talk about, how do you make sure your attitude is... Have you found any secrets for this? How to put your own feelings aside and play the role of the teacher even when you don't necessarily feel like it?

L.: Like what kinds of feelings?

S.: Feelings of frustration, or tiredness, or whatever.

L.: Think about subject matter first. Watch yourself in different subject matters. When you teach math versus when you teach social studies, versus when you teach reading, is the situation changing? Does time of the day make a difference? Does day of the week make a difference in how they react in how you react, in how all of you interact with each other? Does the activity they are involved in make a difference? How does it change their attention span? The way they are engaged, and therefore how does that change you and the way you interact with them? When you give them directions, what does seem to work? For example, when you have someone repeat

the question or the directions versus when you try to catch someone who hasn't been paying attention, you know. In other words, acknowledging that they can repeat the directions for you, is that positive or negative? It's like positive reinforcement versus negative reinforcement. Think about that. Which is which?

- S.: Yeah, but the positive and the negative, it's so easy to fall into the being negative. And then you get on a kind of on a roller coaster and you can't get back, you know, oh, it's so hard. I find that very frustrating, 'cause, once you start being negative, oh... (emphasis added)
- L.: Let's talk about your frustration. Why do you become frustrated?
- S.: Why do I become frustrated? Uh, I think that some of the time it's partly because, oh, I realize, no I didn't explain this. I didn't mention this or talk about it beforehand, but I don't realize it until I get into it. And then, it kind of makes me angry at myself, frustrated, you know. Or like, when we went in that circle, to do that discussion, they've done that before. They did that last semester when we read a book. So, I didn't even think about having to explain it to them again.
- L.: You give students a lot of different activities than the ones they are used to. Your mock interview is coming up. Say someone is interested to hire you. What do you tell them about you? I am a principal and I tell you that I want a 5th grade teacher who would give a different kind of experience to kids. What do you say?
- S.: Well, I would try to plan lessons and units that would give them opportunities to try different types of thinking and to do work on their own, to be responsible for their own work. And I would like them to do a little bit of inquiry with using the internet possibly, depending on how the classroom is set up. I would have them come up with a question about someone or something that they'd be interested, that would relate to our social studies curriculum, for example. First of all I'd want them to be involved in their question. If I didn't feel that it was a question that was worthwhile, I'd help them to re-word it, I would question them further.
- L.: So that's a wonderful thing that comes out when you present yourself like you do. I think what I hear you say is that you learned that expecting them to come up with a good question is not going to do the job. There are other things you need to be doing as well.
- S.: Right.
- L.: So you need to scaffold them. Inform them on a good question. And you do that by walking around, doing an inquiry yourself as a matter of fact. You want them to be involved in inquiry but you also want them to do inquiry themselves as well.
- S.: Right, because if they have trouble, for example finding a resource, I have to be a resource myself to help them get another avenue, so I need to know where good resources are for them, like what internet sites for example, or what book maybe in the library. (March 8 conversation with Sara)

Although Sara talked eloquently about inquiry and how she would go about supporting it among students, she had a hard time realizing that her passion about the novel she chose to teach and the way she made sense of it "colored" her own inquiry with students. One such instance was when she asked the students to say with which character they identified the most: "Did anybody in the book remind you of someone else?" She expected that at least some, if not more, would have mentioned Cassie, the main character in the book, who was close to their age, and who was the one narrating the story. Most people identified with "Little Man," who was funny and reminded them of another student in their class. Sara became very surprised, realizing that something that obvious to her was not necessarily so to students, and that students have, in fact, ideas of their own, which are equally valid and logical:

- S.: The only thing they could come up with was making Little Man like somebody. I thought that was interesting, because I thought every kid in there would relate to Cassie. That they would think "Cassie's a lot like me."
- L.: Remember when you asked the question "Do you think Little Man was raised badly?" I think it was that student, Rachel, who said, "I think Little Man was raised badly." You were surprised, and what happened then?
- S.: And then I kind of attacked her, I think, by saying, "You think Little Man was raised badly?" I should have said, "Oh, that's interesting. How was he raised badly?" to get more of what she was thinking. Because I really think what she meant was his behavior. We wouldn't want the kid to stomp on the book. But she might have missed the subtle nuance of the book. (March 8 conversation with Sara)

As we kept talking and watching some more videotape, Sara realized that she could have held on to her own understanding of how Little Man was raised, and to probe the student further to see where she was coming from. I noticed that when she was not sure about how to handle a commentary she did not expect, she got in the habit of turning towards the "good" students for her "rescue." In that moment, my teacher educator side took over and asked Sara:

L.: We haven't heard from those two as to why they said what they said. So, before those two had the chance to explain their thinking and reasoning, about Little Man being raised badly for

example, how come you go to other kids? We didn't hear from them.

S.: I guess I was surprised. I didn't know what to do with it. And I get distracted sometimes, 'cause some kids get up and wander around...

L.: You keep probing them well and you get them involved in good discussions. Are you aware of that? Do you know it when you are involved in a good discussion?

S.: When I have them involved in a good discussion? Ah, I like it when they all want to talk. I mean, but they are listening. I can tell when they are really listening to the other person too. And that doesn't happen often.

L.: When does it happen? And what makes it happen?

S.: I don't know if I can tell you. I mean, I can't create it, I just know it when it happens. Yeah, I don't know. I wish I did know. That'd be a wonderful thing to know.

L.: I can tell you that on Wednesday, for example, I thought you taught an extremely well-thought-through lesson. You asked great questions that day. You also picked up from what they were saying, and you built on it. For example, you said something about the word thunder, that the author used it a lot and you wanted them to pay attention to that. "Has anybody noticed anything about thunder so far?" So this was an inquiry question. You then asked "What might the word thunder mean for the way we are understanding the novel? What is the meaning of thunder? How is it used here?" (March 8 conversation with Sara)

Although Sara's depth and curiosity in being interested to hear from students was evident and rising during the month of March, and mostly during reading time, I wanted her to pay attention to the way she formed her questions, and what kinds of

reactions/responses/commentary her different kinds of questions elicited among students:

L.: So, I wrote in your notebook last time, "pay attention to the kinds of questions you are asking." For example, when you ask a question that starts with, "Does it," for example "Do you think the title has some kind of significance?" Is that a different question than asking, "What kind of significance might this title have, if any?"

S.: One question makes it sound like, you're expecting a certain answer. The one that asks them, "Do you think the title has any significance?" makes them think, "Well, I'm supposed to think the title has some significance" I guess.

L.: Because the teacher asks so?

S.: Because of the way I said it, yeah. The way I phrased it.

L.: So, if I am a student, how could you have asked me that question to sort of give me space to decide for myself?

S.: I guess I could say, "Why might the author have named the book, *Roll of Thunder, Hear My Cry?*" (March 8 conversation with Sara)

"You Did Not Talk Much"

Sara was clearly interested to learn to ask open-ended questions, and she did. Despite some management issues she had to handle still, she literally "shined" during reading time. On March 11, for example, I happened to be in her classroom for another lesson on the novel *Roll of Thunder, Hear My Cry*. The routines were as usual: her reading to students from the book, discussing with students and filling in the storyline on the bulletin board, and asking the students to support their claims by using text from the novel. On that day, however, students' engagement, and the way she handled their thinking and reasoning and their commentary was, I thought, outstanding. There was a lot of inquiry on her part, and a lot of sincere curiosity and genuine interest to listen to students and to probe them to explain their thinking. Sara made a conscious attempt to stay away from leading questions, and she did it with a lot of comfort, not appearing to be rushed for time, although the school principal was in the room observing her. The school principal was there to write an evaluation letter for Sara. The class was very focused and on task. Sara kept asking a lot of "Why do you think that" questions, and she kept drawing connections among various students' contributions.

When the principal left, I approached Sara and asked, "What did you do today that made kids talk so much?" She admitted to me she spent a lot of time preparing for the lesson. I knew that it also had to do with how much Sara had practiced in this kind of teaching mode, and with how much thought and reflection she had put in thinking and re-thinking about her teaching, by systematically viewing herself on tape and debriefing about it with me. I saw Sara in the hall the

next day on my way to her classroom. She was just coming out of the principal's Office. The principal told her she could not write an evaluation letter for her because "she did not talk much." (emphasis added) In her principal's book, students did most of the talking, Sara barely talked, and there was not much she could be writing about.

Teacher Candidates were hit with conflicting messages, like the one above, regarding what good teaching is about and what it looks like, all the time during their internship year, at least at Ordinary Elementary as I saw it. They were asked to perform a kind of teaching no one modeled for them, a kind of teaching that took time and a lot of effort to reach, and a kind of teaching which was greatly devalued in their classroom placements and school environments. To understand how teacher candidates learn to pay attention to students' thinking and reasoning, then, one needs to come to appreciate a lot about the contextual circumstances in which teacher candidates are involved and are surrounded by. I argue, in other words, that "What is it like to learn to pay attention to students' thinking and reasoning?" is as important a research question as others in my study, a question which arose during my extended time in the field. "What is it like?" is a question which aims to understand context and its effects on teacher candidates' learning to pay attention to students' thinking and reasoning, and on learning to teach for understanding. I only came to appreciate the importance of understanding context, and addressing such a question, after having spent a lot of time with Sara in her classroom placement at Ordinary Elementary. Sara's daily lived experience was, of course, far away from ordinary, and so was mine: I was very close to Sara every time she was excited or frustrated when things worked out well or did not, and every time she encountered hostility from her immediate environment, or encountered conflicting messages she did not know how to interpret, like her principal's puzzling feedback on her March 11 highly interactive lesson, in which "she did not

talk much."

Sara was not affected very much by the principal's feedback. She got over it very quickly. She taught another lesson in which she did most of the talking, one which her principal liked a lot, and for which she gave her a good evaluation. Sara, however, was affected greatly by her CT's constant criticism about her poor classroom management skills (according to her CT's opinion), and her CT's total lack of enthusiasm every time Sara felt things went well. Other factors affected Sara's learning to teach as well. At the end of February, mid-way through Lead Teaching 2, Sara was virtually exhausted and not sure whether she could carry herself through another month. She planned for her teaching totally by herself, not knowing whether she was going towards the right direction with it or not. Her only opportunity to reflect critically on her practice was by watching herself on videotape and by writing about it in her notebook, which she did by being a participant in my study. Because I was not her field instructor, however, nor was I there to evaluate her in any respect, it was not my role to tell Sara what to do to make things better next time, other than to pose questions for her to think about. In the hectic life of a Teacher Candidate learning to be a teacher in an otherwise ordinary school, where she daily had to put on an act in order to entertain various school players, asking Sara to undertake a part in my study was like asking her to race against the wind. During our year together, I asked Sara to do a lot of homework, by watching herself on videotape and by critically reflecting on and writing about her teaching. After a long day at school, teaching virtually every possible subject matter, I asked her to stay and talk with me, to watch herself on tape, and be videotaped as we talked, at times for as long as two hours of intense conversation. Sara was always gracious and generous to me with both her time and her opening up the maze of her mind. Sara's commitment to improve her learning to teach, and her admirable care for her practice, are what had, indeed, sustained Sara's

inquiry, as well as mine.

Vignette Six

"Earning Moral and Intellectual Authority to Teach" 13

Lead Teaching 2, a period of two very intensive months for teacher candidates, was about to end. In the beginning of April, the TCs started going back to their courses at GSU for two days of the week, and they remained in their school placements for the other three. Sara continued to teach *Roll of Thunder*, *Hear My Cry* at Ordinary Elementary until the end of April. She was preoccupied about preparing her CV, composing her job hunting cover letter, and putting together her professional portfolio. Sara was more than happy to keep talking with me, and she and I continued our joint inquiry all the way until the end of June. I wanted Sara to examine her practice retrospectively, to compare her teaching between the fall and the spring semesters, and to think and talk to me about how she thought she changed in paying attention to students' thinking and reasoning. We had our first, post-Lead-Teaching 2 conversation on April 8. I asked her to start by reflecting on the novel she chose to teach and on the new life she created for the classroom.

L.: What did you find difficult about doing that book?

S.: Some of the language was tough, you know. But they've responded fairly maturely. I've been very impressed. I think they're really seeing the pain and the real hatred, and the feelings. Um, today our discussion was kind of interesting, because I asked them, there's a man named Mr. Jameson, the attorney, and he's a friend of the family and he's a nice man and he's a white man. And then there's Jeremy Simms, that's a white kid and he likes these kids. So I asked them about the attorney, and they remembered things and they were telling what he was like and who he was, so I said, "Why do you think the author would make this guy a nice person, why wouldn't he be a nasty person?"

L.: Good question!

-

¹³Borrowed from D.Roosevelt's Chapter 5 Title, in Carroll et al. (2007) *Transforming Teacher Education, Reflections from the Field.*

S.: So they were like, "Because, you know, the world isn't like that. Everybody isn't all bad." And they got into why the author would do that. That's something I really want them to get out of this. That, she didn't just make every, all the blacks on one side, all good, the whites on one side, all bad. And then, T.J.'s going to become pretty bad in the story.

L.: It has been very interesting watching you teach this novel. What has been exciting about it?

S.: Exciting? *Just the kids opening up*. I love it, I just love it, you know. Realizing that they know a lot. (emphasis added)

L.: Talking about things opening up, they were very much into it here. This is the same lesson that the principal was in to observe you, remember? I thought it was amazing, amazing, because they had so much to say. And then, she said to you "you did not talk much."

Sara did not even respond to my comment about her principal. She was wholeheartedly absorbed by watching the class interact around the bus driver scene. In the novel, a white bus driver was driving white students to school, and he splashed mud on black kids who were walking down the street. There was a lot of discussion among Sara's students about whether the bus driver did it on purpose, or whether it was "just to entertain the passengers." Sara watched that discussion on tape with a lot of focus and curiosity, but also with some agony and anxiety. She had a lot to say as she unfolded her thinking to me. For about twenty minutes it was mostly her talking, and me trying to keep up with her body-and-soul kind of talk. She kept questioning her questions ("Do you think the bus driver did it on purpose?"; "Do you think that if they were white kids that the bus driver would do the same thing?") and wondering whether the engaged discussion both of us were watching on tape had, among her students, the effect in regards to race she was hoping for. Sara, through this particular scene of the white bus driver splashing mud on the black kids, found herself caught in the serious business of introducing to a very diverse fifth grade class the idea of "Does race matter?" She spent a lot of time with me, dissecting students' talk about that scene. She wanted to know who said what and why. Although Sara's questions during that particular segment were not necessarily open-ended all the way (some of

them were even leading questions), I thought she did a very fine job orchestrating students' talk around such a difficult matter, an orchestration not characteristic of novice teachers, not even of veteran ones.

Racial and social studies issues were very important to Sara. That is why she chose to teach the particular novel that she did, despite advice from her surrounding environment to the contrary. She chose her own curriculum, based on her moral and intellectual commitments, a stance not characteristic, again, of either novice or experienced teachers. In his chapter "What Gives You the Right? Earning Moral and Intellectual Authority to Teach," D. Roosevelt (2007) discussed the case of Greta, an African-American woman, a non-traditional teacher candidate, returning to her program very much like Sara. Greta struggled to make literature part of her daily routine in the classroom. Roosevelt (2007) traced Greta's mental journey around curriculum choices during her time in the program, as well as later on as a classroom teacher. According to Roosevelt (2007),

A certain kind of robust encounter with literature—one in which readers "relate"; make social and intellectual connections; affirm, challenge, or reject meanings and ways of being, for example—can, then, constitute "real experience that won't dissipate over time," which is what "curriculum," as planned or plotted by a teacher but lived by students and teacher together in the classroom, can be." (p. 102)

Whether Sara's encounter with *Roll of Thunder, Hear My Cry* in her classroom was robust or not was not really so much the issue. What mattered was that Sara took, very consciously, the risk of engaging her students (and herself) in ambitious but ambivalent work, just like what Greta had done with her students: "...her endeavor entails moral hazard, a possible threat to her legitimacy. Keeping the conflicts alive, exposing herself to doubt, and recognizing risk, mitigate the risk and in themselves constitute some of the work or earning moral authority." (Roosevelt, 2007, p. 104)

Sara, then, did claim moral and intellectual authority as a novice teacher, not only by her conscious choice to teach that particular novel, but also by her daily labor with it and with her students. Her moral and intellectual commitments became, in fact, very evident during our April 8 conversation, in which she elaborated on how she cared to make students aware of their immediate, racialized world:

You know, they grow up around here, they have no idea. They are unaware for just small things that I think Caucasians don't think about. For example, you go in the store and you buy band aids and they are called flesh color. Well, whose flesh color? *I mean, whose flesh are they colored like*? You know what I mean? So, you never think that, "Oh, that doesn't apply to me." So, you don't think about race. *But African American people think about race every day*. (April 8 conversation with Sara, emphasis added)

Clearly, Sara was not, as portrayed in the learning to teach literature, the typical white, middle-class female teacher candidate, unaware of the world around her. She had a good grasp of the important ideas in the novel, she cared to make those ideas tacit among her students, and she spoke quite confidently to me, with both breadth and depth, about where she thought her students were at the time and how she planned to move (with) them forward:

- S.: The bus driver's just entertaining the kids, it's no big deal. But really, any kid that was an African American kid in that room was "No, that bus driver was doing it on purpose." They would just realize that.
- L.: It was interesting that Nataly, who's a white girl, was having all these issues and not Makeyla for example.
- S.: Right, because Makeyla knew. And that's why I was trying to bring her to that. So I thought, well, this will be a question that she'll relate to maybe, but maybe not.
- L.: Have you seen any patterns as to the storyline, as to what they consider important ideas in the chapter?
- S.: They pretty much get what the important ideas are, they really do. Uh..., just one thing in the early chapters. They mentioned at the beginning that they grow cotton, and that they were all working out there together, and they didn't find that important. But because I know it's important from the last chapter, I put it up on the bulletin board myself.

Sara and I kept talking about her progress throughout the year. During our conversation

on April 8, I asked her to think again about the kinds of questions she was asking students and on which of her questions she probed them more, in what ways, and why:

L.: Well, what do you think? How did you pay attention to them when they were talking, what kinds of questions were you asking? What do you think about that?

S.: I kind of, I was trying to get them to clarify by asking, what do you mean by a certain word, or how was that?

L.: When do you see that you ask them to clarify? When have you observed yourself that you are doing more of that as opposed to when you don't?

S.: Oh! Well, when it's questions that I am looking for something deeper from them.

L.: And when is that the case? Like, when you were talking about how Cassie felt?

S.: Right! I was trying to get from them, I wanted to see how they thought that she would feel, the way she was treated in the store.

L.: Ok, so trying to have them make inferences. Anytime they make inferences then?

S.: Right! Then I try to clarify, to see... Because I want them to go deeper than just thinking of the feeling, you know, I want them to go "why" or "how."

L.: "Where did you get that from" sort of question?

S.: Yes! Because the parents want to protect them. What would they protect them from, you know, kind of thing, go a little deeper. That's what I was trying to get them to do in their writing too. Expand a little more on their thinking. Don't just say "this is it!" Tell me why, how. Like, I asked them to write on a question the other night "how was Cassie changed since the beginning of the book" and they were writing things like "she is more courageous, more aware, smarter, more whatever" you know. And then I would say "what do you mean, more of what?" And I wrote in there "how is she more mature" because they were saying "she is acting more mature." How? "She is showing more feeling." What kind of feeling? How is she doing this? Where do you see it?

L.: And do you want them to write back to you?

S.: Well, no, not at this point. But I want them to think about it when they look at what they have written, you know, so that maybe next time they will do a little bit more. Now, Greg's writing was great. He picked out instances from the book and he has them there for whoever wants to read them. And when I read it, I made special notice, like "I really liked the way you used specific things that happened in the book to show how it has affected her feeling." That was really good the way he did that.

Sara's growth is reflected not only in the way she kept probing students to clarify their thinking and provide justification for their reasoning, but also by the fact that her talk was informed by specific examples as to how exactly she was expecting students to perform. That was a good time, I thought, to ask Sara a very straightforward question regarding her growth throughout the internship year. I wanted her to talk in retrospect about change in her practice:

L.: When you see yourself in this segment, and you compare it with the beginning of the year, what would you have to say? How have you changed, do you think, throughout the year, in regards to your interaction with kids?

S.: I think I am more confident, for one thing. Second thing is I am not afraid, like, afraid of what's gonna happen necessarily now. I am open and I listen and then I can ask a question about that, or go on from there. Sometimes I don't know how to respond. Sometimes there are situations where I am like, "How do you respond to that?" And I don't know so then I just say, "OK, or whatever" and then I move on... But that's what I am trying to do, like get more into their thinking, make them more aware of what they are thinking by sort of urging them to think more, I don't know, probe them, you know. (April 8 conversation with Sara)

Sara reflected beautifully on how she had developed in her teaching throughout the year, and on how she grew more mature in paying attention to students. She remembered her stiff movement during the fall semester, and how her talk, when watching herself on videotape back then, was dominated by what she had missed: not noticing a student who wanted to talk; not noticing other students wandering around the class; not noticing some of them being off task. She progressively became accustomed to letting go of her lesson plan, and to think and talk less about herself as the protagonist in the teaching and learning scenario unfolding before her eyes.

For a long time during her internship year, Sara kept holding on to the idea that only good questions on her part would elicit students' thinking and reasoning. It was very important to her to know her questions beforehand. It was not until mid-way through her Lead Teaching 2 period (towards the end of February), that Sara made a breakthrough in paying attention to students' thinking and reasoning. During reading time, when Sara was teaching the novel she was so

passionate about, she exhibited a kind of listening to students talk which was far more mature than the one in the fall semester: both her physical and mental movements were more focused on students' thinking and reasoning; her probing them became very systematic and sustained; and what students put on the table *was* curriculum itself for Sara. It was important to her to explicate students' talk around the bus driver scene, for instance. She needed to have proof as to how her agenda "Does race matter?" resonated among students. Therefore, she saw the need for students to have their own questions, which became equally, if not more, important than her own questions. She admitted she could not always be on the top of their thinking, but that she was comfortable with it. Sara, during Lead Teaching 2, made a conscious and laborious attempt, very effectively as I saw it, to "psychologize" the curriculum (Dewey, 1902), and in that respect Sara was well on her way of earning not only moral, but also intellectual authority to teach.

When the Possibilities Become the Focus

Sara and I continued talking about her teaching past her Teaching 2 period, as I kept videotaping in her classroom all the way until the end of May. As she shared with me on a number of occasions, watching herself on videotape helped her progress in her learning to teach more than she had expected. The study's methodology, of having Sara reflect on her videotaped teaching, served not only the study's research purposes, but also worked as a pedagogical tool for Sara's learning to teach. It provided her with both image and sound to examine her practice, which she could hold still at any point in time, and for as long as she wished. Sara often mentioned that when she saw her teaching on videotape, she realized it was not as bad as she had thought it was. That was very reassuring to Sara, something she was in great need of because of lack of feedback from her CT. Furthermore, video made Sara's practice concrete for her; it

helped her detach from seeing it as her exclusive, private territory, and it assigned to her a research role of viewing her teaching as an object of study, by examining it and making sense of it while learning to teach. According to Hutchinson and Bryson (1997), video "...speeds up the process of self-discovery, self-awareness, and self-determination" (p. 300), and it "...gives the potential for a researcher to become the audience to her own self development, to take the role of the other, allowing a space within which to examine the motivations, understandings, and intentions of their own practice, and to realize the potential for change and its effect." (p. 302)

It is crucial to realize that in taking up this "role of the other," novices have the opportunity to engage in meaningful, sustained conversations about their practice in the company of people whom they trust. The fact that Sara talked with me systematically about her on-going sense-making of her practice, helped her develop a kind of tacit knowledge about teaching and learning, which is unlikely to be found among novice teachers, or among more experienced ones for that matter. My role in our conversations was to help Sara see, through my questions to her, good places in her teaching she herself could not see, and to grow from there. I have helped her, in other words, focus on how she could grow by looking at what went well, rather than being stuck on what did not.

On May 3, I gathered all research participants in my study to watch videotapes together, starting from the beginning of the year all the way until the end. Sara, Mai, and Juniper all came to my apartment to watch their and each other's tapes, and to talk about how they thought their practice had changed throughout their internship year, as well as to talk about what it was like for them to participate in my study. It was an exit interview, in the form of a focus group conversation, during which we also watched Level 2 Data (our videotaped conversations over their videotaped teaching—Level 1 Data). Although our conversation that day went over some

difficult matters, we had an amazing time, accompanied by popcorn and a lot of laughter.

All three TCs realized that although they were placed in very different classrooms, they all had very similar patterns in their learning to teach development. They all progressed, perhaps not to the same degree, from an orientation to self to an orientation towards students. They all agreed about the power differentials in their classroom placements, and on how difficult it had been to develop as an independent novice teacher in someone else's territory. To use Eisner's words (one of their 800-level course instructors at GSU), "It is hard to be autonomous around a person—the CT—who puts you up, and puts up with you, and who has an evaluative role over you." (October 18 informal conversation with Eisner) All three TCs talked about how vulnerable they felt, and how much they valued the fact that they had someone to debrief their teaching with, a person who was not there to evaluate them. They laughed at themselves, and at each other's teaching, when they saw what they were like in the beginning of the year. It was as though they saw a picture of themselves from their first grade year. What stood out most, and surprised them, was how their tunnel vision in the beginning of the year eventually gave way to a more mature teaching persona in the classroom. In asking them about "How does paying attention to students' thinking and reasoning change overtime?" they agreed that it is something they knew they cared about from the beginning, but that they could not get to unless they became more comfortable with kids. Sara elaborated on her experience of systematically analyzing her videotaped teaching, and on reflecting and writing about it. In her words, "Video helps you put pieces together and see more of the whole picture." (May 3 focus group conversation with research participants)

Sara, Mai, Juniper, and I had such a good time that day. We enjoyed the goodness of laughter, the playfulness of popcorn, and the comfort of sense making of one's practice in the

company of critical friends. That was reflection-on-action, of no ordinary scale, and the beginning of forming a professional learning community (PLC), a terminology which appeared much later in the literature. In the words of one of my professors at GSU, "There came time to celebrate their learning, and their survival, and their triumph!"

Coming Full Circle

Sara and I met again on May 12 for her exit interview. She was more than happy to come back to my apartment and talk about her progress throughout her internship year, as well as about how she saw herself developing as a teacher the following year. Sara was busy preparing her professional portfolio and applying for teaching positions. Our conversation was very much informed by her current, at the time, professional activity in her mind. I had prepared a number of segments of Sara's teaching from various times in the year for us to watch. She was to reflect on them and talk to me about any change in her practice she saw throughout the year:

S.: Is this from the morning greeting from the fall? I remember how I felt. I can still remember how I felt. Boy, I look really scared, don't I, right away.

L.: Scared?

S.: Yeah!! Wow, that surprises me. I look very cut and dry. I am not comfortable with my role yet. I know how I felt. I am just tense.

L.: Remember you said to someone "No" during DOL without any further comment?

S.: Yeah, because I watched my CT and she always would say "no" and then just move onto the next thing. I wasn't sure, I didn't know if she would get down on me if I said, "Well, that's an idea. But, does anyone else have another idea?" or... It didn't feel very helpful. I looked forward to working with her, but she just wasn't who I thought she was after I got there. I'm not, I'm not very at ease, am I? I was always thinking that she was watching me. I was not sure what the expectation was. I don't know, she never talked to me. Like to say, "Find your own way," or something.

L.: Did you think, like, you had to be like her?

S.: At first...Um hum. Well, she even gave me mixed messages. She'd say that she didn't want that, but whenever I would step up and do it a different way, she'd always break in. So, I didn't know what to do. I really didn't... I think it'll be different, teaching in my own classroom. I really look forward to that... And I'm also afraid of it, because I don't feel I learned how to manage a classroom. I don't feel very confident in that.

L.: Why don't we watch another segment from later in the year? This is now March. What do you think, any changes?

S.: Oh, I was so much more confident and more comfortable walking around, you know, instead of just standing. But, I can see, originally I would watch her at the OHP and she'd never move, she'd sit there. And then she would always tell me "Move, move around!", but, she didn't do that, so I didn't know, you know...

L.: You are basically thinking about what you are going to say next...

S.: Well, I think mostly it had to do with feeling more comfortable.

L.: It's like, you are basically thinking about what you are going to say next... to have the time and energy to listen to what they're saying at the time.

S.: Right! Right. And, ah... being afraid you're going to miss something on your list, of your lesson plan, you know what I mean? And, I got over that, I mean, you come to the place where "Oh, yeah! I forgot to do that. Well, I'll bring it in tomorrow or I'll let you know later" sort of thing.

L.: Remember in the fall you did not like your voice? You all paid attention to your voice, you did not like your voice. I haven't ever met yet one person who likes their voice. All people have surprises when they hear their voice, but then they get used to it.

I shared with Sara my observations of how she reacted to her watching herself on tape in the fall: she focused on her physical appearance and on the students she had missed. She agreed. We talked about the fact that despite having a lot of prior experience in other settings working with children, she still had a lot to learn, because "There is something about managing a classroom which is really different." (May 12 conversation with Sara) Sara and I also talked about a "Zigzagging" movement in her development. I wanted her to elaborate more on that:

L.: When you say, "Zigzag," what do you mean?

S.: I mean the fluctuation... how you feel things are going and how they might really be going. And then a lot of times, your feelings...

- L.: Your interpretation of events of what really happened may not necessarily be accurate?
- S.: Yes. And, I... I learned that from watching the tape, because my feelings would tell me, "Oh, that was terrible!" you know, I wasn't reaching any of the kids. They were all terrible and you know they weren't listening, they weren't on task. It must have been a failure... and then when I watch it, I'm seeing that the kids are engaged, and, they're doing exactly what was expected and they're into it. And, so, then I realized that you can't depend on how you feel something is going, necessarily. So, that was a great lesson.
- L.: During Lead Teaching 2 you reached a point, and then at the end of February there was something, almost like a fall. I am not sure how to put it, did you experience something like a rise and fall?
- S.: Rise and fall is a good way to put it because it is a rise and fall of a million different things, and they are happening at the same time. Like, how much sleep you haven't had... a million things affecting, you know that are happening, and sometimes you are gonna be short and ill-tempered, and you won't pay attention and you'll learn from that.
- L.: Remember at the end of February? You were very tired.
- S.: Oh, yes!
- L.: But then you picked it up and you continued, and you were very invested on that "What do you think" question. Although, at times, it felt as though you were asking it for the sake of asking it. You did not follow up on it.
- S.: I wouldn't know... I didn't know how. And, that's something I wanna learn... because you have to be able to ask really penetrating questions to get at their thinking.

Sara had come a long way in her teaching, although at the time, she could not appreciate it as much herself. We watched, again, and with pride, her March 11 reading lesson, when the principal had come in to observe her. Sara talked to me about the future, of her plans to grow more confident and relaxed in herself, and also to become more alert to students, in order to recognize the teachable moment and be able to use it:

- L.: How would you know that you have a teachable moment? What's that like?
- S.: Once in a while I've been aware of that ah-ha experience among students and you can use that moment to really have them express their thinking, you know. Like in their journals for reading, they started out writing a couple of sentences. I tried to encourage them to make their thoughts more visible, to express their thinking more, you know? And, one girl wrote me a note,

"Thank you for making me think more about my writing!"

I asked Sara to share with me how she knew if she paid attention to students' thinking and reasoning. She mentioned trust and respect: "It is a relationship. That is exactly what it is. *There's respect, hopefully. There's trust, and you listen.* And if they don't understand, they can tell you that. You know what I mean? Whereas, if they don't trust you, they can't say... like 'that one thing where I didn't understand you right.' That kids should be able to say back to the teacher if they feel they have not been heard or misunderstood." (May 12 conversation with Sara, emphasis added)

Sara understood quite well that in the business of understanding it is important to see that people feel free to say, in Sara's words, "I do not think I understood you there." This is the same teacher candidate who walked into her internship year a few months before, expecting students to listen to her, only to learn, through her precious lived experience, that she too needed to listen to students and, in fact, with a "listening eye." Sara expected a kind of respect from students, originating only from them towards her. "What is the matter with them? Don't they know respect?" were her actual words, expressed with anger, in her initial interview with me (November 10). Sara discovered a kind of respect she had not planned for, one which came uninvited, very much like a poem, through her long, laborious work during her year-long internship at Ordinary Elementary. In presenting to me her portfolio, Sara talked with a lot of respect, pride, and with a lot of love about her students. At Ordinary Elementary, in an otherwise ordinary class, with twenty-eight otherwise ordinary students, Sara came to know respect, the very essence of democracy. Beyond any reasonable doubt, Sara had come full circle, with some flying colors and a lot of humility.

¹⁴David Hawkins (1974). The Informed Vision: Essays on Learning and Human Nature.

CHAPTER V: DISCUSSION

Sara's Bridging Two Lines of Literature: Learning to Teach and Teaching for Understanding

Sara grew into earning a lot of love from her students as well. When she came, on May 24, to my apartment to showcase to me "her portfolio in the making," she read from it some excerpts from students' commentaries to her: "Having you here was a delight," and "You made math seem easier." Sara presented her portfolio to me with a lot of confidence and enthusiasm. As always, she was articulate as she elaborated on her advanced and comprehensive work. She had philosophy statements for each section of her portfolio, which included, apart from all the subject matters of the school curriculum, sections on other important matters as well, such as professional development, assessment, and the use of technology in the classroom. On the cover page of her portfolio, she put a statement about her view of democracy, one of her passions, as her FI also indicated in her reference letter for her. Sara cared a lot about community involvement, and she had a section about it in her portfolio. She also cared to make parents part of the classroom community. Every week she sent home a newsletter, which she also included in her portfolio, debriefing parents about activities and progress in each subject matter.

Sara's talk about her students was filled with care, concern, and love. During her portfolio session with me, she could not stop talking about Greg, the child who was growing up with his grandmother. Although when she came to see me she had already left her classroom, she was still worried about the sense Greg was making when the class had a discussion about "Big Ma" (Cassie's grandmother in the novel *Roll of Thunder, Hear my Cry*). Sara talked to me about this particular child, as well as about others, on a number of occasions during our conversations. I saw her concern for him while I was videotaping daily in her classroom: she had one eye on the

classroom and another eye on Greg.

Did, then, Sara learn to pay attention to students' thinking and reasoning? Did she learn to engage students (and herself) around meaningful discussion about important subject matter ideas? Did she learn to employ on-going assessment (Perrone, 1994) in her teaching? Did her interaction with students have an analytic/diagnostic nature (Prawat, 1989)? Did she learn what it looks like to "give children reason?" (Duckworth, 1987) Did she learn to form good questions to open up students' talk and thinking? Did she help students generate their own questions and construct their own understandings? Did Sara, at the end of the day, learn to teach for understanding?

Sara was a non-traditional teacher education student, being already in her mid-forties upon entering the teacher preparation program at GSU. She was interested in learning to pay attention to students' thinking early on. Despite her multiple and varied life experiences, she too had to face the many challenges and difficulties which all novices typically face, verifying Brown, et al.'s (2005) findings on non-traditional teacher education students: "It did not matter that these teachers were older first year teachers with more years of life experiences. Still, the reality was harsh as they began teaching, just as younger teachers have noted." (p. 646)

Despite all that Sara had to overcome (learning to manage a classroom as a learning space without any support from her classroom teacher), her commitment to learn to teach for understanding, paired with a teacher preparation program which supported this endeavor, pushed her away from traditional, stage-based models of teacher learning. Sara did not "graduate" from one stage to go to another, like some literature on learning to teach supports. Even Sara's CT held a point of view similar to the literature, that TCs need to have their classroom management skills and subject matter expertise in place *before* they enter the internship year (June 2 journal notes after

interviewing Sara's CT). Perhaps thinking about stages and phases needs not to occupy our scholarship that much but, rather, and as Levin, et al. (2009) proposed, how we provide TCs with educative experiences, which are framed around attention to student thinking. Sara's story helps us move towards that direction.

Unlike, then, what the literature indicates about novice teachers' learning to teach for understanding, Sara did make, during her internship year, a very good start getting down that road, by examining her questions; by being involved in inquiry; and by recognizing she needed to continue to look for the "teachable moment." She progressively stopped focusing at herself and her physical appearance. She never came to like her voice, but she learned to laugh at herself. She talked in very informed ways about how she changed. She was very aware that during the following year she would continue to be a beginning teacher in need of support for systematically studying and improving her practice.

Sara's classroom management skills did not improve much during her internship year, but, to her credit, that was not a preoccupation in her mind. In fact, both school and university players need to rethink a lot about the notion of classroom management: what does it look like when we see it and what does it look like "to possess it?" What language do we use to talk about classroom management? How do we understand students being on task? How might constructivist inquiry in classrooms generate different experiences, display different images of students working, and require different skills around organizing and running a classroom? What sort of classroom management skills would we, then, require that TCs have "in place?"

During her year-long internship, Sara made some baby steps, but also some moral leaps. She could not figure out, for instance, transitions in seating arrangements. Helping students, during reading time, move from the circle arrangement back to group work and then to their

desks was a nightmare for Sara. It was a nightmare for her CT also. Sara and I talked about it a few times, with little progress on her behalf. When it came time to discuss *Roll of Thunder, Hear My Cry*, Sara put all her troubles aside and dedicated her full attention towards her very important agenda "Does race matter?" I witnessed and recorded her March 11 lesson about the bus driver scene. Sara was not going to lay that scene to rest. She had set her mind, that day, to unpack in students' minds what it was that took place regarding that scene. She put on a very passionate performance. Sara did not care if the principal was there to evaluate her, or if her CT was going to be "on her case," or if I would be asking her later to think about whether she was using leading questions. She cared to *invite students to take a moral stance*. In that sense, Sara herself had taken a giant moral leap. That day, and at that particular moment, I let my research role evaporate, to assume an even more privileged role, that of a student in Sara's class. In the company of young minds, I, too (as "an outsider"), learned about what life was like during those dark times in American history.

Sara, eventually, came to understand classroom discourse and what it takes to start learning to craft one's own trade. In discussing "practice as zooming in and out, temporally and socially," Lampert (2001) highlighted the kind of relationship a teacher needs to cultivate in the classroom in order to achieve her professional goals: "... teachers who maintain productive, intellectual and social connections with their students are working toward their professional aims. The work that is entailed in maintaining these relationships is not something a teacher does because she has a friendly disposition, but because she is identifying and sharpening the essential tools of her trade." (p. 431) Sara invested greatly in "practice as zooming in and out," and she used her friendly disposition to her advantage. She did, in fact, learn to pay attention to students' thinking and reasoning, and she even showcased what it is like to unpack it: she paid attention to

students' intellect and affect, and to their emotional well-being. In several instances during our year-long conversations, I witnessed her anguish about one student who was going to be held back, about another student who was on medication, and about Greg who was growing up away from parents. Sara intertwined, in a fugue-like movement¹⁵, cognition and affect. Her story revealed that paying attention is not merely a cognitive endeavor, but that it also involves and it is informed by affect. Sara enacted, according to Schwartz (2015), the intellectual virtue of *perspective taking and empathy*, which is an intellectual virtue requiring a "great deal of intellectual sophistication" (p. B8). According to Schwartz (2015),

...teachers at all levels must overcome 'the curse of knowledge.' If they can't remind themselves of what they were like before they understood something well, they will be at a loss to explain it to their students. Everything is obvious once you know it. (p. B8)

Sara never assumed that her students' perspectives were obvious. She actively sought out their understandings of subject matter by asking them to write in their journals daily, both for reading and for math. Her writing assignments for student journaling were highly structured and well thought-through. Sara collected and reviewed students' journals regularly, and she informed her subsequent instructional decisions accordingly. Sara also took risks when it came to curriculum decisions, like deciding to teach *Roll of Thunder*, *Hear My Cry*. Taking a risk upon making one curriculum choice over another means that the teacher opens up her classroom to uncertainty and messiness, and to scrutiny and criticism. The novel Sara chose to teach was a difficult text, chronicling an even more difficult story. The author of the book, Mildred D. Taylor, even admitted so herself:

I have tried to present a history of my family as well as the effects of racism, not only on the victims of racism, but also on the racists themselves. I have recounted events that were painful to write and painful to be read, but I had hoped they brought more understanding... My stories will not be "politically correct," so there will be those who will be offended by them, but as we all know, racism *is* offensive. (Taylor, 1976, forward

1

¹⁵A fugue is a form of musical composition and it originates from the latin "fugere" (to flee) and "fugare" (to chase).

pages, emphasis added)

Sara was not afraid of taking risks, she was driven by her passions and hard work, and she had support from her program at GSU, which advocated and modeled constructivist teaching. Furthermore, I believe that our joint inquiry of critically examining her evolving learning to teach, by systematically analyzing her videotaped teaching, served as a catalyst to push her toward more deliberate efforts to want to learn to teach for understanding. Sara and I tailored our joint inquiry around her own needs and learning pace at the time.

Brouver and Korthagen (2005), upon analyzing effective strategies that University clinical supervisors used to help novices integrate theory into practice, referred to a number of principles, the second of which was "supporting individual learning processes." (p.159) According to Brouver and Korthagen (2005), clinical supervision needs to evolve around "description, analysis and interpretation" (p. 159) of teaching, before its assessment and evaluation:

Throughout student teaching, university supervisors and cooperating teachers monitor each student individually as he or she experiences the ups and downs inherent in learning to teach. (Brouver & Korthagen, 2005, p. 159)

Brouver and Korthhagen's (2005) study revealed that teacher education can, indeed, make a difference in helping novices start their journey towards learning to teach for understanding, through a complex interplay of various program features, most of them resembling GSU's program characteristics, such as (a) gradually increasing the complexity of student-teaching tasks and tailoring teacher learning to each individual's pace; (b)forming strong triads of student-teachers, cooperating teachers, and university supervisors, which provide consistency in learning to teach for understanding; and (c)alternating student-teaching placements with University-based courses, so that theory and practice interplay and complement each other.

Although Sara did not have a supportive cooperating teacher, nor, for that matter, was she

part of a triad (CT, FI,TC) with any theoretical consistency, she did have the mentoring and guidance of her University-based master level courses, in which she was mentored and supported to adopt and enact a reform-minded, constructivist oriented, teaching for understanding approach. She constantly sought out students' ideas, which she incorporated in her teaching. As I was observing and videotaping in her classroom daily, I saw how Sara grew out of being shy and timid and relying too much on the overhead projector, to orchestrating and masterfully conducting classroom discussions around difficult matters, in which most students participated, despite the fact that she still had to work on her classroom management and transition skills: her wait time was superb, and it was characteristic of that of an experienced teacher, not of a novice one.

Learning to teach for understanding is not easy, for neither novice nor experienced teachers.

Teaching for understanding has inquiry at its core, which involves, according to Schultz and

Mandzuk (2005), encouraging students to pursue questions, which generates even more questions:

There is a sense of negotiation and fine balance between what the children bring to the experience and the teacher's professional understanding of teaching, learning and young children's development.... Inquiry is intentional, highly organized and structured so that children are enabled to pursue learning in meaningful ways. (p.319)

Learning to teach for understanding requires coordination of various players and multiple layers, namely schools and Universities, and departments across campus, and it requires refocusing the task from "what teachers should know and be able to do" to capturing an evolving identity around critical thinking; researching one's practice; and thriving around uncertainty and ambiguity. Schultz and Mandzuk (2005) underscored that teacher educators should be the first ones to show the way, and they warned us that this is a road "less taken":

If we wish to prepare teachers who are inquiry-minded and who can carry an inquiry stance into their classroom practice, we will need to seek resolutions within our own programs and in collaborative resonance with the schools. This will be complex and messy, fraught with relational problems and contested territorial issues. (p. 330)

We need more research studies revealing the complexity and messiness of learning to teach for understanding, as highlighted above, not only among teacher candidates, among both novice and experienced teachers, but also among teacher educators and various teacher education programs.

The challenge before us is confounded by tensions and dilemmas, ambivalences and ambiguities.

The road ahead, although more challenging and "less taken," is, certainly, both promising and beautiful!

CHAPTER VI: IMPLICATIONS

Implications for Teacher Education

How does this kind of reform-minded teaching (in this study, learning to teach for understanding) shape the mission of teacher education programs? How does it affect the role and work of teacher educators, and what challenges does it bring with it? How and why is, in the first place, the process of learning to teach for understanding important and worthwhile to understand? According to Duckworth (1987), it is so if we want to take seriously other people's minds and the fact that they construct meaning quite differently from us and from each other:

Meaning is not given to us in our encounters, but it is given by us —constructed by us, each in our own way, according to how our understanding is currently organized. As teachers, we need to respect the meaning our students are giving to the events that we share. In the interest of making connections between their understanding and ours, we must adopt an insider's view: We must seek to understand their sense as well as help them understand ours. (p. 112, emphasis in the original)

While Duckworth referred to teachers needing to understand the sense that students make in "the events that we share," a parallel case can be made for teacher educators needing to do the same with teacher candidates. To understand, in other words, what it is like for teacher candidates to learn to teach for understanding, one needs to "adopt the insider's view," from the teacher educator's side this time. Ball (1990) acknowledged that learning to teach for understanding is both complex and uncertain, and she pointed out that to understand this learning means studying it as it evolves in its context:

Taking teachers seriously as learners, considering where they are—what they already know and believe and how they reason, in relation to both content and students—together with what they are trying to do, is key for those who would recommend changes in the practice of elementary mathematics teaching. Moreover, we need to continue to explore what kinds of experiences, supports, and structures can help teachers develop and change their practice. (p. 33)

Schultz and Mandzuk (2005) further supported that while some novices may find supportive environments for this kind of reform-minded teaching, the overwhelming evidence points in the opposite direction. The authors also urged that University-based teacher educators examine their own pedagogy and "day-to-day practices," in order to align with reform-minded teaching pedagogies, a task and a stance more difficult than it may initially seem: "...turning the lens of critical reflection on our own practice can be discomforting, but it is when we are at the edge of our discomfort zones that we learn." (p. 330)

The implications of learning to teach for understanding are, then, both practical and theoretical, both programmatic and academic. They call for informing teacher preparation programs, as well as schools working with novices, as to what experiences and factors support and/or hinder which aspects of such learning at any given time during the internship year. The implications also call for educating a number of players in such programs as to what it means to be a novice; what it is like to learn to ask students particular kinds of questions and wait for their answers; and what it is like to try to understand those answers and figure out more questions. What is it like to learn to pay attention to students' thinking and reasoning, in other words? While all players at various levels of teacher education are potential audiences for this study, novices are too. Their struggles, often kept private, can be validated by reading the stories of other novices, as well as be legitimized as a valuable source of learning. Above all, the implications for this study concern all audiences who live and work with children. These are moral implications, aiming to create a type of moral alertness that Max van Manen (1991) called pedagogical thoughtfulness, which extends itself beyond the classroom walls:

An underlying metaphor for teaching suggests that, in order to come to school and learn new things, students need to cross barriers (for example, a street) to get over to the teacher's side (the school)...A tactful educator realizes that it is not the child but the teacher who has to cross the street in order to go to the child's side. The teacher has to know 'where the child

is,' 'how the child sees things,' how it is that this student has difficulty crossing the street to enter the domains of learning. The teacher has to stand beside the child and help the child locate places to cross over and find means for the child to successfully get to the other side, to these other worlds. In this gesture lies indeed the meaning of *educare*, 'to lead into' the world of increased awareness, responsibility, growth, and understanding. (p. 156, emphasis added)

Sara, the research participant in my study, undertook, during her internship year at Ordinary Elementary School, a journey far away from ordinary. She was open to her being videotaped, and she took the task seriously right from the beginning. She understood early on that watching video was going to be about the serious business of examining one's practice and developing tacit knowledge of it. The fact that our conversations about her practice were being videotaped (Level 2 Data) also conveyed to Sara that our talk, even though more unstructured in the beginning, was going to be around difficult intellectual work. As Sara learned to "educare" for children in her classroom, she learned to "educare" for herself as well. She discovered the child in her and she helped that child, through a focused zooming in and out around her practice to "...locate places to cross over... to successfully get to the other side."

For an entire school year, I witnessed and recorded Sara's (as well as the other two research participants') journey into and through the internship year, a kind of journey far away from ordinary. Sara captured very well where "making her teaching an object of study" would take her. She patiently dissected her practice, as she watched herself on videotape, in the company of a stranger (myself) who kept asking unhelpful (to her) questions, such as "what do you think?" Sara was as patient with me as I was with her. Although she would not understand, at first, why I would not—why I could not—comment on her lesson, she managed to keep, with her patience and good grace, the focus of our relationship around her teaching. In van Manen's (1991) terms, she *educared* for me too! She helped me cross one side of the street of being a field instructor, to the "other side" of the street to be a researcher of practice. All of these experiences were made possible because I

utilized qualitative research methodology, school ethnography, and a case study research design during my school year at Ordinary Elementary, a year not ordinary at all. In the following section, I explore some of these affordances, as well as some of the tensions of doing this kind of research.

Implications for Research

I undertook my dissertation study as a Teacher Education doctoral student who had been involved in both field and course instruction in the previous four years, through the University and in local schools. I had also been involved with various research projects in the local schools, and thus I had already formed an idea of what local elementary schools were like. In a way, I had gone to Sara's school with an "insider's" perspective. On the other hand, being an international student, a foreigner, and despite my long experience as a classroom teacher in my own country, I found that I did carry with me an "outsider's" perspective in very many instances. Being a foreigner, and having the luxury of being a researcher full time, afforded me the opportunity to "make the familiar strange," in what I had originally considered to be a familiar environment. For example, as a researcher at the time, I started posing questions about the classroom arrangement, the heavy textbooks, the lockers out in the hall, the lining up of the students every time they went anywhere, the hilarious loud speaker, questions I never had the time, nor was it my role, to pose as a field instructor. The year during which I conducted my research in Sara's school offered me revelations about US schooling that I did not have throughout my four years as a field instructor.

I had thought long and hard, while I was drafting my dissertation research proposal, as well as throughout the year I conducted my research, about my role towards the research participants. I particularly chose not to be working as a field instructor that year in my research site, or in any other school. I wrote extensively in my research proposal about separating the two roles, because they were essentially conflicting: the field instructor has a clear agenda originating from the University,

in assisting the interns to progress in their learning to teach and in monitoring this progress through specific program standards and guidelines.

My role as a researcher during my study was quite different from that of the field instructor: I was now working with research participants, not interns, in trying to understand their development, as it evolved in their particular contexts and situations. I was not there to push them towards one direction or another, nor to evaluate them or intervene in any way. In fact, during our conversations over watching their teaching on videotape (which I also video and audio recorded) they did most of the talking. I only probed them to elaborate more on their thinking. I tried so hard to remain "neutral," for that matter, that I questioned my own positionality in a number of instances. Sara, for example, had a problem with her cooperating teacher from the beginning of the internship year, a problem that kept escalating as the year progressed. She felt her CT did not encourage her enough, and that she was even excessively critical of her. In most cases, Sara was right: her CT was not encouraging at all, something that Sara was really in need of. As a researcher, I could not have "intervened" in Sara's relationship with her CT, which I would have done had I been her field instructor. Nor could I have taken a stance and say who was right and who was wrong. Not knowing where getting in the middle of the relationship Sara had (or did not have) with her CT would take me, I left that part out: I never pushed her to think about what she could have learned from her CT, despite the bad relationship the two of them had.

In another instance, again, I had videotaped a lesson Sara taught for the school principal, who came in to evaluate her in order to provide her with a reference letter. In my view, Sara was superb in how she orchestrated classroom discussion over a novel. However, her principal left disappointed. According to the principal, Sara "did not really talk much." So, there was nothing for her to evaluate. As much as I had wanted to take a stance, and had I been a field instructor in that

incident I would have had, I decided not to. I was there to research and portray reality as I saw it, and not to take sides or reveal my own convictions about the people who surrounded Sara. I am still uncertain whether that has helped Sara in the long run; whether it disappointed her that I was not there to take sides; in what ways it may have affected our level of trust; and if, at all, my trying to be "neutral" was detrimental to Sara.

Not to my surprise, I found myself being much more comfortable using the context from Sara's graduate courses at Great State University in directing her to think more deeply about her practice. For example, Eisner, one of Sara's 800-level course instructors at the University, consistently asked TCs to pay close attention to the questions they asked students: "What questions do you ask that open up more questions from students? What questions do you ask that close down questions from them?" In a similar fashion, Rita, Sara's field instructor, always pushed the TCs to voice their frustrations and created, in her field instruction seminar, a "safe place" for them to express themselves. I, thus, followed the institutional culture Sara was coming from and I framed my inquiry around questions I had prepared in advance for her to think about, or around questions that arose during our conversations.

My role, then, and my stance, essentially my positionality, was that of a researcher, not of a field instructor. I tried very hard not to "intervene" with Sara's professional journey, only to record and to portray it. However, this research was a joint undertaking. Sara developed in the ways that she did partly because of the relationship we had developed in the field, in this case in her classroom and in her school. Had another researcher been there, with no prior field instruction experience, another relationship would have developed, another kind of inquiry would have emerged, and Sara would probably have taken a different professional journey. Therefore, all of my claims are inherently subjective, and inevitably particular to Sara's case, by no means to be generalized or used

to normalize the process of learning to teach or the field of teacher education. Furthermore, the theoretical framework of constructivism, of focusing on the questions and sustaining inquiry, "blurred" any notions of perceiving various roles as being conflicting or dichotomous. The very essence of constructivism, as a matter of fact, is that it provides a space and the tools for a recursive movement between potentially un-matching roles, such as, in this case, the role of a researcher and that of a teacher educator. Constructivism encourages uncertainty, allows tentativeness, and forces us to focus on the questions rather than on the answers. Constructivism urges us to remain curious on the how and why, and to be cautious of the what. Sara and I remained curious on her "how and why," which came to inform, in due time, her "what." Constructivist inquiry, qualitative research, but also our patience with each other, made that possible.

Just as teaching has its predicaments (Cohen, 2011), so does research have its own predicaments: oftentimes TCs (as well as their CTs and field and course instructors) needed to have answers; they wanted me to offer them answers. I wanted them, us, to remain focused on the questions, to remain "with" the research. Their TE program prepared them to think, to know and to act like a teacher. Their Great State University people expected them to "dress for success." I was pushing them to stay close to their not-knowing, to their being curious and vulnerable, and to eventually "undress" themselves and confront "failure." I wanted them to not let go of their paying attention to students, at whichever cost. I was asking them to keep "giving students reason" (Duckworth, 1987), and to keep figuring out why might the students be saying what they were saying, but also to pay attention to students' silence. Implicitly, and without realizing it at the time, I had expected from TCs "to give me reason" as well, for remaining silent, without explaining to them why. That was, in another more post-structural, feminist

reading of research, quite hegemonic, imposing, and patriarchical. So was my judging of the school principal, out of one single comment she made, when she went to evaluate Sara's March 11 lesson: "You did not talk much." On March 18, when I interviewed Mrs. O. in her Office, the principal of Ordinary Elementary, I discovered a woman full of passion, care and concern for her school, her students' learning, and of the communities they came from. Research does have its goodness, but also its predicaments.

In either reading of the research I had undertaken, my two roles (two of many) as a researcher of practice and as teacher educator, were intertwined, and one was informing the other. I could not be doing this kind of research and asking those kinds of questions to TCs had I not had experience with the program and done field and course instruction before. My future as a teacher educator was already shaped before I even left the field. I learned about what is possible in teacher education (and its predicaments) from this work, which I did not—I could not—have learned as a field or course instructor. Distancing myself from any previous roles, and from the program, afforded me new ways of looking at teacher learning and development. It was, of course, impossible to leave out my many years of experience teaching real children in real classrooms. My veteran-classroom-teacher-baggage influenced both the way I conducted my research, and the way I went about writing it. After all, I have particular convictions as to how it is that children learn and what constitutes their well-being. The way I went about probing the TCs was, fortunately, informed by my convictions. Any attempt to separate roles in ethnographic work is, in my view, a left over positivistic theatrical act, unhelpful to the story-in-the-making of and about teacher education.

EPILOGUE

The Story of Teacher Education

So, at the end of the day, what really IS the story of teacher education? What IS the story of the internship year and of learning to teach? What IS the story of learning to teach for understanding and of paying attention to students' thinking and reasoning?

It is a story about unending tensions and dilemmas, ambivalence and ambiguity, trust and mistrust, rise and fall, progress and regression, fatigue, being overwhelmed, a sense of accomplishment, joy and excitement, and eventually a story about TRIUMPH. Not the kind of triumph one feels after winning a ball game, or scoring high on a test. This is, instead, an ordinary, day-to-day kind of triumph, which accumulates "miraculously" out of repeated, mundane, daily rehearsals around kids! These "rehearsals" are both public and private, both joyful and miserable, both fabulous and pitiful, both a success and a failure, both well thought through and accidental, both alone and with company, both orderly and messy, both predictable and unpredictable, both ordinary and extra-ordinary. In fact, because teaching and learning to teach are so ordinary, that is precisely what makes the craft quite extra-ordinary. These data tell a story, a tale, of how and why something ordinary, such as the process of learning to teach, is, in its very essence, so very extra-ordinary. Deborah Meier's (1995, 2002) compelling account testifies to the above:

It was in the hurly-burly complexity of trying to make **ordinary schools** work that I felt particularly challenged. These schools were, to children at least, the real world. It was within these buildings that the children struggled to make sense of friendships, power relations, and subject matter, and tried to square their new understandings with what they knew of the outside world. Although the world of school was artificial and the values within it strangely at odds with the children's family and community life, it still had its regularities and it was, as all institutions are, connected to the customs of the outer world. (p. 122, emphasis added)

Sara, the otherwise ordinary, middle-class, white female teacher candidate, walked every

day into her field placement at Ordinary Elementary to experience what she thought would be an "ordinary day," only to leave, at the end of the day, with a bag of extra-ordinary experiences. I, too, was under the impression that my year at Ordinary Elementary would be an ordinary experience: after all, I was there to research a process I was familiar with as it took place in context. As a co-habitant in a real school, with real students and real teachers, researching real teacher candidates learning to teach, I lived and re-lived, both as an insider and as an outsider, the smells, the sounds, and the sights of a school and its children at work. In this otherwise "ordinary" school, I saw and recorded some extra-ordinary images: children being engaged with subject matter in various ways; trying to figure out math problems; collecting and displaying information; discussing findings and debating with each other; interacting in literature circles; performing plays they wrote; chasing after their (and each other's) thinking and reasoning; and articulating their understandings. In the midst of all this activity, the intern teachers were present and equally curious, puzzled, overwhelmed, and overjoyed by the work along with the children.

Work at Ordinary Elementary was not always about joy, however. During my year at Ordinary Elementary, I became part of the lives of a multitude of people who kept agonizing if they would survive, if they would succeed, if they would see light at the end of the tunnel. The teacher candidates agonized if they would make it through the year, but so did the cooperating teachers and the principal, and the students and their parents and guardians. This agony kept coming up in the air from various players at various layers, in so many shapes and forms, textures, and colors. Next to agony, thankfully, there was *triumph*, for the little day-to-day victories. Triumph that, eventually, the learning-to-teach-for-understanding story does prevail over agony. A kind of prevalence that follows unusual routes, and maneuvers with precise unpredictability.

Sara's story, a true story, is about an intern, a teacher candidate, a novice teacher learning to

teach for understanding at Ordinary Elementary. An ordinary tale, one might think. But was it? David Berliner (2002), commenting on the nature of scientific work in the field of education, argued:

Doing science and implementing scientific findings are so difficult in education because humans in schools are embedded in complex and changing networks of social interaction. The participants in those networks have variable power to affect each other from day to day, and the ordinary events of life (a sick child, a messy divorce, a passionate love affair, migraine headaches, hot flashes, a birthday party, alcohol abuse, a new principal, a new child in the classroom, rain that keeps the children from a recess outside the school building) all affect doing science in school settings by limiting the generalizability of educational research findings. Compared to designing bridges and circuits or splitting either atoms or genes, the science to help change schools and classrooms is harder to do because context cannot be controlled. (p. 19)

Evidently, I knew from the beginning of my study that my findings from Sara's case could not be "generalizable" to all novice teachers, not even to the ones teaching at the same school where she was teaching. That was not my goal in the first place, nor am I "apologizing" about it. In the words of Alan Peshkin (1993), to start reporting on a piece of qualitative research conveying a message of confinement is "...unnecessarily apologetic. In the non-defensive mood that befits our times, I endorse the declaration of worthy research outcomes unencumbered by the left hand's removing what the right hand has brought forth. Many types of good results are the fruits of qualitative research. Its generative potential is immense..." (p. 28)

My goal, then, in this study was to understand a process (learning to teach for understanding) as it took place within a particular context (the internship year), which I never aimed "to control." As a matter of fact, the messiness that context brought about (all of what Berliner so eloquently elaborated on) illuminated the complexities of understanding learning to teach for understanding, of understanding constructivism in practice, of understanding the role of videotape in learning to see things, and of understanding the story of teacher education.

Jay Featherstone (2007), in Transforming Teacher Education, Reflections from the Field,

discussed extensively the tensions and complexities of enacting the story of teacher education in U.S. Universities, and, in particular, the challenges of doing it in the context of a large Research One University, where teacher candidates are many and where teacher preparation is often misunderstood and undervalued. Sara, during her internship year and as a participant in my study, engaged in serious intellectual work, "uphill work" (Featherstone, 2007, p. 239), weaving an intellectual fabric about and around paying attention to students' thinking and reasoning. It is difficult to weave such a fabric in isolation. As Featherstone (2007) indicated, this work, which is "never exclusively intellectual but also social and emotional" (p.232), needs good company, and "...a culture of inquiry powered, shaped, and supported by conversation" (p. 230). Featherstone (2007) was adamant about the idea that preparing teachers to educate children—all children—and to educate them well, is essentially "a story about democracy" (p. 219). He called for an orchestrated effort to transform teacher education, through developing "collective intelligence" (p. 231), in order to be able to serve this priceless story of democracy:

To do teacher education well, a university has to support a complex ecology, not just a research monoculture. Links to practice and schools are central. A good teacher education program has to be field-based and rooted in conversation; teachers and principals need cultivating as key figures in teacher education. Teacher education requires constant reinventing; teacher educators require the tacit knowledge and understanding of practitioners to enact a site-based program; and because so much remains unknown and forever new, all the people doing teacher education need to become a learning team, a community capable of constant self-educating and development. (p. 219)

This study is about a story, Sara's story, a true story; it is also about a story of teacher education, the way Jay Featherstone (2007) imagined it. A story that will always keep changing, reformulating itself, chasing after its "victories" and "safe places," haunted by its accomplishments and the questions we do not yet know how to ask: a task and a stance far away from ordinary.

CODA

That if real success is to attend the effort to bring a man to a definite position, one must first of all take pains to find HIM where he is and begin there.

This is the secret of the entire art of helping others.

In order truly to help someone else, I must understand more than he
—but certainly first and foremost I must understand what he understands.

If I do not do that, then my greater understanding does not help him at all.

All true helping begins with a humbling. The helper must first humble himself under the person he wants to help and thereby understand that to help is not to dominate but to serve.

All true effort to help does not mean to be a sovereign but to be a servant; that to help does not mean to be the most dominating but the most patient; that to help is the willingness for the time being to put up with being in the wrong, and not understanding what the other understands.

To be a teacher in the right sense is to be a learner. Instruction begins when you, the teacher, learn from the learner, put yourself in his place so that you may understand what he understands and in the way he understands it.

Søren Kierkegaard The Point of View 1854 **APPENDICES**

APPENDIX I:

Summary Chart of Data Collection

Table 1: SUMMARY CHART OF DATA COLLECTION

Type of Data	From Who	Why	When
Classroom observations	Teacher Candidates' classrooms	To develop a sense of the TCs' context	On-going
Informal conversations	Principals, CTs, Field Instructors, TELs, TCs, Students, Course Instructors	To identify key informants, and for Triangulation purposes	On-going
Field notes and commentary	Myself	"Thick" description of culture (school and classrooms)	On-going
Journal	Myself	Reflection on day's observations Memos to myself as to emerging themes/patterns/contrasts Plans for consequent steps	On-going
Participant observation	500 and 800 level seminars, Field and Course Instructors	To identify themes in TCs' thinking and talking about learning to teach for understanding, and for Triangulation purposes	As needed

Table 1 (cont'd)

Videotaping of the Teacher Candidates' teaching	Teacher Candidates	Level 1 Data (documentation of TCs' teaching and interaction with students)	During lead teaching periods 1 and 2
Videotaped debriefings of TCs about their videotaped teaching	Teacher Candidates and myself	Level 2 Data (interpretation of TCs teaching, including their interaction with students)	During and after lead teaching periods
Audiotaping	Mid-term and final three-way conferences of CTs, Teacher Candidates, and Field Instructor	To identify themes in TCs' thinking and talking about learning to teach for understanding, and for Triangulation purposes	Designated times according to the Team's schedule (during and right after lead teaching periods)
Various GSU guidelines and handouts	GSU's Documents	To develop a sense of GSU's goals for learning to teach during the internship year, and to identify expectations of key players' roles	On-going and as necessary
Various internship documents and artifacts (reflective journal, lesson and unit plans, goal statements, 800-level inquiry projects, portfolios)	Teacher Candidates, Course and Field instructors	To identify themes in TCs' thinking and talking about learning to teach for understanding, and for Triangulation purposes	On-going and as necessary

APPENDIX II:

Consent Forms

Date

Dear Teacher Candidate,

My name is Loucia D. Constantinou and I am a doctoral student with the Department of Teacher Education, College of Education. Before coming to MSU, I taught elementary school in my country Cyprus, and developed a great interest in how children learn to make sense of their worlds. When I return home I plan to work with teacher candidates like yourself, during their journey of becoming teachers.

In order to better assist teacher candidates in their learning to teach, I need to develop a deeper and more rounded understanding of what this journey is like. That means for me to systematically study the process that you are going through, and for you to allow me to be part of your experience.

In this study, then, I would like to initiate and sustain, throughout your internship year, conversations that would help me develop such an understanding. These conversations will primarily focus around your teaching and what it is like for you to learn to do it this year. I would like to start videotaping a few of your lessons (about 3-4) during your Lead Teaching 1 period. That way, we can sit together later, at a convenient time and place for you, to talk about some segments of your videotaped lessons. This talk should take no more than thirty minutes for each of your lessons. To keep a record of our conversations and to help my data analysis, I would like to also videotape our talk around your teaching. These initial conversations will help us identify some features in your teaching that you might be more interested in discussing with me as we move along.

After Lead Teaching 1, I will give you another consent form to sign, to indicate whether you are interested in continuing to work with me in this study during your Lead Teaching 2 period as well. To situate our conversations about your teaching we might also need to look at other sources of your work this year, like your developing portfolio, and some of your 800-level course projects.

Please note that giving your consent to participate in this study is voluntary. You also have the right to withdraw from it at any time you wish to do so without any consequences. Although I might be having occasional conversations with your cooperating teacher and university supervisor, I do **not** plan to share data that you provide with either of them or any other person involved in your evaluation. I am not involved in any way in your evaluation, nor do I plan to make public any data that you provide for evaluation purposes.

All data you provide will remain confidential with the use of pseudonyms for all people and places involved. Data from this study will be used for the writing of my doctoral dissertation. You are welcome to my analysis of any data you provide at any time you request so. I regret that no financial compensation for your time is available at this point. My hope is that we will both be compensated professionally, by pushing each other's thinking about teaching and learning to teach.

Thanking you in advance,
Loucia D. Constantinou
Department of Teacher Education, College of Education, MSU
Please, check what applies in your situation:
[] YES, I agree to give my consent to participate in this study. I understand that I reserve the right to withdraw my consent to participate at any point in time.
[] NO, I do not agree to give my consent to participate in this study. I understand that no consequences will take place because of my choice not to participate.
NAME:
SIGNATURE:
DATE:

Date

Dear Field/Course Instructor,

My name is Loucia D. Constantinou and I am a doctoral student with the Department of Teacher Education, College of Education. Before coming to MSU I taught elementary school in my country Cyprus, and developed a great interest in how children learn to make sense of their worlds. While at MSU, I worked with teacher candidates and became fascinated with how they learn to help children make sense of their worlds. When I return home I plan to work with teacher candidates there, during their journey of becoming teachers, as well as with practicing teachers who will be mentoring them.

In order to better assist teacher candidates in their learning to teach, I need to develop a deeper and more rounded understanding of what this journey is like. That means for me to systematically study the process that they are going through, and for them to allow me to be part of that experience.

In this study, then, I would like to initiate and sustain, throughout the internship year, conversations that would help me develop such an understanding. These conversations will primarily focus around their teaching and what it is like for them to learn to do it this year. I would like to start videotaping a few of their lessons (about 3-4) during their Lead Teaching 1 period. That way, each one of them and I can sit together later, at a convenient time and place for them, to talk about some segments of their videotaped lessons. That should take no more than thirty minutes for each of their lessons. To keep a record of our conversations and to help my data analysis, I would like to also videotape our talk around their teaching. These initial conversations will help us identify some features in their teaching that they might be more interested in discussing with me as we move along.

After Lead Teaching 1, I plan to give teacher candidates another consent form to sign, to indicate whether they are interested in continuing to work with me in this study during their Lead Teaching 2 period as well. To situate our conversations about their teaching, I might also need to look at other sources of their work this year, like their developing portfolio, and some of their 800-level course projects.

For triangulation purposes, I would need to be able to attend a few of your 500 and 800 level seminars, and to also have occasional conversations with you throughout the year (at times and places of your convenience) regarding the goals of your seminars, and the purposes that projects you assign may serve.

Please note that my focus in this study is teacher candidates' learning to teach during the internship year and not the nature of your instruction. Please also note that your consent to participate in this study should not, in any way, influence the teacher candidates' decision to do so or not and, in fact, I plan to give consent forms to them in your absence.

Because you are evaluating teacher candidates this year in regards to their learning to teach, I am

unable to share with you (or any other person involved in their evaluation) any data they provide to me that informs their learning to teach process. I, myself, am not involved in any way in their evaluation, nor do I plan to make public any data they provide for evaluation purposes. Any data I gather from observing in your seminars and/or I obtain from having conversations with you will not be used for evaluation purposes either.

All data you provide will remain confidential with the use of pseudonyms for all people and places involved. Data from this study will be used for the writing of my doctoral dissertation. You are welcome to my analysis of any data you provide at any time you request so. Please note that giving your consent to participate in this study is voluntary. You also have the right to withdraw from it at any time you wish to do so without any consequences. I regret that no financial compensation for your time is available at this point. My hope is that we will both be compensated professionally, by pushing each other's thinking about teaching and learning to teach.

Thanking you in advance,
Loucia D. Constantinou Department of Teacher Education, College of Education, MSU
Please check what applies in your situation:
[] YES, I agree to give my consent to participate in this study. I understand that I reserve the right to withdraw my consent to participate at any point in time.
[] NO, I do not agree to give my consent to participate in this study. I understand that no consequences will take place because of my choice not to participate.
NAME:
SIGNATURE:
DATE:

Date

Dear Principal/Cooperating Teacher,

My name is Loucia D. Constantinou and I am a doctoral student with the Department of Teacher Education, College of Education. Before coming to MSU I taught elementary school in my country Cyprus, and developed a great interest in how children learn to make sense of their worlds. While at MSU, I worked with teacher candidates and became fascinated with how they learn to help children make sense of their worlds. When I return home I plan to work with teacher candidates there, during their journey of becoming teachers, as well as with practicing teachers who will be mentoring them.

In order to better assist teacher candidates in their learning to teach, I need to develop a deeper and more rounded understanding of what this journey is like. That means for me to systematically study the process that they are going through, and for them to allow me to be part of that experience.

In this study, then, I would like to initiate and sustain, throughout the internship year, conversations that would help me develop such an understanding. These conversations will primarily focus around their teaching and what it is like for them to learn to do it this year. I would like to start videotaping a few of their lessons (about 3-4) during their Lead Teaching 1 period. That way, each one of them and I can sit together later, at a convenient time and place for them, to talk about some segments of their videotaped lessons. That should take no more than thirty minutes for each of their lessons. To keep a record of our conversations and to help my data analysis I would like to also videotape our talk around their teaching. These initial conversations will help us identify some features in their teaching that they might be more interested in discussing with me as we move along.

After Lead Teaching 1, I plan to give teacher candidates another consent form to sign, to indicate whether they are interested in continuing to work with me in this study during their Lead Teaching 2 period as well. To situate our conversations about their teaching I might also need to look at other sources of their work this year, like their developing portfolio, and some of their 800-level course projects.

To enrich data for my study I would also need to have occasional conversations with you throughout the year (at times of your convenience) regarding goals you have for students' learning in your school. Some other information about your school (i.e. demographics, school mission) will also be needed as supporting documents.

For triangulation purposes, I also would like to be able to attend some of your staff meetings while teacher candidates are present, as well as be present at some of the conversations you will be having with teacher candidates as they plan to teach a lesson and as they reflect about it once they taught it.

Please note that my focus in this study is teacher candidates' learning to teach during the internship year. It is neither about the nature of your mentoring them to learn to teach, nor about the nature of

your own teaching. Please also note that your consent to participate in this study should not, in any way, influence the teacher candidates' decision to do so or not and, in fact, I plan to give consent forms to them in your absence.

Because you are evaluating teacher candidates this year in regards to their learning to teach, I am unable to share with you (or any other person involved in their evaluation) any data they provide to me that informs their learning to teach process. I, myself, am not involved in any way in their evaluation, nor do I plan to make public any data they provide for evaluation purposes. Any data I gather from observing in your classrooms and/or I obtain from having conversations with you will not be used for evaluation purposes either.

All data you provide will remain confidential with the use of pseudonyms for all people and places involved. Data from this study will be used for the writing of my doctoral dissertation. You are welcome to my analysis of any data you provide at any time you request so. Please note that giving your consent to participate in this study is voluntary. You also have the right to withdraw from it at any time you wish to do so without any consequences. I regret that no financial compensation for your time is available at this point. My hope is that we will both be compensated professionally, by pushing each other's thinking about teaching and learning to teach.

Thanking you in advance,

Loucia D. Constantinou Department of Teacher Education, College of Education, MSU

Please check what applies in your situation:

FOR COOPERATING TEACHER AND PRINCIPAL

[] YES, I agree to give my consent to participate in this study. I understand that I reserve the right to withdraw my consent to participate at any point in time.
[] NO, I do not agree to give my consent to participate in this study. I understand that no consequences will take place because of my choice not to participate.
NAME:
SIGNATURE:
DATE:
FOR PRINCIPALS ONLY
This study is primarily about investigating the nature of teacher candidates' interaction with children, the way they learn to pay attention to their thinking, and the way that informs their teaching. In this study, non-verbal interactions with children are as important as verbal ones, and that is why videotaping is involved, in which children from your school are visible. Although children are not the focus of my study, but rather teacher candidates' interaction with them, they are minors involved in the study, and an adult needs to consent, in place of their parents, to their being videotaped. Please, indicate below whether you are willing to do that or not.
[] YES, I agree to give my consent for children in my school to be visible in your study.
[] NO, I do not agree to give my consent for children in my school to be visible in your study.
NAME:
SIGNATURE:
SCHOOL:
DATE:

Date

Dear Parent,

Loucia D. Constantinou is a doctoral student with the Department of Teacher Education, at Michigan State University. Before coming to MSU she taught elementary school in her country Cyprus, and developed a great interest in how children learn to make sense of their worlds. While at MSU she worked with interns, like the one placed this year in our classroom, and became fascinated with how they learn to help children make sense of their worlds. When she returns home she plans to work with interns there, during their journey of becoming teachers, as well as with practicing teachers who will be mentoring them. In order to better assist them in their learning to teach, she needs to develop a deeper and more rounded understanding of what this journey is like. She is, therefore, conducting her dissertation study on this topic.

Ms. Constantinou is interested in videotaping a few of the lessons that interns teach in our classroom in the fall, and a few more which they will teach in the spring. In her videotaping, children from our classroom will be visible. She would also like to occasionally talk with some of our students, as well as take a look at some of their work. In addition to getting your permission, I will also make sure that your child is willing to participate. Participation is voluntary, and both you and your child can withdraw from the study at any time without penalty. Any child who is not part of the study will remain a full member of my class, able to participate in all of the classroom's activities. If your child does participate in the study, he or she can choose not to answer any particular interview question. If you do not grant your permission for your child to be videotaped, Ms. Constantinou will do everything possible to keep from recording him/her. If she should inadvertently videotape your child, she will not use any segments of the tapes in which your child will be identified.

All data from Ms. Constantinou's study will remain confidential with the use of pseudonyms for all people and places involved. Data from this study will be used for the writing of her doctoral dissertation. Your child's name will not be used in any reports, and any identifying characteristics of your child will be disguised. On the form below, you can restrict the use the study can make of any material collected that includes your child. Please note that none of Ms. Constantinou's videotaping, in which your child might be identifiable, will be used for public purposes but, rather, for conversations with her dissertation committee. Thank you very much for considering participation for your child in the study and for returning this form promptly.

Sincerely,	
Classroom Teacher	

CONSENT FOR CHILD'S PARTICIPATION

I have read the above description and understand the nature of my child's participation in it. I understand that data from the study will remain confidential, to be used by the researcher for the purposes of writing her doctoral dissertation. The data might be used in reports about the study, in published articles, in presentations at conferences, and in teacher education classes at the university. I have been assured that in any such uses, my child's identity will not be revealed. I do understand that in any videotapes in which my child appears, he or she might be recognizable by those familiar with the situation even though no names will be used. I may choose to have any segment of videotapes in which my child is identifiable not used in the study or in any presentations.

I have also been assured that I can deny permission for my child's participation in any or all of the activities listed below, and I can withdraw permission for my child to participate in any or all of these activities at any time, without penalty. My child will also have the opportunity to agree or decline to be involved in the study's various activities. Choosing not to participate will have no impact on my child's right to be a full member of his/her class.

I give my permission for my child to participate in the activities I have indicated below (please indicate "yes" or "no" for <u>each category</u>):

You may videotape my child while the teacher candidate is teaching the lesson:
] YES [] NO
You may ask my child questions about the lesson the teacher candidate has taught:
] YES [] NO
You may use some of my child's work in this study, as long as all identifiable information is emoved:
] YES [] NO
CHILD'S NAME:
PARENT/GUARDIAN'S NAME:
SIGNATURE:
DATE:

Date

Dear Teacher Candidate,

This is the second stage of my asking for your consent to participate in my dissertation study, which deals with understanding aspects of your learning to teach during the internship year.

In the fall semester, we initiated conversations about your teaching and your learning to teach. I videotaped some of your teaching (level 1 data) and then we talked about how you made sense of it, while being videotaped at the same time (level 2 data). I also had the opportunity to attend some of your 500 and 800 level seminars, where I learned about the course-related aspects of your career.

During your Lead Teaching 2 period, I would like to continue the conversations about your teaching that we started in the fall. In order to situate my understanding of your learning to teach, I need to be able to systematically observe in your classroom, videotape your teaching, and have conversations with you. I would like to be in your classrooms on different days of the week and at different times of the day, videotaping your teaching of different subject matters. I would also like to continue talking with you about your teaching, while being videotaped, for at least one hour per week during the eight weeks of your Lead Teaching 2 period.

To assist my understanding of our conversations about your teaching, I would also like to have access to your lesson/unit plans. I would like to be able to make copies of some of those, as well as some of your 500/800 level projects. At the end of the year, I will discuss with you my evolving understanding of some aspects of your learning to teach during your internship year. During this "exit" interview, which should last no longer than sixty to ninety minutes, I will ask for your own interpretation of your growth as well.

Please note that giving your consent to participate in this study is voluntary. You also have the right to withdraw from it at any time you wish to do so without any consequences. Although I might be having occasional conversations with your cooperating teacher and university supervisor, I do **not** plan to share data that you provide with either of them or any other person involved in your evaluation. I am not involved in any way in your evaluation, nor do I plan to make public any data that you provide for evaluation purposes.

All data you provide will remain confidential with the use of pseudonyms for all people and places involved. Data from this study will be used for the writing of my doctoral dissertation. You are welcome to my analysis of any data you provide at any time you request so. I regret that no financial compensation for your time is available at this point. My hope is that we'll both be compensated professionally, by pushing each other's thinking about teaching and learning to teach.

Thanking you in advance,
Loucia D. Constantinou Department of Teacher Education, College of Education, MSU
Please, check what applies in your situation:
[] YES, I agree to give my consent to participate in this study. I understand that I reserve the right to withdraw my consent to participate at any point in time.
[] NO, I do not agree to give my consent to participate in this study. I understand that no consequences will take place because of my choice not to participate.
NAME:
SIGNATURE:
DATE:

BIBLIOGRAPHY

BIBLIOGRAPHY

- Ball, D.L. (1990). *Halves, pieces, and twoths: Constructing representational contexts in teaching fractions*. East Lansing, MI: National Center of Research on Teaching and Learning.
- Beck, T.A. (1998). Are there any questions? One teacher's view of students and their questions in a fourth-grade classroom. *Teaching and Teacher Education*, 14(8), 871-886.
- Belenky, M. F. (1986). Women's ways of knowing: The development of self, voice, and mind. New York, NY: Basic Books.
- Berliner, D. C. (1988). *The development of expertise in pedagogy*. Washington, DC: AACTE Publications.
- Berliner, D. C. (2002). Comment: Educational research: The hardest science of all. *Educational Researcher*, 31(8), 18-20.
- Blomberg, G., Renkl, A., Gamoran Sherin, M., Borko, H., & Seidel, T. (2013). Five research-based heuristics for using video in pre-service teacher education. *Journal for Educational Research Online*, 5(1), 90-114.
- Brooks, J.G., & Brooks, M.G. (1993). *In search of understanding: The case for constructivist classrooms*. Alexandria, VA: ASCD.
- Brophy, J. (Ed.) (1988). Advances in research on teaching, Vol.1: Teaching for meaningful understandings and self-regulated learning. Greenwich, CT: JAI Press.
- Brouwer, N., & Korthagen, F. (2005). Can teacher education make a difference? *American Educational Research Journal*, 42(1), 153-224.
- Brown, S.W. (2005). Emily and Rebecca: A tale of two teachers. *Teaching and Teacher Education*, 21, 637-648.
- Bruner, J. (1960/1977). The process of education. Cambridge, MA: Harvard University Press.
- Carroll, D.M., Featherstone, H., Featherstone, J., Feiman-Nemser, S., & Roosevelt, D. (2007). *Transforming teacher education: Reflections from the field.* Cambridge, MA: Harvard Education Press.
- Cherryholmes, C. (1994). Pragmatism, post-structuralism, and socially useful theorizing. *Curriculum Inquiry*, 24(2), 195-213.
- Cohen, D.K. (1988). Teaching practice: Plus ca change. In Philip W. Jackson (Ed.), *Contributing to educational change: Perspectives on research and practice* (pp. 27-84). Berkeley, CA: McCutchan.

- Cohen, D. K. (2011). Teaching and its predicaments. Cambridge, MA: Harvard University Press.
- Collins, A., Brown, J.S., & Newman, S.E.(1989). Cognitive apprenticeship: Teaching the craft of reading, writing, and mathematics. In L.B. Resnick (Ed.), *Knowing, learning and instruction: Essays in honor of Robert Glaser* (pp. 453-494). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Corbin, J. M., & Strauss, A. (1990). Grounded theory research: Procedures, canons, and evaluative criteria. *Qualitative Sociology*, *13*(1), 3-21.
- Cronbach, L.J. (1975). Beyond the two disciplines of scientific psychology. *American Psychologist*, *30*, 116-127.
- Darling-Hammond, L., & Snyder, J. (2000). Authentic assessment of teaching in context. *Teaching and Teacher Education*, 16(5), 523-545.
- Davis, E. A., Petish, D., & Smithey, J. (2006). Challenges new science teachers face. *Review of Educational Research*, 76(4), 607-651.
- Dewey, J. (1902/1990). The child and the curriculum. Chicago, IL: University of Chicago Press.
- Dewey, J. (1904/1967). The relation of theory to practice in education. In R.D. Archambault (Ed.), *John Dewey on education: Selected writings*. Chicago, IL: University of Chicago Press.
- Dewey, J. (1929). The quest for certainty. New York, NY: Putnam.
- Dewey, J. (1938). Experience and education. New York, NY: Coller Books.
- Dewey, J. (1980). The school and society (Vol. 151). Carbondale, IL: Southern Illinois Press.
- Dewey, J. (2004). Democracy and education. Mineola, NY: Courier Corporation.
- Duckworth, E. (1987/2006). *The having of wonderful ideas and other essays on teaching and learning*. New York, NY: Teachers College Press.
- Erickson, F. (1986). Qualitative methods in research on teaching. In Wittrock, M. C. (Ed.), *Handbook of research on teaching* (pp. 119-161). Washington, D. C.: American Educational Research Association.
- Ernest, J. (1999). *Teachers' and family members' subjective beliefs about developmentally appropriate and developmentally inappropriate practices*. Dissertation: PhD, University of Alabama at Birmingham.

- Feiman-Nemser, S., & Buchmann, M.B. (1987). When is student teaching teacher education? *Teaching and Teacher Education*, *3*(4), 255-273.
- Fosnot, C.T. (Ed.) (1996). *Constructivism: Theory, perspectives, and practice*. New York, NY: Teachers College Press.
- Frederiksen, J. R., Sipusic, M., Sherin, M., & Wolfe, E. W. (1998). Video portfolio assessment: Creating a framework for viewing the functions of teaching. *Educational Assessment*, 5(4), 225-297.
- Fuller, F. F. (1969). Concerns of teachers: A developmental conceptualization. *American Educational Research Journal*, *6*, 201-226.
- Fuller, F. F. (1970). *Personalized education for teachers. An introduction for teacher educators*. Austin, TX: Research and Development Center for Teacher Education, the University of Texas at Austin.
- Fuller, F. F., & Brown, 0. H. (1975). Becoming a teacher. In K. Ryan (Ed.), *Teacher education* (Seventy-fourth Yearbook of the National Society for the Study of Education, pp. 25-52). Chicago: University of Chicago Press.
- Gardner, H. (1994). Educating for understanding. Phi Delta Kappan, 563-566.
- Glaser, B.G. & Strauss, A.L. (1967). The discovery of grounded theory. Chicago, IL: Aldine.
- Goldberg, S. M., & Pesko, E. (2000). The Teacher Book Club. *Educational Leadership*, 57(8), 39-41.
- Gredler, G. R. (1997). Issues in early childhood screening and assessment. *Psychology in the Schools*, 34(2), 99-106.
- Greene, M. (1971). Curriculum and consciousness. *Teachers College Record*, 73(2), 253-269.
- Grossman, P. L. (1992). Why models matter: An alternate view on professional growth in teaching. *Review of Educational Research*, 171-179.
- Grossman, P. L. (1992). Teaching and learning with cases: Unanswered questions. *Case Methods in Teacher Education*, 227-239.
- Harrison, W.D. (1994). The inevitability of integrated methods. In Sherman, E., & Reid, W.J. (Eds.) *Qualitative research in social work*. New York, NY: Columbia University Press.
- Hawkins, D. (1976). *The Informed Vision: Essays on Learning and Human Nature*. New York, NY: Agathon Press.

- Head, F.A. (1992). Student teaching as an initiation into the teaching profession. *Anthropology and Education Quarterly*, 23(2), 89-107.
- Hiebert, J., Gallimore, R., & Stigler, J. W. (2002). A knowledge base for the teaching profession: What would it look like and how can we get one? *Educational Researcher*, 31(5), 3-15.
- Hollingsworth, S. (1989). Prior beliefs and cognitive change in learning to teach. *American Educational Research Journal*, 26(2), 160-189.
- Holmes Group (1986). *Tomorrow's teachers: A report of the Holmes Group*. East Lansing, Michigan: Author.
- Holmes Group (1990). *Tomorrow's schools: Principles for the design of professional development schools.* East Lansing, Michigan: Author.
- Kagan, D. M. (1992). Professional growth among pre-service and beginning teachers. *Review of Educational Research*, 62(2), 129-169.
- Kierkegaard, S., Hong, E. H., & Malantschuk, G. (1967). Søren Kierkegaard's Journals and Papers. Edited and Translated by Howard V. Hong and Edna H. Hong. Bloomington, IN: Indiana University Press.
- Lampert, M. (2003). *Teaching problems and the problems of teaching*. New Haven, CN: Yale University Press.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge, UK: Cambridge University Press.
- Leinhardt, G. (1992). What research on learning tells us about teaching. *Educational Leadership*, 49, 20-25.
- Levin, D.M., Hammer, D., & Coffey, J.E. (2009). Novice teachers' attention to student thinking. *Journal of Teacher Education*, 60(2), 142-154.
- Little, J. (1990). The persistence of privacy: Autonomy and initiative in teachers' professional relations. *Teachers College Record*, *91*(4), 509-536.
- Loneck, B. (1994). Practitioner-researcher perspective on the integration of qualitative and quantitative research methods. In Sherman, E., & Reid, W.J. (Eds.), *Qualitative research in social work*. New York, NY: Columbia University Press.
- Lortie, D.C. (1975). *Schoolteacher: A sociological study*. Chicago, IL: University of Chicago Press.
- Loughran, J. J. (2006). Developing a pedagogy of teacher education: Understanding teaching and learning about teaching. New York, NY: Routledge.

- Mathison, S. (1988). Why triangulate? *Educational Researcher*, 17(2), 13-17.
- Meier, D. (1995/2002). The power of their ideas: Lessons for America from a small school in Harlem. Boston, MA: Beacon Press.
- Merriam, S.B. (1998). *Qualitative research and case study applications in education*. San Francisco, CA: Jossey-Bass.
- Merseth, K. K., & Lacey, C. A. (1993). Weaving stronger fabric: The pedagogical promise of hypermedia and case methods in teacher education. *Teaching and Teacher Education*, 9(3), 283-299.
- National Board for Professional Teaching Standards (NBPTS). 1994. *Early adolescence/English language arts standards for national board certification*. Washington, D.C.: National Board for Professional Teaching Standards.
- Paley, V.G. (1988). On listening to what the children say. In Broderick, M., Chazan, D.I., Lawrence, S.M., Naso, P.A., & Starnes, B.A. (Eds.) *For teachers about teaching*. Harvard Educational Review Series No. 20, pp.5-14.
- Perkins, D., & Blythe, T. (1994). Putting understanding up front. *Educational Leadership*, 51(5), 4-7.
- Perrone, V. (1994). How to engage students in learning. *Educational Leadership*, 5(4), 11-13.
- Peshkin, A. (1993). The goodness of qualitative research. *Educational Researcher*, 22(2), 23-29.
- Phillips, D.C. (1995). The good, the bad, and the ugly: The many faces of constructivism. *Educational Researcher*, 24(7), 5-12.
- Piaget, J. (1952). *The origins of intelligence in children*. New York, NY: International Universities Press.
- Prawat, R.S. (1989). Teaching for understanding: Three key attributes. *Teaching and Teacher Education*, 5(4), 315-328.
- Prawat, R.S. (1992). Teachers' beliefs about teaching and learning: A constructivist perspective. *American Journal of Education*, 100(3), 354-395.
- Resnick, L. B. (1989). Developing mathematical knowledge. American Psychologist, 44(2), 162.
- Richardson, V. (1997). Constructivist teacher education. London, UK: Falmer Press.
- Rogan, J.M., Borich, G.D., & Taylor, H.P. (1992). Validation of the stages of concern questionnaire. *Action in Teacher Education*, *14*(2), 43-49.

- Rogoff, B. (1990). *Apprenticeship in thinking: Cognitive development in social context*. Oxford, UK: Oxford University Press.
- Rosaen, C.L., & Schram, P. (1998). Becoming a member of the teaching profession: Learning a language of possibility. *Teaching and Teacher Education*, *14*(3), 283-303.
- Rust, F. (2009). Teacher research and the problem of practice. *Teachers College Record*, 111(8), 1882-1893.
- Sahlberg, P. (2011). Finnish lessons. New York, NY: Teachers College Press.
- Sanders, J.R. (1981). Case study methodology: A critique. In W.W. Welsh (Ed.), *Case study methodology in educational evaluation*. Proceedings of the 1981 Minnesota Evaluation Conference. Minneapolis: Minnesota Research and Evaluation Center.
- Schulz, R., & Mandzuk, D. (2005). Learning to teach, learning to inquire: A 3-year study of teacher candidates' experiences. *Teaching and Teacher Education*, 21, 315-331.
- Schwartz, B. (2015). Intellectual virtues. The Chronicle of Higher Education, LXI (39).
- Sherin, M. G. (2000). Viewing teaching on videotape. *Educational Leadership*, 57(8), 36-38.
- Sherin, M. G., & Han, S. Y. (2004). Teacher learning in the context of a video club. *Teaching and Teacher Education*, 20(2), 163-183.
- Sherin, M., & van Es, E. (2005). Using video to support teachers' ability to notice classroom interactions. *Journal of Technology and Teacher Education*, 13(3), 475-491.
- Sherman, E., & Reid, W.J. (1994). *Qualitative research in social work*. New York, NY: Columbia University Press.
- Shulman, L.S. (1987). Knowledge and teaching: Foundations of the new reform. *Harvard Education Review*, *57*, 1-22.
- Simon, H.A. (1969). The sciences of the artificial. Cambridge, MA: MIT Press.
- Simmons, R. (1994). The horse before the cart: Assessing for understanding. *Educational Leadership*, *51*(5), 22-23.
- Stigler, J. W., & Hiebert, J. (2009). The teaching gap: Best ideas from the world's teachers for improving education in the classroom. PLACE: Simon and Schuster.
- Strauss, A. L., & Corbin, J. M. (1990). Basics of qualitative research. Newbury Park, CA: Sage.

- Taylor, M. D. (1976). *Roll of thunder, hear my cry (Puffin Modern Classics)*. New York, NY: Dial Press.
- Tochon, F. V. (1999). Video study groups for education, professional development, and change. Madison, WI: Atwood Pub.
- Toseland, R.W. (1994). The qualitative/quantitative debate: Moving beyond acrimony to meaningful dialogue. In Sherman, E., & Reid, W.J. (Eds.), *Qualitative research in social work*. New York: Columbia University Press.
- Valli, L. (1992). Beginning teacher problems: Areas for teacher education improvement. *Action in Teacher Education*, *14*(1), 18-25.
- Van Maanen, J. (1988/2011). *Tales of the field: On writing ethnography*. Chicago, IL: University of Chicago Press.
- van Manen, M. (1990). *Researching lived experience*. Albany, NY: State University of New York Press.
- van Manen, M. (1991). *The tact of teaching: The meaning of pedagogical thoughtfulness*. Albany, NY: State University of New York Press.
- Veenman, S. (1984). Perceived problems of beginning teachers. *Review of Educational Research*, 54(2), 143-178.
- Voithofer, R. (2005). Designing new media education research: The materiality of data, representation, and dissemination. *Educational Researcher*, 34(9), 3-14.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- White, J.J. (1989). Student teaching as a rite of passage. *Anthropology and Education Quarterly*, 20(3), 177-195.
- Wideen, M., Mayer-Smith, J., & Moon, B. (1998). A critical analysis of the research on learning to teach: Making the case for an ecological perspective on inquiry. *Review of Educational Research*, 68(2), 130-178.
- Wilson, G., & I'Anson, J. (2006). Reframing the practicum: Constructing performative space in initial teacher education. *Teaching and Teacher Education*, 22(3), 353-361.
- Windschitl, M. (2002). Framing constructivism in practice as the negotiation of dilemmas: An analysis of the conceptual, pedagogical, cultural, and political challenges facing teachers. *Review of Educational Research*, 72(2), 131-175.

- Wiske, M.S. (1994). How teaching for understanding changes the rules in the classroom. *Educational Leadership*, 55(4), 19-21.
- Wiske, M.S. (Ed.) (1998). *Teaching for understanding: Linking research and practice*. San Francisco, CA: Jossey-Bass Publishers.
- Yin, R. (1994). Case study research: Design and methods. Beverly Hills, CA: Thousand Oaks.
- Zeichner, K., & Gore, J. (1989). *Teacher socialization*. East Lansing, MI: National Center of Research on Teaching and Learning.