

Georgia State University
ScholarWorks @ Georgia State University

Early Childhood and Elementary Education
Dissertations

Early Childhood and Elementary Education
Department

1-10-2014

A Case of a Situative Model for Professional Learning

April K. DeGennaro
Georgia State University

Follow this and additional works at: https://scholarworks.gsu.edu/ece_diss

Recommended Citation

DeGennaro, April K., "A Case of a Situative Model for Professional Learning." Dissertation, Georgia State University, 2014.
https://scholarworks.gsu.edu/ece_diss/19

This Dissertation is brought to you for free and open access by the Early Childhood and Elementary Education Department at ScholarWorks @ Georgia State University. It has been accepted for inclusion in Early Childhood and Elementary Education Dissertations by an authorized administrator of ScholarWorks @ Georgia State University. For more information, please contact scholarworks@gsu.edu.

ACCEPTANCE

This dissertation, A CASE OF A SITUATIVE MODEL FOR PROFESSIONAL LEARNING, by APRIL KECK DEGENNARO, was prepared under the direction of the candidate's Dissertation Advisory Committee. It is accepted by the committee members in partial fulfillment of the requirements for the degree Doctor of Philosophy in the College of Education, Georgia State University.

The Dissertation Advisory Committee and the student's Department Chair, as representatives of the faculty, certify that this dissertation has met all standards of excellence and scholarship as determined by the faculty. The Dean of the College of Education concurs.

Caitlin McMunn Dooley, Ph.D.
Committee Chair

Julie Rainer Dangel, Ph.D.
Committee Member

Janice B. Fournilier, Ph.D.
Committee Member

Barbara Meyers, Ed.D.
Committee Member

Date

Barbara Meyers, Ed.D.
Chair, Department of Early
Childhood Education

Paul Alberto, Ph.D.
Interim Dean
College of Education

AUTHOR'S STATEMENT

By presenting this dissertation as a partial fulfillment of the requirements for the advanced degree from Georgia State University, I agree that the library of Georgia State University shall make it available for inspection and circulation in accordance with its regulations governing materials of this type. I agree that permission to quote, to copy from, or to publish this dissertation may be granted by the professor under whose direction it was written, by the College of Education's director of graduate studies and research, or by me. Such quoting, copying or publishing must be solely for scholarly purposes and will not involve potential financial gain. It is understood that any copying from or publication of this dissertation which involves potential financial gain will not be allowed without my written permission.

April Keck DeGennaro

NOTICE TO BORROWERS

All dissertations deposited in the Georgia State University library must be used in accordance with the stipulations prescribed by the author in the preceding statement. The author of this dissertation is

April Keck DeGennaro
345 Inverness Shores Drive
Fayetteville, GA 30215

The director of this dissertation is

Caitlin McMunn Dooley, Ph. D.
Department of Early Childhood Education
College of Education
Georgia State University
Atlanta, GA 30303-3083

CURRICULUM VITAE

April Keck DeGennaro

ADDRESS: 345 Inverness Shores Drive
Fayetteville, GA 30215

EDUCATION: Ph. D. 2013 Georgia State University
Early Childhood Education,
M. T. 1987 University of Virginia
Curriculum, Instruction, Special Education
B. A. 1983 University of Virginia
English
Rhetoric & Communication

TEACHING CERTIFICATES

N, K-8 Teaching Certificate, Virginia 1987, SPED Endorsement
N, K-8 Teaching Certificate, Hawaii 1995, SPED Endorsement
N, K-8 T6 Teaching Certificate, Georgia 1997, Early Childhood Specialist, Gifted
Endorsement

PROFESSIONAL EXPERIENCE

2005-present Research and Teaching Doctoral Fellow
Georgia State University, Atlanta Georgia

2000-present Enrichment Teacher (Gifted Education),
Fayette County Schools, Fayetteville, GA

1989-2000 3rd Grade Teacher
Peeples Elementary, Fayetteville, GA
Pohakea Elementary, Eva Beach, HI
Burnley Moran Elementary, Charlottesville, VA

1987-1995 Clinical Instructor, Curry School of Education,
Technology Institute Faculty, University of Virginia,
Charlottesville, Virginia

1989-1995 Field Experience Supervisory Teacher
University of Virginia, Charlottesville, Virginia

PUBLICATIONS

DeGennaro, A. K. (2012). BOOK REVIEW: Young investigators: The project approach
in the Early Years. (ISBN: 978-8077-5153-4). *Journal of Experiential Education*,
35(1), 305-306. DOI: 10.5193/JEE35.1.305.

DeGennaro, A. K. (2006) "Hard Science" for Gifted 1st Graders. *Understanding our
Gifted*, Fall, 21-22.

Mason, M. & Keck, A.R. (1995). Ramona and the fruit flies: An interdisciplinary
approach. *Journal of National Council of Teachers of Mathematics*, 1(6), 72-80.

RECENT PRESENTATIONS

DeGennaro, A. K. (Nov. 2012) Socratic Teaching and Critical Reflection. National
Association of Gifted Children Convention, Denver, CO. Georgia Association of
Gifted Children Convention, Athens, GA (Mar. 2013).

DeGennaro, A. K. (Nov. 2012). Valued & Engaged: Why Facebook Is So Popular.
National Association of Gifted Children Convention, Denver, CO. Georgia
Association of Gifted Children Convention, Athens, GA (Mar. 2013).

DeGennaro, A. K. (Nov. 2011). Service learning: An experiential instructional strategy that teaches more than standards. National Association of Gifted Children Convention, New Orleans, LA. Georgia Association of Gifted Children Convention, Calloway Gardens, GA (2012-invited presenter)

DeGennaro, A. K. (Nov. 2011). It sounded so good at conference: A journey to implement Socratic seminars in elementary school. National Association of Gifted Children Convention, New Orleans, LA. Georgia Association of Gifted Children Convention, Calloway Gardens, GA (Mar. 2012-invited presenter)

DeGennaro, A. K. (November, 2011). Going to graduate school in gifted education: Choosing a program, surviving and succeeding. National Association of Gifted Children Convention, New Orleans, LA (national)

PROFESSIONAL SERVICE

2005-2010 Manuscript Reviewer, *Corwin Press*

ACADEMIC AND PROFESSIONAL HONORS

2009 Fayette Gamma Nu Chapter of *Kappa Delta Gamma*

2008 Margaret O. Bynum Scholarship Award, *Georgia Association of Gifted Children*

2002 Atlanta Journal Constitution State Elementary Honor Teacher of the Year

1995 Teacher of the Year, Curry School of Education, University of Virginia

1993 Phi Delta Kappa Outstanding Elementary School Teacher of the Year

1993 Electronic Learning Magazine, National Merit Winner, Technology Teacher of the Year

1989 Omicron Delta Kappa Leadership Society, University of Virginia

1979 Alpha Lambda Delta Freshman Honor Society, University of Georgia

SELECTED GRANTS

2012 Panasonic Community Grant Award (\$5,000)

2010 Fayette, Coweta EMC "Bright Ideas" (\$1,500)

2001 NASA Christa McAuliffe Education Workshop, Kennedy Space Center, June 2001 (Former "Teacher in Space" program)

1995 National Science Foundation (NSF) Teachers Experiencing Antarctica Grant Program Recipient (6 week experience to South Pole, Antarctica <http://quest.nasa.gov/antarctica/tg/program3.html>)

PROFESSIONAL AFFILIATIONS

2000-present Georgia Association for Gifted Children
State Membership Co-Chairman, 2007-2009

2000-present National Association of Gifted Children
National Program Committee, 2007-2008
Graduate Student Committee, 2009-present

COMMUNITY SERVICE

2004- 2010. American Cancer Society, Fayette Relay for Life, Board of Directors; Relay for Life School Team Captain.

ABSTRACT

A CASE OF A SITUATIVE MODEL FOR PROFESSIONAL LEARNING

by

April Keck DeGennaro

A sociocultural ontology forms the foundation for this grounded theory ethnography describing how teachers in a U.S. elementary school changed professional learning from a “training model” to a “situative model.” Findings answer the research question: How does the introduction of a situative model influence the process of teacher learning and professional development? A practitioner researcher stance and emic perspective facilitated an iterative analysis of 42 veteran teachers during the first-year implementation of a situative professional learning model called Teacher Communities of Learning (TCLs). Data collection included a repeated questionnaire, participant observations with field notes, and audio transcripts of TCL meetings. Formal and informal interviews provided opportunities for triangulation of data and theory development. ATLAS.ti assisted a constant comparative analysis process. Findings include a description of teachers’ participation in TCLs, influences on participation (e.g., roles, care, reflection), responses to TCLs among Suntree teachers, and shifts that occurred during the academic year as TCLs were introduced. The role of practitioner research in school and teacher change processes, the process of negotiation during situative learning, and differences in teachers’ roles and responses to TCLs are discussed. This research promotes a model for understanding how reflection and enaction account for teacher change and the importance of an ethic of care on formation of a professional community of learners.

A CASE OF A SITUATIVE MODEL FOR PROFESSIONAL LEARNING

by
April Keck DeGennaro

A Dissertation

Presented in Partial Fulfillment of Requirements for the
Degree of
Doctor of Philosophy
in
Early Childhood Education
in
the Department of Early Childhood Education
in
the College of Education
Georgia State University

Atlanta, GA
2013

Copyright by
April Keck DeGennaro
2013

ACKNOWLEDGMENTS

“It is the time you have wasted for your rose that makes your rose so important.”

Antoine de Saint-Exupéry, *The Little Prince*

I am grateful for my husband Rio. Getting to live with, love, and laugh with your best friend is an incredible luxury. At my most panicked and narcissistic moments, you were patient and kind - everything love is supposed to be.

I wish to thank my dissertation committee, Dr. Sarah Bridges-Rhoads, Dr. Janice B. Fournillier, Dr. Julie Ranier Dangel, and Dr. Barbara Meyers. I am so grateful to each one of you for your patience and guidance along the way. Barbara, thank you particularly for joining my committee near the end of my dissertation journey. Above all, I want to thank Dr. Caitlin McMunn Dooley. I feel humbled and honored by the patience, dedication, and wisdom you shared with me. You have my deepest thanks and highest admiration. You made a difference in my life. If you ever need anything, just call. I owe you that level of reciprocation. You are the best advisor – ever.

To Susan, for never letting me give up and for pretending this research was the most scintillating topic of endless conversations. You were delusional when you said, “You can do this. How hard can it be?” Yet, I am forever grateful to you for believing in me even when I didn’t believe in myself.

To Ann, it is hard to put into words the powerful effect you have had on me. Without your generous attention and mentoring, I could not have done this. Thank you for graciously providing propriety, wise counsel, and editing-on-demand. Thank you for being my friend.

To the best cohort of doctoral friends ever! Bonnie, Monica, and Jennifer, you kept me sane. Bonnie, you made reading drafts, and endless attempts to become a scholarly writer, not only bearable, but enjoyable. Monica, your insistence that ATLAS.ti was a good fit for my data helped me navigate this project through the roughest waters. Jennifer, you and I are bound for life. Without you, I would not have made it. Thank you for your time, humor, and care. The thorns of my rose were no match for your wisdom and wit.

And finally, I owe an amazing debt of gratitude to the colleagues, friends, and family at my elementary school. Erin, you are amazing. I stand in a long line of people who admire you. To every one of my colleagues - your courage, dedication, and daily commitment to being the best inspire me. This research let me see you in new ways and uncover hidden treasures of our shared world. The work you do is vitally important. To be able to learn deeply about the amazing things each of you do every minute of each day to improve your teaching was an honor. Thank you.

TABLE OF CONTENTS

	Page
List of Tables.....	vi
List of Figures.....	vii
Abbreviations.....	viii
Chapter	
1. INTRODUCTION	1
Statement of the Problem.....	1
Situative Model	2
Background	5
Research Questions	15
Defining of Terms	16
2. THEORETICAL FRAMEWORK AND LITERATURE REVIEW	18
A Sociocultural and Social Constructivist Theoretical Framework.....	18
Influence of Culture	30
Literature Review	33
3. RESEARCH DESIGN	50
Methodology	50
Methods.....	61
4. FINDINGS	84
How do teachers participate in TCLs?	84
What influences teachers' participation/nonparticipation in TCLs?.....	101
How do teachers respond to the process of change over time in the delivery model of their professional learning?	117
What kinds of shifts in professional learning practice (large and small) occur through participation in TCLs?.....	120

5. DISCUSSION AND IMPLICATIONS	130
How does the introduction of a situative model influence the process of teacher learning and professional development?	131
Implications	137
Conclusion.....	154
References.....	156
Appendixes	171

LIST OF TABLES

Table	Page
1 Participation Description	62
2. Participation Commitment.....	64
3 Data Sources	66
4 Phases of Data Collection	72
5 Timeline of Data collection	73

LIST OF FIGURES

Figure	Page
1 Journey to TCLs.....	12
2 The interconnected model of professional growth.....	47
3 Room Configuration	65
4 First cycle grounded theory model.....	78
5 First cycle and second cycle coding methods.....	79
6 Revised interconnected model for Suntree.....	139
7 Greater learning power of TCLs.....	141

ABBREVIATIONS

BYOT	Bring Your Own Technology
CCGPS	Common Core Georgia Performance Standards
E-SPLOST	Special-Purpose-Local-Option-Sales-Tax
IST	Instructional Support Teacher
NSDC	National Staff Development Council
NTGL	New to grade level
NWP	National Writing Project
PARCC	Partnership for Assessment Readiness for College and Careers
PE	Physical Education
PLC	Professional Learning Community
RTGL	Returning to grade level
RTI	Response to Intervention
SCOPE	Stanford Center for Opportunity Policy in Education
TCL	Teacher Community of Learners

CHAPTER 1

INTRODUCTION

The purpose of this study is to analyze a site-based initiative to change the delivery method and type of learning facilitated during professional learning time in an elementary school. Suntree Elementary (all names are pseudonyms) faculty members had become dissatisfied with staff development over the past few years. Generally, staff development occurred for 90 minutes on Wednesday afternoons, after the students left. Teachers reported to the media center or cafetorium (a room unique to schools where both lunch and assemblies occur, hopefully not simultaneously). In years past, Suntree's teachers sat quietly on forward-facing benches, listened to the principal, or others of reputed "expertise" dispense information designed to improve teachers' professional knowledge. In the 2012-2013 school year, a different model of professional development was introduced: *teacher community of learners (TCL)*.

Statement of the Problem

Professional learning is a significant part of educational reform efforts across the U.S. (Borko, Elliott & Uchiyama, 2002; Cochran-Smith & Lytle, 2009; Darling-Hammond & McLaughlin, 2011; Desimone, 2011; Findley, 2000; Lieberman & Grolnick, 1998; Lieberman & Mace, 2008; Sykes, 1996). Substantial agreement exists that successful professional learning delivery models consist of teachers engaged in socially organized learning activities using knowledge as a form of participation (Borko, 2004; Darling-Hammond & McLaughlin, 2011; Darling-Hammond & Richardson, 2009; Darling-Hammond, Wei, & Adamson, 2010; Darling-Hammond, Wei, Andree, Richardson, & Orphanos, 2009; Desimone, 2009; Flint, Zisook, & Fisher, 2011; Jaquith,

Mindich, Wei, & Darling-Hammond (2010); Lieberman & Mace, 2008; Vescio, Ross & Adams, 2008). Effective professional learning results in (1) improvements in teacher knowledge and practice, (2) changes to teacher expectations for student achievement, (3) increases in teacher enjoyment and willingness to participate in professional learning, and (4) the development of strong communities that foster long-term learning and professionalism (Avalos, 2011). The learning environments teachers provide often reflect their own experiences with schooling (Lortie, 1975). The history of U.S. schools shows a preference for hierarchical structure designating the teacher as the leader of the classroom and the person who most often provides information to students. The U.S. educational system is a product of a society and a culture that is deeply embedded in transmission models of learning (Brown, 1994; Rogoff, 1990). In transmission models, information is presented followed by a test to see if transmission occurred (Rogoff, 1994). Although calls for reforming education generally include reform of professional learning, reform is often targeted at teachers, but teachers generally have little input into their own professional learning (Borko, Elliott, & Uchiyama, 2002; Findley, 2000; Hargreaves, 1996, 1998; Sykes, 1996). What is missing from the literature is documentation of the process that occurs as teachers and schools move from traditional transmission models of staff development to situated professional learning models. What happens when a school changes the professional learning format?

Situative Model

The term teacher community of learners (TCL) is an adaptation of Rogoff's (1994) description of classrooms and schools that create situated learning environments called *communities of learners*. "The idea of a community of learners is based on the

premise that learning occurs as people participate in shared endeavors with others, with all playing active but often asymmetrical roles in sociocultural activity” (Rogoff, 1994, p. 209). The current professional learning literature identifies professional learning communities (PLCs) as an effective model for encouraging teachers to rethink their practice resulting in teaching that supports national reform efforts calling for more situative forms of teaching and learning (Darling-Hammond & McLaughlin, 2010). Similarly, both TCLs and PLCs assume that knowledge is situated in the milieu of teaching (Borko, 2004; Putnam & Borko, 2000), that learning occurs through social interaction with others (Rogoff, 1990), and that engaged participation will improve teacher and student learning (Vescio, et al., 2008).

This research uses the new term TCL in recognition of the extensive descriptions of PLCs that adhere to a specific set of characteristics and assumptions that may or may not be indicative of the professional learning groups formed by the teachers in this study. Therefore, to identify the model of professional learning attained by this study as a PLC might be premature. Likewise, the use of teacher community of learners (TCLs) respects criticism that “the term [PLC] has been used so ubiquitously that it is in danger of losing all meaning” (DuFour, 2004, p. 6).

As well, the Suntree teachers rejected formal structures often included in common PLCs such as meeting formats and protocols for specific discussions and activities to promote community. Much of the professional learning literature describes successful implementation of PLCs through structured models such as Teacher Study Groups (Birchak, Connor, Crawford, Kahn, Kaser & Short, 1998) or Critical Friends Groups

(McKenzie & Reardon, 2003). These models were rejected by Suntree teachers on annual evaluations asking for suggestions for future professional learning activities.

My study focused on what teachers did during professional learning rather than on any particular organizational structures of their meetings. Desimone (2009) cautions that research should not focus on the structure of professional learning, but rather on the conceptual features of successful endeavors. The benefits of professional learning are not derived from implementing a particular model. Studying the processes that occur during the use of a situative model for professional learning at Suntree aligns with Desimone's (2009) conclusions.

This practitioner research study followed an ethnographic methodology and used an emic perspective that was inherent to practitioner research (Cochran-Smith & Lytle, 2009). This study is a year-long grounded theory analysis of how teachers establish, participate in, and respond to TCLs. Situative professional learning consists of meaningful contexts where teachers engage and participate in a process of "becoming knowledgeable in and about teaching" (Borko, 2004, p. 4). Suntree teachers requested professional learning that allowed them to work with colleagues to improve their teaching. This study documented the impact of introducing a situative model on the process of teacher learning and professional development at Suntree Elementary.

This chapter continues with a short narrative that reveals the context of the school and the reasons this research is important to me as an education practitioner. Subsequent sections of this first chapter explain the school's professional learning goals, describe Suntree's experimentation with professional development models in the previous three years, and define important terms. Chapter two contains an extensive explanation of the

sociocultural theoretical framework and constructivist theories of learning that form the ontological and epistemological foundations for the study, followed by a review of the contemporary literature on professional learning that forms the foundation for my work. Chapter three explains the research design. Chapter 4 presents the findings to each research question. Chapter 5 contains discussion and implications for this work.

Background

In this section, I begin with a personal narrative that provides the context of the study including the economic disinvestment that took place across the nation at the same time the state effected new curriculum standards and the district installed new technology equipment. I explain how these factors motivated Suntree to set goals for professional learning and change its professional development model. The section concludes with my role as a practitioner researcher.

Contextual Personal Narrative

I am a public school teacher and a practitioner researcher (Cochran-Smith & Lytle, 1999, 2009). The descriptor “practitioner research” recognizes the interdependence of my practice as a teacher with interests as a researcher detailed in the methods section. Like many at Suntree, I spend my summers reflecting on the past year of teaching and preparing for the next. Most of my teacher friends excitedly share all the new ideas, resources, and practices they learn over the summer. June and July are when teachers have choices in how and what they learn (Grossman, Wineburg, & Woolworth, 2001). During summer, many teachers seek informal learning experiences related to what we teach. For example, I went to Yellowstone and Grand Teton national parks during the

summer of 2012 because I teach my elementary students about the systems of the National Parks. Knowing that teachers are so actively involved in school activities during summers, I was not surprised one hot summer morning when my cell phone chirped with a text from my friend Teri who teaches in the classroom next door to me.

She wrote, "I just came from school...they paved the parking lot!"

"Really? You're kidding." I texted back.

Teri quickly wrote back. "Can you believe it?"

So what is the fuss? Why text about this? Parking lots need to be routinely maintained, no big deal. However, our school parking lot was in great shape and did not need paving. I received three other texts and had a similar conversation with another colleague that morning. When I checked that afternoon, an email from my principal explained to all staff that the county *had* to pave the school parking lot with money that was earmarked for only such expenditures.

The hidden context was that our school system was in dire financial straits and had cut positions, salaries, and benefits. To pave a perfectly good parking lot after cutting instructionally related aspects of funding caused frustration for Suntree's teachers and principal. Frustration like this pervaded the daily work of our school. During preplanning, Suntree teachers continually referred to the paving situation to illustrate their disgust over district spending. Other examples throughout the year included installing card readers on external doors, not replacing curriculum coordinator positions after retirements, and creating new hourly (and therefore non-benefitted) instructional positions. When one colleague reminded a group of us that the money for paving had to be spent or it would be lost, Teri replied, "I don't care! I'm sick of that excuse, too."

The superintendent of Suntree's district sent a letter to all employees the fifth day of school entitled, *Faculty and Staff Budget Letter*. The goal of the letter was to summarize the extent of reductions and to ask staff to provide input as to how the 2013-2014 budget could be reduced by an additional \$20 million. As my colleague Marge left that day, I wished her a good weekend. She commented that her husband Bill, who taught at an elementary school on the list for closure next year, had been visited by the Superintendent. Bill had sent her the superintendent's letter with his comments noted. She was not optimistic about a great weekend in their household.

Likewise, the majority of Suntree's teachers work where they live, have children attending the school system where they teach, and participate in community organized activities through local churches and civic groups. Therefore, disinvestment impacted Suntree teachers both professionally and personally; however, we were instructed by our principal to refrain from criticizing the actions of district policy makers when we talked with parents and with those outside the school system. The summer paving of the parking lot became but one example of the confusion and frustration over balancing a deficit budget. Many of my colleagues complained angrily to me that our school system could pave the parking lots but *still* close five local schools, furlough teachers, reduce the number of paid days, eliminate benefits, and *inadequately* support the professional learning of teachers. We later learned that the principal network was also abuzz about the parking lot paving. The local paper carried a headline announcing that the school system had a major public perception problem -- asking for community support for difficult budget cuts to staffing, transportation, employee benefits, and instructional services (i.e.

reduced student to teacher ratios) -- while finding money to pave perfectly good parking lots.

The bottom line is that the money could not be diverted elsewhere so the county used it to pave lots before they “lost” the pot of money. Frustrated over this vexing use of money bound by political practices, Suntree teachers were expected to design and conduct meaningful staff development with limited professional learning resources and even less funds than the previous year. Teachers do not have the political power to guide the money where they believe it is needed most (Hargreaves, 1996). And like it or not, every day as we entered the parking lot we were reminded of how powerless we as teachers are to control the political constraints on education (Cochran-Smith, 2005a).

Economic Disinvestment

Disinvestment in education is not unique to Suntree; financial challenges existed across the region, state, nation and world (Duncan-Andrade, 2009; Fine, 2012; Johnson, 2012; Martin, 2009) wearing down the quality of teachers’ day-to-day professional experience and significantly impacting communities (Duncan-Andrade, 2009). In 2012, \$1.1 billion was cut from state schools, and in my school’s district, \$14,645,764.00 disappeared from the budget (empoweredga.org). The letter from the superintendent quoted a loss of “more than \$11 million.” Suntree experienced a loss of more than just funding. In the last five years, enrollment decreased substantially, from a high of 850 students to 580. The staff declined from 65 certified teachers to just 42. As the county grew in the 1990’s, the school board avoided redistricting by increasing both the number of schools and increasing the size of existing facilities. In retrospect, these past policies have been publicly criticized as shortsighted and politically expedient rather than fiscally

responsible. In 2011, the local paper decried the number of empty classrooms listing them by school site. Before the district furloughed teachers, there was a drastic reduction in classified staff including paraprofessionals, custodians, and other support positions. The letter from the superintendent indicates additional reductions from classified staff for 2013-2014. Decreased funding introduces many dilemmas (Berg, 2012) and adjustments in expectations for teachers (Talbert, 2010).

Economic disinvestment became a catalyst for changing the professional learning culture at Suntree. Instead of perceiving economic disinvestment as a hardship, Suntree chose to seize economic disinvestment as an opportunity to structure professional learning at the school level without having to meet requirements and structural formats that often come attached to funding from district, state, and national sources. The limited cost of restructuring professional learning to TCLs provided professional learning that was perceived as more meaningful to teachers.

Suntree's professional learning budget was drastically reduced. Ten years ago, our county funded large groups of teachers to attend multi-day conferences in other cities and states. The district's professional development budget covered substitutes, hotel accommodations, and travel expenditures. Suntree's principal, Karen reported that the major source of professional learning money came from Suntree being named a "2011 School of Excellence" for being in the top 10 percent in the state as measured by assessments in reading and mathematics. The award money went directly into the professional learning budget (Appendix A) and it was used to pay for half-day substitutes to come into classrooms as teachers met in TCLs. Suntree is lucky to have a principal committed to finding positive solutions to educational dilemmas. Karen created a model

of professional learning that addressed district goals while providing a sustainable model for future professional learning experiences that was more meaningful for Suntree teachers.

Suntree's Professional Learning Goals

Suntree adopted the district goals as school goals. Increasing 21st century skills (including technology) and realigning instruction to the Common Core Georgia Performance Standards (CCGPS) became the goals for Suntree's professional learning. Suntree's professional learning goals contained an implicit expectation to maintain the high levels of student achievement for which the school is noted, and for which the district is reputed. Suntree teachers worked to revise curriculum to include "21st century skills" (Wagner, 2008) and to increase the use of interactive technology. Professional learning was designed to provide opportunities for teachers to identify strategies to incorporate the 7C's (cooperation, critical thinking, collaboration, creativity, civility, citizenship, and cents) while also revising instructional delivery to allow students to use 21st century technology in the context of their classrooms.

Similarly, emphasis on 21st century skills included learning to use new technology systems installed in every classroom as part of a Special-Purpose-Local-Option-Sales-Tax (E-SPLOST) passed in 2008. E-SPLOST initiatives at district and school level focused on the use of these technologies by students. The culture of transmission (Rogoff, 1994) prevalent at Suntree assumed that the teacher must be an expert in both of these areas to adequately transmit information to students. Increasing student participation and engagement in the 7 C's through the use of these technologies made Suntree's teachers uneasy. Suntree's staff asked for professional learning time to focus on

increasing teacher comfort with 21st century learning and technology. According to Darling-Hammond and Richardson (2009), Suntree's professional learning, centered on improving all students' 21st century learning skills, is an effective approach toward reforming education. Therefore, creating meaningful professional learning at Suntree is a step toward establishing a culture where active and engaged learning can thrive.

Overlaying these two professional learning goals was the knowledge that during this school year, teachers must modify existing curriculum based on the Georgia Performance Standards to implement the Common Core State Standards. According to the Georgia Department of Education website (www.georgiastandards.org), "The Common Core Georgia Performance Standards (CCGPS) provide a consistent framework to prepare students for success in college and/or the 21st century workplace. These standards represent a common sense next step from the Georgia Performance Standards (GPS)." Teachers at Suntree referred to this as CCGPS implementation. Teachers at Suntree requested large chunks of uninterrupted time to work with their grade level and support staff on these three substantial modifications to their teaching (21st Century Skills, technology, CCGPS). This was the impetus for TCLs.

Suntree's New Professional Learning Model

For three years, Karen had been experimenting with different delivery forms for professional learning (see Figure 1). Using a conference breakout format in 2009-2010, teachers chose between several 30-minute presentations occurring simultaneously and then repeated in the second 30-minutes. Teachers selected two sessions during the hour-long professional learning time. In addition to problems with uneven distribution of time,

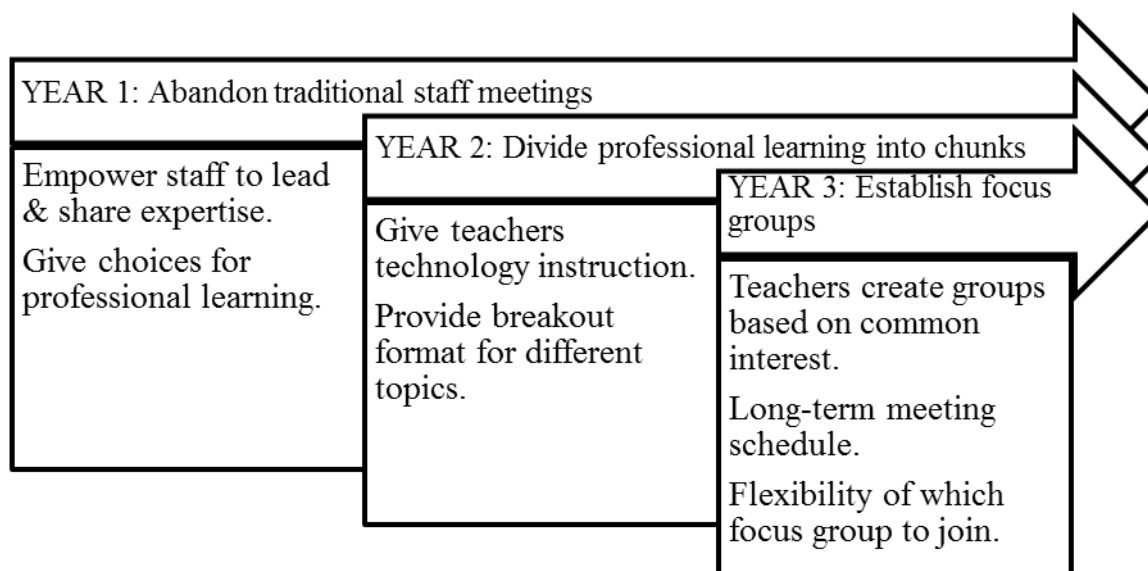


Figure 1. Journey to TCLs.

teacher feedback identified a lack of depth and coherence across sessions as problems with this model. In 2010-2011, Suntree teachers joined focus groups that were designed to meet for the full hour of professional learning time once per month after school. Groups decided upon an agenda and met monthly to engage in conversation about a particular topic (i.e., curriculum model, differentiation, bullying, etc.). Membership in groups was flexible such that a teacher could choose to join a different focus group at any time. Again, focus groups competed with other school business and other required training for time, often leaving a scant 15 minutes for meetings. Feedback from teachers indicated that this model was unrelated to practice, incoherent or repetitive due to group member attrition, and disconnected from district and school goals.

Starting in 2012-2013, Suntime teachers' contracted professional learning time occurred during a 90-minute meeting one day a month after school. Teachers also met once a month during grade-level planning for either technology training or instructional support for students "placed at risk." Optional professional learning was available on other afternoons after school. All professional learning occurred in somewhat flexible grade-level groups, a typical format for elementary school teachers (Talbert, 2010).

To be deemed a successful initiative, TCLs needed to provide a different quality of professional learning for Suntime teachers. Some teachers who participated in TCLs were able to recognize a difference in the quality of their learning immediately, some were not. Rogoff (1990) describes the difficulty that people have as they discover the hidden patterns of knowledge creation that emerge through social learning experiences. This study analyzed what happened when Suntime teachers who had been successfully acculturated to learn and teach through transmission models were provided with sociocultural-based learning opportunities. Would Suntime teachers be able to recognize, engage in, and value a professional learning model based in sociocultural assumptions of learning? The actions and interactions of teachers as they worked to reach the goals they delineated was the focus of my research.

My Role as Practitioner Researcher

As a faculty member and part of the professional learning community of Suntime, I have described the processes that occurred at Suntime during a time when little guidance, support and resources came from the district level. I am a cultural insider at Suntime, part of the team. My practitioner researcher stance is inherently an emic stance (DeWalt & DeWalt, 2011) where I am "the native informant and observer" (p. 17).

Specifically I used professional learning practice as a site for research (Cochran-Smith & Lytle, 2009). As the principal and teachers of Suntime endeavored to create high-quality, meaningful, and rigorous professional learning in the midst of our county's continued economic disinvestment; I observed, analyzed, and tried to understand our efforts.

Although I studied changes in my school, I did not focus on my own efforts to develop as a teacher. Rather, my work was inquiry-oriented and took advantage of my position as a learner within a community of teacher learners (Cochran-Smith & Lytle, 2009). I have a deep respect for the individual efforts and wisdom of my peers. The goal of this study was not to assess teachers' actions, evaluate their ideas (or lack thereof), or document the success (or failure) of their professional learning activities. I simply wanted to observe and describe what happened when teachers participated in a new professional learning model that allowed for opportunities to learn with their peers during formal professional learning time. I wanted to understand the process of implementing a situative model of professional learning. In light of my status as a member of the staff and my experience with the professional literature, I had an opportunity to contribute new knowledge about the processes of change in teachers and professional learning that is often cited as the key to education reform (Lieberman & Mace, 2008). According to Cochran-Smith and Lytle (2009) the practitioner researcher and professional learning reform movements share many key ideas and terms. Both initiatives share the philosophy of a teacher's critical role "in shaping the life of schools and as agents in transforming the work of schools" (Cochran-Smith & Lytle, 2009, p. 53).

Two final disclosures are that because of my interest in professional learning, Karen asked me to be the school's 2012-2013 professional learning contact to the district.

This role was more representative (e.g., attend two county level meetings) and administrative (e.g., submit time logs documenting attendance, answer, or find answers, to questions) than as an agent of change (Rogers, 2003). However, in this role, I had the opportunity to work closely with Karen and to discuss and share information from professional learning literature. In this sense, I influenced the school by encouraging and supporting Karen's interest in reforming our school's professional learning. I was a sounding board for her thoughts and decisions. Karen refers to the process of reforming Suntree's professional learning as a journey. I was a part and a promoter of this journey.

The second disclosure makes me somewhat uncomfortable. I was one of three finalists for our school's 2012-2013 Teacher of the Year which may be indicative of a certain respect teachers have for those of us who seek advanced degrees while continuing to teach. The Teacher of the Year honor comes with the responsibility of effectively writing five essays for possible selection as the county's representative at the state level. As one colleague confided to me, "I voted for you because I think you could write winning essays due to your recent school work." While I was not selected for this honor, I believe the nomination showed a certain level of confidence my colleagues have for my work in our school; confidence that I had identified a worthy problem related to professional learning at Suntree for us to work on together. The research questions that framed our work are set forth in the following section.

Research Questions

This study investigated the following research question:

How does the introduction of a situative model influence the process of teacher learning and professional development?

This overarching question was answered through the following four sub-questions:

1. How do teachers participate in TCLs?
2. What influences teachers' participation/nonparticipation in TCLs?
3. How do teachers respond to the process of change over time in the delivery model of their professional learning?
4. What kinds of shifts in professional learning practice (large and small) occur through participation in TCLs?

Defining of Terms

Attitudes: "manners of acting, feeling, or thinking that show one's disposition or opinion" (Philipp, 2007, p. 259).

Beliefs: "psychologically held understandings, premises, or propositions about the world that are thought to be true" (Philipp, 2007, p. 259).

Communities of learners: "The idea of a community of learners is based on the premise that learning occurs as people participate in shared endeavors with others, with all playing active but often asymmetrical roles in sociocultural activity" (Rogoff, 1994, p. 209).

Computer-aided Qualitative Data Analysis Software (CAQDAS): a tool for supporting the process of qualitative data analysis (Friese, 2012).

Enactment: a mediating process for teacher professional growth characterized by experimentation and changes to practice (Clark & Hollingsworth, 2002).

Ethic of Care: the belief that people "act so as to establish, maintain, or enhance caring relations" (Noddings, 1984/2003, p. xv).

Intersubjectivity: the mutual understanding of a situation achieved between jointly involved participants (Rogoff, 1990).

Knowledge: “the end product of a series of intervening processes” (Prawat & Floden, 1994, p. 41).

Negotiation: “to skillfully overcome obstacles” (Prawat & Floden, 1994, p. 40).

Perception: “the plan for picking up information that might be provided by the environment” (Prawat & Floden, 1994, p. 39).

Power: a social phenomenon that expresses the comparable relation between people with regard to a specific area or subject (Dahl, 1957).

Reflection: retrospective analysis of actions involved in teaching and learning (Choy & Oo, 2012).

Social constructivism: the creation of knowledge through group processes.

Teacher Communities of Learners (TCLs): professional learning that occurs as teachers participate in shared endeavors with other teachers, with all playing active but often asymmetrical roles in sociocultural activity (adapted from Rogoff, 1994).

Transmission model: a kind of practice where information is presented followed by a test to see if transmission occurred (Rogoff, 1994).

CHAPTER 2

THEORETICAL FRAMEWORK AND LITERATURE REVIEW

In this chapter I discuss: (a) sociocultural theory as the theoretical framework that supports this research project; (b) social constructivism and the theories of learning that emerge from that perspective; followed by (c) a review of the professional learning literature that informs my work and is based in sociocultural theory. A sociocultural theoretical framework was necessary to study the professional work of teachers involved in learning through social interaction and allowed for a focus on various participants' perspectives during those social interactions.

A Sociocultural and Social Constructivist Theoretical Framework

This study builds upon the work of educational researchers who have applied Vygotskian theory to learning (e.g., Rogoff 1990, 1994; Rogoff & Toma, 1997; Wertsch, 1985, 1991). Specifically, I ground my research in Lev S. Vygotsky's (1978) notion that learning occurs through interaction among humans within specific contexts.

Complementing this sociocultural ontological framework is an epistemology of social constructivism. As a sociocultural theory, social constructivism is the epistemology that shaped the delivery of a new professional development model at this school. According to Prawat and Floden (1994), learners construct their knowledge through a process of negotiation with others within social contexts influenced by cultural and historical factors. Researchers using a sociocultural framework attend to various perspectives within a social context. These situative perspectives focus simultaneously on the individuals as well as their communities. Likewise, as Bereiter (1994) points out in defense of social constructivist research designs, "there is no basis for claiming that one

view or another gives a better account of how things really are, and so we are free to choose . . . whatever way gains us an advantage in solving problems” (p. 21). A helpful way to explain this focus is through an analogy of a multifocal lens (Borko, 2004). A multifocal lens allows a person to select the correct part of the lens depending upon distance. Likewise, a multifocal lens can be used to sharpen the focus of view from including a large contextual view, or through use of a zoom, restrict the focus to a more narrow perspective.

In the remaining sub-sections, I describe concepts relative to sociocultural theory and social constructivist perspectives and explain their relationship to the study at hand. These concepts are interrelated; however, for the sake of clarity, I present them in a linear format originating from near to far, from the level of the individual to the level of the larger sociocultural activity.

Goal-Directed Action

This study focuses on the goal-directed actions of teachers during a time when their school moved toward situative professional learning. Goal-directed action includes behaviors and thoughts that extend from a desire for knowledge about something (Rogoff, 1990). Consequently, I observed teachers’ conversations and actions as they participated in TCLs. I asked them about interactions that shaped their professional learning.

Sociocultural theory recognizes thinking as a functional, active, and directed activity to solve problems (Rogoff, 1990). Thinking is made up of “goal-directed activity” (p. 8). As such, thinking occurs beyond the individual and in the context of interaction with others to solve problems.

To act and communicate, individuals are constantly involved in exchanges that blend "internal" and "external" —exchanges characterized by the sharing of meaning by individuals. The boundaries between people who are in communication are already permeated; it is impossible to say "whose" an object of joint focus is, or "whose" a collaborative idea is. An individual participating in shared problem solving or in communication is already involved in a process beyond the individual level (Rogoff, 1990, p. 195).

While problem-solving is just one example of goal-directed actions and thinking, this study focuses on the goal-directed actions of teachers in TCLs to solve problems.

Rogoff (1990) extends Vygotsky's theories and makes several assumptions about goal-directed action in social contexts that are relevant here. The first assumption deals with the role of the *zone of proximal development* in providing opportunities, which could be considered potential for teacher learning. A second assumption of sociocultural theory is that thinking is a process rather than a collection of static constructs such as knowledge and beliefs. The third assumption is that "the basic unit of analysis is not the individual but the process of the sociocultural activity" (p. 14). A fourth and final assumption is that historical and cultural factors heavily influence social interaction. When taken together, these assumptions explain why sociocultural theory is the best lens for describing Suntree's new form of professional learning.

Zone of Proximal Development (ZPD)

Recognizing the potential to increase the knowledge and development of teachers through shared endeavors during situative professional learning is an important aspect of professional learning in a sociocultural framework. The difference between the actual level and a level of potential development that can be reached through interaction with more capable peers is the ZPD. Vygotsky demonstrated that individuals could reach a higher level of cognitive function with guidance from a more knowledgeable peer than when solving problems independently. Vygotsky (1978) described this independent

problem solving ability as “actual developmental level” (p. 85) and compared it to the level of development that was possible with “adult guidance or in collaboration with more capable peers” (p. 86).

However, providing opportunities for engagement will not ensure that teachers meet their ZPD (Chaiklin, 2003; Harland, 2003). There are two “issues” bound up in whether or not teachers learned in their TCLs. First, because the model being introduced at Suntree required each individual teacher to create her own professional learning goals and self-determine how to address those goals, a teacher needed to know what she didn’t know (i.e., her ZPD) in order to construct interactions that would position her learning. This may be problematic for teachers who have not been self-reflective or who have a reluctance to share challenges in their own knowledge and ability. There is also no guarantee that an individual will self-identify areas of potential growth and learning because, for example, they fear a loss of prestige or possible criticism. Second, there is no guarantee that another member of the learning community will have the set of skills necessary to help another teacher develop, and no guarantee that individuals will accept responsibility to engage in the professional learning of others. Bringing teachers together for situative professional learning created an environment conducive for increasing teacher knowledge and nurturing professional learning; however, knowing one’s ZPD and taking advantage of it are very different.

Apprenticeship

The TCL format can allow for flexible apprenticeships that benefit all members of a group (Lave & Wenger, 1991). Sociocultural theory is predicated on the assumption that explicit action (what one can observe and document) provides the context for

implicit learning (not directly stated but inferred from actions and observable behaviors). For instance, when a student performs a skill correctly we infer she has learned to do it. Participation in social activity transforms the individual, the activity, and the community in which participation occurs (Werstch, 1985). There are explicit and implicit sources of learning between masters and apprentice. For example, a calligrapher may explicitly discuss the amount of ink that works best for clean, crisp work; a novice may implicitly learn to tap the stylus to remove ink through observation without explicit directions.

Additionally, in communities of learners, cultural assumptions about adults as teacher and students as learners are challenged. TCLs positioned all teachers equally as taking the role of master or apprentice depending upon the interaction (Rogoff, 1994; Rogoff & Toma, 1997; Rogoff, Matusov, & White, 1996).

Transformation of Participation

Transformation of participation means that an individual Suntree teacher changes her participation to be more invested in mutual outcomes of the collective. Rogoff et al., (1996) describe a “transformation of participation in sociocultural activities” as distinguished from “a one-sided process in which only teachers or learners are responsible for learning” (p. 388). Participation in communities of learners encourages transformation. Being responsible for the totality of learning is impossible due to the flexibility of roles and the variety of sources from which goal-directed action emerges. Therefore, the roles of leader, teacher, learner, and others are flexibly assumed based on the type and purpose of shared endeavors. Brown (1994) describes engineering learning environments in ways that “lure” participants to enact different roles by designing environments that “facilitate interactions, reciprocity, and community” (p. 7). The TCL

environment was designed to lure Suntree teachers into participation when an individual recognized an opportunity to contribute her expertise to the work of the group or to share experiences from teaching in another setting or grade level that provided a different perspective.

Intersubjectivity

The concept of intersubjectivity was a critical element of Suntree's professional learning because idea construction is a process that occurs as individuals solve problems together. Intersubjectivity is defined slightly differently by different theorists, but in this study is the mutual understanding of a situation achieved between jointly involved participants (Rogoff, 1990). Intersubjectivity suggests the belief that ideas are not static and cannot be evaluated as "things sitting in the mind" (p. 9) of an individual teacher and transmitted to others during professional learning. "Cognition is not the passive possession of mental objects such as cognitions and percepts" but is instead useful in "negotiating the stream of life" (Rogoff, 1990, p. 9). To clarify the concept that ideas reside in a fluid form between individuals, Rogoff provides an analogy of air and water. Although air and water exist simultaneously outside and inside of individuals, the use and processing of these elements is what gives them purpose and makes them essential to survival in individuals. Thoughts and ideas function in much the same way. The process of give and take makes ideas useful in solving problems. Similar to Rogoff, Palincsar (1998) defines a give and take between individuals as intersubjectivity, the ability to find common ground while Billett (2006) defined intersubjectivity as "individuals' coming to share their social partners' understanding" (p. 62). Additionally, Prawat & Floden (1994) state that intersubjectivity identifies how individuals negotiate challenges to their

culturally embedded expectations and assumptions about learning. All of these definitions emphasize a slightly different aspect of the goal-directed actions of individuals working to understand each other through sharing and negotiating meaning.

The formation of TCLs was predicated on how well groups negotiated understanding among individuals to create new constructs that belonged to the TCL. Intersubjectivity involved the negotiation of roles, meanings, and norms (Westheimer, 2008) which was crucial in deciding which voices were heard and how, or if, individual voices were merged into new understanding (Wertsch, 1985). The formation of TCLs was predicated on how well groups negotiated understanding between individuals to create new constructs that belonged to the TCL. These group-owned constructs emerged from, and defined, a new culture that valued the products of shared endeavors over notions that adoption of any individual's construct is an achievement. Teachers who were engaged in the process of clarifying, extending, and summarizing understanding shared in not only their own ability to get it right, but in the groups' shared endeavor to do so. Such an intersubjective attitude runs counter to Western societal notions that value the individual (Palincsar, 1998; Rogoff, 1990; Wertsch, 1985). Intersubjectivity allowed Suntree teachers' access to learning that was only present when working as part of a group through the process of internalization which is discussed in the next section.

Internalization

Internalization allowed each individual Suntree teachers to develop a version of the learning created during group work in TCLs. Internalization is a process by which an individual "appropriates" (Rogoff, 1990, p.193) the learning created by the group. Rogoff (1990) describes this as the blending of information found in and of social contexts such

that ownership of learning becomes unimportant. Rogoff (1990) dismisses the notion of a barrier dividing internal and external knowledge sources. According to Rogoff, the notion that individuals “cross a barrier” (p. 195) to enter into a social context does not exist.

Constructs exist simultaneously in individuals and social contexts as individuals participate in the act of constructing them. Individuals create internal versions of socially shared constructs (Palincsar, 1998). Construction of individual’s meaning and context is concurrent and seamless according to sociocultural theory.

Cobb (1994) extends Rogoff’s description of internalization by example through the socially agreed upon mathematical construct of number. When an individual speaks of three things, others in the group share the conception of number even if each brings an independently formed cognitive construct of “3” to this interaction. These individuals did not invent or discover “3.” Individuals construct the concept “3” in their minds, through an “apprenticeship” (Rogoff, 1990) of parents, teachers and knowledgeable others who encourage and shape the individual’s eventual construction and internalization of a concept of “the number 3” that is useful in communicating with others. The “taken-as-given concepts, symbols, and conventions of scientific and mathematical communities shape the cognitive structures that develop — a very Vygotskian idea” (Bereiter, 1994, p. 21). Likewise, Suntime teachers each had a set of concepts, symbols, and conventions for professional learning, curriculum, and curriculum development. As teachers interacted and communicated, there was a possibility for a new shared understanding to emerge. Communication that focused on internalization of shared conceptions was an essential process of acculturation. As individuals interacted to solve problems and developed shared conceptions, a potential for cultural change of professional learning existed.

Reflection is a possible, but not universal, mechanism that individuals use for internalization and is discussed in the next section.

Reflection

Establishing a time for reflection was one systematic and explicit practice to encourage development of an “intersubjective attitude” (Palincsar, 1998; Rogoff, 1990; Wertsch 1985) essential to the formation of, and engaged participation in, Suntree’s new format for professional learning. Reflection is an example of the type of engaged participation that is often not a part of individual-centered forms of learning (Rogoff & Toma, 1997). Participation can never be fully internalized and is “based on situated negotiation and renegotiation of meaning in the world” (Lave & Wenger, 1991, p. 51). This negotiated meaning happens as much in the silent spaces of the individual as the communal spaces of shared endeavors. “Understanding and experience are in constant interaction – indeed are mutually constitutive” (Lave & Wenger, 1991, p. 52). Negotiated goal-directed action is a result of an “ongoing flow of reflective moments of monitoring in the context of engagement in a tacit practice” (Lave & Wenger, 1991, p. 54). Reflective moments are organized around and essential to transformation of participation as individuals accept the changing roles required during shared endeavors.

In contrast, time for reflection was subtracted from each TCL meeting; however, it often consisted of five or fewer minutes of time. Providing a time for reflection is different from the type of reflection that Lave and Wenger describe as the internalized discourse in negotiating participation. Reflection is one of the “cultural systems” (Palincsar, 1998, p. 355) that can be validated during shared decision making. Schultz

(2010) suggests that by accepting the possibilities of silence, reflection becomes a space for individuals to negotiate options for participation.

Tensions of Negotiation Within Groups

Suntree teachers learned to recognize disagreement as an opportunity to invest in the process of reconceptualizing their own, and others' understanding toward a negotiated new idea. The aim of negotiation is to develop meaning and understanding that promote the work of the group. "Sociocognitive conflict" (Palincsar, 1998, p. 350) is a catalyst for learning. Conflicts that arise during shared endeavors are the key to teachers' assuming a more active role in their own learning (Palincsar, 1998). Social construction of ideas is advanced by active participation to clarify and grapple rather than settle or compromise (Prawat & Floden, 1994). In shared endeavors, the construction of ideas depends upon negotiation to seek insight and to reconceptualize understanding.

Additionally, negotiation involved what appeared to be periods of disengagement from the work of the group (such as a teacher watching and appearing to listen but not verbally contributing to a discussion), yet these seemingly disengaged individuals were actually very active in their learning. A sociocultural perspective allows for the possibility that seemingly disengaged behavior might provide a space for reflection, self-assessment, or other mechanisms that help individuals internalize participation in group activity (Lave & Wenger, 1991). Silence, for example, has the potential to be misunderstood in multiple ways. Schultz (2010) identifies silence as being full of possibilities and fraught with misinterpretation. Her research with students explores "what it means to include listening to silence as a critical pedagogical practice" (p. 2835), and focuses on silence as a form of power and of protection. Through observations of

silence, Schultz identifies the context from which silence emerges and explores the multiple ways silence functions in social context. For example, she describes a classroom interaction in which a boy named Luis, who rarely participated in discussions, leveraged his silence to make his minimal contributions more powerful. In another vignette, she describes Zakiya as a student who chooses to remain silent during school as a way to avoid taking up roles or accepting responsibility for leadership in light of the “demanding responsibilities once she returned home from school” (Shultz, 2010, p. 2843). Schultz describes teachers as misinterpreting Zakiya’s silences and as unable to relate to the culturally based reasons for her silence. Schultz’s work suggests that “listening for silence” is as important to analysis of social action as discourse.

Caranfa (2004) puts forth a more theoretical notion of silence. That wisdom, in the tradition of Socrates, emerges from “conversation, indeed listening to, oneself” (p. 214). Caranfa (2004) argues that silence is the foundation of learning and that social interaction creates “an inner state of silence necessary for the expansion of our sensory, mental, moral and spiritual frontiers” (p. 212) and where “the words spoken by the teacher take root and grow inside” (Kingsley, 1995, p. 230 as cited by Caranfa, 2004, p. 212). Furthermore, Caranfa (2004) identifies a form of self-negotiation behavior through the possibility that individuals may be silent as they search “not so much to refute others, but to refute [themselves]” (p. 214).

In the literature on communities of learning, silence is recognized as a form of negotiation and is addressed through the notion of legitimate peripheral participation (Lave & Wenger, 1991; Rogoff, 1990, 1994). Social constructivist theory identifies the participants’ silence as having multiple roles. When individuals seem to be disengaged in

either physical or discursive interaction, sociocultural theory suggests an individual may be claiming a space for ongoing reflection and monitoring of self-perspectives to develop the skills necessary for transformation of participation (Rogoff, 1990; Rogoff, 1994; Rogoff & Toma, 1997). Alternatively, they could be resisting transformation which is also an active form of participation. “Resistance is a variant that challenges goals and [the] focus of the initiative” (Talbert, 2010, p. 563) and is more often a response of veteran teachers than novices to reform efforts. Viewed through social constructivism, Suntree’s new form of professional learning allowed for variations in how teachers chose to engage and participate in professional learning. Some of this participation that appeared to be disengaged behavior was actually providing a space for internalization of the experience, a very engaged state of participation. I viewed variations in teacher participation through an ethic of care (Noddings, 1984/2003), which is elaborated in the following section.

Ethic of care

Noddings (1984/2003) ethic of care describes the reciprocal relations between Suntree teachers. The emphasis of “care theory” is on the relations between people as they work together with a goal of ethical and moral interaction. The ethic of care works well within the ontology and theoretical framework of this research because it is based in the notion of asymmetrical relations between people and emerges from the feminine perspective of gender studies (Noddings 1984/2003). Given that Suntree has an all-female teaching staff, taking a feminist theory such as “ethic of care” could be helpful. The roles of “one-caring” and “cared-for” are not static and shift between and within individuals similar to the roles of “apprentice” and “novice” (Lave & Wenger, 1991;

Rogoff, 1994). Finally, caring also explains interactions in terms of an ethically-based form of motivation which I prefer to the concept of “power” (Dahl, 1957).

Influence of Culture

I have confidence that Rogoff’s research describes Suntime; a predominantly white, middle class community where a dyadic model of learning is deeply embedded as the typical experience of most faculty and students. Goal-directed actions during shared problem solving are heavily influenced by historical and cultural factors (Prawat & Floden, 1994). Rogoff describes an information exchange format where one adult and one child form a dyadic culture of problem solving. I believe Rogoff’s documentation of typical U.S. family social interactions mirrors Suntime’s culture, deeply embedded in a predominant white, middle-class family experience. The adult’s role is to “provide information and the learner’s role is to act as receptacle, receiving and retaining it” (Rogoff, 1997, p. 473). Rogoff contrasts this European-American family culture with a “community-of-learners model” of family interaction typical of a Guatemalan Mayan family (Rogoff, 1990, 1994, Rogoff & Toma, 1997) where multiple children and caregivers come together to interact. These descriptions are not intended to describe the ways every U.S. or Guatemalan Mayan family interacts, but to offer contrasting patterns of interaction in families shaped and supported by their culture. Such examples are helpful in understanding how culture determines an individual’s expectations about how learning occurs.

Palincsar (1998) identifies “Western societies in which individualistic traditions have prevailed” (p. 355) as being less apt to easily accept the tenets of social constructivist learning theory. Thus, reflection and “conversations with oneself”

(Caranfa, 2004) may be less valued, less well-defined, or even less identified as present in these societies. Palincsar (1998) describes several programs of research documenting cultures in which development of “a commitment to find common ground” (p. 355) is a natural function of learning. Her research highlights the important role of the teacher in establishing and reinforcing the norms of a social constructivist perspective.

According to Rogoff (1994) "most US teachers and parents have been 'brought up' in the adult-run model of learning" (p. 218); while this statement may be debatable, it was true of Suntimee. Likewise, I believed that Suntimee teachers were unaware of these cultural factors that form their perspectives about teaching and learning. A transmissive model of professional development was deeply embedded in Suntimee teachers' cultural experience. This perspective has been reinforced through transmissive “staff development” for the majority of their teaching career. Despite, or perhaps because of, this situation, the potential of collaboration was not unknown to them. Teachers sought out colleagues in informal ways throughout the day to share and build upon each other's ideas (Mawhinney, 2010). Teachers expressed dissatisfaction with transmissive model staff development and requested an opportunity to spend the allocated professional learning time in collaboration with other teachers. However, moving from a transmission model to a community of learners model is like learning a new culture (Rogoff, 1994). The introduction of the TCL format, and Suntimee teachers' active participation in TCLs, has begun changing the school culture toward a preference for participatory forms of teacher learning (Rogoff, Matusov & White, 1996). This did not happen all at once, but over time, changes began to occur.

Cultural Change in Schools

Fullan (2007) proposes a theory of change in schools that explains why the TCL initiative may have been deemed worthwhile by Suntime teachers. Fullan's theory is sociocultural and recognizes the individual and the school collective as essential to cultural change. Fullan defines the culture of a school as the relationships between people which dictate what work gets done or not done. He explains that the organization decides if a particular reform is warranted in terms of being worth the effort, sustainable, and able to be refined to fit future iterations of the culture.

Fullan agrees with McLaughlin & Talbert (2001) that the leadership role of the principal is pivotal in providing experiences where teachers become participants in and creators of their own learning. "In short, there is no reason for teachers to believe in the value of proposed changes, and few incentives (and large costs) to find out whether a given change will turn out to be worthwhile" (p. 28). Teachers asked for opportunities to work with each other. Karen, as principal, created a framework for that to happen. Fullan stresses that principals who provide "relationship centered" experiences for their teachers are building capacity for sustained and effective change. He describes distributed leadership as a successful strategy for changing school culture. TCLs were predicated in sociocultural theories that position individuals to contribute expertise as needed to create meaning during group work.

In the past, Suntime teachers came together in a large group to be told what their problems were and how to fix them. The teachers went back to their classrooms (or home) after professional learning time was over, but the implementation (or not) of the professional learning information was left to the teacher in isolation. Teachers

complained about this type of professional learning (similar to findings from Flint, et al., 2011.) They suggested instead, that time should be given for teachers to meet during the school day in smaller groups to identify problems and work in teams to solve them.

Analyzing the actions of these teachers as they interact with others to solve problems requires a social constructivist approach. These teachers came together to solve problems affecting the learning and achievement of the school. Along the way, they would address many concomitant issues that naturally arise when individuals work together in a social context.

Literature Review

“What we have to learn to do we learn by doing.” - Aristotle

With sociocultural theory as background, this review outlines what is known about effective professional learning. The first section of the review describes research that establishes the characteristics of effective professional learning in situative contexts from the last two decades. Situative models are based in social constructivist theories in which learning is inseparable from the context in which it occurs. From that literature emerges an extensively studied model of situative professional learning, the *professional learning community* (PLC). A brief review of the literature on PLCs will identify strategies and challenges facing Suntree’s professional learning reform as it begins implementing situative professional learning; however, this study encompasses Suntree staff’s first attempts at situated learning — a step before Suntree attempts to form PLCs. Several articles included in the PLC section of this review (Darling-Hammond & Richardson, 2009; DuFour, 2004) were provided to principals by Suntree district learning coordinators. As such, Suntree’s TCL model is a site-based approach to implement a

situative form of professional learning that is informed by the literature on PLCs. The review concludes with behaviors and factors that may foster teacher professional learning and a model for studying teacher change processes (Guskey, 2002; Clarke & Hollingsworth, 2002).

Literature Selection Criteria

Criteria to determine which research would be included and which omitted were based on three factors. First, articles appeared in peer-reviewed scholarly education journals or handbooks of research on teacher education, and whenever possible synthesized large bodies of research, such as Vescio, et al.'s (2008) review of the impact of PLCs. A second consideration in selecting articles was to rely upon literature published within the last decade. Exceptions to restricting publication within the last decade were made for seminal works such as Lave & Wenger's 1991 book, *Situated Learning: Legitimate Peripheral Participation*. Finally, the third criterion narrowed the extensive literature available by selecting research for its direct contribution in framing this study such as the articles provided by Suntree's district professional learning coordinators.

Effective Professional Learning

This section begins with a review of Lave and Wenger's (1991) seminal publication, *Situated Learning: Legitimate Peripheral Participation*. The section continues with a review of Guskey (2000, 2003), Borko (2004, Putnam & Borko, 2000), and Westheimer (1993, 1999, 2008) who extended situated learning theories into professional learning practice and identified characteristics, lists of the features, goals, and categories that describe effective professional learning. The section concludes with a

review of the three-part National Staff Development Council (NSDC) and Stanford Center for Opportunity Policy in Education (SCOPE) report on the *Status of Professional Learning in the United States*.

Lave and Wenger (1991) introduce three concepts: situated learning, communities of practice, and legitimate peripheral participation that have helped change the conception of effective professional learning, and learning in general, over the last two decades. Sociocultural learning theory suggests that all learning is situated and occurs as a result of learning with others. *Situated learning* describes “learning as an integral and inseparable aspect of social practice” (p. 29). Learning cannot exist in *meaningful* ways outside of the social context in which it is learned. Teachers participating in situated learning contexts come to “be” learners through participation in a community at the same time they create the community. This results in a state of learning while doing. Individuals learn how learning occurs as they participate in the processes of learning with others. This creates a *community of practice* defined by Lave and Wenger (1991) as “an intrinsic condition for the existence of knowledge, not least because it provides the interpretive support necessary for making sense of its heritage” (p. 98). Learners form connections to the people and places of their learning and through interaction a sense of community is formed.

Legitimate peripheral participation is a term that “provides a way to speak about the relations between newcomers and old-timers, and about activities, identities, artifacts, and communities of knowledge and practice” (p. 29). The complexity of teaching makes legitimate peripheral practice a characteristic of everyday social interactions in teaching. Examples of complexity of teaching are teachers moving to a new grade or subject area,

assuming a new role or leadership position within the school, or when they self-identify an area of practice worthy of inquiry. In these situations, an experienced teacher may become an apprentice, and a novice teacher the master. Lave and Wenger's theory has not produced much empirical inquiry because it is a theory about how learning occurs; however, it is the foundation for most of the literature of this review.

In the early 2000's, effective professional learning is described in the literature through characteristics and lists of structures, types, or features of effective models. My study is not evaluating Suntree's efforts; however, Guskey's (2000) work on evaluating professional development identifies defining features, major models, and the advantages and disadvantages of effective professional learning. For example, when teachers are involved in a school-wide improvement process they gain invaluable opportunities to learn and grow through assessment and observation of school-wide policies and procedures. Other effective professional learning exists when teachers participate in action research, personal inquiry, and in individually guided activities focused on school or classroom contexts. Guskey acknowledges that each form provides a slightly different emphasis toward individual or contextual improvement.

Guskey (2003) compared 13 lists describing effective professional learning models. Guskey found many problems with these lists: inconsistent criteria for establishing effectiveness, various sources of evidence (i.e. self-reports or consensus of writers and researchers), and contradiction between lists. Guskey states that what works in one context may not in another and that effective professional learning should be based on the effective practices of individual teachers in individual schools to "provide a basis for highly effective professional development within that context" (p. 750). The majority

of effective characteristics identified on Guskey's lists are encompassed by a situative learning perspective (Borko, 2004; Putnam & Borko, 2000).

Borko (2004) maps the terrain of effective professional development and extends her earlier work describing a situative perspective as a "new view of knowledge and thinking" (Putnam & Borko, 2000, p. 4). Borko (2004) identifies evidence that teacher practice can change through intensive programs and that teacher learning is fostered through strong professional communities. She identifies The Community Teacher Learners Project (Grossman, Wineburg & Woolworth, 2001; Wineburg & Grossman, 1998) as an example of professional learning through participation in a strong community. The formation of a community of learners is the focus of Wineburg and Grossman's (1998) research but in my own analysis of Grossman, Wineburg, and Woolworth (2001), the Community Teacher Learners Project exemplifies the *difficulty* of community and norm establishment and the *difficulty* of negotiating shared meaning when teachers from different disciplines come together to form a learning community. As an example of effective professional learning, the Community Teacher Learning Project does identify how participants may be transformed through participation, particularly discordant forms of participation and the importance of facilitation to support and to encourage participant engagement in these contentious forms of discourse that are essential to developing community.

Borko (2004) describes the *National Writing Project* as a successful example of effective professional learning resulting in long-term changes to teachers' professional network, philosophies about writing, and an "increase in both the time spent on writing instruction and use of exemplary teaching practices" (p. 11). The *National Writing*

Project is an oft-cited example of effective situative professional learning for developing writing in teachers and their students. However, as an alumnus of the *Central Virginia Writing Project*, drawbacks to participation include Saturday and summer work outside school time, availability to a limited number of teachers by choice and other factors, and a narrow focus on developing writing which limits transferability of practice to other subject areas.

Borko's (2004) treatment of effective professional learning has several limitations. First, her map focuses on the implementation of programs rather than the transformation of teachers' understanding of and participation in learning communities as a result of their participation. Secondly, she focuses on professional development as a function of research. The programs "represent one way in which research activities can progress toward the goal of providing high-quality professional development for all teachers" (p. 4). From my practitioner researcher perspective, reliance on outside experts to provide effective professional learning is just a transmission model of instruction at the institutional level (Cochran-Smith & Lytle, 2009). A third limitation of Borko's analysis is indicative of a characteristic tone in much of the literature that teachers are "broken" and new forms of professional learning, imposed by outsiders, are required to "fix" them. Unintentionally, Borko has reinforced an unacceptable version of teacher capacity; that teachers have neglected their role in keeping up with the ever changing expectations resulting from the changes occurring exponentially in education and the larger society (Grant, 2008).

Teachers as Learners

Similar to Borko (2004), Westheimer (1993, 1999, 2008) argues that teachers are not trained for the teaching profession as *learners* beginning with teacher education and extending through the culture of professional learning in schools. He argues that the ideals of democratic society depend upon teachers' ability to model for students learning within the disciplines of academia and larger life-skills of civility, tolerance, and respectful participation with diverse others. Westheimer's democratic social learning perspective addresses the tension between individual autonomy and collective membership in situative learning experiences. Westheimer identifies resistance to community formation as stemming from deeply seated school culture and organizational factors that promote isolation in classroom spaces (Lortie, 1975) along with individual evaluation measures that deter teacher community (Westheimer, 1999). Westheimer (2008) identifies six goals for developing effective professional learning: (1) improve teacher practice so students will learn; (2) create a culture of intellectual inquiry where ideas matter to students and teachers; (3) include teachers in school leadership and management learning; (4) promote teacher learning with novice teachers; (5) reduce the culture of isolation and alienation; (6) pursue social justice and democracy. Westheimer concludes that it is the tensions of community formation and ongoing work that produce and define teacher learning. His most compelling argument is that teachers cannot simply be responsible for creating morally sustainable and effective learning environments for students without recognizing the moral rectitude of providing caring and supportive learning environments for their own professional development. To reform professional learning, teachers must be learners first. This process must begin during teacher

education (Cochran-Smith, 2005b), extend through induction (Feiman-Nemser, 2001) and become an integral part of professional learning (Flint, et al., 2011). Westheimer (2008) concludes that more research is needed to explore the “muck, the ambiguity, and the mystery of how communities succeed and fail to manage conflict and how they ensure full participation of members with a diversity of backgrounds and interests” (p. 774). In summary, effective professional learning provides opportunities for teachers to work with other teachers, in intellectual discussions focused on improving teaching and learning.

Status of Professional Learning in the United States

Compared to the rest of the world, professional learning in the United States lags behind (Darling-Hammond, Wei, Andree, Richardson, & Orphanos, 2009) despite the clear identification of effective professional learning by Gusky, Borko and Westheimer in the 1990s and 2000s. Commissioned in 2008 and completed in 2012, NSDC and SCOPE conducted extensive studies aimed at measuring the effectiveness of professional learning in the United States. In the first report, Darling-Hammond et al. (2009) document that “overall, the kind of high-intensity, job-embedded collaborative learning that is most effective is not a common feature of professional development across most states, districts, and school in the United States” (p. 4). One statistic cited is that teachers abroad receive an average of 15 to 20 hours of professional learning compared to 3 to 5 hours on average in the United States. The authors conclude that teachers in the United States receive *ineffective* professional learning more often than not, that teachers feel they have little influence on improving professional learning, and that across the nation the professional learning offered varies dramatically.

In the second report, Darling-Hammond, Wei, and Adamson (2010) identify trends and challenges facing the nation's professional learning status. Induction and mentoring of new teachers were areas of some improvement; however, the quality of in-service opportunities has diminished for teachers since 2008. The authors identify effective professional learning that contributes to positive student achievement as lacking in most states. The authors suggest looking at four specific states as models of effective practice. Suntree's state ranks among the lowest for providing intensive, content-focused, and embedded professional learning for teachers. Jaquith, Mindich, Wei, and Darling-Hammond (2010) focus on case studies of these four states to identify policy and practice that supports effective professional learning in the third installment of the report.

In the final report in the series, Mindich and Lieberman (2012) focus on PLCs as an effective form of professional learning through two case studies in one of the model state's program. The authors identified a set of four factors essential to the development of PLCs: vision, community, resources, and processes. Vision involves understanding by all parties what is possible and what is different about PLCs and other situative forms of learning. The report's two case study schools had supportive principals who admitted they were learning and relying on teachers to share leadership for the PLCs. At Suntree, Karen is supportive and listens to staff. She and the leadership team establish the vision and purpose for the TCL format; however, according to Mindich and Lieberman (2012) effective vision for PLCs includes a specific component encouraging teachers to use professional learning time for classroom-focused inquiry. Suntree's school wide goals focus on aligning curriculum with state mandated standards and incorporating technology into teaching. This may qualify as a type of embedded learning that occurs when teachers

are given time to work with others who are “working to reform teaching in similar ways” (DuFour, 2004, p. 65) and as such be an effective form of professional learning. Suntree may be moving toward effective professional learning; Suntree is not yet implementing PLCs.

Mindich and Lieberman (2012) delineate the processes and characteristics of effective PLCs in the case study models. Their study confirms Karen’s decision not to identify Suntree’s efforts as fledgling or undeveloped PLCs. Mindich and Lieberman (2012) advise formal training on how to conduct PLCs, establish norms, and decide on topics through a set of essential processes. Resource processes focus on the ways administrators present and train faculty for implementing PLCs including introduction of activities like sharing, discussing articles, and setting expectations for group work. Mindich and Lieberman (2012) found that training helped teachers understand that meetings were no longer simply fulfilling a requirement but were establishing powerful networks of collaboration resulting in successful outcomes that could be shared and celebrated as a community. The process of negotiating authentic interaction that holds members of the PLC accountable is “vital for successful cooperation but difficult to make happen consistently” (Mindich & Lieberman, 2012, p. 5).

Professional Learning Communities (PLCs)

The NSDC case studies of effective PLCs presented by Mindich and Lieberman (2012) are not designed to prepare schools to implement PLCs. Suntree’s district professional learning coordinator provided articles to principals during summer meetings and suggested that schools consider PLCs as an effective model for professional learning. While establishing PLCs is a long-term goal for Suntree, the current study is about how

that journey began. Thus, this section reviews literature on PLCs with the idea that it is the end goal but not necessarily the goal of this study.

PLC Literature Provided by the District. PLCs establish a culture that embeds learning, including professional learning, as the right and responsibility of each person. Suntimee's district professional learning coordinators provided principals with two articles from ASCD's journal *Educational Leadership*. DuFour's (2004) article defines PLCs. Darling-Hammond and Richardson's (2009) article describes what makes PLCs highly effective.

DuFour (2004) begins with what is and is not a PLC and states ineffective implementation of the model results in unfair criticisms and the subsequent dismissal of PLCs as an effective reform effort. DuFour (2004) distills professional learning communities into three core ideas. The first is a distinction between *students must learn* and *students are taught*. DuFour (2004) argues that every teacher must answer three questions: "What do we want each student to learn? How will we know when each student has learned it? How will we respond when a student experiences difficulty in learning?" (p. 8). Professional learning communities ensure that decisions related to student achievement are timely, systematic, and require students to invest additional effort to succeed. The decision of how to proceed is not left to the individual teachers in isolation.

DuFour's (2004) second big idea focuses on the development of a culture of collaboration. DuFour states that collegiality is not the same as community. Schools that focus on building camaraderie at the expense of critical evaluation of practice are not

developing professional learning communities. Uniquely, DuFour (2004) describes situations that often masquerade as collaborative community building in schools.

Other staffs join forces to develop consensus on operational procedures, such as how they will respond to tardiness or supervise recess. Still others organize themselves into committees to oversee different facets of the school's operation, such as discipline, technology, and social climate. Although each of these activities can serve a useful purpose, none represents the kind of professional dialogue that can transform a school into a professional learning community (DuFour, 2004, p. 9).

Conversely, PLCs are characterized by teachers coming together to focus on improvements and practices that ensure all students learn.

The third big idea is a focus on results. DuFour (2004) describes a change in language for goal setting. Instead of goals focusing on the action of teachers learning curriculum models or specific practices, goals should be written to measure outcomes in terms of increasing percentages of students reaching achievement targets. The odds of achieving the desired results improve in schools with PLCs because "each teacher has access to the ideas, materials, strategies, and talents of the entire team" (p.10).

The second article provided by Suntimee's district, Darling-Hammond and Richardson (2009) describes professional learning that emphasizes content, context, and design criteria. PLCs are identified as a premier model for a new paradigm. Like DuFour (2004), Darling-Hammond and Richardson (2009) advise that teachers must work through challenges to form PLCs to reap the rewards of working in a community. The authors provide a variety of structures within learning communities that can improve teacher practice and student learning (i.e. peer observations of practice, analysis of student work and student data, and study groups). Moving Suntimee's staff directly from a culture where professional learning has been transmitted to situative learning in formal

PLCs may cause the kind of failed PLC experience DuFour warns against and cause Suntime teachers to reject the PLC model erroneously as ineffective and unsustainable.

Participation in PLCs. Vescio, et al. (2008) report uniformly that effective PLC participation results in substantive and sustained changes in practice. Studies were selected using “websites of organizations that are at the forefront of work with school-based learning communities” (p. 82) and literature searches between 1990 and 2005 on ERIC and EBSCO databases. The collective results of the 11 studies indicate *well-developed* PLCs contribute to improvements in teaching practice and student achievement. Most encouraging for Suntime, are the significant findings that all 11 studies documented a change in the professional learning culture of the school. Suntime’s TCL effort is expected to change Suntime’s school culture and create a capacity in teachers for more developed forms of situative learning that may include PLCs. Vescio, et al., (2008) identify four categories to describe the characteristics of PLCs that promoted cultural change: (a) collaboration, (b) a focus on student learning, (c) teacher authority, and (d) continuous teacher learning. Providing opportunities for teacher collaboration during professional learning along with the deprivatization of learning may be ample challenge for Suntime teachers this year. Last year, Karen had difficulty recruiting teachers to videotape a lesson for the edification of colleagues. However, according to Vescio, et al. (2008), “teachers who reported that they did not use designated meeting times to focus on teaching practice did not report changes in the instructional culture” (p. 85). Karen provided a space for teachers to have authority over their learning but it was up to Suntime teachers to accept the empowerment and responsibility to make decisions about their own learning. Vescio, et al. (2008) describe continuous teacher learning as the

driving force for changes in the culture of teaching because teachers are motivated to be involved with efforts to improve their own and their students learning.

Conversely, Talbert (2010) identifies a large body of research in which teachers “respond negatively to PLC initiatives that aim to increase their professional judgment and accountability” (p. 556). Because PLCs challenge traditional expectations of how professional learning works, teachers often resist development of key elements necessary for successful implementation. Specific key elements Talbert discusses as often problematic for successful implementation are norms for collaboration, critical evaluation of teacher practice, accountability for individual and group learning, and engagement in the process of collaboration. These factors that are sometimes problematic for PLCs also form a core set of characteristics essential for the formation of effective learning in TCLs at Suntree.

Learning Behaviors of Teachers

Clarke and Hollingsworth’s (2002) description of teacher change was particularly helpful to explain how Suntree teachers developed as learners. Clarke and Hollingsworth (2002) describe professional learning as “an inevitable and continuing process of learning” (p. 947) and propose an interconnected, nonlinear model that can be used to understand the learning behaviors of teachers in multiple contexts and across their professional lifespan. This model extends the work of Guskey (2002) and illustrates how teacher learning is derived from three domains of information and facilitated by the processes of enaction and reflection as shown in Figure 2. The interconnected model provides a useful way to conceptualize and discuss the effect that mediating processes may have on professional learning and vice versa.

Domains. The “external domain” encompasses any type of data that is generated by others (i.e. systemic professional development initiatives, presentation of information, reading of professional literature, or attendance at conferences). The “professional domain” encompasses three subdomains: (1) the *personal domain* includes a teacher’s knowledge, beliefs, and attitudes; (2) the *domain of practice* describes professional experimentation efforts; and (3) the *domain of consequence* involves effects from practice that are salient to teachers. The authors connote salience within a domain based on the teacher’s interpretation: what is significant for one teacher may not be for another. An example is teachers’ experimentation with collaborative grouping in math, seen by one teacher as increasing student participation and by another as increased noise level.

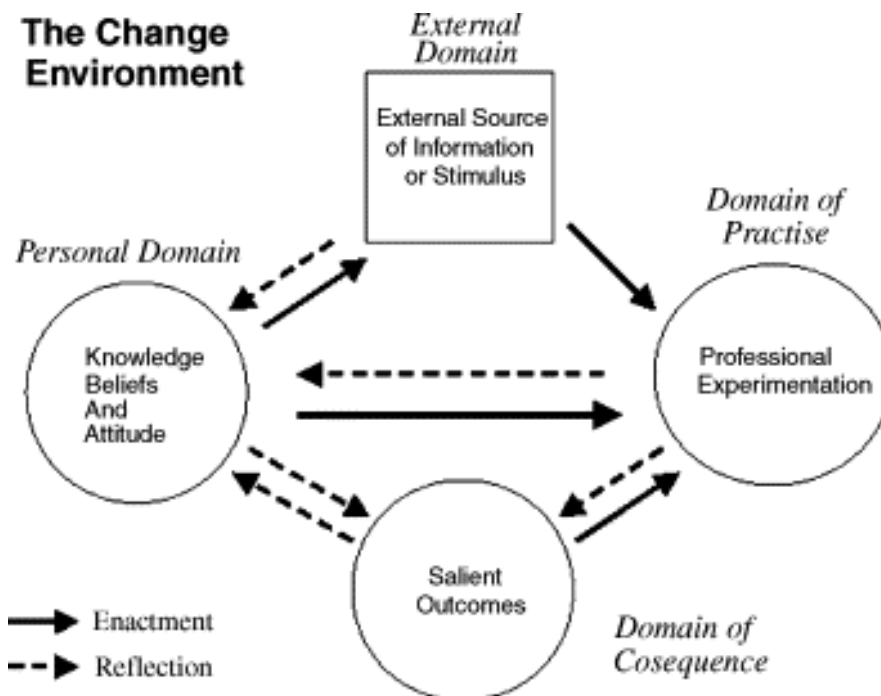


Figure 2. The interconnected model of professional growth

Enaction and reflection. Separating the processes of enaction and reflection into discreet parts is an arbitrary way to focus attention and discussion on them. Clarke and Hollingsworth (2002) define enaction as the activities teachers use to implement, experiment, and change practice. Enaction includes application of learning and is inseparable from the processes of reflection that refine teacher practice based upon implementation. Reflection is a way to make processes and intentions “visible” for review and critical appraisal. I asked teachers to share and reflect upon the actions and decision making that supported their enaction of professional learning activities to inform my observations of their mediated actions. As previously stated, isolating enaction is difficult as the activity of describing actions cannot be separated from the revisions and embellishments of reflection and memory. Clarke and Hollingsworth (2002) recognize that a model, although nonlinear, cannot fully represent the complexity and multiple growth pathways of professional learning and teacher change.

Reflection. Karen predicted that making reflection explicit would be the most challenging aspect of Suntree’s professional learning reform. Atkinson (2012) describes reflection as “ranging from instrumental reflection on instructional strategies to critical reflection on personal beliefs and ideological discourses shaping educational practices” (p. 176). One reason teachers are often insulted by explicit requests for reflection from authoritative sources (i.e. professors, assignments, principals, etc.) is that “there is no such thing as an unreflective teacher” (Zeichner, 2006, p. 207, as quoted in Atkinson, 2012). Thinking and producing lessons requires constant and recursive acts of reflection. Atkinson (2012) concludes, “These teachers did not reject reflection as essential and beneficial to teacher growth and development. They found fault with its representation as

a decontextualized and autonomous activity” (p. 188). Atkinson (2012) suggests that teachers often define reflection as inspiration that occurs as “knowing in action” rather than “a single event representative of reflection” (p. 188). In her study, focus group teachers criticized the ideal of a self-critically honest reflective practitioner as false and unrealistic. Atkinson (2012) found that teacher responses to reflection “suggest that scholarship, research, and pedagogy connected with teacher reflection may have somehow forwarded an oversimplified, essentialized, or even romanticized conception of teachers’ thinking” (p. 189). If so, a reluctance to reflect during TCLs may be a bigger challenge than simply overcoming a perception that it is a waste of time. According to Clarke and Hollingsworth (2002) the goal of including explicit attention on the processes of reflection in teacher professional learning is to refine and develop reflection as a habit that can contribute to positive growth in practice. Therefore, efforts at Suntree to include reflection as a component of TCLs need to balance the legitimate concerns of teachers with the limits such ideological complaints impose on developing reflective practices.

In the next chapter I delineate the methodology and methods selected to tell Suntree’s complex story.

CHAPTER 3

RESEARCH DESIGN

This qualitative study captured the experiences of teachers at Suntree Elementary as they participated in TCLs. Karen, Suntree's principal, and teachers agreed to restructure professional learning to allow teachers to access this expertise during contracted professional learning time. The overarching question, "How does the introduction of a situative model influence the process of teacher learning and professional development?" was answered through four sub-questions.

This chapter is divided into two parts: methodology and methods. In the methodology section, I describe the sociocultural framework, grounded theory ethnography (Charmaz, 2006), and practitioner research including my biases and subjectivity within that stance. The methods section details the setting, participants, data collection, data analysis, and considerations and limitations of this design.

Methodology

I studied sociocultural theory and selected *mediated action* and *voice* (Wertsch, 1985) as the important elements of situated learning for this study. I view professional learning in TCLs as a form of mediated action because teachers had to choose actions to reach their goals in different contexts (e.g. goal-directed actions). I documented differences in participation as voice. I used ethnography as a method of data collection and grounded theory as a method for data analysis. Ethnography and grounded theory are compatible with each other (Pettigrew, 2000), fit with my practitioner research stance, and allowed me to collect a range of data from multiple vantage points.

Sociocultural Framework

Sociocultural theory is the ontological foundation for my beliefs about how people learn. Sociocultural theory situates individuals within social contexts to explain how meaning is constructed (Lave & Wenger, 1991; Palinscar, 1998; Prawat & Flodin, 1994; Rogoff, 1990, 1994; Rogoff, Matusov, & White (1996); Rogoff & Toma, 1997; Wertsch, 1985, 1991). An entire realm of meaning becomes available for study from a focus on the actions of an individual within the context of the environment (Wertsch, 1985). In observing the professional learning of teachers and as a researcher, I had to decide “which phenomena are interesting and deserve attention” and “what counts as an appropriate description or explanation” (Wertsch, 1991, p. 7). I chose to document and analyze the mediated actions of teachers as they interacted with, and within, the TCL environment.

Mediated action. The mediated actions of the teachers formed the primary data source for this study. Mediated action is a theory that explains how construction of meaning can be analyzed by observing both the person and the context in which actions occur (Wertsch, 1985). According to social constructivists, learning is a group phenomenon rather than an individual experience (Prawat & Floden, 1994). All human action is mediated action because we learn from others by passive and active association through, but not limited to, observation, reading, and discussion. Mediated action includes teachers’ goal-directed actions to solve problems during professional learning. Even the action of thinking relies on the signs, symbols, and language of one’s culture.

Constructivists, according to Bereiter (1994), “tell us to pay attention to the mental activities of the learner, and socioculturalism tell us to pay close attention to the

cultural practices in the learner's milieu" (p. 21). I agree with Bereiter (1994) that a learner's mental activities and the cultural milieu of the setting are not mutually exclusive entities. Knowledge is constructed simultaneously within the individual and within the social context; however, all individual knowledge finds its source in social actions.

To understand the mediated actions of teachers in sociocultural activity, I observed and audiotaped professional learning each month of the school year as teachers met in TCLs. I asked teachers during interviews to share their perspectives on their mediated actions within their group. Mediated action explains how teachers created new forms of knowledge and learning that could not be separated from, and only existed in, the context of the TCL meeting. During mediated action, participants "voice" is also important to consider.

Voice. As differences in mediated action emerged, I sought to understand the experiences behind the different voices of TCL participants through an iterative process of data collection and analysis. Wertsch (1991) uses the term voice as a reminder that mediated action is often a function of communication between members in social settings. Voice is (a) the repurposing of utterances for a specific purpose (Wertsch, 1985; Grossman, Wineberg, & Woolworth, 2000), (b) the words one speaks put together for a specific purpose within a specific social setting (Hargreaves, 1996; Wertsch 1985, 1991), and (c) comprised of the words that are chosen to convey a thought along with tone, attitude, and how words are delivered and manipulated for an audience (Tappan, 2006; Wertsch, 1985). Voice is not what an individual says, nor the way it is said, voice represents a much larger realm of process including shared appropriation of utterances (Wertsch, 1985). Once uttered, a voice becomes changed through individual assimilation.

My understanding of sociocultural theory required me to actively identify voices that dominated and voices that were silent during shared endeavors. I noted large and small changes in voice over time in my reflections and analytic memos and used interviews to explore my assumptions about these differences. Mediated action and voice provided foci that described the processes of learning in this study. In the next section, I explain how ethnography and grounded theory allowed for a robust analysis across these two sociocultural constructs within the data set.

Ethnography and Grounded Theory

For this study, I utilized ethnographic methods to provide a broad exploratory qualitative examination of the data while preserving the richness and authenticity of teachers' experiences (Bogdan & Biklen, 2007; Goetz & LeCompte, 1984). I chose ethnographic methods to help remove "the blinders that familiarity often attaches to us" (Ely, Anzul, Friedman, Garner & Steinmetz, 1991, p. 17). Consistent with a sociocultural ontological stance, ethnographic studies describe how individuals behave in cultural settings (Bogdan & Biklen, 2007). As a staff member at Suntree, I used ethnographic methods to collect data from multiple vantage points within the field of study: participant observation field notes and audio recording transcripts of TCL meetings, questionnaires, interview transcripts and notes, and researcher documents (described fully in the Methods section of this chapter). I captured and analyzed a range of individual experiences with situative learning across the school year (Charmaz & Mitchell, 2001). In addition, ethnographic methods are often used in concert with grounded theory; according to Pettigrew (2000) ethnography and grounded theory create a "happy marriage" because

grounded theory provides a flexible palette of approaches that respond to changes in data collection and analysis.

Grounded theory ethnography, like any methodology, has specific guidelines for trustworthiness and credibility (LeCompte, 1982). First, ethnography requires prolonged engagement. Because I was a member of Suntime, I was on site all day, every day. Yet, as a practitioner researcher, prolonged engagement had a negative side as well. I sacrificed my own professional learning during the school year of this study and removed myself from apprenticeship with my teacher colleagues to create time for data collection. I describe my level of participation using DeWalt and DeWalt's (2011) modification of Spradley's (1980) typology. I purposefully chose "moderate participation" (p. 23) as my level of engagement to be better able to focus more of my attention on my colleagues' participation instead of dividing my focus between my own contributions and documenting theirs. Conversely, this focus on others allowed me a unique opportunity to contrast my own proclivities for group learning with my colleagues gain insights for my own future participation. During participant observations I made notes listing future actions to verify and validate sources. The constant vetting of decisions through audit trails and analytic memo writing, and time debriefing with those outside the research site exhausted time that I could have use for my own professional learning as a classroom teacher. Additionally, my perspective was the only lens through which data was viewed regardless of measures to mitigate my biases. My reliance upon audio recording of groups to allow collection of simultaneous events severely limited my ability to make sense of interactions because so much rich detail was unavailable to me. I took comfort in

the words of DeWalt and DeWalt (2011) that, “every ethnographer makes mistakes, and these are rarely fatal either to the individual or to the research” (p. 19).

Second, grounded theory ethnography requires that there be some relevance for contextualized studies such as this. As with many qualitative research approaches, ethnography inherently lacks generalizability (LeCompte, 1982). However, professional learning is a general social process and any industry that participates in ongoing training of workers may find this study of interest. I have tried to provide enough detail that my efforts may be relevant to other practitioner researchers in conducting similar studies and to other elementary schools exploring a change in professional learning toward more sociocultural forums. My goal, nor that of ethnography, is not to provide a template for anyone to follow.

Third, I benefitted from having broad access to the research site and strong rapport with research participants when conducting this ethnography. However, my confusion and difficulty organizing data and conducting timely analysis could have been, in part, because of my inability to pull apart my biases and social affiliations with participants and be transparent about the effect of my own subjectivity on the research. I believe the trustworthiness in this study was greatly improved by using Computer Assisted Qualitative Data Analysis Software (CAQDAS). I conducted the analysis but the computer assisted and facilitated accessibility to the data (Bogden & Biklen, 2007).

As a member of Suntimee’s staff (and thus a cultural insider), I used grounded theory methods (Charmaz, 2006; Strauss & Corbin, 1998) to allow unique patterns and themes to emerge that were specific to my local cultural context. Charmaz (2006) describes grounded theory ethnography as a way for cultural insiders to maximize data

collection and analysis opportunities because they have established rapport with participants for extended periods of time. I had not recognized these cultural patterns until I began to listen and observe others and reflect upon my own place in this culture.

In the next section I discuss the perspectives I bring to this research as a practitioner that while providing advantages, also raise what Cochran-Smith and Donnell, (2006) describe as “tricky ethical, epistemological, and political issues that are involved when practitioners study their own work” (p. 504).

Practitioner Research and Subjectivities

In my role of practitioner researcher, the distinction between professional practice and research related to practice is “blurred” (Cochran-Smith (2005b) p. 221), thus providing an authentic context for research. Practitioner research refers to a systematic purposeful exploration of a topic described by identifying the role of the agent involved (Cochran-Smith & Donnell, 2006; Cochran-Smith, 2005b; Cochran-Smith & Lytle, 1999; Cochran-Smith & Lytle, 2009). I have implemented three strategies identified by Cochran-Smith (2005b) to address criticisms of practitioner research and its potential to contribute to policy and the larger research community: (1) Develop practitioner expertise in research; (2) Identify researcher biases and perspectives; and (3) Establish a Group of “Peer Debriefers.”

Develop practitioner expertise in research. The first strategy is for practitioner researchers to develop expertise as consumers of research and as researchers. Lampert (2000) stresses the importance of teacher voices being heard through authentic research,

and to produce work that contributes not only to local knowledge but to the larger field of education. As Cochran-Smith and Lytle (1999) state:

It is assumed that the knowledge teachers need to teach well is generated when teachers treat their own classrooms and schools as sites for intentional investigation at the same time that they treat the knowledge and theory produced by others as generative material for interrogation and interpretation. In this sense, teachers learn when they generate local knowledge of practice by working within the contexts of inquiry communities to theorize and construct their work and to connect it to larger social, cultural, and political issues (p. 250).

Reporting local knowledge of professional learning practice for Suntree will make “that knowledge accessible and useable in other contexts and thus transforming it into public knowledge” (Cochran-Smith, 2005b, p. 219).

Identify researcher biases and perspectives. A second strategy is to select methods and data sources to mitigate a close association to the subjects. I do not believe that any research can be objective; rather, I sought to recognize my inherent biases and subjectivities through critical self-reflection and peer-debriefing in weekly discussions with those outside Suntree.

In order to explain my perspectives about professional learning in elementary schools, I describe my subjectivities as a practitioner researcher (Cochran-Smith & Lytle, 1999, 2009) and longtime member of Suntree’s staff. My intimate knowledge of the site, the participants, and the culture of professional learning affects the study at every level. The following sub-sections describe the most prevalent sources of bias stemming from (1) the selection of Suntree as my research site, (2) a preference for sociocultural forms of professional learning, (3) knowledge of professional learning research, and research in general, and (4) my close association with Karen, Suntree’s principal.

Selection biases. Selection biases permeate this research but are also the reason for it. Because I was already “in” the setting I had access to a wide range of data types essential in developing a robust and relevant grounded theory. I explained orally and in writing the time commitment and options for participation (including nonparticipation) and always asked permission to audiotape or join TCLs as a participant observer. I answered questions and addressed concerns immediately. To lessen this bias, I documented these actions and discussed them with university colleagues.

Preference for sociocultural forms of learning. As a practitioner researcher, I favor sociocultural models for my own professional learning, for my students, and entered this study believing Suntime teachers favor sociocultural models as well. To mitigate this bias I discussed my assumptions with colleagues outside the research site and listened when participants described problems with TCLS that were characteristic of sociocultural models.

Knowledge of research. My knowledge of professional learning literature may have caused me to expect an outcome based on how professional learning has occurred in different settings. However, I did not want to select evidence that only supported my expectations while overlooking evidence that contradicted it. Therefore, I chose grounded theory methods (Charmaz, 2006) to allow themes to emerge from Suntime’s data rather than use a confirmatory approach. I did not want my knowledge of professional learning to privilege my assumptions or understandings of how TCLs work over the experiences of Suntime teachers. Likewise, I routinely asked my research participants to confirm and contradict my interpretations of data. Informal exchanges were included in researcher

documents; suggestions or corrections from reviewed transcripts were done in writing. I appended the data to include participant's alternate perspectives.

Close association to Suntree's principal. My role in this study cannot be separated from my close association with the Suntree principal, Karen, and my support for her decision to implement TCLs at Suntree. A close personal history with Karen was the impetus for conducting research at Suntree but also compromised my independence as a researcher. My decisions about data collection emerged through conversations with Karen. She provided a source of guidance, insight, and reflection about my choices for presenting the study, securing consent, and administering questionnaires. We also discussed the potential influence my research could, and did, have on the trajectory of professional learning at Suntree. I documented our interactions and examined them through reflection, analytic memos, and discussions with university colleagues to be transparent about our close association and its effect on my study.

Establish a Group of "Peer Debriefers." A third strategy to address criticisms of practitioner research is to establish a group of people outside of the research site to question and confront practitioner researcher bias. Several graduate students agreed to provide a sounding board for my reflections and decisions. E-mail became a primary way for me to clarify my thoughts in writing and to get written feedback from these individuals. Additionally, I scheduled regular face-to-face meetings with a fellow doctoral student and a colleague from Suntree who had retired. These differing perspectives offered valuable insights and questions about my analysis. I used multiple data sources to increase the depth and robustness of my analysis (Goetz & LeCompte, 1984). I agree with Bogdan and Biklen (2007) that use of the imprecise term triangulation

“confuses more than it clarifies, intimidates more than it enlightens” (p. 116). They advise simply to describe what I did. For example, in August before school started, I asked Suntree teachers to help me understand what they wanted from professional learning through a questionnaire. I observed and audio recorded multiple groups each month during professional learning meetings, and I interviewed the teachers. I believe the term crystallization (Ellington, 2009) is helpful in describing my approach and thinking about the biases I brought to this research. Crystallization is based on constructing understanding of an experience based upon analysis that is informed by multiple perspectives. My analysis was a process of crystallizing my thinking about Suntree’s professional learning by analyzing multiple sources of data and the reflections and memos I wrote as I collected and analyzed data. I consistently shared my assumptions and questions with participants and peer debriefers. My goal was to create a multifaceted and robust analysis by being open to alternative ideas and questions about my decision making process.

I kept reflection documents and analytic memos in both paper and online formats to reflect my thinking about how my exchanges and conversations affected my emerging assumptions or questions. E-mail became a primary means for an audit trail between the many participants, Karen, my colleagues outside Suntree, and my university colleagues. The record of correspondence was printed and kept in a file. This allowed me to make notes, highlight, check off and revisit my path both electronically and on paper. Often, after reflecting and reaching a decision, I would compose an email to a peer to get feedback on my new direction. These electronic memos were an essential vehicle for me to maintain records of my thinking.

In summary, this first section identified the sociocultural framework, ethnographic grounded theory, as well as my practitioner research stance and biases. The next section details the specific methods used to collect and analyze data.

Methods

In this section I describe the setting, participants, data collection, and data analysis. In addition, I explain the use of vignettes for reporting findings and the limitations and considerations of the research design.

Setting

Suntree Elementary is in a suburban area described as “rural/fringe” by the National Center for Education Statistics (nces.ed.gov), located approximately 50 miles from a large southeastern metropolitan area of the United States. During this study, the school served 580 students, of which 5% were African American, 6% were Hispanic, 3% were Asian, 84% were white and another 2% were identified as two or more races. Suntree was not a Title 1 school; 3% of students qualified for free or reduced lunch (an indicator of the income level). The school identified 24% of students as gifted, 10% as receiving some form of special education services, and 8% who participated in the early intervention program in reading or math. TCLs were prompted by teachers’ desire to work together to improve use of classroom technology, integrate 21st century skills into instructional practice, and to align existing curriculum with CCGPS standards in math and language arts. TCLs were part of a professional learning framework designed by Karen, Suntree’s principal. TCLS provided a sociocultural space for teachers to address these conceptual issues that affected their teaching practices.

DeWalt and DeWalt, (2011) stress the importance of matching the research site to the type of research being conducted. Selecting Suntree supported my stance as a practitioner researcher and allowed me to collect enough data to build a grounded theory through unlimited access to Suntree facilities and staff.

Participants

Suntree's 42 teachers and two administrators agreed to participate in this study. The Assistant Principal (AP), Josie, and one teacher, Elisabet, agreed to be observed and audiotaped during TCL meetings but did not consent to participation in other ways. Regardless, Elisabet completed the second questionnaire in spring, and Josie initiated several informal discussions about my research. All other staff members and Karen agreed to participate fully in the research (See Table 1).

Table 1

Participant Description

Participants	Experience Range	Ethnicity	Grade level experience range
36 teachers	7-25 years	White	7- 15 years at grade level
5 teachers	6-15 years	White	1 year at grade level
1 teacher	16-20 years	Asian	16 years at grade level
2 administrators	17-20 years	White	6-10 years as administrator

I did not participate in professional learning activities in TCLS; rather I used my professional learning time to document teachers' mediated actions as they participated in TCLS. I felt my active participation in my own learning would limit my ability to effectively collect data. In participating in professional learning activities I have always gauged my participation in terms of what I believe is best for Suntree, its teachers, and its students. This year, my position as a practitioner researcher caused me to also consider how my interactions during professional learning would affect the types of actions taken by my colleagues. I made efforts to limit my interaction when possible, to observe participants, to ensure that the audio recording was working, and to take field notes. I refrained from providing information and, telling personal opinions or stories unless called upon by teachers in the group to disclose and as a means to gain entry into the group. I wanted to document the mediated actions of Suntree teachers in TCLS and felt my active participation would complicate my research without adding significant benefits.

The maximum time for participation (excluding informal interviews) was 10.0 hours over the course of the school year (See Table 2).

Table 2

Participation Commitment

	Data Collection Method	Time	# of times	Total Time	Total time per individual
41 Teachers	Questionnaire	30 minutes	2	60 minutes	10.0 hours
	TCL Observation	60 minutes	8	8 hours	
	Formal Interview	30 minutes	2	60 minutes	
Elisabet	Questionnaire	30 minutes	2	60 minutes	9.0 hours
	TCL Observation	60 minutes	8	8 hours	
Karen	TCL Observation	60 minutes	8	8 hours	8¾ hours
	Formal Interview	45 minutes	1	45 minutes	
Josie	TCL Observation	60 minutes	8	8 hours	8.0 hours

Each month, professional learning occurred through TCLs, at tables in one large room (see Figure 3). Administrators, district level instructional support teachers (ISTs), and specials teachers (i.e. technology teacher, media specialist, counselor, gifted, Early Intervention Program teachers, and Special Education staff) had easy access to TCLs due to this organization framework. Specials teachers created a TCL but were available to consult with grade level TCLs. The math and English Language Arts (ELA) ISTs assisted TCLs in CCGPS implementation. Grade chairs received a document from Karen the week before the monthly meeting. On this report, teachers described their goal(s) for the upcoming TCL meeting and requested computers if necessary. On this form, district ISTs

and special teachers could also be “reserved” to join TCL discussions. The resources, roles, responsibilities, and specific skills available to teachers were flexible and available across TCLs during professional learning time.

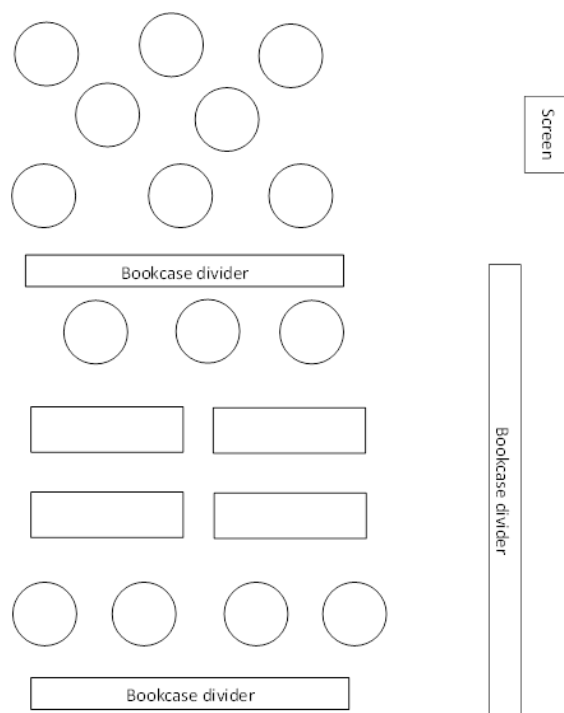


Figure 3. Room Configuration

Data Collection

Sources of data for this study are: (1) a questionnaire given two times across the school year, (2) field notes and audio tape transcripts of TCLs, (3) transcribed interviews and notes from informal interviews, and (4) documents (See Table 3). The data sources answered the research question, “How does the introduction of a situative model influence the process of teacher learning and professional development?” through four sub-questions.

Table 3

Data Sources

Research Sub-question	Questionnaires	Observations & Audio Recordings of TCLs	Interviews	Documents Including Researcher Reflections & Memos
How do teachers participate in TCLs?	✓	✓	✓	✓
What influences teachers’ participation or nonparticipation in TCLs?	✓	✓	✓	✓
How do teachers respond to the process of change over time in the delivery model of their professional learning?	✓	✓	✓	✓
What kinds of	✓	✓	✓	✓

transformations (large and small) occur through participation in TCLs?				
--	--	--	--	--

The four sub-questions break the larger research question into ways of categorizing the mediated actions of teachers in TCLs: the ways teachers participate, the things that influence that participation, the responses of teachers to participation in TCLs, and changes that occur through participation in TCLs. The four data sources that answer these research questions are described in the subsequent sections.

Questionnaire. At the first faculty meeting in August, 2012, I explained my research and teachers’ participation options. I answered questions and got consent using IRB forms. I disseminated a questionnaire (Appendix B) asking for descriptive information about their experience, education and teaching assignments, personal goals for professional learning, and answers to five questions. The questions elicited experiences with professional learning that Suntree teachers preferred, or ones they described as positive. Return rates were low on this August questionnaire because teachers did not have time during the meeting to complete it. When I followed up with teachers in person, several apologized that they did not complete it and others reported the questionnaire got “lost in the shuffle” of getting ready for the new school year.

A revised questionnaire was given in March, and participants were given time during the meeting to complete it, (See Appendix C). This questionnaire better answered the research questions; provided a second source of data for comparison with

observations, audio recordings and interviews; and reflected the analysis of data collected up to that point, primarily participant observations and audio recordings of TCL meetings as explained in the next section.

TCL field notes and audio transcripts. Each month I conducted a participant observation of one TCL while audio recording two other TCLs. This allowed me to collect data simultaneously from three TCL meetings. During participant observation, I concentrated on observing and recording field-notes, intentionally limiting my participation and interaction. The focus of my observations was the mediated action of TCL participants. I wrote about who was talking, when they talked and the tone (angry, nervous, excited, etc.). These foci helped me identify the ways teachers constructed meaning during TCL meetings. Likewise, I observed how teachers negotiated roles, navigated tensions, and developed norms of participation in situative professional learning (Borko, 2005; Gusky, 2000, 2003; Mindich & Lieberman, 2012). I took notes in the form of narrative and included talk, action, and inaction of teachers. I noted my questions and reflections during note-taking. Observations provided “a strategy that can allow us to discover the existence of patterns of thought and behavior” (DeWalt & DeWalt, 2011, p. 126). Observation allowed me to compare and contrast teachers’ descriptions of their participation from questionnaires and interviews.

DeWalt and DeWalt (2011) suggest combining audio recordings simultaneous to participant observation and taking field notes to capture verbal exchanges and the nuances of voice. A more practical reason for audiotaping during Suntree’s TCLs was that I was a lone researcher and could not collect data during simultaneous meetings of multiple TCLs. I audiotaped the third and fourth grade TCLs in September based on

initial questionnaire responses. I selected the specials TCL for participant observation based on answers by several of those participants expressing a strong negative experience with professional learning.

I listened to recordings immediately after the TCL meetings. Transcriptions were made within two weeks of the meeting. The exception to this was during October when I initiated CAQDAS research and implementation. The October audio files were not transcribed until the November holiday break. I recorded my thoughts, questions, and impressions during transcription of the recordings. I reviewed and clarified my observation notes within 48 hours. If I had questions, I was often able to catch participants immediately after a meeting or the next day. For example, if I transcribed an audio recording and thought a participant might have been angry, I confirmed my assumption by informally discussing the interaction with them the next day. While reviewing notes and audio recordings, I created a record of the questions I asked and decisions I made. I reflected on what I did or did not record and why. These notes and my reflection of the observation became data. As the year progressed, I began to focus my participant observation on the TCLs that might best explore a pattern emerging from the data. I selected teachers to interview based on emerging themes.

Interviews. I used responsive interviewing (Rubin & Rubin, 2005) to investigate and extend understanding of observed and recorded behaviors and questionnaire answers. I adopted the term “conversation partner” to “suggest a congenial and cooperative experience as both interviewer and interviewee work together to achieve a shared understanding” (Rubin & Rubin, 2005, p. 14). This is in line with my sociocultural and practitioner research stance. I had a prepared protocol (Appendix D) as a guide for the

conversation with teachers and Karen (Appendix E). I shared a copy of my research questions with the eight participants before beginning an interview. I allowed my conversation partner to influence the place of the conversation and the length of the interview within the frame of the research protocol and research questions. The goal of the semi-structured interviews was to allow teachers to share their experiences with professional learning historically, culturally and currently. I endeavored to listen more than I talked. My intent was to connect experiences by offering one partner the chance to verify another's experience or to offer an alternative viewpoint (Rubin & Rubin, 2005). In this way I identified patterns across the data.

I used email to set up and confirm formal interviews offering teachers options of time and place. Five structured interviews occurred outside of Suntree at my home or the home of participants, two interviewees asked to be interviewed in my classroom. Karen's interviews occurred in her office. Interviews lasted between 20 and 40 minutes and were audio recorded. I transcribed interviews within a week; most within 48 hours. I used email to send participants transcripts for verification, clarification, and feedback (see Appendix F).

My participant researcher status facilitated the interview process and informal interviews were a great benefit of this stance (Cochran-Smith & Lytle, 2009). When participants did not respond to email transcriptions within a week, I would follow up in person. I used these informal interviews to reassure participants that I valued their input and encouraged them to tell their thoughts in a way that was most convenient for them. I documented and reflected on informal interviews that occurred throughout the day and these documents became part of my data.

Historically, Karen and I routinely shared informal exchanges about professional learning throughout the school day. For this study, I documented my interactions and reflected upon my response to Karen and my thinking about our discussions as a source of data. I documented and reflected upon my actions and intentions in supporting Karen and professional learning at Suntree. These reflections and memos formed part of the audit trail and were an additional source of data.

Documents. I used content analysis (Krippendorff, 2004) to examine three documents Karen disseminated each month: (1) the professional learning planning sheet, (2) the teacher reflection handout, and (3) the individualized professional learning plan (iPLP) developed for specials teachers. The plan submitted before TCL meetings (Appendix G) was authored by Karen and was to prepare for TCL meetings. It required teachers to meet briefly prior to the TCL meeting to decide their focus, to designate roles for facilitator, note taker, time keeper, and to request access to computers, and specials teachers or ISTs needed to be included in their work. The teacher reflection document (Appendix H) was created by Karen. The audience was each individual teacher. The document provided a definition of teacher reflection and listed suggested ways, or strategies for reflecting.

I collected documents that originated from county and regional sources outside of Suntree and asked teachers how they used them. My emic perspective and participant researcher status familiarized me with the documents used or referred to by teachers in TCLs.

Timeframe of data collection and analysis. My data collection and analysis was divided into three phases (Table 4). This division fit with my dual responsibilities as a

Table 4

Phases of data collection

	Phase 1	Phase 2	Phase 3
Questionnaire	Administered to 42 teachers	Administered to 42 teachers	
TCL meetings	3 TCLs each month (1 participant observation & 2 audio recordings)	3 TCLs each month (1 participant observation & 2 audio recordings)	3 TCLs each month (1 participant observation & 2 audio recordings)
Interviews	none	Informal interviews	8 Formal Interviews

practitioner researcher and allocated data collection effectively across the schedule of professional learning meetings.

The first phase of data collection lasted four months and was the longest (See Table 4). TCLs did not meet in December, 2012 due to holiday activities. At the end of this first data collection phase, I began using CAQDAS, specifically the program ATLAS.ti, to organize and facilitate analyzing the large amounts of data collected. The second phase lasted two months, and I selected the TCLs for data collection based on themes emerging from the data. The third phase also lasted for four months; however, TCLs did not meet in March due to a county math training or in April because of required diversity training in which the state teacher-of-the-year spoke about her experiences teaching at a school for blind students. During March and April I conducted formal interviews. The next section details the analysis of data using grounded theory methods.

Table 5

Timeline of Data Collection

<p>Phase 1</p> <p>Month 1</p> <p>August 2012</p>	<ol style="list-style-type: none"> 1. Presented study to staff, answered questions; secured signed IRB consent 2. Distributed and collected August questionnaire 3. Organized data and established plan for TCL meetings' data collection. 4. Participant observation & field notes of specials TCL 5. Began analysis of data, analytic memo writing, reflection logs
<p>Month 2</p> <p>September</p> <p>2012</p>	<ol style="list-style-type: none"> 1. Participant observation & field notes of specials TCL 2. Audio recorded 3rd & 4th TCLs; transcribed recordings 3. Conducted informal interview with Karen to verify professional learning plan 4. Continued analysis of data, analytic memo writing, and reflection logs
<p>Month 3</p> <p>October</p> <p>2012</p>	<ol style="list-style-type: none"> 1. Participant observation & field notes of 1st grade TCL 2. Audio recorded K and 2nd grade TCLs; transcribed recordings 3. Conducted informal interviews with Karen and teachers; recorded notes 4. Continued analysis of data, analytic memo writing, and reflection logs 5. Researched use of CAQDAS
<p>Phase 2</p> <p>Month 4 & 5</p> <p>Nov/Dec</p> <p>2012</p>	<ol style="list-style-type: none"> 1. Participant observation & field notes of K TCL 2. Audio recorded 1st and 5th grade TCLs; transcribed recordings 3. Conducted informal interviews to verify assumptions from ongoing analysis 4. Offered transcriptions and field notes from phase 1 and month 4 to participants 5. Continued analysis of phase 1 and 2 6. Began using ATLAS.ti to facilitate ethnographic grounded theory data analysis
<p>Month 6</p> <p>January 2013</p>	<ol style="list-style-type: none"> 1. Participant observation & field notes of specials TCL 2. Audio recorded 4th & 5th TCLs; transcribed recordings 3. Analyzed corpus of data for emerging patterns for category development 4. Revised and evaluated data collection plan 5. Continued analysis of data, analytic memo writing, and reflection logs 6. Conducted informal interviews to verify assumptions from ongoing analysis
<p>Month 7</p>	<ol style="list-style-type: none"> 1. Participant observation & field notes of specials TCL 2. Audio recorded SPED and EIP TCLs; transcribe recordings.

February 2013	<ol style="list-style-type: none"> 3. Analyze data sets 1 and 2 using grounded theory constant comparison methods 4. Continue analytic memo writing, and reflection logs 5. Conduct informal interviews to verify assumptions from ongoing analysis
Phase 3 Month 8 March 2013	<ol style="list-style-type: none"> 1. Distribute and collect questionnaire at professional learning meeting. 2. Continue analysis of data, analytic memo writing, and reflection logs 3. Conduct informal interviews to verify assumptions from ongoing analysis 4. Set up formal interviews
Month 9 April 2013	<ol style="list-style-type: none"> 1. Conducted three formal interviews; transcribed 2. Member checked interview data 3. Conduct informal interviews to follow up on member checks & verify assumptions from ongoing analysis 4. Continue analysis of data, analytic memo writing, and reflection logs
Month 10 May 2013	<ol style="list-style-type: none"> 1. Conducted four formal interviews; transcribed 2. Member checked interview data 3. Conducted informal interviews to follow up on member checks & verified assumptions from ongoing analysis 4. Continued analysis of data, analytic memo writing, and reflection logs
Month 11 June 2013	<ol style="list-style-type: none"> 1. Conducted formal interview with Karen. 2. Member checked interview data 3. Used email to member check & verify assumptions from data analysis 4. Completed analysis of data 5. Provided participants with findings

Data Analysis

I analyzed data using a combination of grounded theory constant comparison methods focused on the mediated actions and voice of teachers as they participated in TCLs for professional learning (Charmaz, 2006; Strauss & Corbin, 1998). I collected a large volume of data because I wanted to develop a full description of professional

learning at Suntree. I added CAQDAS after the first phase of data collection (See Figure 4) to manage emerging codes and to analyze the data to build a grounded theory (Strauss & Corbin, 1998). Ethnographic grounded theory involves recursive analysis of data to allow for refinement of questions and data collection as an ongoing iterative process. This involved examining and reexamining data in light of the research questions guiding the study. I describe the coding methods I use in a sequential way, however I used them concurrently and recursively as data were collected. After a brief description of grounded theory constant comparison methods, I describe the specific coding methods I used in a process of First Cycle and Second Cycle analysis (Saldaña, 2009).

Grounded theory methods and constant comparison. I used grounded theory elements as conceptualized by Charmaz (2006) who adapted her analysis techniques from Glaser and Strauss' (1967) Grounded Theory. Frequent recursive reviews of the four sources of data allowed themes to emerge. According to Charmaz (2006), line-by-line coding using words that connote action, such as leading, explaining, or clarifying, reduces the tension of making conceptual leaps before the required analysis is completed. As I coded the first month's data, I developed ideas that guided further collection of data. For example, look for a pattern of interaction across TCLs. I also noted tentative conceptual links to form theories about and between data such as, are teachers participating equally? As these first themes and patterns emerged from the material, I combined codes to reduce the number of categories. In other words, building community could contain both agreeing and disagreeing as both are relational activities that establish community. I created memos during this initial line-by-line analysis of my emerging

ideas and connections between units. In these memos, I noted these decisions and the thought processes leading up to them.

Constant comparison methods allowed categories to emerge that may be unique to Suntree along with codes that can be described in terms of the existing literature on effective professional learning. I created categories and themes by establishing common elements that linked codes within each TCL, across individuals, and in multiple data sources. I tested these theories through conversations with teachers and others and by applying themes to all the data. I questioned the extent to which themes applied and if additional themes occurred in my data (Harry, Sturges, & Klingner, 2005). An example was the category barriers and the ways teachers made references to them. I confirmed that these “inside joke” references were occurring in all TCLs. After theming the data (Saldaña, 2009) I reduced and reorganized the data to be sure I could answer the research questions. After a period of reflecting on and reanalyzing the corpus of the data, I identified the major concepts that could be used to tie the individual TCL experiences together. This resulted in “explanations emphasizing the power of [my] analysis to develop a theory that explains” how introduction of a situative model for professional learning affected Suntree (Harry, Sturges & Klingner, 2005, p. 9-10).

The first evidence that hand coding would not be sophisticated enough to analyze my data occurred in August. I transcribed August field notes and audio recordings of TCLs and formatted them with a 3 inch margin on the right to facilitate hand-coding. However, I quickly filled this margin in my first coding session. I did not have enough room for notes, observations, questions or additional analysis. My audit trail and analytic memos reflected my difficulty, even fear, of getting started. Frequently, one code

segment contained multiple mediated actions and I was not sure how to code it to reflect my thinking. I knew I had to keep coding and use analytic memos to record my thoughts and decisions.

By the end of September, I was thinking about larger categories. As I coded, I created memos about possible ways codes fit together. I also reflected on the problem of how to analyze patterns across the corpus of the data. In my reflections and analytic memos I described my feelings about initial coding and iterated my fears that I would run out of space, courage, and sanity before I made it to Christmas. How, I wondered, would I ever analyze so much data? How would I break it apart and still preserve the nuances of teacher interaction? Feedback from my doctoral colleague was that I should be ecstatic to have so much rich data; I felt panicked and overwhelmed. I continued to collect data and code using a mix of the coding methods I describe next, and I updated my attribute code list.

I used ATLAS.ti software. This did not alter my data analysis methodology or methods it simply allowed me to “approach the analysis of [my] data in a systematic computer-assisted way” (Friese, 2012, p. 3). I imported all data from August and September into ATLAS.ti and recoded it electronically (see Figure 4). ATLAS.ti keeps track of similarly coded data and sequences of codes. Likewise, the identification of specific codes, such as *in vivo codes* (Glaser & Strauss, 1967) is accomplished by highlighting and clicking an icon. ATLAS.ti facilitated theory development because I was able to create visual representations (network views) that allowed me to look at the data in different ways.

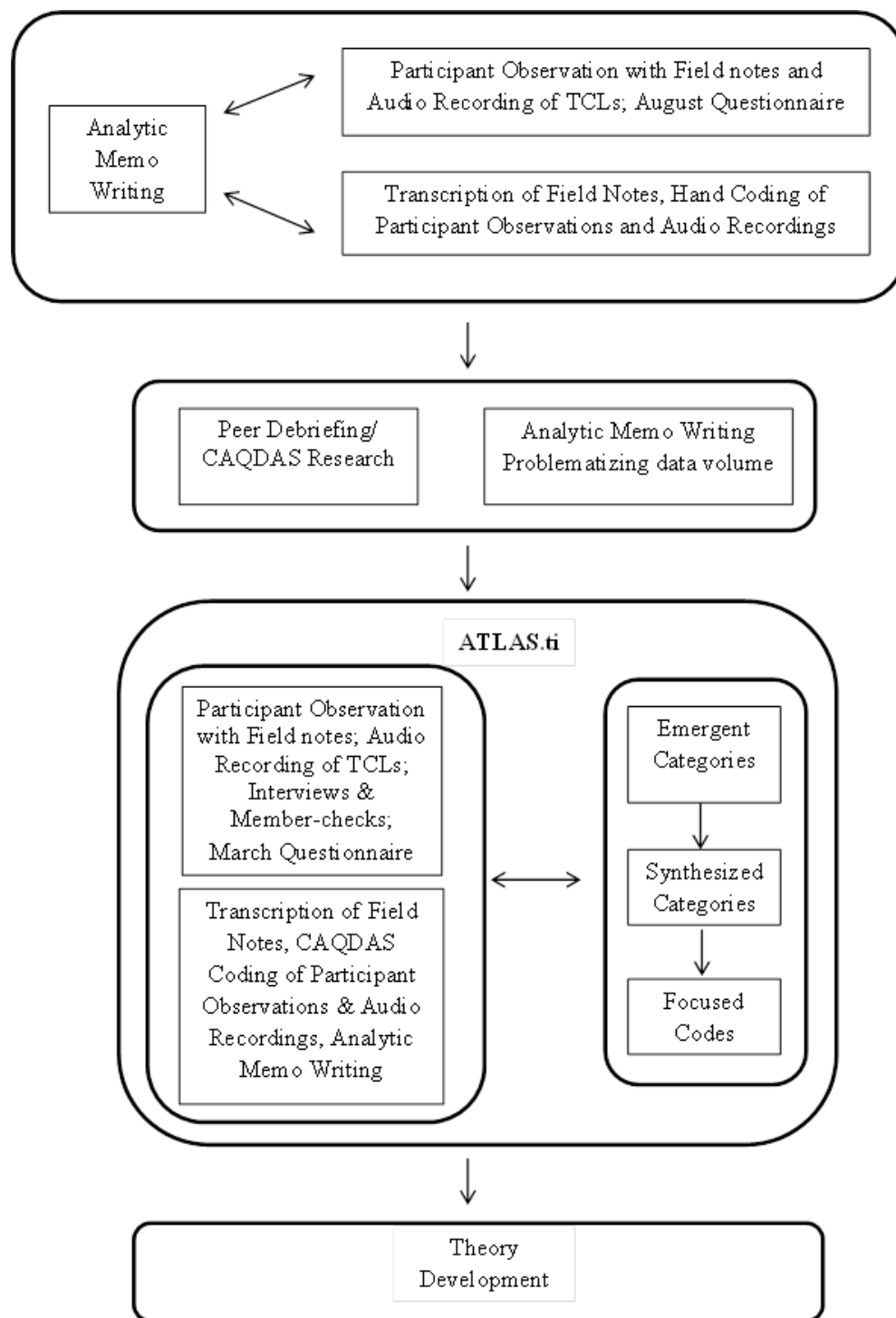


Figure 4. First cycle grounded theory model

The following section describes the specific coding methods (Saladaña, 2009) I used to accomplish grounded theory analysis as described above (see Figure 5). Coding methods (Saldaña, 2009) were chosen based on the methodological needs of the study and the sociocultural theoretical framework.

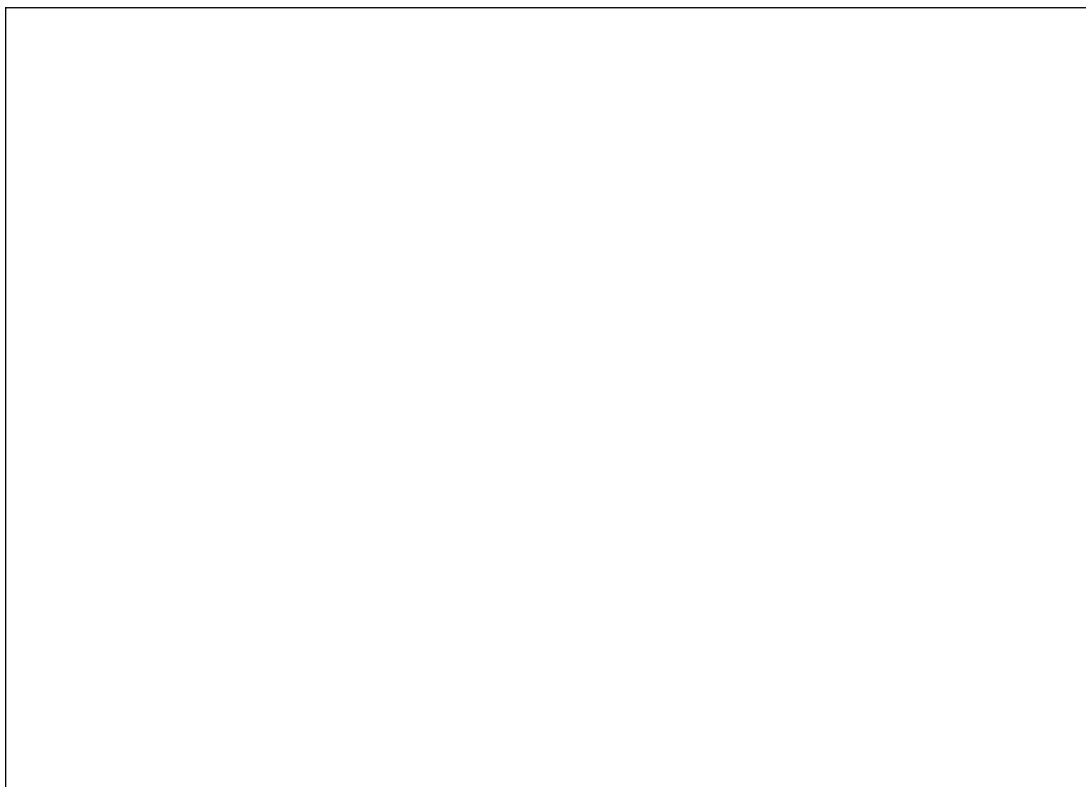


Figure 5. First cycle and second cycle coding methods

Coding methods. I used five coding methods to break the data apart to allow themes to develop prior to interviews and three coding methods to begin reintegrating and reorganizing the data into a manageable number of categories for theory development. The description of coding methods in this section follows a linear path; the actual application of methods in two cycles occurred interchangeably and recursively throughout analysis.

First Cycle Coding Methods. I used *attribute coding* (Saldaña, 2009) to organize and plan for the collection of data using the descriptive information reported on the August questionnaire. I created an attribute code document (see Appendix I) that listed each TCL, the participants of each TCL by pseudonym, and a tentative division of participant observation and audio recordings for each month. The resulting document was not static; it was revised as the study unfolded.

I made two a priori decisions for coding my data. The first was to code close to the data using line-by-line coding which initially generated over five-thousand meaningful data units divided across 161 codes (see Appendix J). The second a priori decision was to use *process codes* (Saldaña, 2009) which are gerunds (“ing” words) to describe mediated actions of teachers. Saldaña (2009) describes process codes as “used exclusively to connote action in the data” (p. 77). I had many co-occurrences of process codes in the first data collected. Second, I used *simultaneous coding methods* (Saldaña, 2009) to capture the actions of teachers that co-occurred and represented patterns common across TCLs. My emic perspective familiarized me with exchanges that might appear to an outsider as simple actions, but as an insider, I recognized when teachers were alluding to something else; an important cultural behavior of Suntimee’s staff. An

example was the co-occurrence of LEADING and JOKING followed by LAUGHING. This pattern often reduced tension in a TCL because the speaker alluded to a shared frustration or “inside joke” of teachers’ experience. I began using the Simultaneous Code LRT (Leading/Reducing tensions) when I recognized this pattern of mediated action.

I used in vivo codes to identify participants’ words if they captured meaning better than a code I created. These codes often contained the meaning of their experiences and I explored these in interviews. Likewise, in vivo codes were a catalyst for thinking about differences in the quality or type of participation among teachers during TCL meetings that indicated voice. Saldaña (2009) defines in vivo codes as “a word or short phrase from the actual language found in the qualitative record” (p. 74). I had to decide if phrases like “jump in” or “off the charts” were unique to Suntree, or simply common educational shorthand to describe joining a discussion or student scores. In vivo codes occurred infrequently until I began coding interviews. However, I went back through the corpus of the data (made easy because I was using CAQDAS by the time of interviews) to look for in vivo codes that I may have missed after coding interviews. The context of interviews encouraged participants to use in vivo codes to explain their thinking about their TCL interactions.

I included Structural Coding to be sure I was collecting data that would answer the research questions and to organize my data for comparison to interviews. Again, ATLAS.ti made this “extra step” easy to accomplish. Saldaña (2009) suggests structural codes provide a “grand tour” (p. 48) of the data that organizes it by relation to specific research questiona. Before I themed the data, I used the four sub-questions under the overarching research question to divide my codes into conceptual phrases: 1) the actions

of teachers, 2) the influences on their participation, 3) teacher responses to the change in professional learning, and 4) changes (large or small) that occurred through participation in situative professional learning.

I looked for themes capturing the connections and patterns in the data before conducting second cycle coding analysis to be sure I had categories that described my two main types of data: teachers' mediated actions and voice. I imposed the themes "participation", "influences", "responses", and "transformations" on the data which I generated from the verbs in my research sub-questions. This system organized the majority of codes into categories but was not all inclusive. Second cycle coding methods (Saldaña, 2009) are described in the next section.

Second Cycle Coding Methods. The division of coding methods into two cycles helped me manage the recursive and iterative analysis of the large amount of data collected and analyzed for this study (Saldaña, 2009). Two cycle coding is also the recommended logic for using ATLAS.ti (Friese, 2012). During this stage of analysis, I used coding methods to organize and synthesize data that had been previously broken apart by earlier coding methods. During second cycle coding, I applied *pattern coding* to identify similarly coded data, *focused coding* to reorganize the data conceptually, and *theoretical coding* to look for primary themes that would provide a few overarching "central or core categories" (Saldaña, 2009, p. 163) that would encapsulate all the data and provide meaningful answers to my research questions. These overarching themes described different experiences indicative of Suntree teachers who participated in different TCLs during professional learning. The four themes that emerged were

negotiating, building community, navigating barriers, and establishing roles (see Appendix K). These are detailed in the next chapter on findings.

CHAPTER 4

FINDINGS

The overarching research question is: How does the introduction of a situative model affect the process of teacher learning and professional development? I divided this question into four sub-questions: (1) How do teachers participate in TCLs? (2) What influences teachers' participation or nonparticipation in TCLs? (3) How do teachers respond to the process of change over time in the delivery model of their professional learning? and (4) What kinds of shifts in professional learning practice (large and small) occur through participation in TCLs? In this chapter, findings are organized under these sub-questions to answer the overarching question.

The following sections describe the processes I used to generate themes from the data analysis that were then used to answer the research questions. For each research sub-question, I (a) summarize findings, (b) describe the themes that answer the question, (c) explain categories in each theme, and (d) provide a minimum of two specific data samples to exemplify each category. At the end of each section, I provide a synthesized answer to the research sub-question at hand. Chapter 5 contains a discussion of the major findings and implications of this research.

Research Sub-Question 1: How do teachers participate in TCLs?

Teachers participated in TCLs through intellectual and social processes. In other words, teachers interacted to solve problems related to their teaching but also shared information that established personal connections. The themes used to answer this question are *negotiating ideas* and *building community*. TCLs provided an opportunity for the negotiation of ideas to solve problems identified as important to small groups of

teachers. Similarly, negotiation of ideas occurred at the same time teachers' built community that created enjoyable and productive TCL experiences.

Negotiating Ideas

Suntree teachers negotiated ideas during TCL meetings. The theme *negotiating ideas* comprised the intellectual mediated actions and voice of teachers. TCLs provided a time and space for teachers to negotiate their ideas about curriculum, pedagogy, policies and students. The teachers negotiated their ideas during TCLs through processes described in these categories: leading, explaining, describing, clarifying, absorbing, acknowledging, admitting challenges, and realizing. The first four categories [leading (468), explaining (1183), describing (691), and clarifying (1150)] occurred most often and contain the most meaningful data units that are distributed evenly across categories. The last four categories, [absorbing (75), acknowledging (190), admitting challenges (97), and realizing (138)] were equally important to negotiation of ideas but occurred less frequently and contain meaningful data units evenly distributed across them. I describe the categories in an order similar to the pattern of occurrence during TCL meetings.

Leading. *Leading* describes teachers' comments to impart an agenda, and all participants led at some point during each TCL meeting. Leading not only occurred as a way to begin the work of the TCL, but also transpired throughout the TCL meeting. In the following example about CCGPS alignment, Jinny, who was designated as the grade-level chairperson, began the TCL meeting time by reminding her grade level team what was written on the planning sheet (P8_TCL3_9-12), "Alright. We said we were going to try to figure out this correlation for StoryTown." In another example, a second grade

teacher led by saying (P6_TCL2_10-12): “Ok. Here's what I was thinking, I haven't given a ‘check progress’ yet. Can we create a check progress or a couple of check progresses?”

Explaining. The category *explaining* describes 1183 of 5464 comments during the TCL. Teachers shared expertise in a particular curriculum area and also indicated a willingness to be apprenticed by others through explaining. This category captures “ideas in progress.” Participants put ideas out to be considered, critiqued, evaluated, and improved. In this example, a fifth grade teacher explained her practice for teaching a new CCGPS math lesson perhaps hoping someone would suggest a less time-consuming alternative (P11_TCL5_1-13):

I know what I'm doing tomorrow. And I've already looked at those cards, going, “can I?” And I literally have to go through this, and say, “can I match up every one of these cards myself?” Because I'm happy to do the lesson before I ever teach it (Patty interrupts: That's how I've always had to teach it.) That's what I do. And I do the lesson before I ever teach it myself.

Sometimes explaining indicated a potential problem with curriculum, pedagogy, policies, or students. For instance, during a fifth grade audio recording, the team of teachers was discussing a lesson on fractions with the district IST. One teacher explains difficulty she had teaching a concept (P11_TCL5_1-13), “But you can't do one fourth times three. It's one fourth of three. And my kids are still going to look and go; how come that is not one fourth times 3, but one fourth of three?” Frequently, explaining set forth the steps or assumptions brought to a task, or a teacher explained her position on an issue for others’ evaluation and comments. Explaining included sharing new ideas and suggesting alternative practices. Additionally, Karen would often use the first few minutes of a staff meeting to explain something for teachers to consider during TCLs, as in this example (P5_TCL1_11-12):

Make sure that you *are* sharing ideas with each other, supporting each other, giving tips, I mean you tried in the past and it worked, if something's not going well, tell the people at your table, "This did not go well? Does anybody have some ideas for how I could do it differently?" Or what have you done before. This is really a time to do that.

Teachers also explained their vision of TCLs. For example, when I observed the specials TCL in September, the media specialist explained that when she is needed by a TCL, she isn't prepared to answer their questions necessarily, and needs time to pursue the request or research an answer. This encouraged the art teacher to explain that she finds little professional learning in her content area during staff meetings and TCLs were not an improvement. She explained that she felt most professional learning time at Suntree was designed for regular classroom teachers and not specials teachers (P14_TCLSPEC_1-13). Explanations disclosed information that speakers were personally addressing and were put forward during TCL meetings for others' to consider and offer a response,--if not immediately, then perhaps at some future time.

Describing. The category *describing* was used 691 times by teachers to provide evidence for their claims as part of negotiating ideas. Describing was a more concrete declaration and did not invite response. By describing, teachers were simply offering an example to provide details or a narrative to others. Teachers stated the elements of a resource or why they used it and detailed actions and reactions of students. An example from a kindergarten discussion showed how describing students' behavior introduced an area of concern for implementing technology initiatives (P7_TCLK_10-12): "First of all, and I think it was one of you who reported it to somebody and then shared it with me, because they thought it was amusing, is that the kindergarteners are coming in, and they don't know how to use a mouse." In another example from fourth grade, a teacher describes how students use a website (P9_TCL4_1-13): "It's for teachers and students so

that they have a platform that's safe and secure to blog about assignments; or if they're reading, if you give them a chapter to read at home, to know that they do it.” In another example, teachers in the first grade TCL described resources found online to determine if they could be used to meet CCGPS objectives (P5_TCL1_11-12): “This is Monster Mansion. They use teddy bears, Unifix® cubes, paper clips, and measured the roads. And then there's a recording sheet. This one is Cupcake ruler. They have certain things that they have to measure with the cupcake.”

Clarifying. The next category, *clarifying* describes the back and forth that occurred when teachers needed more information to understand what was being said. Because each topic in a TCL required four or five teachers to get on the same page, teachers frequently asked for clarification during TCL meetings. During the work of a TCL, several different teachers provided information to clarify the same element.

For example, during a participant observation in October, I observed the first grade TCL as they worked together to develop CCGPS assessment. Faydra led by stating that the group needed Unit 1 CCGPS performance assessments. Cami asked, “like showing the number 99?” Laverne asked if they would do the performance assessments in small or whole group. Cami clarified Laverne’s question by saying that it depended on the task, and suggested they ask each child to make their name in manipulatives. Faydra asked what Cami meant. Cami clarified that each letter has a number value; students spell their name, add the letter values together, and make the sum for their name out of manipulatives. Laverne clarified that she asked about small or whole group because it will be difficult to get the amount of manipulatives needed for a whole group to do this

assessment. Faydra said she didn't think most first graders would be able to do it without a lot of teacher help so small group might be better (P15_TCL1_10-12).

Absorbing. The category *absorbing* described periods of silence, times when teachers repeated verbatim what had just been said, or used pause-fillers like “soooooo,” “hummm,” or “wait a minute” to provide time to think. I used interviews to confirm with participants my assumptions about some of these silent spaces in the data and I used interviews to ask participants who were not captured in audio recordings why they were not verbally participating in TCLs. These teachers confirmed that they were participating and using the time to absorb what was being said. For example, during an interview with Emmi, a kindergarten teacher (P21_K/IT_5-13), I asked: “So are you still participating even when you are not speaking?” To which she replied: “Yeah, I mean I'm active listening (laughs).” In another example, a fifth grade teacher describes how she participated at the beginning of the year (P22_5/IT_4_13): “Well. I felt like I did mostly sitting back and listening. I was absorbing because I wanted to fit in. I really didn't know what to expect and I wanted to fit in.”

Acknowledging. The category *acknowledging* happened when teachers were in the middle of a pattern of negotiation. Acknowledging was one way teachers showed they were actively engaged in the process of mediated action. Teachers acknowledged lengthy explanations, or clarifications that were helpful in several ways such as, “Right!” “Yes.” “I understand.” “Keep going.” or “Super.” Teachers also had acknowledgements such as “Nope,” “I don't follow,” or “Nuh uh” to indicate they were not understanding. Most of the meaningful data units in this category were one or two word phrases. An exception to that, for example, occurred when a teacher acknowledged and then repeated the previous

statement (P6_TCL2_10-12), “Correct. They have to make the connection that it’s the same thing.”

Admitting challenges. The category *admitting challenges* was further subdivided by role to determine if administrators, district ISTs and teachers admitted challenges. For example, the kindergarten TCL asked the Math IST if the report cards reflected the new conceptual understandings using CCGPS terms (P7_TCLK_10-12). The IST said, “I don't know anything about report cards. I just teach the math.” The kindergarten grade chair pushed it by expressing concern that the old report card did not match the new CCGPS standards. The IST replied, “I don't know the answer to that question.” In a similar example, the ELA IST told the fifth grade TCL (P11_TCL5_1-13), “I thought of it and I planned to send it to you today and I forgot. I'll send it to you.” Karen admitted challenges, as in this example, “Oops! She’s in first grade. I just assumed that since she was new she was in kindergarten” (P5_TCL1_11-12) and this example, “When I was a new teacher, I had to do the homework the night before the kids, too” (P11_TCL5_1-13). Teachers admitted challenges such as this example from a teacher who had taught fifth grade for ten years, but this was her first year teaching math (P11_TCL5_1-13): “At the beginning of the year, I screwed that up royally!” and a third grade teacher who said (P8_TCL3_9-12) “But is this like the one we used last time with the responders because I goofed up last time. Do I have to put the answers in?”

Realizing. The category *realizing* happened after teachers participated in cycles of clarifying, describing, and explaining their ideas. Realizing occurred near the end of negotiation and expressed an “ah-ha” moment or sometimes defeated resignation. An example of a teacher realizing an “ah-ha” after her colleagues clarified and explained

ideas successfully happened during a kindergarten TCL meeting in which the teachers discussed reading assessments (P7_TCLK_9-12): “Oh. I know what you're asking. And if they're below that, then I wouldn't put them on SRI or reading counts.” In another example, a fifth grade teacher has a realization that she was not able to teach some of the CCGPS math concepts and resigned herself to dependence upon others (P12_TCL5_11-12): “I wouldn't have known. I wouldn't have. I would have just been, ‘here's what you do’ because that’s how I was taught. And I get kind of angry and that's what's hard because it’s like nobody knows for sure.”

TCLs followed similar patterns of negotiation where teachers negotiated the topic, negotiated a plan to address that topic, and then negotiated differing aspects of participation in the completion of their work. Teachers were equally involved in negotiation; the distribution of data units in the categories for the theme negotiating ideas was balanced across participants.

Building Community

Building community is a theme that describes the social aspects of teachers’ work in TCLs. Suntree teachers were careful to preserve professionalism and courtesy. The tone and behavior of teachers was never observed as hostile. The teachers used polite and mannerly behaviors. I confirmed in interviews that teachers teased and joked without the intent of causing hurt feelings. Most teasing was related to something previously shared between individuals and brought up as relevant during the TCL meeting. In addition to polite exchanges, and joking, teachers often commiserated with each other about difficulties experienced during the day. As well, the time provided for community building often contained elements of personal struggle such as a wrecked car, a dentist

appointment, or ill children along with triumphs such as a daughter winning a poster contest or a teacher getting braces removed after the TCL meeting. Teachers built community through these processes: observing social scripts, having fun, disagreeing, agreeing, interrupting, exchanging personal information, criticizing/complaining, commiserating/consoling, ignoring, self-correcting, volunteering, housekeeping, validating self, others, and validating the TCL or TCL format.

Observing Social scripts. *Observing social scripts* describes teachers' comments involved in exchanging pleasantries, using manners, and other expected social formalities. For instance when someone joined a TCL, they politely interrupted the work to ask if a seat was taken, (P11_TCL5_1-2013) "May I pull up a chair?" Another example is when someone did not bring something needed for a meeting and apologized to the TCL, "Ya'll, I'm sorry. I swear to God there is a stack in this room. I grabbed a stack just a minute ago" (P7_TCLK_10-12).

Having fun. *Having fun* is a category that captured laughing, joking and teasing. The good natured banter permeated TCLS and was one indicator of the efforts participants made to create a positive climate at Suntree. Door prizes were one place having fun occurred as this exchange from the November TCL meeting exemplifies (P5_TCL1_11-12):

Karen: For our door prizes today I have a lovely, lovely, I'm sure it's 100% leather, DARE bag (giggles).

Cami: Laughs

Karen: Don't you need that for all your schoolwork that you're taking home? (laughter) We have a gift certificate from this new place in Fayetteville called Len Yap. Did I say that right? (Several teachers from New Orleans shout out correct pronunciation of Lagniappe.)

Karen: (laughs) Sorry about that. We have a collection of every post-it you could possibly want.

Faydra: Oh! I could use those.

Karen: Norrie? Norrie is drooling back there! (whole staff laughter)

Teresita: Look at her. She's just about to die!

Karen: And...last but not least. And I'm telling you what this is just in case my name is on this, (pause) Kassie (laughs). I was a judge for recitation contest today, (giggle) and as my gift I got a Walmart gift card and some little candy bars, and I love you *so much* (laughs) I'm giving them away" (whole staff laughter).

Karen made fun of herself when she mispronounced a French word and made reference to an earlier meeting where she was caught "re-gifting" a monogrammed mug as a door prize. This humorous way of admitting her own challenges was a fun way Karen started some TCL meetings.

Disagreeing. *Disagreeing* describes teachers' comments that were designed to "get it right." Teachers did not shy away from indicating disagreement. For example, (P10_TCL4_10-12): "The math IST said to use it in the unit beginning, but I think it should be at the end." Another example involved disagreement over setting a mandatory recitation policy in kindergarten (P7_TCLK_10-12): "No, no no...Look right here, *if* your child's interested."

Agreeing. *Agreeing* happened when teachers built consensus and everyone felt similarly about the work of the group at a particular point in the meeting. For instance (P6_TCL2_10-12), "Let's see if everybody is about at the same place. Everybody has done doubles, and make 10, and fact families?" In another instance, teachers agreed upon CCGPS curriculum alignment order (P8_TCL3_9-12), "So why don't we, (pause) maybe we don't want to split them up. Do we want to just go in order? What do ya'll think?" Agreeing also occurred when TCLs explained to the ISTs how they were implementing CCGPS and ISTs agreed with their practices. "OK, so you've got it going. You know what to do" (P7_TCLK_10-12).

Interrupting. *Interrupting* describes teachers' engagement in the negotiation of TCL work. Over-talking was a common way teachers engaged in TCLs by interrupting. I had difficulty transcribing audio tapes when several dyads of teachers talked at once. Interrupting also describes joining and leaving a TCL which frustrated some teachers. For example, when the math IST joined second grade, (P6_TCL2_10-12) she interrupted by saying, "Making your own worksheets, huh?" to which a teacher replied, "Oh, yeah, we're good at that. We do it all the time. You have to make it. We have nothing." I confirmed in an interview that this teacher was not angry or upset with the IST, she actually said, "I adore Anita." She was simply frustrated over being interrupted so frequently when trying to get an overwhelming amount of work (coded as a barrier) accomplished. Additionally, whole group announcements made by Karen and Josie interrupted teachers frequently. For example, "Don't forget to turn in the green sheet" (P7_TCLK_10-12).

Exchanging personal stories. Teachers were told to take five minutes for *exchanging personal stories* before beginning the TCL work agenda and then Karen asked if anyone wanted to share with the larger community. For example, "I have news. It's about my daughter at middle school. (Karen says, "that's okay.") She won a \$50 Walmart gift card for a safety poster contest" (P6_TCL2_10-12). Personal exchanges also occurred during TCL discussions, (P7_TCLK_10-12): "I can type this up tonight and I will get this ready to go to her this afternoon. I just have to leave. I get my shots. This is the end of the 6 weeks and if I don't get my shots today I have to double up."

Criticizing/complaining. *Criticizing* and *complaining* describes disparaging or critical comments that participants made often about events that were not within their

control. For example, when Karen used a lot of the time available for a TCL meeting one teacher whispered to another, “She needs to move on” (P6_TCK2_10-12). In another instance, during an interview (P20_IT_TCL5_5-13), a teacher complained about being asked to develop a unit to align with the future assessment initiative: “Do we really need this now? I said, number 1, it’s too expensive. So, why are we worried about THAT now when we have THIS that HAS to get done?”

Commiserating/consoling. *Commiserating* describes comments that were meant to show like feelings and understanding. For example, something like, “Awwwwwww!” (P5_TCL1_11-12) or “I know. I don’t either” (P7_TCLK_10-12) showed commiserating. *Consoling* was described during an interview when a teacher shared a behavior she recognized as a technique to console her (P22_IT_NTGL_4-13),

And Tracie was so supportive. I mean, I would know when I was really stressed out because she would start rubbing my arm (demonstrates on Teddie who laughs and says, Yep that’s what she does!) She would be like, it’s all good. That was what we said all year, it’s all good.

Ignoring. *Ignoring* happened when teachers intentionally did not recognize another’s contribution to the proceedings of the TCL. Sometimes teachers ignored someone joining or leaving a TCL. In participant observations, I noted that sometimes a group member who was not speaking would acknowledge the newcomer, but the teacher speaking ignored the interruption and continued (P14_TCLSPEC_FN_1-13). Teachers also selectively ignored interruptions that occurred as over-talking as in this example:

Cami: Do you think it will take the LA IST a long time?

Faydra: It’s next Thursday and...

Laverne: Oh good. Well, we can...

(Cami continues, ignoring the interruptions): Will it take a long time not *this* Thursday but *next* Thursday? (P5_TCK1_11-12)

Self-correcting. *Self-correcting* describes instances when teachers would respond by changing or contradicting something they said or by adding to it. This behavior built community by recognizing the legitimate objections or comments of others in the group. For instance, self-correction occurred after a teacher took exception to criticism of a student's recitation performance (P5_TCL1_11-12), "He did a good job. I mean I'm not saying that he didn't do well. But I think the other girl wins. If she nails it, that poem is 10 times harder." In another instance, a teacher self-corrects an admonition of only using trade books for reading (P10_TCL4_9-12), "But, we are still teaching third graders although they are in fourth grade. And I do like the pictures, I refer to the pictures a lot (Jamie, uh-hum) and they have that visual which I like."

Volunteering. *Volunteering* describes teachers' offers to provide resources, give of their time, or accomplish tasks for the TCL. For example (P7_TCLK_9-12), "So the first time, if you want, I can join you, if you let me know when you want to do that, and we can meet in the lab and I can, you know, help go over with them about those basics." Additionally, teachers often volunteered. For example, "You want me to make a quiz? (P10_TCL4_9-12), and "I'll make copies for us" (P9_TCL4_1-13).

Housekeeping. *Housekeeping* occurred when teachers worked on tasks that were related to teaching or TCL meetings but not professional learning. Housekeeping described the beginning part of each staff meeting which consisted of announcements and school-wide business. For example, in August the nurse showed a video on blood-borne pathogens. During TCL meetings, for example, housekeeping happened when teachers got or discussed snacks (P11_TCK5_9-12), "I am going to get a diet coke! Do you want anything?" In another example, housekeeping described discussions about filling in

reports (P10_TCL4_9-12), “How should I fill in our report, should I just put we revised tests?” Additionally, I coded housekeeping in field notes of participant observations, for example, “Karen presented graphs of observations” (P18_TCL5_FN_9-12) or “Principal set timer for 3 minutes of individual reflection” (P8_TCL3_9-12).

Validating self or others. *Validating self or others* describes teachers’ comments that confirmed their own practice and decisions or that of their colleagues. For example, after the grade-level discussed poetry recitation, the AP asked why several students were upset and a teacher replied, “I had one with tears, but if you notice we handled it and she bounced back” (P5_TCL1_11-12). In another example, a teacher asked the ELA IST to validate the way she taught paragraph writing (P11_TCL5_9-12),

I look at their overall writings and where do I think they are weak, the topic paragraph and the conclusion. And I feel like the middle ones are pretty good. (IST: uh huh) So, am I teaching these paragraphs right in how to write them correctly, focusing on topic and conclusion sentences?

Validating the TCL format. *Validating of the TCL format* describes comments that were made by teachers expressing satisfaction and enjoyment of professional learning from the experiences of TCLs. Often teachers expressed sentiments about how good they felt to have used the TCL time to get things done that they needed immediately in their classrooms. For example, a second grade teacher said, “I am so glad we're doing this, because I was going to do this after the meeting” (P6_TCL2_9-12). Another type of validating occurred when the ISTs recognized the contributions of the members of TCLs, “Ya'll bring such wonderful unique strengths to the table” (P11_TCL5_1-13). In another instance, a teacher said, “I love our meetings. I mean I really look forward to them. I can't believe it when she says its 4:00 and we have to stop” (P22_NTGL_IT_4-13).

Overlapping Nature of Negotiating Ideas and Building Community

Negotiating ideas and building community often co-occurred in the data. Teachers participated in negotiating using intellectual processes while they also observed the social observances of civility and citizenship. Time and teacher energy was conserved by supplementing negotiation with mannerly and polite responses to avoid spending time on hurt feelings or other misunderstandings. For example, in November, I audiotaped a TCL in which the teacher who was leading the discussion lost her train of thought and a second teacher supplied the concept. The original speaker expressed thanks, and the group laughed, and agreed to identify some reading activities:

Cami: And about doing something, you know big with *Charlie and the Chocolate Factory*, like a day for *Charlie & the Chocolate Factory*. You know, while we're doing something every, (sigh) I'm not explaining myself very well

Laverne: Culminating activity

Cami: Thank you. (Laverne laughs) I'm not explaining myself very well. But we talked about having the different Wonka® candy and graphing that, and so if you find anything that goes along with that. (P5_TCL1_9-12)

A second example from an audio-recorded participant observation in February shows how teachers in TCLs were negotiating ideas and building community while having fun. The special area teachers had requested time for their TCL to meet with the deaf/hard of hearing (DHH) teacher to teach specific signs to use with students during art, music and PE (P14: FN_SPEC_2-6-13).

Marsha: Let's start with a refresher of some basic signs you might need or might see a DHH student use. I have given you a paper with the signs and pictures of the signs (water, wait, stop, walk, running, sorry, bathroom).

Melody: Can you teach us how to ask them when something is wrong?

Marsha: Like what?

Melody: Well, what does this mean? One child keeps doing this. (She approximates hand motions.)

Marsha: Who is doing that? Is it this? (Marsha does a hand sign.)

Melody: (tells the student's name) Yes. He comes up and does that and I don't know what he's saying or asking. I don't know what to tell him so I just say, "go!"

Marsha: (Starts laughing and finally manages to say) He is telling you he has to go to the bathroom. He has to poop.

(At which point the whole TCL laughed until some cried.)

Melody: Well I knew it was something urgent. (Everyone started laughing again.)

The example began with negotiating ideas. Marsha is *leading* and *describing* sign-language resources. Melody and Marsha are *clarifying* each other's comments through questions asking for more information. Melody's *describing* a student behavior results in *realizing* and an "ah-ha" moment for Marsha. The entire TCL was *having fun* which built community.

Answer to Research Sub-Question 1

This study identified the processes teachers used to negotiate and build community during the introduction of situative professional learning. Much of the professional learning literature provides lists and descriptions of characteristics of effective professional learning from a situative perspective (i.e. Avalos, 2011; Borko, 2004; Borko et al. 2002; Burbank & Kauchak, 2002; Cochran-Smith & Lytle, 1999; Darling-Hammond & Richardson, 2009; Desimone, 2011; Flint et al., 2011; Putnam & Borko, 2000; Gusky, 2002, 2003; Jaquith et al., 2010; Lieberman & Mace, 2008; Mindich & Lieberman, 2012; Talbert, 2010; Vescio et al., 2008). This study analyzed the processes teachers used to engage in situative learning with other teachers to implement initiatives that originated from the district and state level. This study contributes to a gap in the professional learning literature by shedding light on process rather than outcome of teachers' professional learning.

The most important finding documents that teachers' participation in TCLs occurred through interdependent processes to negotiate ideas along with processes to

establish and preserve community. This indicates that the tensions essential to negotiation (Westheimer, 2008) occur recursively between and among teachers in situative learning environments and are developed when teachers explicitly use care during negotiation. This study documented the principal's emphasis on promoting and creating a caring environment (Noddings, 1984/2003, 2002, 2006) specifically to support situative professional learning interactions (Borko, 2004) and apprenticeship learning (Lave & Wenger, 1991; Rogoff, 1990, 1994).

A second major finding important to understanding how teachers participate in situative professional learning was the equitable distribution of data across categories and participants. Each teacher was documented at some point during data collection in every process of negotiation. In other words, all teachers actively participated in negotiations (i.e. led the TCL, admitted challenges, asked for clarification) and all participants had limited verbal participation at some point (i.e. not speaking during a TCL documented by observation or audio recording) during the year-long collection of data. Interviews provided opportunities for participants to claim silent spaces as being actively engaged through "absorbing" or "listening" which is often described as a reflective stance (Atkinson, 2012; Caranafa, 2004) and an important component of legitimate peripheral participation (Lave & Wenger, 1991).

Teachers were ready for the implementation of situative professional learning this year as evidenced by teachers engaged participation in negotiations and building community during the very first meetings in August. Likewise, the types of processes did not differ across the year. In other words, teachers used the same processes of negotiation and building community in August as in May.

Teachers were also able to recognize a difference in the quality of their learning as evidenced by the March situative learning meeting when the participation of teachers included resistance to the transmissive form of professional learning. Teachers participated in surveys and interviews by indicating a preference for situative formats, particularly TCLs, for future professional learning.

Research Sub-Question 2: What influences teachers' participation/nonparticipation in TCLs?

Barriers to professional learning stemming from outside initiatives, the roles of individuals, and to a limited extent, cultural differences influenced teachers' participation in TCLs. Outside influences included the state and district mandates that changed existing curriculum (i.e. CCGPS, technology, 21st century skills) and economic disinvestment. The roles of leadership, being new-to-a-grade level (NTGL), or a special area teacher influenced participation. One teacher self-identified cultural differences as an influence on her participation.

Navigating Barriers to Professional Learning

Barriers to professional learning influenced Suntree teachers' participation. The theme *navigating barriers* comprised contextual factors Suntree teachers could not control such as CCGPS curriculum mandates, economic disinvestment, and county and school policies. As teachers negotiated their ideas about curriculum, pedagogy, policies and students they often had to navigate barriers that varied for each individual: learning curve of initiatives, overwhelming amount of work in a limited amount of time, TCL meeting format, fear of being unprofessional, and constraints on funding for education.

Learning curve of initiatives. *Learning curve of initiatives* describes the comments teachers made about the changes they were implementing in teaching due to advances in technology, inclusion of 21st century skills instruction, and the new CCGPS standards. In this example from an interview, Karen shared her awareness of teachers' stress about CCGPS implementation (P57_IT_Karen_6-13), "I felt that overall, the focus was very helpful because Common Core was so new and honestly, teachers were struggling with it at first." In another example, a teacher explained the totality of teaching materials that have to be created by teachers to align existing materials with ELA CCGPS (P10_TCL4_9-12), "We're using Storytown [a reading basal series], so we have everything for that. So to plan a week for the story basal is no problem. But everything with *Who is Neil Armstrong?* We literally have to develop everything; assessments, worksheets, you name it!" In another instance, a NTGL teacher described CCGPS implementation (P22_NTGL_IT_4-13),

I mean, I had taught third grade before and I don't want to sound arrogant, but I did not expect it to be this hard. I knew what I had seen in fourth grade and I thought I would just go in to third and fix it. I would just teach those little third graders what they needed to know for fourth, but it wasn't like that at all. Everyone was new in some sense because CCGPS was new so we all worked together.

In another instance, CCGPS was a barrier to professional learning related to technology, (P56_ITTECH_5-13), "So, in working with CCGPS, what they needed to focus on did not include technology. I wasn't useful to them at that moment, and it wasn't growth for me at all."

Overwhelming amount of work. *Overwhelming amount of work* describes teachers' comments that were a result of having too much to do in too little time. For example, "I went through and pulled all the problem solvers I think we want to use and

they're still in their little pile (TCL laughs)” (P8_TCL3_9-12). In another example, “we are so overwhelmed with what is happening NOW” (P20_IT_TCL5_5-13). Additionally, teachers made comments like, (P7_TCLK_10-12) “It'll be a day or two. I've got two conferences tomorrow.”

This category also describes participants' comments about the precious nature of time. For example, “So I don't want to take a lot of your time” (P7_TCLK_10-12). In another instance, the Math IST recognizes that teachers have a finite amount of time to revise and realign curriculum during this year, “Mark it for next year, right?” (P8_TCL4_9-12).

TCL meeting format. The *TCL meeting format* was a barrier to professional learning. All TCLs met simultaneously so that administrators, district ISTs and teachers from special areas could participate in them on an “as needed” basis. This caused many interruptions to teachers' work. For example, the administrators sometimes joined a specific group for an entire meeting period, but also sometimes just went from group to group with a specific message as in this example. “I wanted to talk to second through fifth about the computer so I guess I'll just walk around and tell people” (P5_TCL1_11-12). In another example, the media specialist joined a TCL during a math discussion (P8_PO_TCL3_9-12) and stated,

“May I interrupt to show you a book you might use next week? It's called *14 Cows for America* and you can count it as part of the social studies time. It's about a village in Africa that gave a gift of cows to the US on the anniversary of September 11th.”

Additionally, the ISTs did not have a set time to join groups so they joined and left creating interruptions to the learning of TCLs. The Math IST might join during an ELA discussion (or vice versa) as in this example, “I see you guys are working on math but I

just wanted to share a couple of things with you” (P11_TCL5_9-12). In interviews, teachers expressed their understanding that the design of meeting in one room was intended to benefit teachers by increasing access to others as resources and will continue as the meeting framework for the next year.

Fear of being unprofessional. This category describes teachers comments, often whispered, that described behaviors that may have been deemed unprofessional by teachers, or Karen. For example, during the housekeeping portion of the meeting, two teachers are side-talking and one says, “Karen just looked at me” (P6_TCL2_10-12). In another instance, field notes recorded teachers not participating in reflection (P10_TCL4_9-12), “soft talking . . . snorting laughter . . . let me know what you wrote, I’m writing it down.” Additionally, teachers would say something and then remember they were being audiotaped indicating fear of being viewed as unprofessional, “She was the one that could write up stuff to make it sound good. (Laughs) You’re taping this though” (P20_IT_TCL5_5-13).

Constraints on money. *Constraints on money* describes references to funding, or lack thereof, available for professional learning. For example, funding was limited to cover the cost of substitutes for teacher’s to meet in TCLs during the school day. Karen announced in August, “The money for subs comes from the \$1000 award for being named a School of Excellence. Not sure how far it will go” (P2_HKFN_8-12). In another example, teachers discussed the redundancy of district efforts to align existing resources with the CCGPS, (P9_TCL4_1-13), “Math IST: It’s their way of trying to kind of help, because they spent all this money on this basal and it’s not aligned (Teddie: Oh absolutely) with CCGPS. Andrea: They should, because that’s a lot of money!” Teachers

also commented on the cost of supplementing professional learning at home, “And I've pinned a lot of things but I didn't print them out. I'm out of ink at home” (P5_TCL1_11-12). Additionally, teachers commented about the rules governing how “instructional money” could be spent as a barrier (P9_TCL4_1-13):

Felicia: Andrea, you know what I wanted to get with some of our money, I want

Andrea: Do we have any more money?

Felicia: Well, we just have to tell the secretary we want our money.

Jamie: laughs, yeah right

Andrea: Ok, you go try that out and see how it works for you.

Jamie: Yeah. I don't think that's going to work for you (Andrea & Dorri laugh)

Although Suntree’s PTO tried to help teachers by providing gift cards for supplies not covered by “instructional money” the loss of benefits was a barrier felt by all, but felt strongly by some teachers, (P9_TCL4_1-13), “I would like one month of health insurance (Jamie: but I like those) instead of a gift card.”

Roles

The theme *roles* describes participation in TCLs that was influenced by an individual’s role on Suntree’s staff. Karen, Josie, and the district ISTs fulfilled the role of *leadership* during TCL meetings. Teachers’ roles emerged in three categories: teachers who changed from one grade to another referred to themselves as *new-to-grade-level* (NTGL) teachers, *returning-to-grade-level* (RTGL) teachers, and *specials* teachers who participated differently due to their role administering an educational program to students (i.e. special education, gifted, EIP, music, art, PE, technology). An individual’s role influenced their participation in TCLs.

Role of Leadership. Karen, Josie, and the two district ISTs assumed leadership roles during TCLs. Karen described her leadership role as a facilitator during an interview (P57_Karen_IT_6-13):

I think because of the format we have been using for professional learning, it's helped me become a type of principal that's similar to what we're asking teachers to do, for me to be a facilitator of learning rather than the person who is always driving the learning. So I feel like I set up a framework where people were likely to increase their own professional learning and then I just let it happen.

Teachers trusted Karen's leadership to design professional learning time to allow them to work with each other. For instance (P22_ITNTGL_5-13), "I think we have to have faith in our administration that when they introduce something to us, it won't waste our time." In another instance, "We do trust Karen" (P22_ITNTGL_5-13).

The different leadership style of the two ISTs influenced teachers' participation in TCLs. I noted this difference in participant observations and audio recordings and confirmed it during interviews. The ELA IST presented sources of information to teachers. For example (P5_TCL1_11-12), "Masteryconnect.com you do the free one. So when you sign up, there're these tabs across the top. Click on the one that says common assessment and then you go through the whole process, language arts." In interviews, teachers said this presentation of resources was often overwhelming, (P20_IT_TCL5_5-13):

We met with the math IST in our learning time, and that was very helpful; language arts, not so much helpful. We got off on tangents on that; because it's so overwhelming. And I even told her, I said, one thing that would be helpful . . . is a list of exactly what it is you want and stop repeating it. I mean, if it's an adage, put that down. And if it's something that . . . but she's got it just on-and-on-and-on and we're looking at it; and it was crazy, way too much information. It was organized, if you read through the whole thing. Basically it took you, it was just ridiculous.

The math IST's leadership style provided teaching techniques and scenarios that described how teachers could help students implement math concepts. For example (P12_TCL5_11-12):

If you're dividing up, just hundreds, then they should be able to think, OK, if I have 24 cents and I have 6 people how much money am I going to give to each? And they should be able to draw a model for that. What if it's not 24 hundredths? What if it's 1 and 24 hundredths and I wanted to put it into 4 equal groups? So what does that look like? It would look like that. And then, it would look like that, right? So, I'd have one whole and I'll have 24 hundredths. OK but I want to divide that by 4. So you're going to start by dividing by whole numbers. OK?

In another example, she described how second grade teachers would apply a math assessment rubric (P6_TCL2_10-12):

To get a 3 in understanding they have to have shown through their words, through their numbers, and their pictorial models that they really understood what the problem was asking, and they have to get the correct answer. Now if they are deficient in one of those, there's no model, there's no numbers, there's no words then they automatically get a 2 if they get the correct answer.

In an interview, Karen described this difference in the IST's leadership (P57_IT_Karen_6-13):

I think that the difference in approach was partially personality. I think the math IST was just more that type of person who wanted to be helpful and you know, get in there with the teachers and work alongside them. The English Language Arts IST tended to be more of the person, "I'm just here to give you the information and if you want to know more you can. We have it right here on the Google site. You can go get it." So I think that was part of it. I think another component was the approach of their supervisors and what they were being told to do, because my belief is, although I'm not involved in any of their meetings so I don't know what was said, but my belief is that the math coordinator had a different role for the math ISTs than the ELA coordinator. And so the directives they were getting from their own supervisors were different.

Role of NTGL teachers. No Suntime teachers were new to the school, but five teachers were asked to teach at a different grade level for the 2012-2013 school year. The NTGL role influenced teachers' participation in TCLs. NTGL teachers often asked for additional support. For example (P7_TCLK_10-12), "I definitely would like for you to join me the first time." In another example, they asked for an opportunity to implement

curriculum before receiving additional assistance (P8_TCL3_9-12), “OK let me try it first with my kids. I mean if you’re ready for it I’ll send it, but I need to do it first to see that it works.”

NTGL teachers described their role as “sitting back and listening” (Heddi_P22_NTGL_IT_4-13) and “not wanting to step on toes” (Teddie_P22_NTGL_IT_4-13) during TCL meetings. During an interview (P57_IT_Karen_6-13), Karen commented on this role:

They probably just felt like they needed to be learning from the other people at the grade level. And I can see if I was in that situation, I probably would be a little quiet also. Because I would feel like my role at that time was to learn from them and they may have felt if they had something to contribute they may have felt a little reserved about putting it out there, a little unsure.

NTGL teachers also admitted challenges frequently during participant observations, audio recordings of TCLs, and in interviews. For example (P8_TCL3_9-12), “That’s what I didn’t do. I didn’t do it for myself, and I didn’t do it for the students. So when they put them in sentences, they all got zeros. Why did that happen?” In another instance, a NTGL teacher admitted a deficit about her own teaching of math lessons to the Math IST in front of her TCL (P11_TCL5_1-13):

It's like it begins to actually click with me when I'm teaching it. But I am not beyond this, Anita. If I have totally screwed up a lesson I'm going, ‘I just totally screwed up that lesson.’ That's what I say.

NTGL teachers offered their perspective from a different grade level to the TCL. For example, a NTGL kindergarten teacher discussed reading ability (P7_TCLK_10-12), “I would have first graders that would still not even get a BR. You know a BR, beginning reader.” In another instance that occurred during a fall TCL meeting, a third grade teacher

said (P8_TCL3_9-12), “I worry about the skills. That’s what we did in fourth grade and so much of the text is not at the level of most of these students.”

Role of RTGL teachers. Most of the data I collected describes the participation of RTGL teachers. The majority of Suntree teachers did not change grade levels. They had the experience of teaching in the grade level for at least one year prior to the implementation of CCGPS. These teachers drew upon this previous experience to navigate participation in TCLs. For example (P10_TCL4_9-12): Jamie: “I have everything we need already for *Sign of the Beaver*.” Dorrie: “Me too. I have a ton of stuff.” In another instance during a participant observation with the kindergarten TCL, I observed teachers revising a letter to parents by comparing the skills from the previous years’ report card to the new CCGPS standards (P19_TCLK_9-12).

Role of specials teacher. Specials teachers did not find TCLs particularly useful for their professional development. During the August TCL, specials teachers discussed different students across the school and shared strategies to address students’ behaviors. For example, one of the PE teachers describes this activity in TCLs as helpful for her (P23_IT_Evita_5-13):

I’ve also benefited this year from just sitting there and talking to one another about how is little Johnny doing in your class? Well, they might be doing this in your class but they’re doing that in our class. In the classroom they’re doing something completely different. So that was helpful too. Just sitting and conversing with other specials teachers, with one another, you know, about the students because we see a different side of a student than the classroom teacher might see, or the art teacher, or the music teacher.

I observed the specials TCL participate in this way for two months, but in January I documented teachers’ ideas for restructuring their participation in more meaningful ways. The outcome of this discussion resulted in the creation of the iPLP which is discussed as

a shift in professional learning at Suntree (sub-question 4).

In another example two specials teachers discussed the benefits of TCLs in their role as EIP teachers when one is itinerant (P13_TCLEIP_2-13),

Katrina and I do enjoy the chance to get together and talk about this, because last year we never had the chance, especially with Katrina only being at our school only in the mornings. And we wouldn't, there was never a time for us to chat because she's not here all day.

Role of technology teacher. The role of the technology teacher was unique among the specials group and was coded separately because of the emphasis on learning to incorporate new technology equipment. Because technology was one of the district initiatives driving Suntree's professional learning, teachers requested specific technology training from the technology teacher. Netta shared her unique professional learning needs as both a presenter of information and as a teacher needing time to develop professionally (P56_IT_Netta_5-13):

As a presenter, I'm not doing near as much, or, it has changed. In the past it had been generally getting together with large groups and disseminating some sort of information. People would absorb that, or write it down and then go back and try to apply it at some later point. That usually isn't successful when it comes to technology, which is my focus.

She also described a change in her roles during professional learning:

I guess we need to change that to a provider of information not a presenter of information, but as a provider. Because it's not presenting anymore, I guess. No it's really not, it's really not. It keeps me on my toes. It keeps me learning.

This change in her role as a special teacher was important in the development of the iPLP. She described the TCL experience (P56_IT_Netta_5-13):

That was not good this year. And we've kind of talked about it with the administration and kind of come up with an alternate plan for next year to try something new. But in the current setting, because so many of us in our specials department are "onesies" there was not anything that we could accomplish because there was no one else to bounce ideas off of. Me personally, I would use that time to go back and maybe answer questions teachers had had, that I didn't

know the answer to. Or a new feature that I could show them that would help them in the classroom. So, I feel like I'm professionally developing personally quite often during the day when people ask me questions I don't know the answer to.

Netta described this new role as “on demand development” (P56_IT_Netta_5-13).

Cultural Differences

There was not a lot of data for the theme cultural differences. However, I noticed Emmi was often quiet during negotiations and would ask clarifying questions near the conclusion of discussions. Because cultural differences are an important influence on social interaction, I looked closely at her participation as the one racial and ethnic minority on Suntree’s staff. Sometimes, her comments during TCL meetings were interrupted. For example (P7_TCLK_10-12):

Emmi: “I feel like before they even try to do Kidspiration for sentences they know their letters, they don't know where to find, you know they”

Penny: “They WILL find the letters. They just take their time and they do it. Yeah. I never saw there was a problem” (overtalks Emmi's continued objection so I can't make out what Emmi says)

Emmi: “You know like we could do a lesson, find the A, find the B” (Marty begins talking.)

I interviewed Emmi to discuss her participation. She did not mention any negative feelings about her participation or feeling interrupted more than others in her TCL. She described herself as listening to others due to her culture and personal preference. For instance (P21_IT_Emmi_5-13), “I like to listen to their opinions, then if I feel strongly about an idea or something I will share it. I just like to listen to their opinions more than share. It's just my personality within the team.” In another instance, Emmi discussed how being a minority on Suntree’s staff influences her participation:

I am from Lima, Peru; however, I am also Chinese heritage. So I'm a minority there already, and then I guess that is very much it. I'm not from here. My first language is not English, it's Spanish. Although I've been here for 20 plus years,

I'm still feel, you know, I do represent a minority within my faculty and the students.

I looked closely at how her role influenced her participation. During participant observations and audio recordings, I documented times when Emmi's participation was absent or limited. For example, during a participant observation in November, Emmi did not speak until the last five minutes of the TCL and then she asked the name of a computer program the teachers were discussing and wrote it down in her notes (P19_TCLK_FN_11-12). During an interview, Emmi describes her participation as "active listening" and "showing respect for her team" (P21_IT_Emми_5-13): "No. I don't prefer it, I respect it. They might be the team leader, or they have to lead the conversation or that meeting itself. So I'm just an active listener participant, but I do respect their opinions, too."

Answer to Research Sub-Question 2

Teachers' participation in TCLs was influenced by barriers to their learning, a participant's role as NTGL, RTGL, or a specials teacher, and in one TCL, by cultural differences. Teachers' participation was also influenced by the way leadership roles were performed by Karen, Josie, and the two district ISTs.

Barriers to professional learning originated from political, social, and economic sources outside of Suntime. Calls for educational reforms include increasing teachers' access to participation in situative learning and growing their involvement in their professional learning (Darling-Hammond et al., 2009; Darling-Hammond et al., 2010; Jacquith et al., 2010; Mindich & Lieberman, 2012). Likewise, this study illustrates how situative learning provides a positive context for teachers' work addressing imposed initiatives and outside constraints. Suntime teachers efficiently and capably addressed the

complexity in their workplace through participation in TCLs. The theme *barriers to professional learning* provided a set of common obstacles for Suntree teachers who often used humor to refer to influences that were beyond their control. Ironically, the complex political, social, and economic issues identified in extant literature that are used to justify reform in teacher education (e.g., Cochran-Smith, 2005a; Westheimer, 2008) were similar to issues that the Suntree teachers mentioned as barriers to their learning. Nonetheless, as Suntree teachers mentioned barriers, they created camaraderie and solidarity in their common purposes. Teachers were able to work through challenges in TCLs and emerge as stronger individual teachers, thus creating a stronger collective. Teachers identified as a group in TCLs, and their collective voicing of barriers could be viewed as a form of social action (Flint et al., 2011). This solidarity was evident in observations and audio recordings as teachers spoke as “we” rather than “I” in response to prompts. For example, a teacher described a benefit of situative learning as, *we* are not alone! However, this social action does not appear to go beyond the walls of Suntree. Teachers were asked on the spring questionnaire what they would say to people outside of Suntree about this new form of professional learning. Comments such as, “look what we get to do” and “try it, you would like it” were typical. For now, Suntree teachers are content to participate in TCLs without encouraging others in the district to reform.

Participation was influenced through a teacher’s perception of her expertise at the grade level. NTGL teachers were more aware of their participation during negotiation of ideas. NTGL teachers perceived CCGPS implementation as more challenging for them because RTGL teachers had some familiarity with the curriculum being realigned to the new CCGPS. NTGL teachers perceived previous experience as a helpful perspective. In

contrast, RTGL teachers also felt like they were new to the ideas offered in the TCL—they were not nearly as confident as the NTGL teachers believed them to be. For instance, one RTGL teacher reported that not teaching math the year before made math CCGPS more difficult to implement than ELA CCGPS. Another RTGL teacher reported that implementing the new initiatives was stressful for everyone.

NTGL teachers described their role in TCLs as “sitting back” and “absorbing” the discussions of RTGL teachers. However, data did not support this as true of the participation of all NTGL teachers, all of the time. Data confirmed that NTGL teachers asked questions about how to implement CCGPS and frequently led by asking for help or validation of practices from ISTs during TCL meetings. Likewise when asked during interviews, RTGL teachers did not identify any difference in the participation by NTGL teachers. The roles NTGL and RTGL emerged as important influences on teacher participation at Suntree but may not be important roles in schools with a wider range of teacher experience. Conversely, a teacher’s perception of her role may be an important influence on teacher participation in situative learning. A variety of viewpoints allows situative learning to “go” somewhere (Lave & Wenger, 1991). The limited diversity at Suntree made the theme *roles* a source for growth and change in TCLs at Suntree.

From the start, Karen expressed concern that the TCL model would not be effective for specials teachers and suggested they join grade-level TCLs to supplement curriculum planning by providing expertise from their content area. The two problems that arose from this approach were (1) TCLs were focused on central curricular changes for CCGPS and not yet at the level of extension/enrichment activities; and (2) special area teachers were not developing as professionals as they performed this resource role

during professional learning. The iPLP allowed a special area teacher to identify goals and establish a plan to meet them through individual effort or group involvement. This finding may provide a model for differentiation of professional learning where teachers establish a network or networks of peers for professional learning (Lieberman & Grolnick, 1998) rather than relying on arbitrary frames such as grade or subject level formats imposed by administration.

The participation of administrators during TCLs was not the focus of this study, but leadership emerged as one factor influencing teachers' participation. A blatant reaction, positive or negative, when Karen and Josie joined TCLs was not noted during observations or audio recordings. Likewise, teachers were not asked to describe the influence of leadership on their participation specifically although several teachers stated they felt Karen's leadership was responsive to teacher input. Others volunteered comments of trust and appreciation for Karen's efforts to provide appropriate and evolving professional learning. Alternatively, as previously mentioned, teachers preferred ISTs to adopt a "teaching/training leadership" style over a "providing resources" style. Findings from this study indicate that the role of leadership and style of administrators' participation influences teachers' participation in situative professional learning formats. More research on the role of (1) administrator participation in situative learning, through both formal or informal methods, and (2) different leadership approaches by administrators participating in situative learning forums is suggested by these findings.

The role of one's culture is an essential element of participation in sociocultural learning (Lave & Wenger, 1991; Rogoff, 1990). Emmi, the only racial (Asian) and ethnic (Spanish) minority at Suntree, reported that cultural difference was an influence on her

participation during professional learning. Similar to findings by Ramas and Kristina (2010), Emmi's preference for TCLs emerged because situated learning contexts allowed her to experience learning through the context of her cultural experiences. In TCLs, Emmi explained her ideas to peers, and they were able to ask questions and clarify their understanding. Likewise, Emmi could extend her understanding during negotiation by asking questions of others. Emmi stated a preference for listening to her colleagues rather than talking but felt more comfortable contributing in the small group especially when she had a strong opinion. Similar to findings by Pailliotet (1997), Emmi's cultural and personal predilection was to be quiet when compared to the participation of her ethnic-majority colleagues. My own assumptions that this was a problem indicated my misunderstanding of her cultural and personal preferences for participation in sociocultural activity. Pailliotet describes similar challenges experienced by Asian ethnic minorities including misunderstandings by others for cultural style of participation in socio-cultural forums. Emmi's positive experience with TCLs indicated that the culture of professional learning at Suntree is moving toward more inclusive forms of learning for its one minority participant. This is a positive step for the school as Suntree's demographic is changing toward more diversity in staff and students in the next year. According to Takahashi (2011) who conducted case studies of four teachers, situative learning environments have a positive effect in general, and on self-efficacy beliefs specifically, of teachers of ethnic-minority and low-income students. Little is known about Emmi's experience: the effect of situative learning on ethnic-minority teachers who work exclusively with ethnic-majority teachers and predominantly ethnic-majority and higher-income students.

Research Sub-Question 3: How do teachers respond to the process of change over time in the delivery model of their professional learning?

Teachers responded to the process of change over time by validating the TCL model. Teachers had a strong negative reaction to one professional learning meeting that was transmissive. Similarly, teachers resisted the residual elements of professional development that competed with TCL time (e.g. lengthy faculty announcements, set reflection times, completing a planning sheet). Most telling, teachers asked to schedule additional opportunities to meet in TCLs during the regular school day in 2013-2014.

Validation of TCL Format

The category *validation of TCL format* describes teachers' expressions of appreciation and enjoyment during audio recordings and observations of meetings and in interviews. For instance (P6_TCL2_10-26), "This has been so productive!" In another instance, the EIP teachers validated the TCL format on an audio recording

(P13_TCLEIP_2-13):

We do enjoy having this opportunity because we can make sure we are on the same page and even though we have different grade levels in different subject matter. We're, our requirements are the same and it's just a good chance for us to see how we are progressing on those items.

Karen also shared that although no teacher criticized the TCL initiative she was open to the possibility that TCLs may have had critics (P57_IT_Karen_6-13):

There could be some people, I don't know. I don't want to speak for other people and no one came to me specifically and when we surveyed everyone, they all felt that the professional learning was effective and wanted more of it. But there could be people who just felt like they needed to go with the flow, the majority, and be quiet. There could be some people who feel like they would rather attend a workshop or hear a speaker or attend a conference.

Resistance to Transmissive Professional Development

This category emerged during the March meeting when the district math supervisor used the monthly professional learning time to present information about the Partnership for Assessment Readiness for College and Careers (PARCC). I asked teachers to complete a second questionnaire during the March meeting. Teachers provided unsolicited feedback on the questionnaire about this use of their professional learning time. For example, a teacher wrote, “Presentations like this – NOT HELPFUL!!!!!!” During an interview, a teacher expressed frustration about the use of March professional learning time (P20_IT_TCL5_5-13), “The PARCC thing, we don't even know if that's going to come into our grade level or our school.” In an interview, I asked Karen what would happen if we went back to predominantly presentation style professional learning like we had in March. Karen said (P57_IT_Karen_6-13):

I think our staff would just wither up and die. (Laughs) I think that having that more traditional model, which was out of our control, just made people realize, even more, how much they appreciate the way we do things now. Because they realize that we get so much more out of our time together if we are able to interact and talk, rather than just sitting and listening to someone presenting information.

Requesting Additional Situative Professional Learning Time

During interviews and on end-of-year school surveys, teachers asked to give up daily planning time during the school day in 2013-2014 to meet in TCLs to focus specifically on technology training. Much of the work in monthly TCL meetings addressed CCGPS curriculum issues, but teachers also wanted training with E-SPLOST equipment in classrooms. For example, (P21_IT_Emmi_5-13), “We need to be trained as well at different times, not necessarily in the afternoon, but during planning times where Netta comes in, so it's taught in another time.” The specials teachers also requested more professional learning time during the day. For example (P23_ITSPEC_5-13), “Well,

continuing to have Netta share technology with us. That's very beneficial. I need to find out more information about Google docs.” Karen reported that teachers wanted their professional learning each month in TCLs but would be willing to give up their planning time during the day for technology training. “Well, the input that I've gotten from the staff and the discussion of our leadership team is that we want to do more of the same, and even more, more of the same next year (P57_IT_Karen_6-13).”

Answer to Research Sub-Question 3

Similar to extant research on teachers' positive responses to situative professional learning (Flint et al., 2011; Sykes, 1996), Suntree teachers were renewed as learners after the first year implementation of situated learning. Before the TCL initiative, a majority of teachers expressed disillusionment with professional learning on the August questionnaire; after the initiative, on the March questionnaire, a majority voiced anticipation for and enjoyment of monthly professional learning meetings. Over time, teachers' responded by gradually increasing their reliance on TCLs to address difficulty implementing curriculum in their classrooms. Likewise, teachers identified additional ways TCL meetings during the school day would be helpful (i.e., technology). According to Flint et al. (2011), allowing teachers to direct their own learning and development impacts their perceptions of themselves as professionals in positive ways. Suntree teachers have become invested in their professional learning, at least in the short term.

Conversely, Brody and Hadar (2011) identified a four-stage model of personal development trajectories in teacher educators that identifies a progression through four stages over time: anticipation/curiosity, withdrawal, awareness, and change. Contrary to these findings, teachers at Suntree did not exhibit withdrawal at any time during the

implementation year; rather, teachers became more dedicated to their own learning.

Evidence of this was establishing extra meeting times outside of contracted professional learning time. Teachers asked Karen to schedule additional TCL meetings where teachers could focus on technology implementation during planning time in the school day.

Withdrawal was described by Brody and Hadar (2011) as occurring when participants felt meetings validated what they were already doing or when they experienced push-back from their students to implementing initiatives learned in meetings. At Suntree, validation of practice was a strengthening aspect of teacher participation in situated learning.

Likewise, Suntree teachers used TCL meeting time to discuss and unpack “push-back” from students to learning, in particular during discussions with county ISTs. As stated by Guskey (2003), what constitutes effective professional learning in one context may not in another. Likewise, the response over time of teachers from different contexts may also be different.

Research Sub-Question 4: What kinds of shifts in professional learning practice (large and small) occur through participation in TCLs?

Taking responsibility for one’s learning, recognizing reflection as mediated action (instead of an isolated activity), and vertical collaboration were shifts in professional learning practice that occurred through participation in TCLs. Teachers became comfortable identifying areas of need and asking for help from others. Reflection occurred as a necessary part of participation; teachers resisted the practice of a set reflection time at the end of meetings. Karen said, “I did not do a good job with reflection this year” (P57_IT_Karen_6-13); however, reflection occurred as mediated action during TCLs. Karen also expressed disappointment that she “did not see vertical conversations

going on like kindergarten and first grade teachers talking” (P57_IT_Karen_6-13), although, teachers often did collaborate with other grade levels as needed to solve problems. Similarly, teachers’ participation in TCLS identified some residual aspects of previous years’ professional development that teachers felt were not compatible with the situative TCL model.

Taking Responsibility for Learning

Teachers came to every TCL meeting prepared to work. They expressed excitement for each month’s TCL meeting because they had identified areas of deficit and anticipated the help provided by leadership and other teachers. For example (P13_AT_TCLEIP_2-13), “I looked forward to today because we get to help each other with the RTI PLPs that are new because they're very confusing to do.” In another example (P20_IT_TCL5_5-13), “When we got together we could compare. Well, that didn't work. We're not doing that next year.”

In January, during a participant observation, specials teachers discussed their ideas for professional learning that would meet their self-identified needs. They expressed dissatisfaction with TCLs as no more effective for their individual professional learning than previous transmissive forms of professional development. After the meeting, I asked these teachers if I might tell Karen that they had ideas and suggestions to improve their professional learning time to make it more effective. Karen had disclosed her concerns about this group (P57_IT_Karen_6-13), “From the beginning I had been worried about that group. I was afraid it wasn't going to work for them.” Karen was very receptive to my reporting feedback to her after the special’s TCL meeting (P57_IT_Karen_6-13):

Well, I thought it was fine that you had come to tell, to share with me what people were saying because it was exactly what I was worried that people, that it was what I was worried would happen, and it did. And we fixed it. I just, you know, it's one of those things. I wish one of them had come to me right off the bat and said, "This isn't working." But they don't want to do that, so.

Through Karen's discussions with specials teachers, the individualized professional learning plan (iPLP) was developed (see Appendix L). This document prompted specials teachers to take responsibility for their own learning. The specials teachers set a plan for reaching goals specifically related to their content area, document time and efforts toward reaching those goals, and use the monthly TCL time for other work as needed. The teachers were very excited about the opportunities iPLPs provided. For instance, (P23_IT_Evita_5-13): "What can WE gain from that hour every month? Not what's going to help, I shouldn't say "us," I should say the children? How can we help the children? That was one of those barriers that specials teachers have." And in another instance (P56_IT_SPEC_5-13):

During that time would be a great opportunity for us to actually go meet with some of those people from other schools in the same field. And that would actually grow us beyond ourselves because we would get new ideas, new subject matter, new structures for training that we do provide. So it would actually grow us in our jobs.

Designated Time for Reflection

On the spot reflection describes the set time for reflection during professional learning time. Karen would stop the work being done in TCLs and announce that it was time for teachers to reflect. Teachers were often confused about what to do during this reflection time. For example, during a participant observation (P10_FN_TCL4_9-12), I documented this confusion when someone asked, "As a group?" and Erin replied, "No individually, individually, not as a group." Additionally, the amount of time made available for reflection was short, (less than 5 minutes) or not provided at all. This made

it difficult for teachers to engage in reflection of any length or development. For example, Karen stopped TCL meetings in November and announced, (P10_TCL4_9-12), “And I'm going to be quiet and since our time is short I'm going to set the timer for three minutes. We're just going to reflect for three minutes. And then we'll be done.”

In the same way, teachers needed advanced notice to wrap-up TCL discussions before moving to reflection. Teachers finished what they were doing before switching to reflection which further shortened, or used up, available reflection time. As a participant, I was unable to complete my own reflection during this time due to the talking, giggles, and whispered jokes at the tables where I was observing. For instance, I wrote in my field notes (P TCL4_9-12): “Dorri: what are we doing (whispered)? Andrea: We're supposed to be reflecting. Dorri: OK. Andrea: Be quiet and pray (laughs).” I asked about on-the-spot reflection time during interviews, and the teachers described the difficulty of transitioning to reflection “on demand.” This lengthy example captures the frustration of on-the-spot reflection and compares it to the type of reflection this teacher finds helpful (P20_IT_TCL5_5-13):

A: What about the time that we used for written reflection each month? (five seconds go by) You know how she would say, (T: Yeah.) stop and everybody write reflectively. What did you think about that?

T: It was alright (four seconds go by). Uhm, I don't know (three seconds go by). It was okay but (five seconds go by) I don't think it was, did she really read them? Maybe? I don't know!

A: Where is yours? What happened to your written reflection?

T: In my, I kept them all in my little thing I brought with me, my little folder.

A: What kinds of things did you put in there?

T: What she asked us. Stuff that happened during the week, you know, I don't know. (sighs) I made it up most days.

A: So it wasn't helpful.

T: I think most of us, we all compared, you know, it's like, OK, (laughs) it's like confession in Catholic Church, if you're Catholic. What are you going to say when you get in there? (April laughs) OK, that sounds good. I'm going to say this. Oh! That's a good one.

A: So you didn't feel it helped you be more reflective?

T: No, no; because it wasn't anything about our classroom. I mean, I don't even know what I wrote about. See, I don't even remember. I mean if it had been about, (pause) Naw. No. I don't think so, but maybe I'm the wrong person to ask.

A: So that time didn't make you more reflective? Do you feel you're not a reflective person?

T: No. I mean, I sit around going, "man, that didn't work." You know, in my classroom, myself, but to sit there; whatever questions she had for us. I don't even remember what they are. I'm sure you've got a bunch of questions there, something about "What do you want to do next, better, or whatever." It's already been passed. We're already passed that.

Vertical/collaborative Planning

This category describes the socially mediated learning that occurred as a necessary part of professional learning when teachers were working in TCLs. In other words, teachers sought information from another grade level during TCL meetings. For example, fifth grade needed to establish a list of conventions that students should be accountable for in their writing (P18_FN_TCL5_9-12):

Suzannah: So in 5th grade, they are held accountable for all those because they were taught in 3rd.

Patty: They should be accountable for them in 4th, right?

Suzannah: Yes. I'm going to go talk to other grade levels to be sure they are in agreement."

In another instance (P7_AT_TCLK_10-12):

Netta: And it's good if they can actually reach the point where they go to a new paragraph too because that works the same way as word processing. They have to actually hit the enter key.

Penny: But they don't understand how, they don't even understand paragraph.

Netta: I think I'll talk to first grade. That might be where we push more for first grade and make sure they get that new paragraph.

In previous years, Karen provided time during faculty meetings for conversations between grade levels. She did not provide a time for these conversations this year, but stated her intention to reinstate the practice. When asked what disappointed Karen about TCLs, she said (P57_IT_Karen_6-13):

One thing I'm hoping will happen next year, and I may have to put some things in place to try and facilitate it happening if it is not happening on its own, one of the things that did not happen this year, so this would be a disappointment I guess, but it's okay, is that I did not see vertical conversations going on. Like kindergarten and first grade teachers talking.

This year, such vertical conversations occurred naturally as TCLs worked to solve problems.

What Did Not Change

Teachers commented about several tasks that were remnants of previous years' professional learning. Karen asked TCLs to create documentation of their working agenda before and after TCL meetings. One teacher felt this kept TCLs focused. For example (P21_ITK_5-13), "Karen brings the memo back with what we're going to be talking about ahead of time. So we know what's coming up in the meeting. Yeah. I've liked it. We've utilized the time wisely this year." Other teachers found that document unhelpful and fabricated their comments. For example (P20_TCL5_5-13):

Why we have to have a check out sheet? I just don't understand why she tries to fill it up? We've got professional learning we're supposed to be learning, you know professional learning for us as professionals to do. There's always some agenda that has to be finished first; before we start. And it's controversial. Like that PARCC thing. That stops us from doing what WE want to do. Yeah, there might be some things that she has to do. I'm sure as her agenda she's got to get that done too, but most of it seems to be just check-offs, like we did one, I don't even remember what it was. But we all talked, Susannah typed, and we got it done, but we had to quickly get it done. We were making stuff up just so we could "check it off." I don't know, maybe that's just the way we work, but I can't imagine anyone else putting that much time into it either. I mean, I think we all do the same thing. And, my opinion, why? I don't understand that. She did start doing surveys, which is better.

In another example, teachers hurriedly wrote something down (P10_TCL4_AT_10-12), "Just put we revised math for lesson order," because reporting competed with the limited time they had each month to work on their own self-identified needs. In an interview, a teacher suggested why teachers did not like these reports (P _ IT_SPEC_5-13), "Well, if

it's anything that was critical on that list, then the teachers are already discussing it in the meetings they are having or they are taking care of it at a different time.”

Teachers also lamented the requirement that TCL meetings had to be in one room (P21_TCLK_5-13) “I'd like for us not to be in the media center but to go back to the classroom to be hands on. To see how it really works and what we need to do, like the still camera, or the Mobi.” In another instance, teachers often had to go back to their room for materials which impacted work time (P6_TCL2_10-12), “Do you want me to go get it? How much time do we have left?”

The monthly meeting was also a time for “Housekeeping” which consisted of administration observation statistics, messages about PTO events like Spring Fling or Cultural Arts Week, and other announcements of upcoming initiatives such as badge-access systems or district wide technology changes. Teachers appreciated the necessity of this time; however, as previously mentioned, I documented at least one incident of complaining when this portion of the TCL meeting time was lengthy. When Karen would ask if anyone had announcements, few if any were made. This supports teacher reports that they valued the time to meet in TCLs. For instance (P22_IT_NTGL_5-13):

Heddi: I look at my watch and think dag gone! Where did the time go?

Teddie: That is a positive for it to be 4:00 and we aren't looking at our watches and saying, “man, ten more minutes.”

Rachel: Because we're engaged

Teddie: We're invested

Heddi: We need to keep doing it this way.

Karen's ideas about how to document teacher participation in specific activities did not change. Karen believes she needs to initiate specific reflective activities for

teachers to become reflective practitioners about professional learning (P57_IT_Karen_6-13):

In the past I hadn't done a very good job of providing time for reflection, and I will be honest, I feel like I was inconsistent with how I handled it because it is one of those things that tends to get pushed to the side if you're in a hurry. And most of the time we're in a hurry. That is just the way educators are. I've actually already started collecting articles as I find them. Things that I think people will find interesting. I'm saving them in a little folder on my computer so that I can have some good quality things to reflect upon. And I found that, I felt, that people did a better job when they reflected if I gave them a specific question, or a specific question to reflect upon. Now my ultimate goal would be for us to just be able to reflect in general, on whatever is important to the individual person at that time.

I saw the reflective nature of mediated action in TCLs. I probed Karen's thinking by asking her to explain her reasons for asking teachers to reflect in staff meetings:

Because I think that when we don't, for many people, when you don't schedule a specific time to do that practice of reflecting, it's something you just don't do. We all know it's important. I think everyone would agree that you need to reflect, but we get so busy and so focused on getting to the next thing that we don't take time to do it. So scheduling that time after school, when we are all together, to reflect and really think about how things are going or your effectiveness, whatever, is helpful.

Answer to Research Sub-Question 4

Many small shifts occurred during the implementation of situated learning that resulted in a large shift in the culture of professional learning overall. First and most important to establishing communities of learners (Rogoff, 1994; Rogoff et al. 1996; Rogoff & Toma, 1997) teachers accepted responsibility for their own and other's learning through flexible apprenticeships. Another shift in the professional learning culture at Suntree is a preference for learning through intersubjectivity. Similar to Rogoff and

Toma's (1997), findings with communities of learners in classrooms, Suntree teachers began to rely upon shared thinking to identify problems and solve teaching dilemmas.

Another shift in Suntree's professional learning practice emerged as resistance to common professional development practices that teachers felt were difficult to implement or unnecessary for their learning. Karen has gaged professional learning participation in the past primarily through formal reporting and observation of teacher behavior during scheduled activities. The embedded and recursive nature of situative learning makes documenting reflection, vertical collaboration, and outcomes of teachers' actions more difficult for Karen. She has stated that she intends to continue reflection-on-demand, to structure static opportunities between grade-levels for vertical collaboration, and to require progress reports after teachers meet in TCLs.

A shift in thinking about the ways Suntree implemented professional learning has begun to occur even if some of the structures for delivery have remained static. In other words, some things need to change but haven't yet. Karen intends for the isolated time for written reflection to shift teachers' professional learning activity to include explicit written reflection about professional learning and learning in general. Karen recognizes that teachers (and principals) are inherently reflective as an essential aspect of their minute-by-minute decision making during the day. Her statement that she didn't do a very good job with reflection indicated her belief that teachers do not understand the on-demand-type of reflection she is introducing rather than teachers just don't like doing it. The actual state of reflection at Suntree may be in flux because Karen and the teachers recognize that there are different types and purposes of reflection. Teachers rely on reflection as a natural part of practice and situative learning. Written reflection is a

practice for capturing reflection for specific future purposes. In other words, a teacher can read her own written reflection to stimulate her thinking or share it with others for their feedback and comments. Until teachers recognize the purpose for written reflection along with clear benefits of the practice, a shift will not occur at Suntree because teachers find more value using professional learning time for collaborative verbal reflection.

Clarke (1995) describes the unseen conversations that occur between a teacher and her classroom practice as “knowledge-in-action” (p. 244). Similarly, participation in situative professional learning is a conversation a teacher has as she deliberates about her own learning. TCLs were an opportunity for Suntree teachers to bring those deliberations out for contemplation with others to revise and improve practice. Reflection emerges in the literature (see Schön, 1987; Schulman, 1988) as a way to make knowledge-in-action available for review, discussion, revision, and research. Karen intended to provide a reflection time for teachers to reflect upon what they did during TCLs as an extension of their professional learning. However, Karen’s concept of written reflection has yet to reach the social collaborative goal that teachers have.

Karen may need to be more explicit about her goals for reflection to make reflection about one’s learning as natural as reflection about one’s teaching. It may be a seismic shift for her to get teachers to give up precious professional learning time to reflect on their professional learning. Similar to Clarke’s (1995) findings, Karen intends to stimulate reflection by providing articles and videos for teachers to write about next year. She believes increasing teacher use of reflection is just another facet of Suntree’s journey to change the culture of professional learning.

CHAPTER 5

DISCUSSION AND IMPLICATIONS

This study answers the question: How does the introduction of a situative model influence the process of teacher learning and professional development? My interest in this research stems from my participation in the journey of Suntree Elementary to change to a delivery model for professional development where Suntree teachers could access the expertise of their fellow teachers during professional learning time. I analyzed the mediated actions and voice (Wertsch, 1991) of teachers as they participated in a situative model of professional learning (Borko, 2004; Putnam & Borko, 2000, Lave & Wenger, 1991) to determine the processes that occurred and how teachers responded to the TCL experience.

In the previous chapter, findings were described through four research sub-questions: (1) How do teachers participate in TCLs? (2) What influences teachers' participation or nonparticipation in TCLs? (3) How do teachers respond to the process of change over time in the delivery model of their professional learning? and (4) What kinds of shifts in professional learning practice (large and small) occur through participation in TCLs? I answered each sub-question in terms of the findings using themes and categories of data as examples, followed by a summary that answered each sub-question.

In this chapter I begin by answer the overarching question: How does the introduction of a situative model influence the process of teacher learning and professional development? I then discuss six implications of this research for the field of professional learning: (1) revision of Clarke & Hollingsworth's (2002) Interconnected model to illustrate the process of teacher growth and change in TCLs; (2) inclusion of

(Noddings, 1984/2003) ethic of care as an essential element of situative learning initiatives because care theory provides a supportive framework for teachers as they build and maintain the complex and crucial element of community; (3) the need of specials teachers, or teachers in departments that consist of only one or two teachers at a school, to find meaningful participation in situative professional learning through individualized situative learning plans or to seek collaboration beyond the school context; (4) a call to include the situated nature of teaching practice and professional learning in teacher evaluation; (5) the importance of practitioner research in understanding school implementation of situative learning initiatives; and (6) the implications for Suntimee's professional learning journey. The final section contains some unanswered questions about teachers' participation in situative professional learning in general and TCLs specifically.

Overarching Research Question: How does the introduction of a situative model influence the process of teacher learning and professional development?

TCLs had a positive influence on the process of teacher learning and professional development at Suntimee. Similar to findings by Flint et al., (2011) the introduction of a situative model renewed and transformed professional learning for Suntimee's experienced teachers. Teachers at each grade level successfully formed communities of learners where apprenticeship and legitimate peripheral participation occurred (Lave & Wenger, 1991). Teachers experienced opportunities for teacher growth and change beyond the experience of learning in isolation. In TCLs, increased learning opportunities occurred routinely because a teacher identified an area of weakness for herself that other teachers in the TCL shared. Improvement of teaching across the grade level was owned by all teachers in the

TCL. Additionally, Suntree has shifted to a culture where providing professional learning through situative forms of learning creates opportunities for teachers to engage in intellectual discussions.

Intellectual discussions about Suntree initiatives were the foundation of TCLs. Westheimer (2008) concluded that intellectual discussions focused on teaching should comprise the majority of professional learning research. Likewise, at Suntree, teachers stated that they looked forward to TCL meetings in order to get ideas and feedback from colleagues during discussions focused on improving their teaching. Intellectual discussions about teaching dominated TCLs and contained negotiations between teachers to identify problems and suggest possible solutions. This negotiation created the type of discussion Darling-Hammond et al. (2009) described as embedded and high-intensity. These discussions merged the contributions of individuals into a new, group-owned understanding of practice. Teachers looked forward to TCL meetings because this type of learning did not exist in the individuals, it emerged when teachers collaborated and negotiated tenable solutions and improvements to practice. After TCL meetings, teachers returned to their classrooms empowered with this new learning and planned to return to the next TCL meeting with feedback about its use, effectiveness, and possible revision. Teachers participated in a recursive process of enaction and reflection toward improving the practice of all teachers at a grade level. TCLs became the forum where teachers shared and negotiated understanding of their ideas.

As evidenced by the intellectual discussions, the categories like explaining and describing captured the essence of thoughtful, reflective talk used by teachers during negotiation. The category *explaining* was especially important because it demonstrated

how teachers' participation in situative learning contained elements of reflection.

Documenting reflection is difficult because it is a process that is invisible in the mind of a teacher. When teachers were verbally *explaining* ideas or problems for the TCL to address, contributions were more abstract than when they were *describing* resources or student behavior. In contrast to *explaining*, the category *describing* differentiates meaningful units that were concrete elements of idea construction that teachers used as evidence for their practice. When teachers were *describing* resources and student behaviors, they were stating practice in a concrete way. *This is what I did. This is what I have done in the past. This is what I normally do. This is the outcome of my efforts in terms of how students behaved or what they said.* Descriptions provided context for teachers' explanations, negotiations, and discussions about an idea that was not yet an "ah-ha" but an invitation for engagement from the TCL and for apprenticeship. When other teachers in the TCL asked for clarification, or questioned the reasoning behind a teacher's explanations, it required all teachers to engage and grapple with the concepts a teacher put forth to the TCL. Explaining was a type of engagement that required reflection from all members of the TCL. Teachers who presented ideas or explained problems used reflection to organize information and determine salience. Teachers who received explanations reflected on ideas, filtered them through their own experiences, and then agreed, disagreed, or asked for clarification.

Reflective talk within TCLs invited a variety of viewpoints and these viewpoints occurred at Suntree through a teacher's assignment within Suntree's staff. As Lave and Wenger (1991) identified, multiple viewpoints influence situative learning by increasing the availability of resources in a community. Suntree did not create TCLs to be

instructive for newcomers because all Suntree teachers had experience. However, being new to a grade level emerged as a specific viewpoint at Suntree that influenced learning in TCLs. This study documented NTGL participation as a catalytic element in the growth of experienced teachers. NTGL has similarities to being new to the profession. According to Feiman-Nemser (2003), new teachers have legitimate needs that include the necessity of becoming a professional learner expected to meet the same instructional objectives as their more experienced peers. Induction programs and mentoring opportunities often focus on emotional support and strategies for managing classroom tasks, and often last for one year. Professional learning in TCLs provides a long-term supportive environment for nurturing the growth of all teachers, growth that originates from their “personal struggle” (Feiman-Nemser, 2003, p. 26) with daily teaching whether a teacher is a new or experienced, new to teaching, or new to a grade level.

Teachers participating in TCLs this year created new professional learning precedents for future generations. Lave and Wenger (1991) identify contradictions that accompany the continuity of situated learning as community forms of learning move forward in time. While new teachers may benefit from these situative learning opportunities, being new to a school requires additional expenditure of time that makes daily planning time an even more precious commodity. Teachers at Suntree have designated daily planning time for professional learning to address their instructional challenges in technology. In addition to the pressure of being new to Suntree, new staff members may be unfamiliar with situative learning, making it potentially stressful. Newcomers to Suntree will be integrated into TCLs, and Lave and Wenger (1991) identify the “reproduction of social order” as a “major contradiction” (p. 114) for

situative learning. Teachers who have participated in TCLs will need to provide an opportunity for teachers who were not at Suntree during the TCL implementation year to learn how to participate in TCLs. In one year, Suntree has begun shifts and transformations that will continue to evolve. The next cycle of TCLs at Suntree will address the natural cycles of continuity and displacement that occur from competing viewpoints about development of professional learning practice (Lave & Wenger, 1991). Thus, the culture of professional learning will continue to shift, change, and evolve as the complexion of the school changes and becomes more diverse. As teachers leave and others join the staff, the tensions of different perspectives will provide new challenges for TCLs. Diversification of the staff began as Suntree ended the 2012-2013 school year and welcomed students and teachers from redistricting and school closure.

Including teachers in the implementation of TCLs was an essential element of shifting the culture of professional learning at Suntree toward a situative model. Fullan (2007) describes this single element, inclusion of individuals that make up the collective, as the linchpin of change; “The interface between individual and collective meaning and action in everyday situations is where change stands or falls” (p. 9). The extant literature describes situative learning as the optimum way teachers learn (e.g. Borko, 2004; Putnam & Borko, 2000; Lave & Wenger, 1991; Lieberman & Mace, 2008; McLaughlin & Talbert, 2001; Westheimer, 1999). However, prescribing situative learning for all teachers would not have resulted in the long-term change in professional learning culture that is occurring and will continue to transform the culture at Suntree (Fullan, 2007; Stoll, Bolam, McMahon, Wallace, & Thomas, 2006).

This study also provided information useful in understanding the ways teachers incorporated reflection as a recursive and embedded part of professional learning. Atkinson (2012) describes three assumptions that underlie research on teacher reflection that are confirmed by this study: (1) teachers produce knowledge about teaching; (2) this knowledge creation occurs through reflection; and (3) reflection is the empowering agent of teacher professional learning toward improvement of practice and student learning. Atkinson identifies research on reflective practice as difficult because it relies on making the various sources and components of teacher knowledge observable. Predominantly, research on teacher reflection utilizes narrative to make reflective activity visible. In Atkinson's (2012) study, teachers critiqued narrative representations as incomplete and static. Likewise, Suntree teachers resisted producing narratives during the time set aside for on-demand reflection. In contrast, this study captured the reflective nature of their participation during TCL interactions.

This study documented and analyzed the processes of situated learning teachers used to participate in TCLs. As demonstrated by the themes *negotiating ideas* and *building community* TCLs allowed teachers to enact both intellectual and social agendas during professional learning time. To understand the processes of negotiation, I used Clarke and Hollingsworth's (2002) interconnected model. This model illustrates the possible pathways of a teacher's growth and change after experiencing some form of professional learning. As discussed in the next section, this study extends the work of Clarke and Hollingsworth (2002).

Likewise, I used Nodding's (1984) ethic of care theory to understand the processes of community during TCLs. Similar to findings about teachers' professional

learning documented by Flint et al. (2011), an ethic of care can be used to describe the relational aspects of situative learning. Additionally, this study extends that observation and reveals that Suntree's TCL initiative explicitly incorporated an ethic of care piece that emphasized the importance of relationships as a component of the TCL initiative. In other words, at Suntree, establishing positive and professional relationships was equal in importance to achieving professional learning goals. Therefore, an implication for implementation of situative learning in any form may be to include an explicit framework for supporting the development of community as an essential, yet difficult, element of situative learning (Grossman, et al., 2001; Lieberman & Miller, 2011; Mindich & Lieberman, 2012; Westheimer, 1993, 1999, 2008).

Promoting teacher change is the goal of all teacher development programs (Clarke & Hollingsworth, 2002) and was the result of TCLs. Suntree teachers have become more willing to self-identify areas of weakness, willing to accept responsibility for their own and others' learning, and willing to participate in more professional learning if it occurs in communities of learners (Rogoff, 1994).

Implications

In this section I discuss implications of this research for Suntree from my practitioner research stance, extend a future research agenda, and identify several unanswered questions about implementing TCLs. I conclude by suggesting that TCL model, based on the sociocultural community of learners model (Rogoff, 1994; Rogoff, et al., 1996; Rogoff & Toma, 1997) may provide an alternative option for reform of professional learning.

Modeling the Process of Teacher Growth and Change in TCLs

Results of this study support and extend Clarke and Hollingsworth's (2002) model of teacher change. The model uses non-linear pathways and mechanisms to diagram reflection and enactment as the only two mediating actions accounting for teacher change. Their model (2001) revised Guskey's (1986) model of teacher change to include four different domains where change may originate (external domain, domain of practice, domain of consequence, personal domain). I selected the interconnected model to provide a visual model useful in understanding how apprenticeships in TCLs relate to teachers' classroom practice. I do not imply a causal relationship between professional learning and classroom practice (Clarke & Hollingsworth, 2002; Fullan, 2007; Guskey, 1986); rather, classroom practice is the space where teachers enact professional learning gained through negotiating their ideas in TCLs or where they bring forth ideas to offer in the TCLs.

I revised Clarke and Hollingsworth's (2002) model of teacher change to better illustrate teachers' participation in TCLs at Suntree (see Figure 6.) The external domain represents the experience of teachers in TCLs, a new, situative model for Suntree professional learning. The domain of practice is represented by each teacher's individual activity enacting curriculum in her classroom and the resulting dilemmas and "ah-has" she achieves through her practice. The domain of consequence contains the results of her individual efforts. All three of these domains (external, practice, and consequence) are filtered through the personal domain. The personal domain consists of the internalization of the construct that was created, clarified, or elaborated through TCL negotiations.

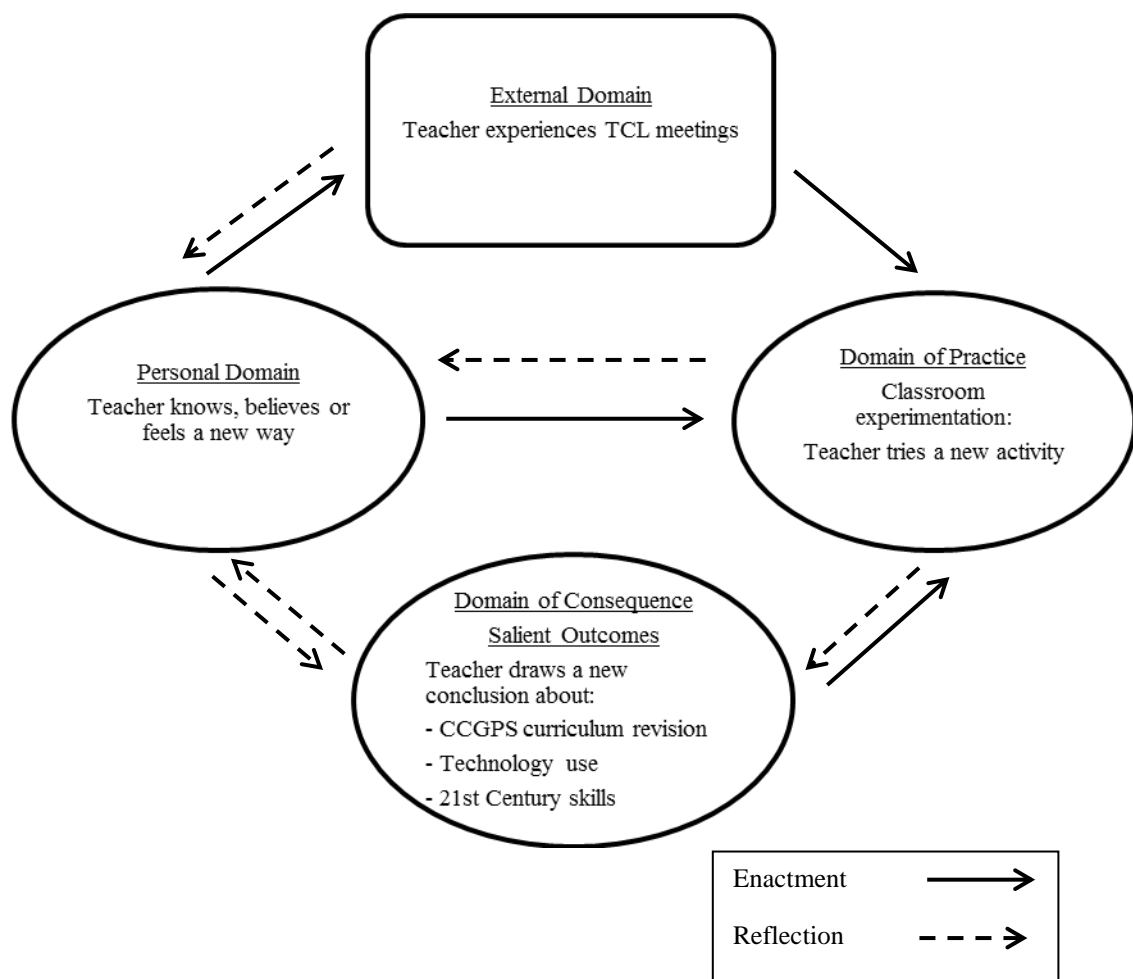


Figure 6. Revised interconnected model for Suntime

The revised model illustrates the sociocultural theories of intersubjectivity (Palincsar, 1998; Rogoff, 1990; Wertsch, 1985) and internalization (Bereiter, 1994; Cobb, 1994; Palincsar, 1998; Rogoff, 1990) at work: (1) teachers were exposed to the external domain of negotiation of concepts during TCLs; (2) teachers filtered concepts constructed during TCLs through their existing knowledge/beliefs/ attitudes to create an individual construct that they used during negotiations with others during TCL meetings; then (3) teachers experimented with internalized constructs in their classrooms; and finally (4) teachers shared the outcomes of their classroom experimentation when they

met in the next TCL. Intersubjectivity occurred again when teachers merged their individual experiences into revised versions of the original construct. In other words, teachers weighed external sources of information (TCL participation) through the domain of practice and the domain of consequence and based outcomes on professional experimentation and classroom testing.

The interconnected model revised again shows that there is great potential for increased learning power when multiple teachers contribute their experiences to the construction of knowledge. Quantification is not the goal of the revised model; rather, the revision captures the synergy of learning that occurs in TCLs. One person's learning is not just multiplied by another person, but by all other TCL members' increased learning. In other words, if one person learns more everyone's learning potential is increased. I put the interconnected model in parenthesis and used X in place of any specific numeric value to indicate that TCLs provide exponential growth in teachers' learning (Figure 7).

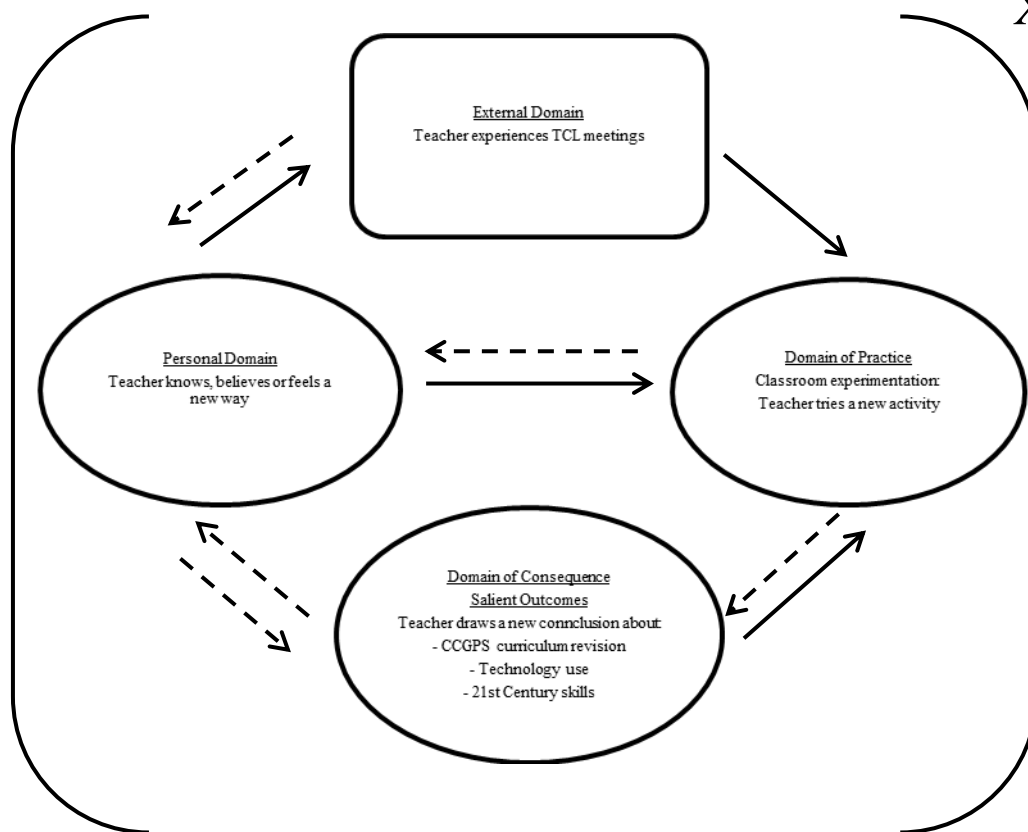


Figure 7. Greater learning power of TCLs

This possibility illustrates a cycle of change for each TCL member but also elucidates the synergy created by situative learning experiences. Each teacher's individual efforts renew and increase understanding of the whole grade level. As one teacher stated, "I think they got enough detail in the plan where all the teachers were doing it the same way so it wouldn't matter which classroom you were in, all the kids are getting the same type of instruction" (P56_IT_SPEC_5-13). Likewise, Suntree teachers wanted to work with teachers from their specific grade level because what works at one grade level may not work at another. Similarly, Gusky's (2003) stated that what works at one school site may not at another. The hidden power of TCLs was the increased ability of individual teachers

to meet students' needs because of their participation in group learning with grade level peers.

Supporting Development of Community

Noddings' (1984/2003) theory, ethic of care provides an approach that can support the establishment of community during the implementation of situated learning initiatives. *Caring* is an intentional mindset to care and be cared for in a relationship with others rather than a surface level of interaction. Care theory relies on trust and continuity of relationships. Mindich and Lieberman (2012) state, "there is less research about exactly how to create community and how principals work to support and monitor PLC efforts to allow for successful changes in practice" (p. 1). Karen provided time for teachers to interact and build community. She also modeled and cautioned participants to care for one another during professional learning and reminded teachers of how stressful each individual might feel as they admitted challenges and offered their ideas for group evaluation. Karen also provided 10 to 15 minutes of time for teachers to share personal experiences before the work in TCLs formally began. Thus, Suntime teachers were provided with a structure for their participation that promoted positive relationships with colleagues. This is not to say that teachers did not disagree about the content of their work, but disagreement was overshadowed by the experiences of caring and sharing that preceded or followed such contention. In addition to the modeling of care by Karen, and the opportunity to establish positive relationships, the effort to preserve a positive working environment stemmed from teachers desire to avoid spending time on topics that did not directly contribute to their working agenda or their positive working relationship with the grade level.

Care theory (Noddings, 1984/2003) is an essential element of situated learning at Suntime. Suntime teachers built community as they negotiated ideas as is common in the professional learning literature. What is uncommon is the explicit reminders given by Karen to reduce time spent on careless interactions. According to Grossman, Wineburg and Woolworth (2000), it is the establishment of community that makes situative professional learning different from a gathering of teachers. Grossman et al. (2000) identify the need for some essential tensions at the heart of a teacher community that spur discussion resulting in growth and change. However, there must be agreement on enough common purposes for gathering to respect and sustain what individuals contribute to a community. Grossman et al. (2000) describe their own hesitancy to establish norms for the teachers in their study from their role as researchers as well as facilitators of the PLC under study. However, part of their purpose was documenting the struggles of teachers to find common ground. Conversely, Karen modeled caring behaviors and encouraged teachers to have fun while maintaining a polite and professional bearing during all aspects of work at Suntime. Her purpose was to support positive communities such that the dissention and tension of negotiation would find balance from a “bank” of good will in the group. As demonstrated by the twelve categories that make up the theme building community, teachers were engaged in social exchanges and invested in caring for others as part of their interactions. The sum of meaningful data units evenly distributed across these twelve categories indicate the extensive amount of time and effort that teachers spent caring for each other as an integral part of TCL negotiations in order to build and maintain community. Suntime teachers were engaged in creating both the intellectual and social aspects of TCLs. Because an ethic of care was practiced, teachers participated with

colleagues in positive ways on issues of importance to them during TCLs. Including a specific framework such as ethic of care in situative learning initiatives is indicated by this study.

Similarly, the TCL initiative included time for work that created harmony and allowed for the contention necessary to evoke change and learning for Suntree's teachers. Therefore, the ethic of care (Noddings, 1984/2003) is more than a theory useful in understanding situative learning participation and functions as an essential element in establishing successful communities of learners. Achinstein (2002) challenged the assumption that the term community was synonymous with consensus, harmony, and cohesion. Rather, she identified community as a place where challenge, conflict and dissonance are the substance of learning and change.

Meaningful Professional Learning for Specials Teachers

At Suntree, teachers who were singles or dyads from PE, art, music, media, counseling, technology, gifted, and EIP formed a community but experienced limited situational learning due to lack of "common ground" in a specific content-area. As Flint et al, (2011) documented, transformation of professional learning involves agentic learning by teachers where they voice a desire for specific forms of professional learning to meet their needs. Professional learning should be a time of growth for all teachers. Situated learning is predicated on groups of teachers finding others who share enough common ground to identify mutual areas of concern, identify shared problems, and find acceptable solutions. During the first month of the year, special teachers met together to talk about the students they served in different settings sharing techniques and insights.

However, by the second and third month, these teachers were disillusioned with situative learning as no better than previous forms of professional development.

The problem for Karen was how to structure professional learning to give these teachers such opportunities to utilize professional learning time at Suntree in more meaningful ways. The PE teachers described the transformative power of situative learning with other PE teachers to identify challenges and exchange strategies. Likewise, the art, music and gifted teachers preferred opportunities to engage in situative learning with others in their fields. The counselor, librarian and technology specialist had unique needs that often involved answering questions or finding resources to address problems specific to individual teachers or a particular grade level. Through dialog with the specials teachers, Karen responded to requests for an “independent project” approach to professional learning. Once created, Karen asked specials teachers to share their iPLP with others. Sharing an iPLP created the opportunity for an interesting type of apprenticeship to occur. For instance, the PE teachers identified a deficit in their ability to teach the DHH students. They created an iPLP for February professional learning time in which the DHH teacher would teach basic sign language. When this iPLP was shared with the specials grade level, teachers recognized they shared this deficit and the full grade level asked to meet as a TCL for sign language instruction. Instead of focusing only on physical education signs (i.e. stop, go, walk, run, catch) the art and music teachers asked for classroom oriented sign language that the PE teachers also needed (sit down, get in line, repeat, what? where?). The counselor brought up safety- and health-related signs and asked to learn signs to mediate social squabbles which were also very applicable to all present. The DHH teacher was ecstatic to be asked to help her students

and stated that she needed to develop an iPLP to help her develop new ways to help specials, and other teachers work with DHH students.

At Suntime, specials teachers took responsibility for finding someone to help them when they were given the time and permission to do so. At the end of the year, the specials teachers requested that iPLPs be made available for the 2013-2014 school year and Karen agreed. In interviews, special area teachers reported feeling respected and valued by this initiative. One teacher remarked that as a former classroom teacher, she knew her special area was often perceived by teachers as simply a way to provide teachers a planning time. Regardless of that, she believed that treating her as a professional and allowing her to identify the type of learning that will improve her practice should be as important as providing classroom teachers optimum professional learning (P23_IT_Specials_5-13) in situative formats. The technology teacher seconded that view and feigned shock at being viewed as professional enough to chart a course for her own learning to improve her teaching. The impetus to seek out professional learning emerges from classroom experiences in gym, art, music and other special areas that cause teachers to experience stress and difficulty in meeting student learning or behavior goals. Although a single, or dyad in a department, teachers are capable of utilizing professional learning time to find others with expertise in their field. In this day of ubiquitous technology, help may indeed be a webinar away. Perhaps I am inured by the success of Suntime, but I feel most teachers would do so if given the opportunity.

Teacher Evaluation

This study did not evaluate teacher participation in professional learning nor does Suntime's teacher evaluation system include professional learning as an element of

evaluation; perhaps it should. Darling-Hammond, Amrein-Beardsley, Haertel and Rothstein (2012) evaluated teacher evaluation and found that the socio-cultural nature of learning is excluded from most current teacher evaluation systems. The authors do not address the situated nature of teacher learning, they specifically note that evaluating a teacher based on student performance does not include the variables that emerge from a sociocultural perspective of student learning. Recent reform of teacher evaluation includes gathering “evidence about the quality of teacher practices” as measured by student test scores (Darling-Hammond et al., 2012, p. 8). Darling-Hammond et al. (2012) point out that the problem with this type of measure is that while a teacher may be a large part of a student’s achievement; she is but one element in the learning situation that includes other students, myriad contextual elements of a child’s world, and often other teachers. According to the authors, a more stable system of evaluation is based on national standards aligned with common core initiatives, includes multiple observations across a school year, the submission of artifacts (lesson plans, assessments, assignments, etc.), lesson videotapes, and scoring by rubrics. This leaves me wondering why professional learning is not included in the evaluation of teachers.

A sociocultural perspective and this study suggest that the type of learning available to teachers should be a consideration in their evaluation. In other words, if the extant research indicates situative professional learning is more effective for teacher learning than other forms then access to situative professional learning should be a consideration when evaluating teachers. Teachers should not be penalized if situative learning is not available to them; the school should be penalized for not providing teachers access to situative learning.

Additionally, what is the most effective and fair way to evaluate individuals when learning is a product and a process of sociocultural acquisition? In this study, teachers reported that participation in TCLs improved their ability to teach by clarifying student expectations, CCGPS learning objectives, and by providing time to work with colleagues to produce materials for teaching aligned with CCGPS (i.e. progress checks, lesson materials, etc.). The research has clearly delineated that Suntree's TCL initiative constitutes effective professional learning. An innovative teacher evaluation program would include benchmarks derived from the NSDC and other research sources grading a school based on the professional learning it offers its teachers. Similar to the way schools create plans when they fail to meet annual progress requirements for students, schools should be graded on professional learning offerings and required to create systems for improving professional learning when warranted. Teacher evaluations should at the very least, reflect the quality of professional learning schools make available to teachers.

Implications for practitioner research

In 1975, Lortie identified flaws in the institution of education and described teaching as an "egg-crate" profession where teachers closed the door and worked in isolation. In 1991, Lave and Wenger argued that situated learning and apprenticeships were the way learning occurred and questioned assumptions that learning was the transmission of factual knowledge. Since then, professional learning literature championed and encouraged the field of education to embrace situative learning (e.g., Borko, 2004; Putnam & Borko, 2000; Lieberman & Mace, 2008; McLaughlin & Talbert, 2001; Westheimer, 1998). In the past decade, NSDC published a series of reports describing the deplorable state of professional learning including alarming statistics of

how few teachers experience situative learning in the United States (Darling-Hammond et al., 2009; Darling-Hammond et al., 2010; Jaquith et al., 2010; Mindich & Lieberman, 2012), and urging the field to reform. Five years ago Lieberman and Mace (2008) wrote an open letter to the President begging for him to do something about the problem of teacher professional learning. Sadly, it is not the field of education, researchers who read professional learning journals, or the President who can reform education. Teachers are able to reform their own professional learning as this study documented. Sadly, most teachers are unaware of this movement to reform professional learning. Practitioner research studies like this one may be one way to bridge the divide and bring the knowledge of research to teachers in schools.

As Cochran-Smith and Donnell (2006) point out, practitioner research correctly values practitioners as knowers, learners, and researchers who “understand, analyze, and ultimately improve educational situations” (p. 508) through participation in the embedded and authentic processes of practice. One way to improve education is to encourage more practicing educators to become practitioner researchers. Cochran-Smith and Donnell (2006) wrote for an audience of primarily researchers encouraging education faculty to recognize the potential for generating “innovative research and new forms of knowledge” (p. 509) by adopting a practitioner research agenda. This study exemplifies the types of powerful implications that can emerge from practitioner research. As several Suntimee teachers stated, their comfort level “being researched” improved when the researcher was “one of them.” Conversely, Cochran-Smith and Donnell (2006) conclude that practitioner research challenges the traditional notion of research both explicitly and implicitly by

challenging “who legitimately can do research and what kind of relationships should exist between researchers and the people and processes they study” (p. 514).

Along the same lines, one TCL did not have any NTGL teachers. Comparing the evolution of participation in this group to TCLs with one or more NTGL teachers would be worthwhile. Such a comparison may provide additional insights into the workings of TCLs when the makeup of teachers does not change from year to year. Conversely, the addition of new staff members to Suntree and changes in grade level assignments indicate that a longitudinal study of TCLs over time would be an informative study. Certainly such and extensive exploration would benefit from a team of several practitioner researchers.

Implications for professional learning in TCLs at Suntree

The fact that Suntree was all female may have influenced TCL implementation in many ways. Suntree was an all-female staff of teachers over the age of 35. All schools will have a diverse and unique make-up of staff members that influence the implementation of initiatives. For example, the ethic of care is described as a feminine approach to ethics and moral education and may be less applicable in more gender diverse staffs.

TCL implementation at Suntree may also look different as the school becomes more culturally diverse. The participation of one teacher was influenced by her personality and Spanish/Chinese heritage. The addition of culturally diverse perspectives would increase resources and broaden available perspectives. Cultural diversity might also increase the amount of time, or change the quality of the negotiation of ideas or building community.

At Suntree, changes in technology alone provide enough new venues for learning to keep teachers busy in TCLS without imposing an outside agenda on their learning. Student accessibility to information and new ways of problem solving with myriad others in a global world requires students to learn different capabilities. The movement for 21st century skill development rides on the crest of technological change and is a global phenomenon. The types of learning that teachers identified as challenges may not be unique to Suntree because all schools are facing a rapid infusion of new technology and new ways to teach students 21st century ways of learning and communicating. This year, an Education Special-Purpose-Location-Option-Sales-Tax (E-SPLOST) initiative provided classroom display and student response systems for teachers to learn shortly after the district cut Microsoft software licensing forcing teachers to learn the Google platform. Communities of learning improved teacher engagement in learning because teachers contributed to creating the agenda for the work.

The types of flexible and tailored learning teachers created in TCLs, identifying their own needs and becoming responsible for the learning agenda, can help them envision how to provide such learning environments for students. Teachers at Suntree preferred situative professional learning time. The technology teacher agreed that situative learning was a more effective way to deliver technology instruction. Wireless capability will deliver “bring-your-own-technology” to Suntree next year. The BYOT initiative means learners will have access to technology, and each other, to stimulate ideas and discussion if instruction is provided in forums that allow sociocultural learning behaviors to occur. Technology instruction in TCLs provided a framework for self-identification and apprenticeship for teachers. The same types of framework should

translate into situative learning being a more effective way for students to learn technology, too. This logic is similar to theory behind the NWP which suggests the NWP improves student writing through teacher participation in writing workshops. The NWP provides teachers opportunities to experience the writing process with peers so they can implement the writing process with their students. In other words, because Suntree teachers have experienced an enjoyable and engaging form of professional learning, providing a similar experience with situative learning for students based on their experience with TCLs becomes possible. This shift in instructional delivery toward situative learning may be precipitated through the area of technology. In the future, how to create situative learning environments for students may become a future focus for teacher work in TCLs.

Unanswered questions

Are teachers aware of the role of reflection in professional learning? One implication of this study is the role of reflection on teacher change. For example, a focus on reflective practice during situative learning might provide insights about teachers' awareness of reflection during professional learning. Likewise, in Clarke and Hollingsworth's (2002) model, reflection occurs at every step *except* between the external domain and the domain of practice. This study does not provide data to support or contradict that interpretation; however, teachers might provide evidence for reflection that occurs between their participation in TCLS and practice in their classroom, or insight why reflection does not occur between those two domains. It may be that teachers reflect recursively between the external domain and the domain of practice when the model is applied to situative learning experiences.

Is there a magic number of participants in TLs? Exploring the effects of quantity of participants in situative learning is a possible extension of this research. At Suntree, most TCLs contained four or five teachers but functioned equally well when that number was reduced to three teachers. Discovering if there is a “magic number” of teachers for TCL participation might be useful.

How do administrators learn to facilitate professional learning? There are many useful research implications for administrators. In this study, Karen described her own journey to become a more facilitative and reflective principal. She self-identified areas for improvement and modeled admitting challenges. Karen was willing to listen to teacher feedback and was responsive to teacher suggestions. TCLS may not have been successful, or existed, under a different style of leadership. This research raised issues for Karen that warrant study. The administrative practices that Karen previously relied upon for professional development did not work for TCLs at Suntree. Research documenting the evolution of practices, such as how, or if, principals hold teachers accountable for situative professional learning, is needed. Lastly, research is needed to document how administrators provide meaningful professional learning for singles and dyads of teachers on staffs. Suntree’s iPLP initiative provides a model worthy of further investigation especially at middle and high school where there are many singletons of content area teachers.

How would another researcher have analyzed TCLs?

While practitioner research provided a responsive format for this research it also limited the number of themes that could be explored by one person through data collection and analysis. This study gave a concise overview of participation by all

teachers on a staff and provided a much-needed analysis of the processes that occurred as teachers participated in situative learning. Additionally, this study provided many possible avenues for future research. For example, case-study of TCL participation would be useful to explore the experience of specific individuals to determine how TCLs worked for different teachers or how teachers perceive each other during TCL participation. In a specific instance at Suntree, one of the SPED teachers joined a different TCL each month. She was the only teacher who participated with every grade level in that way. Analysis of her participation across different TCLS might identify differences between her participation and others' and identify factors that influenced her participation. Conversely, studying the influence of her joining on different TCLs would also be informative.

Conclusion

This study contributes to the paucity of research on the processes teachers use to participate in situative learning. Results indicate that the introduction of a situative model affects the process of teacher learning and professional development through the influences of roles, cultural differences, barriers to learning, and responsive leadership. Teachers respond positively to implementation of situative learning by validating the TCL format and asking for opportunities to determine the course of their own learning. Participation in TCLs shifted to a preference for learning in situative formats where apprenticeships occur which is a change in the professional learning culture at this school. Further studies are needed to describe different approaches schools can adopt to implement situative professional learning that meets the needs of their school.

Schools should consider establishing Rogoff's (1994) communities of learners with teachers rather than PLCs, study groups, or other frameworks for professional learning and trust that teachers will embrace situative learning as Suntime teachers did. Administrators and teachers can work together to craft a time and space for teachers to work with others of similar interest and expertise. Teachers need time that is open for negotiating ideas that matter to the community and time for building community where apprenticeships flourish.

Suntime teachers were not aware of the professional learning research behind situated learning, nor did they call their grade-level groups TCLs. Nonetheless, Suntime has made a journey to situative learning and other schools can learn from this analysis of their experiences.

References

- Atkinson, B. M. (2012). Rethinking reflection: Teachers' critiques. *The Teacher Educator*, 47(3), 175-194. <http://dx.doi.org/10.1080/08878730.2012.685796>
- ATLAS.ti. Version 7.092. [Computer software] (1993-2013). Berlin, Scientific Software Development
- Avalos, B. (2011). Teacher professional development in *Teaching and Teacher Education* over ten years. *Teaching and Teacher Education*, 27(1), 10-20. <http://dx.doi.org/10.1016/j.tate.2010.08.007>
- Billet, S. (2006). Relational interdependence between social and individual agency in work and working life. *Mind, Culture, and Activity*, 13(1), 53–69. http://dx.doi.org/10.1207/s15327884mca1301_5
- Bereiter, C. (1994). Constructivism, socioculturalism and Popper's world 3. *Educational Researcher* 23(7), 21-23. <http://dx.doi.org/10.2307/1176935>
- Berg, A. (2012). *De-marginalizing science in the early elementary classroom: Fostering reform-based teacher change through professional development, accountability, and addressing teachers' dilemmas*. Center for Digital Research and Scholarship at Columbia University Retrieved July 20, 2012 from <http://hdl.handle.net/10022/AC:P:13422>
- Birchak, B., Connor, C., Crawford, K.M., Kahn, L. H., Kaser, S., Turner, S., & Short, K.

- G. (1998). *Teacher study groups: Building community through dialogue and reflection*. Urbana, Illinois: National Council of Teachers of Education.
- Bogdan, R. C. & Biklen, S. K. (2007). *Qualitative research for education: An introduction to theories and methods, (5th ed.)*. Boston, MA: Pearson Education, Inc.
- Borko, H. (2004). Professional development and teacher learning: Mapping the terrain. *Educational Researcher*, 33(8), 3-15. Retrieved from JSTOR
<http://www.jstor.org/stable/3699979>.
- Borko, H., Elliott, R., & Uchiyama, K. (2002). Professional development: A key to Kentucky's educational reform effort. *Teacher and Teacher Education* 18(8), 969-987. [http://dx.doi.org/10.1016/S0742-051X\(02\)00054-9](http://dx.doi.org/10.1016/S0742-051X(02)00054-9)
- Brody, D., & Hadar, L. (2011). "I speak prose and I now know it." Personal development trajectories among teacher educators in a professional development community. *Teaching and Teacher Education* 27(8), 1223-1234.
<http://dx.doi.org/10.1016%2Fj.tate.2011.07.002>
- Brown, A. L. (1994). The advancement of learning. *Educational Researcher*, 23(8), 4-12.
<http://dx.doi.org/10.2307/1176856>
- Burbank, M. D. & Kauchak, D. (2002). An alternative model for professional development: investigations into effective collaboration. *Teaching and Teacher Education*, 19(5), 499-514. <http://dx.doi.org/10.1016%2FS0742-051X%2803%2900048-9>

- Caranfa, A. (2004). Silence as the foundation of learning. *Educational Theory* 54(2), 212-230. <http://dx.doi.org/10.1111/j.1741-5446.2004.00015.x>
- Chaiklin, S., (2003). The zone of proximal development in Vygotsky's theory of learning and school instruction. In: Kozulin, a., Gindis, G., Ageyev, V.S. and Miller, S.M., eds. *Vygotsky's educational theory in cultural context*. Cambridge University Press, 39-64. Retrieved from <https://docs.google.com/a/mail.fcboe.org/file/d/0B7vPY1vPBLXiMVNqamJobFNFaEE/edit>
- Charmaz, K. (2006). *Constructing Grounded Theory: A Practical Guide Through Qualitative Analysis*. Thousand Oaks, CA: Sage Publications.
- Charmaz, K., & Mitchell, R. G. (2001). Grounded theory in ethnography. In P. Atkinson & A. Coffey & S. Delamont & J. Lofland & L. Lofland (Eds.), *Handbook of ethnography* (pp. 160-174). London: Sage.
- Choy, S. C. & Oo, P. S. (2012). Reflective thinking and teaching practices: A precursor for incorporating critical thinking into the classroom? *International Journal of Instruction* 5(1), 167-182. Retrieved from http://www.eiji.net/dosyalar/iji_2012_1_11.pdf
- Clarke, A. (1995). Professional development in practicum settings: Reflective practice under scrutiny. *Teaching and Teacher Education*, 11(3), 243-261. <http://dx.doi.org/10.1016%2F0742-051X%2894%2900028-5>
- Clarke, D., & Hollingsworth, H. (2002). Elaborating a model of teacher professional

growth. *Teacher and Teacher Education*, 18(8), 947-967.

[http://dx.doi.org/10.1016/S0742051X\(02\)00053-7](http://dx.doi.org/10.1016/S0742051X(02)00053-7)

Cobb, P. (1994). Where is the mind? Constructivist and sociocultural perspectives on mathematical development. *Educational Researcher*, 23(7), 13-19.

<http://dx.doi.org/10.2307/1176934>

Cochran-Smith, M. (2005a). The politics of teacher education and the curse of complexity. *Journal of Teacher Education*, 56(3), 181-185. DOI:

10.1177/0022487105276411

Cochran-Smith, M. (2005b). Teacher educators as researchers: multiple perspectives.

Teacher and Teacher Education, 21(2), 219-225.

<http://dx.doi.org/10.1016/j.tate.2004.12.003>

Cochran-Smith, M., & Donnell, K. (2006). Practitioner inquiry: Blurring the boundaries

of research and practice. In Green, J. L., Camilli, G., and Elmore, P. B. (Eds.)

Handbook of Complementary Methods in Education Research, (pp.503-518).

Washington, DC: American Educational Research Association.

Cochran-Smith, M., & Lytle, S. L. (1999). Relationship of knowledge and practice:

Teacher learning in communities. *Review of Research in Education* 24, 249-305.

<http://dx.doi.org/10.2307/1167272>

Cochran-Smith, M., & Lytle, S. (2009). *Inquiry as stance: Practitioner research for the next generation*. New York, NY: Teachers College Press.

Dahl, R.A. (1957). The concept of power. *Behavioral Science* 2(3), 201-215.

DOI: 10.1002/bs.3830020303

Darling-Hammond, L. (2010). Toward 21st century supports: Linda Darling-Hammond shares her thoughts on how issues of equity and policy make schools safe for good practice. *Education Digest* 75(6), 48-53. (Originally published (2009) *Principal Leadership* 10, 18-21.)

Darling-Hammond, L., Amrein-Beardsley, A., Haertel, E., & Rothstein, J. (2012). Evaluating teacher evaluation: Popular modes of evaluating teachers are fraught with inaccuracies and inconsistencies, but the field has identified better approaches. *Phi Delta Kappan*, 93(6), 8 – 15.

Darling-Hammond, L., & McLaughlin, M.W. (2011). Policies that support professional development in an era of reform. *Kappan* 92(6), 51-92. Originally published (1995) *Phi Delta Kappan* 76(8).

Darling-Hammond, L., & Richardson, N. (2009). Teacher learning: What matters? *Educational Leadership*, February, 46-53.

Darling-Hammond, L., Wei, R. C., & Adamson, F. (2010). *Professional learning in the United States: Trends and challenges*. Dallas, TX. National Staff Development Council. Retrieved from <http://www.learningforward.org/docs/pdf/nsdcstudy2010.pdf>

Darling-Hammond, L., Wei, R. C., Andree, A., Richardson, N., & Orphanos, S. (2009). *Professional learning in the learning profession: A status report on teacher development in the United States and abroad*. Dallas, TX. National Staff

Development Council. Retrieved from

<http://www.learningforward.org/docs/pdf/nsdcstudy2009.pdf>

DeWalt, K. M., & DeWalt, B. R. (2011). *Participant observation: A guide for fieldworkers*. New York, NY: Altamira Press.

Desimone, L. (2009). Improving impact studies of teachers' professional development: Toward better conceptualizations and measures. *Educational Researcher* 38(3), 181-199.

Desimone, L. (2011). Outcomes: Content-focused learning improves teacher practice and student results. *JSD*, 32(4), 16-20. Retrieved March 25, 2012 from <http://www.learningforward.org/news/articleDetails.cfm?articleID=2318>
[http:// dx.doi.org/10.3102/0013189X08331140](http://dx.doi.org/10.3102/0013189X08331140)

DuFour, R. (2004). What is a professional learning community? *Educational Leadership*, May, 6-11.

Duncan-Andrade, J. M. (2009). Note to educators: Hope required when growing roses in concrete. *Harvard Educational Review*, 79(2), 181-192.

Ellington, L. L. (2009). *Engaging crystallization in qualitative research: An introduction*. Thousand Oaks, CA: Sage Publications.

Ely, M., Anzul, M., Friedman, T., Garner, D., & Steinmetz, A. M. (1991). *Doing qualitative research: Circles within circles*. London: Falmer Press.

Feiman-Nemser, S. (2001). From preparation to practice: Designing a continuum to

strengthen and sustain teaching. *Teachers College Record*, 103(6), 1013-1055.

Feiman-Nemser, S. (2003). What new teachers need to learn. *Educational leadership*, 60(8), 25-30.

Findley, S. J. (2000). Instructional coherence: The changing role of the teacher. *Southwest Development Educational Laboratory*. Retrieved from <http://www.sedl.org/pubs/teaching99/>

Fine, M. (2012). Disrupting peace/provoking conflict: Stories of school closings and struggles for educational justice. *Journal of Peace Psychology*, 18(2), 144-146. <http://dx.doi.org/10.1037/a0028095>

Flint, A. S., Zisook, K., & Fisher, T. R. (2011). Not a one-shot deal: Generative professional development among experienced teachers. *Teaching and Teacher Education* 27(8), 1163-1169. <http://dx.doi.org/10.1016/j.tate.2011.05.009>

Friese, S. (2012). *Qualitative data analysis with ATLAS.ti*. Thousand Oaks, CA: Sage Publications.

Fullan, M. (2007). *The new meaning of educational change (4th ed.)*. New York, NY: Teachers College Press.

Glaser, B. G. & Strauss, A. (1967). *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Chicago, IL: Aldine Publishing Co.

Goetz, J. P. & LeCompte, M. D. (1984). *Ethnography and qualitative design in educational research*. Orlando, FL: Academic Press.

- Grant, C. A. (2008). Teacher capacity: Introduction to the section. In M. Cochran-Smith, S. Feiman-Nemser, D.J. McIntyre, & Demers, K. E. (Eds.), *Handbook of Research on Teacher Education* (pp. 128-133). New York, NY: Routledge.
- Grossman, P., Wineburg, S., & Woolworth, S. (2000). *What makes a teacher community different from a gathering of teachers?* [Occasional paper of the Center for the Study of Teaching and Policy and the Center on English Learning & Achievement]. Seattle, WA: Center for the Study of Teaching and Policy.
- Grossman, P., Wineburg, S., & Woolworth, S. (2001). Toward a Theory of Teacher Community. *The Teachers College Record*, 103, 942-1012
<http://dx.doi.org/10.1111/0161-4681.00140>
- Guskey, T. R. (1986). Staff development and the process of teacher change. *Educational Researcher*, 15(5), 5–12.
- Gusky, T. R. (2000). *Evaluating Professional Development*. Thousand Oaks, CA: Corwin Press.
- Guskey, T. R. (2002). Professional development and teacher change. *Teachers and Teaching: theory and Practice*, 8(3/4), 381-391.
- Guskey, T. R. (2003). What makes professional development effective? *Phi Delta Kappan*, 85(10), 748-750.
- Hargreaves, A. (1996). Revisiting voice. *Educational Researcher*, 25(1), 12-19.
<http://dx.doi.org/10.2307/1176723>

- Hargreaves, A. (1998). The emotional practice of teaching. *Teaching and Teacher Education, 14*(8), 835-854. [http://dx.doi.org/10.1016/S0742-051X\(98\)00025-0](http://dx.doi.org/10.1016/S0742-051X(98)00025-0)
- Harland, T. (2003). Vygotsky's zone of proximal development and problem-based learning: linking a theoretical concept with practice through action research. *Teaching and Teacher Education, 8*(2), 263-272. DOI: 10.1080/1356251032000052483
- Harry, B., Sturges, K. M., & Klingner, . K. (2005). Mapping the process: An exemplar of process and challenge in grounded theory analysis. *Educational Researcher, 34*(2), 3-13. <http://www.jstor.org/stable/3700040>
- Jaquith, A, Mindich, D., Wei, R. C., & Darling-Hammond, L. (2010). Teacher professional learning in the United States: Case studies and state policies and strategies. Dallas, TX. National Staff Development Council. Retrieved from <http://www.learningforward.org/docs/pdf/2010phase3report.pdf?sfvrsn=0>
- Johnson, H. (2012). Defunding higher education: What are the effects on college enrollment? Retrieved August 15, 2012 from http://www.ppic.org/content/pubs/report/R_512HJR.pdf
- Krippendorff, K. (2004). *Content analysis: An introduction to its methodology* (2nd ed.). Thousand Oaks, California: Sage Publications.
- Lampert, M. (2000). Knowing teaching: The intersection of research on teaching and qualitative research. *Harvard Educational Review, 70*(1), 86-99.
- Lave, J. & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*.

New York, NY: Cambridge University Press.

<http://dx.doi.org/10.1017/CBO9780511815355>

LeCompte, M. D. (1982). Problems of reliability and validity in ethnographic research.

Review of Educational Research, 52(1), p. 31-60.

Lieberman, A., & Grolnick, M. (1998). Educational networks: Changes in the form of reform. In Hargreaves, A. (Ed.) *International Handbook of Educational Change*, (pp. 710-729). Great Britain: Kulwer Academic Publishers.

Lieberman, A., & Mace, D. H. (2008). Teacher Learning: the Key to educational reform.

Journal of Education, 59, 226 - 234. DOI: 10.1177/0022487108317020

Lieberman, A., & Miller, L. (2011). Learning communities: The starting point for professional learning in schools and classrooms. Dallas, TX. National Staff Development Council. Retrieved from

<http://www.learningforward.org/docs/august-2011/lieberman324.pdf?sfvrsn=2>

Lortie, D. C. (1975). *Schoolteacher*. Chicago, IL: The University of Chicago Press.

Martin, G. (2009). The new built environment in education: Neoliberalism on trial in

Australia. In Hill, D. (Ed.), *The Rich World and the Impoverishing of Education: Diminishing Democracy, Equity and Workers Rights*. New York, NY: Routledge.

Mawhinney, L. (2010). Let's lunch and learn: Professional knowledge sharing in teachers' lounges and other congregational spaces. *Teaching and Teacher Education*, 26(4), 375-382.

McKenzie, M. & Carr-Reardon, A. M. (2003). Critical friends, FAQ. Retrieved from

<http://www.nsrharmony.org/faq.html#15>

McLaughlin, M., & Talbert, J. (2001). *Professional communities and the work of high school teaching*. Chicago: University of Chicago Press.

Mindich, D., & Lieberman, A. (2012). *Building a learning community: A tale of two schools*. Stanford, CA. Stanford Center for Opportunity Policy in Education.

Retrieved from

<http://www.learningforward.org/docs/publicationssection/2012phase4report.pdf>

Noddings, N. (1984/2003). *Caring: A feminine approach to ethics and moral education*. Berkeley, CA: University of California Press.

Noddings, N. (2002). The language of care ethics. *Knowledge Quest*, 40(4), p.52-56.

Noddings, N. (2006). Educating whole people: A response to Jonathan Cohen. *Harvard Educational Review*, 76(2), 238-242.

Pailliotet, A. W. (1997). "I'm really quiet": A case study of an Asian, language minority Preservice teacher's experiences. *Teaching and Teacher Education*, 13(7), 575-690. <http://dx.doi.org/10.1016%2FS0742-051X%2897%2981484-9>

Palincsar, A.S. (1998). Social constructivist perspectives on teaching and learning. *Annual Review of Psychology*, 49, 345-375.

<http://dx.doi.org/10.1146/annurev.psych.49.1.345>

Partnership for 21st Century Skills (2012). Retrieved from <http://p21.org/>

Pettigrew, S. F. (2000). Ethnography and grounded theory: A happy marriage? In S.J.

- Hoch, S.J. & Meyer, R.J. (eds.), *Advances in Consumer Research*, (pp. 256-260).
Provo, UT: Association for Consumer Research
- Philipp, R. (2007). Mathematics teachers' beliefs and affect. In F. Lester (Ed.), *Handbook of research on mathematics teaching and learning* (2nd Edition ed.). Reston, VA: National Council of Teachers of Mathematics.
- Prawat, R. S. & Floden, R. E. (1994). Philosophical perspectives on constructivist views of learning. *Educational Psychology*, 29(1), 37-48.
http://dx.doi.org/10.1207/s15326985ep2901_4
- Prior, L. (2003). *Using documents in social research*. Thousand Oaks, CA: Sage Publications.
- Putnam, R. T., & Borko, H. (2000). What do new views of knowledge and thinking have to say about research on teacher learning? *Educational Researcher*, 29(1), 4-15.
<http://dx.doi.org/10.3102/0013189X029001004>
- Ramas, M. & Krastina, L. (2010). Cultural intelligence in the school. *Revista de Psicodidáctica*, 15(2), 239-252. Retrieved August 17, 2013 from
<http://ehu.es/ojs/index.php/psicodidactica/article/viewFile/818/690>
- Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). New York, NY: Free Press.
- Rogoff, B. (1990). *Apprenticeship in thinking: Cognitive development in social context*. New York, NY: Oxford University Press.
- Rogoff, B. (1994). Developing understanding of the idea of communities of learners. *Mind, Culture and Activity*, 1(4), 209- 229.

- Rogoff, B., Matusov, E., & White, C. (1996). Models of teaching and learning: Participation in a community of learners. In Olsen, D. R. & Torrance, N. (Eds.) *Handbook of Education and Human Development*, (pp. 388-413). Malden, MA: Blackwell Publishing.
- Rogoff, B. & Toma, C. (1997). Shared thinking: Community and institutional variations. *Discourse Processes*, 23, 471-497. <http://dx.doi.org/10.1080/01638539709545000>
- Rubin, H. J., & Rubin I. S. (2005). *Qualitative Interviewing: The Art of Hearing Data*, (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Saldaña, J. (2009). *The Coding Manual for Qualitative Researchers*. Thousand Oaks, CA: Sage Publications.
- Schön, D. (1987). *Educating the reflective practitioner: Towards a new design for teaching and learning in the professions*. San Francisco: Jossey-Bass.
- Shulman, L. (1986). Paradigms and research programs in the study of teaching: A contemporary perspective. In M.C.Wittrock (Ed.), *Handbook of research on teaching* (3rd ed., pp. 3-36). New York: Macmillan.
- Shultz, K. (2010). After the blackbird whistles: Listening to silence in classrooms. *Teachers College Record*, 112(11), 2833-2849.
- Spradley, J. P. (1980). *Participant Observation*. New York: Holt, Rinehart, & Winston.
- Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (2nd ed.). Thousand Oaks, CA:

Sage Publications.

Sykes, G. (1996). Reform of and as professional development. *Phi Delta Kappan*, 77(7), 464- 468. Retrieved from <http://ezproxy.gsu.edu:2048/login?url=http://search.proquest.com/docview/218473711?accountid=11226>

Takahashi, S. (2011). Co-constructing efficacy: A “communities of practice” perspective on teachers’ efficacy beliefs. *Teaching and Teacher Education*, 27(4), 732-741.

Talbert, J.E. (2010). Professional learning communities at the crossroads: How systems hinder or engender change. In A. Hargreaves et al. (eds.), *Second International Handbook of Educational Change*, DOI 10.1007/978-90-481-2660-6_32. http://dx.doi.org/10.1007/978-90-481-2660-6_32

Tappan, M. B. (2006). Moral functioning as mediated action. *Journal of Moral Education*, 35(1), 1-18. DOI: 10.1080/03057240500495203

Vescio, V., Ross, D., & Adams, A. (2008). A review of research on the impact of professional learning communities on teaching practice and student learning. *Teaching and Teacher Education*, (24), 80-91.

<http://dx.doi.org/10.1016/j.tate.2007.01.004>

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Chapter 6 Interaction between learning and development (79-91). Cambridge, MA: Harvard University Press.

Wagner, T. (2008). *The Global Achievement Gap: Why Even Our Best Schools Don't*

Teach the New Survival Skills Our Children Need--and What We Can Do [Kindle Edition]. New York, NY: Basic Books.

Wertsch J. (1985). *Vygotsky and the social formation of mind*. Cambridge, MA: Harvard University Press.

Wertsch J. (1991). *Voices of the mind: A Sociocultural approach to mediated action*. Cambridge, MA: Harvard University Press.

Westheimer, J. (1993). Building school communities: An Experience-based model. *Phi Delta Kappan*, 75(4), 324-328.

Westheimer, J. (1999). Communities and consequences: An inquiry into ideology and practice in teachers' professional work. *Educational Administration Quarterly*, 35(1), 71-105.

Westheimer, J. (2008). Learning among colleagues: teacher community and the shared enterprise of education. In Cochran-Smith, M., Feiman-Nemser, S., & McIntyre, J. (eds.). *Handbook of Research on Teacher Education*. (pp. 756 – 783). Reston, VA: Association of Teacher Educators.

Wineburg, S., & Grossman, P. (1998). Creating a community of learners among high school teachers. *Phi Delta Kappan*, 79, 350-353.

APPENDIXES

APPENDIX A

SUNTREE PROFESSIONAL LEARNING BUDGET

Proposed 2012-13 Professional Learning Budget

\$3000 from School System (Estimated)

\$1000 from Dept. of Education (GA School of Excellence)

of Teachers Who Need Subs for PL in 2012-13

19 classroom teachers

4 specials teachers

4 special education teachers

27 total teachers who need subs for professional learning

Costs for Substitutes

\$75 per substitute (full day)

\$1012.50 – half-day subs for 27 teachers

\$862.50 – half-day subs for 23 teachers (classroom teachers, special education teachers)

\$150 – half-day subs for 4 teachers (specials)

Professional Learning Activities and Costs

Registration for Technology Specialist to attend State Technology Conference - \$150

2 substitute days for classroom teachers to attend State Technology Conference - \$300
(Teachers will present at the conference to cover the cost of registration)

1st Wednesday of Every Month – Collaborative professional learning – Common Core
GPS, 21st Century Skills - \$0

2nd Wednesday of Every Month – Leadership Team/School Improvement Planning - \$0

Approx. once a month (dates are written on staff calendar) – Small group technology learning during planning times - \$0

Approx. once a month (dates are written on staff calendar) – Response to Intervention discussions during planning times - \$0

After School as Needed - Optional technology learning sessions - \$0

During the School Day - Technology Course for Parapros - \$0

Half-Day Professional Learning Sessions – See options below

Half-Day Professional Learning Sessions - Option #1 (\$2887.50)

3 half-days for 23 teachers (classroom teachers and special education teachers) - \$2587.50

2 half-days for 4 teachers (specials) - \$300

Half-Day Professional Learning Sessions - Option #2 (\$3600)

4 half-days for 23 teachers (classroom teachers and special education teachers) - \$3450

1 half-day for 4 teachers (specials) - \$150

Possible Dates for Half-Day Professional Learning

After October 23

After January 9

After March 25

Near Beginning or End of Year

APPENDIX B
INITIAL QUESTIONNAIRE

Dear Faculty Member,

Thank you for taking the time to complete this questionnaire. You will be asked to complete it 2 times over the course of the year. This information will be used by April DeGennaro to research the formation of learning communities at Peeples. Benefits to you include the opportunity to be part of the larger research conversation benefiting teachers and teaching and to increase your own understanding of professional learning through communities of practice. Your participation in this study is completely voluntary and you may choose not to participate at any time.

- Your answers will be kept confidential and secure through random number assignment known only to April DeGennaro.
- You will have the opportunity to verify, amend, elaborate or delete any of your contributions.

*This personal data section appears only on the first questionnaire. It will be used to create a description of our staff and learning communities and not to identify you personally. Skip any items you feel uncomfortable answering. **The first 2 questions below it also appear only once.***

Name (#): _____ Age: _____

Highest Degree: _____ Major area: _____

Other certifications/endorsements/qualifications: _____

Total years teaching experience: _____ Years in FCBOE: _____ at PES: _____

Ethnicity: _____ Current grade-level and/or special areas: _____

1. What are your personal goals for professional learning this year? _____

2. What do you suggest as school-wide goals for professional learning? _____

Thank you for taking the time to thoughtfully answer the following 5 questions.

You will be given a random number to use to identify your surveys over the year. You may be asked to clarify, amend, or elaborate your answers as part of the research process. I will be happy to address any questions or concerns. - April

Please tell about a good professional learning experience you have had.

What words would you use to describe positive, or good, professional learning?

How do teachers learn in these types of professional learning models?

How do you learn as a professional? What helps your professional learning?

How would you describe professional knowledge? How does it grow?

APPENDIX C

MARCH QUESTIONNAIRE

Dear Faculty Member,

Name: (optional)

Thank you for taking the time to complete this questionnaire. The information you provide will be confidential, and you will not be identifiable in the review of my findings. If you have any questions, please let me know. THANK YOU!!!! April DeGennaro

Please describe your experience during our monthly professional learning meetings this year. _____

How does this format meet (or miss) your professional learning needs? _____

How has your experience with this format of professional learning changed your opinion about learning - and professional learning specifically? _____

If someone from another school asked you about the format we have used this year, what would you say to them? _____

I would appreciate any other comments you feel would help me understand your experience with professional learning this year. _____

APPENDIX D

QUALITATIVE INTERVIEW PROTOCOL

Introduction

After establishing rapport and exchanging pleasantries, the conversation will begin with a reminder of the purpose of the research. The participant will be asked if they have any questions before beginning the interview.

Statement to Participant of the Research Purpose

The purpose of this research is to explore the ways you experience professional learning. In this interview I just want to talk about your experiences, opinions, and perspectives about professional learning in the past, this year, and the future.

Interview Questions (As a means of member-checking, the researcher might ask about questionnaire responses, observations, or interview answers given by the participant.)

1. Tell me about your participation in professional learning this year.

Follow up Question: How did you feel about this experience?

2. Is this experience that you describe typical of professional learning? Would you describe it as “common”?

Follow up if necessary: Have you ever done professional learning a different way? How did you feel about it?

3. What influences your participation in professional learning? (Follow up questions will explore previous and current experiences.)

I'd like to change my focus a bit...

4. What would you describe as essential elements of professional learning experiences?

Follow up: You mentioned, (or did not mention) - refer to Q 1 for elements cited by participant - as an essential element. Why is that?

5. How do you see your professional learning in the future?

Follow up: You mentioned, (or did not mention) teacher directed or adult-led activities specifically in your description. Could you elaborate on how you understand the teacher's roles and responsibilities in professional learning?

APPENDIX E

INTERVIEW PROTOCOL - KAREN

1. How is professional learning going for you this year? Could you place it within a context of how you have thought about or experienced professional learning throughout your career?

2. Could you describe one thing you liked or that you didn't like about professional learning this year?

3. In November, during professional learning, you said:

OK I want to know one thing before we do our little reflection. You know this time is a great time for us to get work done. And I know your great need is to get work done, especially those of you who are dealing with common core. You need time to be able to talk to each other and work on your units and things. But what are some other benefits from a professional learning standpoint? Because I want to be sure we don't lose sight that this is also growing time and learning time. What are some things that these monthly times to get together help us in as far as just growing and learning as a teacher?

Could you tell me your thoughts and feelings, what you remember, of that discussion?

Follow up: Only a few people say anything, (we're not alone; reflection; in private a teacher says "venting" but you don't hear that) then you say:

Good. Make sure when you're having your conversations with each other, and I know you're doing this, but it's just a reminder. Make sure that you ARE sharing ideas with each other, supporting each other uhm, giving tips, I mean you tried in the past and it worked, if something's not going well, tell the people at your table, "This did not go well. Does anybody have some ideas for how I could do it differently? Or what have you done before. This is really a time to do that. OK we're gonna do our door prizes and then get to our professional learning. Help yourself to the snacks provided by PTO.

What is your intent here?

Follow up - I've noticed you frequently start a cautionary statement but say, "and I know you would never do this" and I wondered if you could tell me what you are thinking or doing when you say this to teachers.

4. What can you tell me about reflection this year?
5. This year in the monthly professional learning groups the focus was on implementing the CCGPS. How would you describe your participation during these meetings? Did you feel this professional learning time was nice, essential, worthless, combination depending on month?
6. How did this year's professional learning, where you met in groups with different grade levels transform your beliefs or ideas about professional learning? Possible follow up: We had one faculty meeting where a math "expert" presented material, what if we went back to that format as a predominant model of professional learning?
7. How would you describe the culture of our school? Where do you see it in the future?
Follow up:
8. Tell me about the principal you are now after this year's professional learning experience.
 - What strengths have you developed this year?
 - What are you most proud of?
 - What do you think others valued most about you during professional learning?
 - What things bothered you (or others) about professional learning time this year?
8. Where do you see professional learning going next year?
Follow up: What would happen if we stopped doing it this way?
9. Were you aware of teacher's feelings about the ISTs? To what do you attribute this feedback? Will you intervene next year?
10. Is there anything I didn't ask that you want me to know?

APPENDIX F

E-MAIL SAMPLE: VERIFICATION OF INTERVIEW TRANSCRIPT

Hi Evita,

Thank you again for letting me interview you last week. I got it transcribed and it is attached. Please let me know if there is anything that you don't agree with, or that isn't clear from what was recorded. Also, if you think of anything that you want to clarify, just add it in another color so I will know it was added and send it back. Thank you so much!

Toodles,

April

APPENDIX G

STAFF MEETING PROFESSIONAL LEARNING PLANNING SHEET

**Staff Meeting
Professional Learning Planning Sheet**

Complete the top section and turn in to Erin by the MONDAY prior to the staff meeting.

Grade Level/Department: _____

Meeting Date: _____

At this month's professional learning session, we plan to focus on the following:

Our group facilitator will be: _____

Our timekeeper will be: _____

Our note taker will be: _____

Please arrange for the following resources to be available for us:

- | | |
|--------------------------------------|--|
| ___ Math IST (name) | ___ Special Education Teacher – (name) |
| ___ English/Language Arts IST (name) | ___ Special Education Teacher – (name) |
| ___ Counselor (name) | ___ Special Education Teacher – (name) |
| ___ Technology (name) | ___ Special Education Teacher – (name) |
| ___ Media Specialist (name) | ___ EIP |
| ___ Computer with Internet Access | ___ Enrichment |
| ___ Physical Education (2 names) | ___ Another Grade Level _____ |
| ___ Music Teacher (name) | ___ Other _____ |
| ___ Art Teacher (name) | |

Erin will return this paper to you at the staff meeting.

Complete the following section during the professional learning session and turn in to Erin:

Summary of Meeting:

Resources Needed for Next Meeting

Person Responsible

Next Steps:

APPENDIX H
TEACHER REFLECTION

Teacher Reflection

Reflection is an important part of professional growth; however, we often fail to make time to do it. As part of our professional learning this school year, we will set aside time to reflect on the day's discussion, how you are growing/changing as a teacher, and what steps you need to take next. The questions/sentence starters below will guide you in your reflection, but we encourage you to use a method that will be most helpful to you! You may want to write directly on this piece of paper or keep your thoughts in a notebook.

Possible Questions/Topics for Reflection

After today's discussion, I have a greater understanding of...

I have more questions about/want to learn more about...

What did I gain from today's discussion/sharing?

What would I like to learn/do between now and the next time we meet?

Am I being a cooperative/productive member of my grade level/department team?

What could I do to make our discussions more productive?

My Fears/questions/concerns about new ideas...

What are some ways my teaching is improving?

What is in area in which I need to improve?

APPENDIX I
ATTRIBUTE CODING

SITE (SY August – May)

Suntree Elementary (Enrollment between 550-600 students)
42 teachers (no changes during year)
2 administrators (Karen, Principal; Josie Assistant Principal)

KTCL

Penny (Grade Chair)
Emmi
Marty (NTGL)
Carilyn (Maternity leave Aug-Nov)

1TCL

Faydra
Cami (Grade Chair)
Paula (NTGL)
Laverne

2TCL

Wenonah
Elisabet (limited consent)
Justine
Norrie (Grade Chair)

3TCL

Jinny (Grade Chair)
Lillian
Rachel (NTGL)
Regan
Teresita

4TCL

Andrea (Grade Chair)
Felicia
Jamie
Dorri
Teddie (NTGL)

5TCL

Heddi (NTGL)
Teri (Grade Chair)
Patty
 Susannah
 Tracie

SPECIALS

Me (April)
Evita
Netta (Grade Chair)
Kassie
Mandy
Victoria
Betty
Mae
Melodie

SPED/EIP

Lilly
Maggie (NTGL)
Ingrid
Sheryl (Grade Chair)
Katrina
Corinne
Marsha

KTCL

November – PO/Field notes
March – Audio transcription
May – Emmi interview

1TCL

October – PO/Field notes
November – Audio transcription

2TCL

October – Audio transcription

3TCL

September – Audio transcription
October – Audio transcription
April – Rachel interview

4TCL

September – Audio transcription
January – Audio transcription
April – Teddie interview

5TCL

September – PO/Field notes
 November – Audio transcription
 January – Audio transcription
 April – Heddi interview
 May – Teri interview

Specials

August – PO/Field notes
 January – PO/field notes
 April – Evita interview

SPED/EIP

February – Audio Transcription (SPED)
 February – Audio Transcription (EIP)

Housekeeping

August – PO/Field notes week 1
 August – PO/Field notes week 2
 October – PO/Field notes
 November – PO/Field notes

Documents

Professional learning plan
 Back-to-school slideshow
 Reflection Notes
Rocket Launch weekly schedule
 Professional learning agenda
 iPLP
 e-mail correspondence

APPENDIX J
PHASE 1 CODE MANAGER

Initial Code Name	Description	Exemplar Quote
Leading	Moving the group in a particular direction	“Do we want to do ___ now?”
Learning (later changed to realizing/”a-ha” moment)	(not sure about this...what constitutes learning.	“Oh, I get it. I need to ___.”
Agreeing	Statements or sounds	“Uh huh”, ” yep”, “that’s right”
Disagreeing	“	“nuh uh”, “I don’t do it that way.”
Complaining	Expressing dislike of something	“I hate it when _____”
Questioning		“Can I ask you a question?”
Defending	Explaining practice	“I don’t do it that way. I was taught that...”
Overtalking	Two or more people talking at once. Often unable to make out in transcribing	
Suggesting idea	Putting an idea out for others to consider; process related	“What if we do ...”
Suggesting alternatives	Variation of above	“We could do ___ and then ___”
Validating Self	Sharing practice to get approval	“Did you give the exact same pretest and posttest?”
Validating Others	Stating that they do it same way	“I like the way you did that. I’m going to do that, too.”
Supporting	Statement of support	“I think that’s a good idea”
Dividing workload Co-occurs with leading often	Sometimes said and sometimes occurs when TCLs have 2 conversations going on	“What if you do that one and we do this one?”
Joking	Words or laughter	
Admitting (deficit)	One member says they did not do what another has explained	“I am clueless. I have no idea how to teach _____.”
Admitting (success)	Almost bragging Esp. with county folks to get them to say “you did it correctly”	“So that’s how I did it”

Consoling	Expressing sympathy	“Oh no. You poor thing.”
Interrupting	Often stops process.	“Wait. Go back to ____”
Asking for clarification	Natural process of extending an idea	“Did you do (title of book) yet?”
Joining/Leaving TCL	People coming and going	“Is anyone sitting here?”
Asking for ideas	Asking how someone is doing something	“How did you do that?”
Asking for help (merged later with admitting deficit)	Expressing deficit	“Can you show me what you did?”
Asking for consensus	Marking agreement	“Do we want to make that assessment now?”
Asking for validation	See admitting	“So, ILT, did I do it right?”
Asking for permission	Often co-occurs with interrupting	“Can I join you?” “Is this seat taken?”
Sharing strategies	Explaining how something is done	“Well, what I did was. . . “
Sharing ideas	Providing help in the form of an idea	“What is we did. . . “
Sharing concerns	Pointing out a potential problem	“Yeah, but if we do that, then we won’t be able to . . .”
Sharing past practice	Using past practice as resource for current discussion	“Last year, I used unifix cubes and just gave each kid a handful.”
Sharing status of work	Stating the timeline or agreed upon pace of things	“I gave that assessment Monday and today I introduced the next unit.”
Sharing status of practice	Explaining how something is taught	“Just give them something small and let them measure with it.”
Suggesting a new practice	Putting forward something to consider	“We could do it this way.”
Suggesting an alternative	Changing the idea on the table	“Next time, we should teach ____ before we ____.”
Silence	A way to indicate audio blanks	
Mentioning research/researcher	Realizing or pointing out that I was present even as a recorder	“This is second grade professional learning. Prepare to be amazed.”
Mentioning audio recorder	Remembering audio recorder was on	“Oh no. That was just recorded wasn’t it?”
Technology	Identified the content of discussion	Content identified as technology
CCGPS	Identified the content of discussion	Content identified as CCGPS ELA or Math

APPENDIX K

PHASE 2 CODE MANAGER

HU: A Case for Situative Learning_7_19_13_Final_Coding Scheme
 File: [C:\Users\April\Desktop\A Case for Situative Learning_7_19_13_Final_Coding.hpr7]
 Edited by: Super
 Date/Time: 2013-07-19 14:19:06

B_NAVIGATINGEXTERNAL BARRIERS T0 PROFESSIONAL LEARNING**barriers_fear of being unprofessional****barriers_TCL meeting format****barriers_learning curve of initiatives (tech, CCGPS, 21st cent)****barriers_money****barriers_off task or topic****barriers_overwhelming amount of work****barriers_time limits****BLDG_BUILDING_COMMUNITY****bldg_comm_self-correcting****bldg_comm_commiserating/consoling****bldg_comm_Criticising & complaining****bldg_comm_disagreeing****bldg_comm_agreeing****bldg_comm_having fun****bldg_comm_housekeeping****bldg_comm_ignoring****bldg_comm_interrupting****bldg_comm_observing social scripts****bldg_comm_exchanging personal stories****bldg_comm_validating self or others****bldg_comm_volunteering****NE_NEGOTIATING IDEAS****NEG_absorbing/active listening****NEG_acknowledging****NEG_ad_admitting defecits****NEG_ad_ist****NEG_ad_karen****NEG_ad_ntgl****NEG_ad_rtgl****NEG_clarifying**

NEG _describing (resources & student behavior)
NEG _explaining
NEG _leading/suggesting ideas
NEG _realizing (aha!)
NEG _validating tcl or tcl format

ROLES

ROLES_LEADERSHIP PARTICIPATION

ROLES_leadership_essential questions for professional learning

ROLES_leadership_Focus of TCLs

ROLES_leadership_journey

ROLES_leadership_plan

ROLES_leadership_reflection

ROLES_leadership_vertical planning example

ROLES_NTGL_PARTICIPATION

ROLES_NTGL_sharing previous experience

ROLES_NTGL_wanting to fit in/not step on toes

ROLES_SPECIALS_PARTICIPATION

ROLES_specials_iPLP

ROLES_specials_On demand development.

ROLES_specials_technology

APPENDIX L

INDIVIDUALIZED PROFESSIONAL LEARNING PLAN

Individualized Professional Learning Plan

I realize that our current professional learning design may not fully meet your needs as a professional. Therefore, I am giving you the opportunity to develop an individualized plan that will enhance your professional growth.

You may choose to continue doing professional learning in the media center each month as we have done since the beginning of the school year, or...

You may choose to create a plan that is specially designed for you (an Individualized Professional Learning Plan). Keep in mind that your plan must enhance your growth as a professional - It cannot be extra time to "get work done." You may want to collaborate with a professional in your area at another school, or you may have another idea of ways to enhance your growth.

If you would like to have an IPLP, please complete the attached sheet (just the 1st page) and return it to Erin by Monday, February 4. The 2nd page is a log for you to keep track of the time you spend doing your IPLP. You must spend at least 4 hours of out-of-contract time (before 7:15am, after 3:00pm, or on weekends/holidays).

I would be happy to work with you to develop your plan - Just let me know if you would like to meet!

-Karen (pseudonym)

___ I would like to continue to meet in the media center for collaborative planning and discussion each month.

___ I would like to develop an Individualized Professional Learning Plan that will meet my needs as a professional.

2012-2013 Individualized Professional Learning Plan
Please complete and return to Karen by Monday, February 4.

Name:

Position:

My goal for professional learning (what I hope to learn by doing my IPLP):

These are the specific steps I plan to take for my IPLP:

I need Josie or Karen's help with the following:

At February's staff meeting, we will offer basic sign language to help specials teachers communicate with our DHH population.

___ I will attend the sign language training at the February staff meeting.

___ I will not attend the sign language training at the staff meeting in February. Instead, I will start my IPLP.

For our March staff meeting, we will have a workshop on the new PARCC Assessment for Math.

___ I will attend the PARCC Assessment workshop at the March staff meeting.

___ I will not attend the PARCC Assessment workshop at the staff meeting in March. Instead, I will work on my IPLP.

