

Walden University ScholarWorks

Walden Dissertations and Doctoral Studies

Walden Dissertations and Doctoral Studies
Collection

1-1-2011

Advantages and Disadvantages of Cross Grade Level Collaboration to Improve Collegial Interactions

Fidelia Johnson Walden University

Follow this and additional works at: https://scholarworks.waldenu.edu/dissertations

Part of the Adult and Continuing Education Administration Commons, Adult and Continuing Education and Teaching Commons, Elementary and Middle and Secondary Education Administration Commons, and the Elementary Education and Teaching Commons

This Dissertation is brought to you for free and open access by the Walden Dissertations and Doctoral Studies Collection at ScholarWorks. It has been accepted for inclusion in Walden Dissertations and Doctoral Studies by an authorized administrator of ScholarWorks. For more information, please contact ScholarWorks@waldenu.edu.

Walden University

COLLEGE OF EDUCATION

This is to certify that the doctoral study by

Fidelia Johnson

has been found to be complete and satisfactory in all respects, and that any and all revisions required by the review committee have been made.

Review Committee

Dr. Nathan Long, Committee Chairperson, Education Faculty Dr. Anastasia D'Angelo, Committee Member, Education Faculty Dr. Teresa Dillard, University Reviewer, Education Faculty

Chief Academic Officer

Eric Riedel, Ph.D.

Walden University 2013

Abstract

Advantages and Disadvantages of Cross Grade Level Collaboration to Improve Collegial Interactions

by

Fidelia Johnson

MA, Columbia University, 2005

EdS, University of Georgia, 2000

MEd, Georgia College (Georgia College & State University), 1986

BS, Georgia College (Georgia College & State University), 1983

Doctoral Study Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Education
Teacher Leadership

Walden University

April 2013

Abstract

Researchers have connected student achievement to teacher collaboration; however, there is a paucity of studies conducted on how teachers use identified advantages and disadvantages of cross grade level collaboration to improve collegial interactions to achieve better student performance, professional development, teacher effectiveness, and job satisfaction. The purpose of this case study was to investigate how rural southeast Georgia elementary school teachers use identified advantages and disadvantages of cross grade level collaboration to improve collegial interactions. The theory of collegial coaching provided the conceptual framework for this study. The research questions focused on improving teacher effectiveness and student learning via collaborative dialogue. Data were collected via interviews, observations, and archival records from 14 teachers and administrators (maximum variation used) and analyzed for overarching emergent and dominant themes, patterns, issues, topics, ideas, relationships, cases, crosscases, and concepts. Hatch's typological analysis was employed to decipher the data. Ethnograph v6.0 and QDA Miner 4.0 were used to code the data for triangulation. Quality control and validation were achieved through triangulation and memberchecking. The findings illustrated the merits of ongoing collaboration and effective collegial interaction for teaching and learning. They also highlighted the potential of meaningful discussion in achieving effective collegial interaction. This study can lead to positive social change by providing teachers, administrators, and collaboration facilitators 2 models that can be used as guides for planning quality collegial interaction opportunities and in justifying time to collaborate across grades.

Advantages and Disadvantages of Cross Grade Level Collaboration to Improve Collegial Interactions

by

Fidelia Johnson

MA, Columbia University, 2005

EdS, University of Georgia, 2000

MEd, Georgia College (Georgia College & State University), 1986

BS, Georgia College (Georgia College & State University), 1983

Doctoral Study Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Education
Teacher Leadership

Walden University

April 2013

UMI Number: 3558368

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent upon the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



UMI 3558368

Published by ProQuest LLC (2013). Copyright in the Dissertation held by the Author.

Microform Edition © ProQuest LLC.
All rights reserved. This work is protected against unauthorized copying under Title 17, United States Code



ProQuest LLC. 789 East Eisenhower Parkway P.O. Box 1346 Ann Arbor, MI 48106 - 1346

Dedication

This dissertation is dedicated first and foremost to God. Glory to God! Also, to my mother who taught me that all things are possible through and with God, I dedicate this dissertation in honor of her beautiful mind. Thank God I have both my father and mother's work ethics and their resolve to never give up, despite life's adversities. I know that they are proud that I have accomplished this milestone in my life and did not forego this genius opportunity.

To my family, I say thank you for keeping me focused on my genius opportunity. True genius opportunities are far and few. Authoring a dissertation is one of those genius opportunities.

To my mentor, doctoral chair, and methods specialist, Dr. Nathan Long, I greatly appreciate how you made me believe that I could complete the doctoral program. You told me that I have all of the skills necessary to attain the doctorate. Your words were always inspiring. It was an honor to have you on my committee.

To Dr. Anastasia D'Angelo, I greatly appreciate your unyielding dedication. Your willingness to join my committee without hesitation was critical to my success. Thank you also for providing support at a moment's notice.

Acknowledgments

To Dr. Nathan Long, I thank you for your words of encouragement throughout the writing of this dissertation and for every word of encouragement during each course completed with you. Without your help, this doctoral journey would never have been possible. You encouraged me to believe that I have all of the skills necessary to complete the doctorate. Your words "YOU CAN DO THIS" will forever ring in my head. You are a great mentor. Thank you for guiding me through this important journey.

Also, to Dr. Anastasia D'Angelo, I greatly appreciate you for your willingness to join my committee and provide the kind of support that is unsurpassed. Your support motivated me to continue. You made my successful completion of the doctoral journey believable. Thank you for being there for me.

To my family and the writing center tutors and editors of Walden University and my friends and colleagues, I have nothing but the most sincere gratitude for you. I greatly appreciate your support and encouragement throughout the entire doctoral journey. You made the arduous journey of attaining the doctorate tolerable.

Thanks to God, I never gave up! Thanks to God, I have individuals in my life that cared enough to see me come to a prosperous end in my pursuit of a doctoral degree. The journey was difficult, but God saw me through to a triumphant finale.

Table of Contents

Lis	st of Tables	ix
Lis	st of Figures	X
Se	ction 1: Introduction to the Study	1
	Introduction	1
	Problem Statement	2
	Purpose of the Study	4
	Nature of the Study	5
	Research Questions	8
	Conceptual Framework	9
	Definition of Terms.	14
	Assumptions	18
	Limitations	19
	Scope and Delimitations	21
	Significance of the Study	22
	Summary	24
Se	ction 2: Review of the Literature	27
	Introduction	27
	Case Study Research	28
	Case Study Defined	29
	Appropriate Usage of Case Study	30
	Various Types of Case Study	32

The Strengths and Weaknesses of Case Study	33
Collegial Coaching	34
Collaborative Planning Defined	36
Collaborative Practice	38
Cross Grade Level Collaboration Defined	40
Teacher Talks	42
Higher Quality Collaboration	48
Classical and Current Theories	51
Instructional Design Theory	51
Self-Regulated Learning	53
Cooperative Learning.	54
Learning Theories	55
Systems Thinking Theory	56
General System Theory	56
Debriefing and Systems Thinking As Agents of Change	57
Evidence from the Literature	60
Related Literature	66
Advantages and Disadvantages of Cross Grade Level Collaboration	67
Collegial Interaction	68
Survey Research Studies	70
Empirical Research Studies	77
Critical Analysis	83

Summary	84
Section 3: Methodology	87
Introduction	87
Research Design and Approach	88
Qualitative	88
Case Study	89
Alternative Approaches	91
Research Questions	94
Ethical Measures	95
Participants and Sampling.	100
Setting	103
Instrumentation and Materials	107
Data Collection	107
The Questionnaire Phase	108
The Interview Phase	111
Relationship of Research Questions to Interview Questions	113
The Observation Phase	115
The Archival Data Phase	116
Data Analysis	118
Data Collection and Analysis Method by Research Question	122
Research Question 1	122
Research Question 2	125

Research Question 3	127
Validity and Quality	129
Role of the Researcher	131
Summary	133
Section 4: Results	136
Introduction	136
Overview	136
Framework of Study	
Introduction of Participants	138
Study Goals, Expectations, Challenges, Limitations, Commona	alities, and
Variations	139
Data Collection Procedures	142
Discrepant Cases	144
Data Collection Process	147
Phase I: Questionnaire Phase	148
Phase II: Interview Phase	152
Phase III: Observation Phase	156
Phase IV: Archival Phase	
Findings of Each Case	169
Case I: School A	170
Questionnaire Phase	170
Interview Phase	175

Observation Phase	179
Archival Phase	
Summary	186
Case II: School B	187
Questionnaire Phase	187
Interview Phase	190
Observation Phase	192
Archival Phase	194
Summary	197
Case III: School C	198
Questionnaire Phase	198
Interview Phase	201
Observation Phase	203
Archival Phase	204
Summary	207
Case IV: School D	208
Questionnaire Phase	208
Interview Phase	210
Observation Phase	213
Archival Phase	215
Summary	218
Case V: School E	220

	Questionnaire Phase	220
	Interview Phase	222
	Observation Phase	224
	Archival Phase	226
	Summary	228
R	esearch Questions	230
	Research Question I	231
	Case I: School A	232
	Case II: School B	235
	Case III: School C	238
	Case IV: School D	241
	Case V: School E	244
	Research Question II	248
	Case I: School A	249
	Case II: School B	251
	Case III: School C	252
	Case IV: School D	254
	Case V: School E	255
	Research Question III	258
	Case I: School A	259
	Case II: School B	260
	Case III: School C	261

Case IV: School D	263
Case V: School E	265
A Conclusion to Research Questions and Cases	266
Themes and Patterns Evident from Interviews and Observations	267
Emergent Themes, Patterns, Issues, Relationships, Cases, Cross-Cases, an	d
Data Triangulation	272
Dominant Themes, Patterns, Issues, Relationships, Cases, Cross-Cases, ar	nd
Data Triangulation	280
Emergent and Dominant Patterns	290
Methods Triangulation of the Interview, Observation, and Archival Findin	ngs294
Summary	300
Section 5: Summary, Conclusion, and Recommendations	302
Overview of the Research Study	302
Evidence of Quality	306
Findings of the Study	312
Expected Findings	313
Unexpected Findings	319
Interpretation of Findings	322
Implications for Social Change	336
Recommendations for Action	341
Recommendations for Future Research/Further Study	348
Reflections of the Researcher	351

Summary of Study	356
Conclusion	361
References	363
Appendix A: Questionnaire	375
Appendix B: GTEP Map	380
Appendix C: Consent Form	381
Appendix D: Superintendent's Letter of Permission	383
Appendix E: Interview Questions	384
Appendix F: Questionnaire Consent Form	386
Appendix G: Field Notes Worksheet	388
Appendix H: Archival Data Worksheet	389
Appendix I: Data Triangulation Chart	390
Appendix J: Member-Checking Letter	391
Appendix K: Interview Questions Guide and Notes	392
Appendix L: Recruitment Letter	393
Appendix M: Coding Worksheet	394
Appendix N: Researcher's Logs	395
Appendix O: Transcripts	398
Appendix P: Field Notes	413
Curriculum Vitae	415

List of Tables

Table 1. The Relationship of Research and Interview Questions	114
Table 2. Data Collection and Analysis Method by Research Question	123
Table 3. Tabulated Questionnaire Chart	151

List of Figures

Figure 1. GTEP Map	380
Figure 2. Cross grade level collaboration framework.	346
Figure 3. A framework for improving collegial interaction.	347

Section 1: Introduction to the Study

Introduction

Collaboration is one of the many practices teachers employ to obtain the knowledge needed to help students consistently maintain self-managing behaviors for successful academic achievement. Helping students achieve also means helping students maintain their attraction to learning in all subjects and other areas of life. Educators need to inquire through collaboration, research, and assessment how they can help students initiate and maintain an attraction to learning. A lack of knowledge of how to help students in this way can limit the educator's ability to effectively instruct students in the learning process, thereby obstructing their students' capacity for learning.

The purpose of this study was to examine teacher collaboration in relation to collegial interactions, teacher effectiveness, student learning, professional development, and job satisfaction. When investigating teacher collaboration, an inquiry of why teachers need to collaborate with their colleagues and their students should be included. Also warranted is an examination of how teachers use their time to interact with each other at and across grade levels. In addition, an exploration of the knowledge regarding how to conduct regular cross grade level collaboration that provides the preparation teachers need to prepare students for subsequent grades is appropriate.

To further address the topic of teacher collaboration, debriefing was examined as a way to provide opportunities for improving collegial interaction. Systems thinking was investigated as an approach for improving the thinking of teachers thereby improving their interactions. In addition, other aspects (learning, teaching, modeling, and emulating)

of teacher collaboration were addressed. An example that demonstrates the other aspects of collaboration is the example "teachers in high-performing schools were more likely to see each other teach, and administrators and teachers alike were more likely to point out exemplary teaching that others should emulate" (The Southeast Center for Teaching Quality, Retrieved April 30, 2013, p. 1). This example implies that there was time for collaboration to determine what exemplary teaching resembles and demonstrates that collaboration when there is learning, teaching, modeling, and emulating involved is professional development. Professional development is about learning, teaching, modeling, and emulating. Thus, collaboration as professional development was also a focal point for this study. Professional development can be the avenue through which effective teaching is taught, modeled, and emulated. If this avenue is accepted, then the decision regarding how professional development is delivered becomes the issue. Therefore, an examination of using collaboration to deliver professional development to improve collegial interactions as the means to improved teacher effectiveness and student learning was central to this study.

Problem Statement

Elementary school teachers in rural southeast Georgia need regularly scheduled cross grade level collaboration. Teachers have little opportunity and time to devote to collaboration. Darling-Hammond, Wei, Andree, Richardson, and Orphanos (2009) stated that "U.S. teachers report little professional collaboration in designing curriculum and sharing practices and the collaboration that occurs tends to be weak and not focused on strengthening teaching and learning" (p. 5). Similarly, Leonard and Leonard (2003)

stated, "Teachers are dissatisfied with scheduling and appropriations of time, which often serve to deter collaborative practice" (p. 4). Also, in a study conducted with 238 Louisiana teachers in 10 districts and 88 schools, Leonard (2002) found using survey data that

they felt, that to the extent desirable, prevailing conditions in their schools did not reflect trusting and caring environments, that teachers did not seem to sufficiently like each other, that levels of shared values and beliefs were not adequate, and that diversity of opinion was not promoted to a desirable extent. Taken together, it may be succinctly stated that these teachers were dissatisfied with the conditions commonly considered to promote collaborative environments. (para. 18)

Elementary school teachers from a rural southeast Georgia school system wish to improve the existing state of collaboration. Many of these teachers verbally expressed their desire at school functions (e.g., faculty meetings and professional development training) that more time is needed to collaborate across grade levels with the express aim of preparing students for future grades and improving the state of collaboration.

A district self-administered survey (via Zoomerang) was also administered by the school system. The findings were discussed at each school in the county. Based on the findings revealed through the survey, each school community in the county developed a school improvement plan. The findings of the district self-administered survey were also reviewed for expressions of teacher discontent for the present state of collaboration. The expressions of teacher discontent are what lead me to conduct this study.

Teachers who teach students at the same grade level have to collaborate, even if informally. While cross grade level collaboration is uncommon, various researchers have pointed to its necessity, especially if teachers are to prepare students for future academic success while helping them succeed at their present grade level. For instance, when cross grade level collaboration opportunities are given, teachers may be more likely to participate in a professional learning community or organization where teachers work together to achieve desired results and assume collective responsibility for student learning across grade levels (National Network for Collaboration, 1998; National Staff Development Council, 2009). In addition, Leonard (2002) found that teachers tend to participate in professional interaction (collaboration) when there is sufficient opportunity, support, and the expectation to do so (para. 19). Thus, to collaborate effectively, scheduled time, support, and more opportunities to do so are essential. However, there is a gap in the literature focused on identifying and using the advantages and disadvantages of cross grade level collaboration and the collaborative needs and desires of teachers to improve collegial interactions to achieve better student performance, professional development, teacher effectiveness, and job satisfaction.

Purpose of the Study

The purpose of this qualitative case study was to identify how the participating teachers use the advantages and disadvantages of cross grade level collaboration to improve collegial interactions to achieve better student performance, professional development, teacher effectiveness, and job satisfaction. Also, an understanding of how the collaborative needs and desires of teachers that can be used to improve collegial

interactions was investigated. Central to this study was gaining an understanding of how teachers collaborate across grade levels, and if this collaboration improved collegial interactions. Effective collaboration requires regular scheduling and appropriation of time and more opportunities for collaboration to take place. This study may provide a framework for improving the state of collaboration and for supporting the collaboration efforts of teachers across grade levels to prepare students for future grades.

Nature of the Study

This qualitative case study was conducted at multiple sites using qualitative procedures and methods. The study was bound by place (school), time (3 weeks), and setting (the elementary school setting). The problem that constituted the reason for conducting this study was explored through five cases (five teacher communities) bound by place, time, and setting. The participants of the study (administrators and teachers) were selected because they were either implementers (facilitators) of collaborative practices or participants in collaborative planning and have requested assistance in improving collaborative practices and collaborative planning. The facilitator of collaborative planning meetings has been trained in consistent and effective delivery. To assist the administrators and teachers, I first collected archival data (collected archival data throughout the study) and thereafter observed teachers' use of collaboration and collegial interaction and conducted individual and group interviews. A researcherdesigned questionnaire (Appendix A) was administered to participating teachers (administrators excluded) before the study (at the start), during the study, and at the end of the study.

The interview data were audiotaped, transcribed, interpreted, coded, and analyzed. The data collected from observations included diagrams of the setting and field notes: verbal descriptions, direct quotations, and observer's comments (Merriam, 1998, p. 111). The observation data were recorded, interpreted, coded, and analyzed. Archival data were examined for authenticity and were then coded and analyzed. Using the data from the different sources, categories were constructed to expose themes, patterns, topics, concepts, issues, cases, events, relationships, and ideas. Hatch's (2002) nine steps in typological analysis were used to analyze the data collected. All data collected from interviews and observations were either member-checked, peer audited, or peer debriefed. The accuracy of themes, patterns, topics, issues, concepts, cases, events, relationships, and ideas were member-checked.

To collect the data and conduct observations, specific curricular materials were necessary. The materials for this study are specific to collaborative planning. To collect the data, one-on-one interviews were conducted with all participants (10 administrators and teachers) and a group interview was conducted with four to eight participants of the study. The individual and group interviews were recorded on audiotape. The participants were selected via maximum variation sampling. A log of the classroom observations was kept. Later, the observations were recorded as descriptive (verbal descriptions) and reflective (observer's comments) notes to include demographic information and as direct quotations. I collected data from the administrators and teachers before, during, and after their collaboration planning sessions (and during noninstructional times and instructional times when observing) at school on a daily basis for 2 weeks. Thereafter, data were

collected twice the third week. The data collection process spanned approximately a 3 week period. As data were collected, an analysis of data accumulated was continuous. Data were synthesized "into overall portrait of cases" and generalizations where possible were concluded (Leedy & Ormrod, 2005, p. 144). Participating administrators and teachers were interviewed one time individually. The four to eight participants (formed from the initial participant population of 50 and discriminately sampled) were interviewed one time as a group during the study. The administrators that participated in the group interview participated with the teachers unless the administrators of the different elementary schools agreed to meet with me separately. The teachers that were interviewed as individuals or as a group were interviewed when their students were attending the physical education class or any other noninstructional time. Administrators were interviewed via an appointment for participation in individual and group interviews.

Maximum variation was the primary sampling method used throughout this study. This sampling method requires "in advance some criteria that differentiate the sites or participants, then selecting some sites or participants that are quite different on the criteria" (Creswell, 2007, p. 126). Maximum variation was employed as a sampling strategy "to represent diverse cases and to fully describe multiple perspectives about the cases" (Creswell, 2007, p. 129). Creswell (2007) stated, "This approach is often selected because when a researcher maximizes differences at the beginning of the study, it increases the likelihood that the findings reflected differences or different perspectives — an ideal in qualitative research" (p. 126). Discriminant sampling was used as the secondary sampling method to gather when warranted "additional information from

individuals similar to those initially interviewed to determine" if the assertions made by the first participants hold "true for these additional participants" (Creswell, 2007, p. 68). Discriminant sampling was used to select participants for peer auditing or debriefing when warranted. Additionally, by using discriminant sampling, a new, more effective delivery of professional learning "with specific components, a central phenomenon, causal conditions, strategies, conditions and context, and consequences" was one of the expected outcomes of this study (Creswell, 2007, p. 68). The population for this study included 50 selected (via maximum variation sampling) administrators and teachers of which 10 teachers and administrators were expected to participate in the study. The teacher collaboration community was the focus at Schools A, B, C, D, and E.

Quality control and validation was achieved primarily through triangulating data sources and member-checking but peer debriefing, peer auditing, and an external auditor was used as well or when warranted. The results and findings were reported to the participants (and nonparticipants) as an e-mailed PowerPoint presentation (if warranted also as a written report disseminated via e-mail). The accuracy of the findings for this study confirmed that collaboration more specifically cross grade level collaboration can be used as professional development to improve collegial interactions.

Research Questions

The research questions of this study were

1. How do rural southeast Georgia elementary school teachers use identified advantages and disadvantages of cross grade level collaboration to improve collegial interactions?

- 1. How do teachers, when they collaborate across grade levels, improve collegial interactions?
- 1. How do students demonstrate improved learning experiences that are based on teacher collaboration?

Other questions designated as research background questions were used to address the biases and limitations inherent in a research design. Data (collected as responses to the research and interview questions) were collected from regular education and special education teachers and administrators.

Conceptual Framework

The conceptual framework appropriate for examining grade level and cross grade level collaboration as professional development for improving collegial interactions is the systems thinking theoretical framework. According to Laszlo (1996), "Systems thinking gives us a holistic perspective for viewing the world around us, and seeing ourselves in the world. It is a way of organizing, or perhaps reorganizing, our knowledge in terms of systems, systemic properties, and inter-system relationships" (p. 16). Laszo stated, "Systems thinking is a discipline for seeing wholes. It is a framework for seeing interrelationships rather than things, for seeing patterns of change rather than static 'snapshots'" (p. 68). Laszlo also stated that "systems thinking is a discipline for seeing the 'structures' that underlie complex situations, and for discerning high from low leverage change" (p. 69). Systems thinking was first introduced in relation to general system theory by Bertalanffy (1968). Bertalanffy introduced the general system theory as an idea that preceded cybernetics, systems engineering and the emergence of related

fields (p. 10-11). Before Bertalanffy's introduction of the theory, the general system theory appeared in scholarly literature as an emerging theory under various titles and as the topic of many theorists.

The general system theory may be useful in improving collegial interaction. The general system theory is the methodical investigation of wholes and wholeness (Bertalanffy, 1968, p. xx). As a scientific exploration of wholes and wholeness, the general system theory is an understanding of the wholeness (or the unity) of a learning organization. A learning organization that is unified or whole practices a systems thinking approach. If the wholeness of a learning organization is understood, the members who make up that organization are better understood. If the members are understood, their issues are understood. When their issues are understood, the solutions are easier to find. Therefore, the way to improve collegial interactions through collaboration may be via a discussion of an issue and its solution.

A general system theory is a theory that may be useful in understanding the functioning self (the part) in an organization (the whole). The general system theory is a theory that is based on the philosophy that an organization can only be meaningfully studied as a system (Bertalanffy, 1968, p. 9). The learning organization featured in this study was analyzed as a system (as a community and as a case). A system is "a set of elements standing in interrelation among themselves and with the environment" (Bertalanffy, 1968, p. 252). For example, "social phenomena must be considered as 'systems'" (Bertalanffy, 1968, p. 7). Laszlo (1996) stated, "We call a human being a natural system. We likewise call atoms, molecules, cells, organs, families, communities,

institutions, organizations, states, and nations natural systems" (p. 19). As Laszlo stated, "All parts express the character of the whole, yet all parts are not the same. This is the systems concept of nature and it is a precondition of coming to know ourselves" (p. 60). Self-knowledge can help learners and teachers know how to improve and develop in order to reach their fullest potential. This also may mean that collegial interaction of teachers who know themselves can be improved through the strengths and weaknesses they possess.

The general system theory is also important to interdisciplinary synthesis and integrated education (Bertalanffy, 1968, p. 51). This made the cross grade level aspect of the study feasible. As the postulation of a new discipline that is the formulation of universal principles applying to systems in general, the general system theory is an attempt to "generalize systems irrespective of their particular kind, elements, and the 'forces' involved' (Bertalanffy, 1968, p. 32-33). If systems are generalized regardless of kind, element, or force engaged to reveal how unified or interrelated they are, connections, transferences, relationships, gaps, issues, and conflicts are exposed. Here in lies the rationale for the general system theory.

The general system theory can be used to point to a more "unitary conception" of the learning organization (Bertalanffy, 1968, p. 48). Bertalanffy (1968) stated, "Characteristic of organization, whether a living organism or a society, are notions like those of wholeness, growth, differentiation, hierarchical order, dominance, control, competition, etc." (p. 47). Bertalanffy stated that "notions like wholeness, holistic, organismic, gestalt, etc., which all signify that, in the last resort, we must think in terms

of systems of elements in mutual interaction" (p. 45). The aim of general system theory is a "general science of 'wholeness'" (Bertalanffy, 1968, p. 37). Functioning as a whole system is significant to communities of collaborative practice.

Another conceptual framework that was central to this case study was the instructional-design theory. In the instructional-design theory, guidance is offered on how to better help people learn and develop cognitively, emotionally, socially, physically, and spiritually (Reigeluth, 1999, p. 5). An instructional-design theory provided the support necessary for establishing a professional development community in which grade level and cross grade level collaboration and collegial interactions are used to improve teaching and learning.

The collaborative problem solving theory (CPS) was also a conceptual framework that was central to this case study. As an instructional-design theory, the primary goals and preconditions of the CPS are "to develop content knowledge in complex domains, problem-solving, and critical thinking skills, and collaboration skills" (Nelson, 1999, p. 242). The CPS theory is based on "learning to use naturally effective collaborative processes, rich social contexts and multiple perspectives for learning, cultivating supportive," and "respectful relationships among learners, as well as between learners and the instructor" (Nelson, 1999, p. 242). The methods that are significant to this study and to CPS are four interactive methods that are the guidance for the interaction taking place during CPS (Nelson, 1999, p. 254). The four interactive methods are learning and purposefully using social skills and team building activities, promoting investigation, interaction, interpretation, and intrinsic motivation, encouraging

simultaneous interaction and face-to-face interaction, and promoting equal participation, positive interdependence, and individual accountability (Nelson, 1999, pp. 242-243). All four interactive methods are vital to the successful execution of the CPS theory.

The conceptual framework most crucial to this study was collegial coaching. Through collegial coaching, collaborative teaching and learning and collegial interaction are achieved. Dantonio (1998) stated, "Collegial coaching lets you share your expertiseand learn from the experts around you" (p. 35). Dantonio stated that "collegial coaching is all about practicing, observing, sharing, reflecting, and conferring with a partner to enrich your teaching" (p. 35). Collaboration is also about collegial coaching. Collegial coaching makes collaboration across grades feasible because the two have the same characteristics.

Collegial coaching gives the participants a chance to be the coach and can be used by teachers at all grade levels and levels of experience (Dantonio, 1998, p. 35). Teachers can become the authority in their field of expertise. The teacher who employs collegial coaching is in control (Dantonio, 1998, p. 36). However, collegial coaching must be employed successfully, and all successful coaching experiences include a clear focus, sharing with a colleague, and time (Dantonio, 1998, p. 36). For successful coaching experiences to take place, teachers must plan to decide on goals, objectives, focus, strategies, and needs to be met; observe to gather information to analyze teaching style, grow professionally, learn and set parameters; reflect to gain perspective; and debrief to problem solve (Dantonio, 1998, p. 37). Likewise for successful coaching experiences to take place, collegial coaching must take place in a safe, supportive environment and must

include teacher-designed professional development (Dantonio, 1998, p. 37). Teachers who design their own professional development tend to follow through to the end.

A discussion of the theories mentioned in this section and various tenets of the theories are detailed in Section 2.

Definition of Terms

For this study, the key terms and concepts are defined: *collaboration*, *collaborative inquiry*, *collaborative problem solving*, *collegial coaching*, *collegial interaction*, *cross grade level collaboration*, *cross grade level collegial interaction*, *debriefing*, *differentiated collaboration*, *effective collaboration*, *effective teaching*, *emotional drive*, *general system theory*, *grade level collaboration*, *instructional design theory*, *intensive professional development*, *professional development*, *systems thinking*, *and teacher effectiveness*.

Collaboration: Collaboration is a process of participation in a professional learning community or organization through which teachers work together to achieve desired results and assume collective responsibility for student learning (National Network for Collaboration, 1998; National Staff Development Council, 2009). "Collaboration in education is generally defined as 'co-equal professionals' voluntarily co-planning to achieve common goals" (Friend & Cook, 2006 as cited in Carter et al, 2009, p. 60).

Collaborative inquiry: Collaborative inquiry is "the process by which colleagues gathers in groups to pursue, over time, the questions about teaching and learning that the group members identify as important" (Weinbaum, Allen, Blythe, Simon, Seidel, &

Rubin, 2004, p.2). Collaborative Inquiry as collaborative action research is deep "reflective study of one's actions and effects of these actions in a workplace context. As such, it involves deep inquiry into one's professional action" (Riel, 2007, p. 1). Through collaborative action research teachers can learn through and from their own practices.

Collaborative problem solving: The primary goals and preconditions of the CPS theory are "to develop content knowledge in complex domains, problem-solving, and critical thinking skills, and collaboration skills" (Nelson, 1999, p. 242).

Collegial coaching: Collegial coaching is all about practicing, observing, sharing, reflecting, and conferring with a partner to enrich your teaching (Dantonio, 1998, p. 35).

Collegial interaction: Collegial interaction is the converging of teachers at their grade level to discuss classroom teaching and student learning (Zahorik, 1987, p. 385).

Cross grade level collaboration: Cross grade level collaboration is a process of participation in a PLC or organization through which teachers work together to achieve desired results and assume collective responsibility for student learning across grade levels (National Network for Collaboration, 1998; National Staff Development Council, 2009).

Cross grade level collegial interaction: Cross grade level collegial Interaction is the converging of cross grade level teachers to discuss classroom teaching and student learning (Zahorik, 1987, p. 385).

Debriefing: Debriefing is an intensive professional development that would include learning content and teaching skills, examining personal belief systems about how students learn to avoid teaching impediments, and devoting time to acquiring

complex knowledge and skills to reach competency (Katzenmeyer & Moller, 2001, p. 108-109). Debriefing takes place before and after a day or week of instruction as reflection sessions with colleagues.

Differentiated collaboration: Differentiated collaboration is the use of a variety of collaboration strategies and methods to collaborate that meet the collegial interaction needs of the collaborating teacher. Differentiated collaboration depends on a teacher's individual differences. A teacher's individual differences determine the way he or she will collaborate.

Effective collaboration: Effective collaboration is collaboration that works (does what it is purported to do) for the teacher, student, and the learning organization. Based on experience, effective collaboration is about genuineness, being present, practicality, value, positivity, and outcome, and data and evaluation is central.

Effective teaching: Effective teaching is quality instruction that causes a positive transformation in the way a learner processes information to gain knowledge and wisdom. Effective teaching means sharing the responsibility of helping students reach their proficiency in learning to learn with other colleagues.

Emotional drive: Emotional drive is what drives a person's feelings, thoughts, and behaviors. "The drives are the chief source of motivational force, and, together with the genetic factors in the individual's development, they serve to organize the general field of psychic functioning" (Arlow, 1959, p. 197). In addition, Arlow (1959) stated that "a drive has been defined as a psychic representative of a somatic stimulus, having an energetic

supply of its own, an aim, and an object. It is a bridge between the psyche and the soma" (p. 197).

General system theory: General system theory in education is interdisciplinary synthesis and integrated instruction (Bertalanffy, 1968, p. 51). An interdisciplinary and integrated system of learning implies completeness. Umpleby (2001) stated that "the original purpose of general systems theory was to help people in different disciplines learn from one another" through the use of a universal language (p. 6). A universal language to unite all disciplines into one general system has numerous possibilities.

Grade level collaboration: Grade level collaboration is a process of participation in a PLC or organization through which teachers work together to achieve desired results and assume collective responsibility for student learning at the same grade level (National Network for Collaboration, 1998; National Staff Development Council, 2009).

Instructional design theory: "An instructional-design theory is a theory that offers explicit guidance on how to better help people learn and develop. The kinds of learning and development may include cognitive, emotional, social, physical, and spiritual" aspects" (Reigeluth, 1999, p. 5).

Intensive professional development: Intensive professional development (IPD) is professional learning conducted by the teachers within the learning organization instead of a facilitator outside the organization. As in-house facilitators, the teachers usually conduct professional learning sessions within their area of expertise.

Professional development: Professional development (PD), once known as staff development, is professional learning conducted by a facilitator who is not a member of the organization.

Systems thinking: Senge (2006) stated that systems thinking is about "making full patterns clearer, and to help us see how to change them effectively" (p. 7).

Teacher effectiveness: Teacher effectiveness is defined as the competency, efficacy, and expertise of a teacher.

Assumptions

Two aspects of the study were assumed. First, the population sample was predominately from the faculty population of the rural elementary schools in the district. The administrators and teachers (of regular and special education) of the rural elementary schools in the district were selected because they requested assistance in helping their students better experience the process of learning. The administrators and teachers of this study also voiced a need to improve collegial interactions across grade levels through collaboration. The administrators and teacher participants are accustomed to being observed, interviewed, and assessed. This familiarity could potentially threaten or profit the research efforts. All necessary actions were taken to ensure that their familiarity prove beneficial by controlling for negative and positive reinforcements of behaviors that maintain "negative transfer" (Biehler & Snowman, 1982, p. 292). Additionally, the administrators and teacher participants were selected "based on their contribution to the development" of cross grade level collaboration as professional development to improve collegial interactions (Creswell, 2007, p. 240). The administrators and teacher

participants' contribution to the development of cross grade level collaboration as professional development to improve collegial interactions came by way of a questionnaire (Appendix A) that I designed for the study to determine the professional development and collegial interaction needs, desires, and interests of the teacher participants. All questionnaire and interview responses were considered sincere, comprehensive, and accurate. Second, the aim of the study was to develop cross grade level collaboration as one of the means to improving collegial interactions. I assumed that administrators and teachers were familiar with the study (through me via an e-mailed PowerPoint presentation of the study or through an oral presentation of the study in group or individual sessions) so that participants had a broad perspective. Finally, all collected data were regarded as reliable since the data collected came from archival documents, meeting minutes, related district survey results, and written policies.

Limitations

There were various limits in this study. One of the limits was expected in the area of confidentiality. While maintaining confidentiality is a "primary obligation" of the researcher, confidentiality can limit complete disclosure, minimize availability, restrict access, and prevent the continuation of valuable research (American Psychological Association [APA], 2001, p. 387). The participants of this study did not limit my access to any available data, and based on their countenance, most of them seemed relieved to disclose completely. Also, time could have become a limitation to the study. Longitudinal studies yield the best results but take a great deal of time. Time was limited in this study to 3 weeks. Within 3 weeks, ample quantities of data were collected from interviews,

observations, and archival documents of 2009, 2010, and 2011. Lastly, the participants were beginning teachers to veteran teachers but beginning teachers could have become veterans and veterans could have become retired teachers. Thus, participant control could have become an issue. For this study, replacing participants became the participant control issue. Another possible participant control issue was the novice teacher participant. A novice teacher participant may lack the mental maturity of the experienced teacher to be the best participant. Experienced teacher participants are expected to have more experiences, interests, and passions. Experienced teacher participants are considered the best participants but the use of experienced teacher participants over novice ones would pose different limits (referred to as biases). Therefore, novice teacher participants were not excluded. The diverse backgrounds of the participants as related to their experience and how they collaborated and interacted could have been a limitation if the diversity fragmented the findings and hindered the conclusion of the study. This diversity did not fragment the findings nor hinder the conclusion of the study. Furthermore, the sample size could have also created limitations but did not. A larger sample size would mean collecting more data which could take more than 3 weeks to gather. The sample size was taken from the following demographics: 80% of the teachers and administrators are European American and 70% are female. Thus, the gender and ethnicity of certified teachers and administrators do not reflect that of the school system population. This limited the data collected to the female European American. Lastly, since this is a case study, data were limited to specifics thereby making generalizations practically implausible. Thus, generalizations where plausible were concluded.

Scope and Delimitations

In the beginning, the study was confined to observing, interviewing, and surveying (a questionnaire/Appendix A) the administrators (administrators excluded from the questionnaire phase) and teacher participants (selected using maximum variation sampling) of local elementary schools to determine their use of identified advantages and disadvantages of cross grade level collaboration to improve collegial interactions. In time, I moved forward to investigating teacher collaboration as professional development to improve collegial interaction. Later, I included examining systems thinking and community learning as agents for the development of teacher collaboration as professional development that lead to improving collegial interactions that improve the student learning process. Throughout the study, efforts were made to identify the advantages and disadvantages of cross grade level collaboration to improve collegial interactions.

Five cases bound in the present time, place, and setting constitutes the scope of the study. Each case is a teacher community situated in an elementary school in southeast Georgia. The school district has eight elementary schools, with the following characteristics:

- School A/Case 1: houses 391 students, with 27 full-time teachers;
- School B/Case 2: houses 784 students, with 53 full-time teachers;
- School C/Case 3: houses 517 students, with 37 full-time teachers; and
- School D/Case 4: houses 449 students, with 36 full-time teachers.

The population of students at the four remaining schools was 401 at one, 288 at another, 622 at yet another, and 357 at the last school. Between the four schools, there were 115 full-time teachers. School E and Case 5 were chosen from the four or the four were seen as one.

The above declarations are the scope and delimitations of the study. Creswell (2003) stated that delimitations are used to "narrow the scope of study" (p. 148).

Narrowing the scope of a study can create focus and direction. Also, specifics can be examined, and one kind of research design can be used.

Significance of the Study

Three results were expected to evolve from this study. One expected result was that teachers may understand the connection between professional development and collegial interactions in relation to their own learning. Another expected result was that teachers may understand that collaboration through collegial interaction can be used as professional development. Lastly, the study was expected to give way to practical approaches to making regular cross grade level teacher collaboration possible.

The topic of cross grade level collaboration as professional development to improve collegial interactions has not been investigated. Researchers have studied collaboration and professional development but their findings exclude improving collegial interaction to improve teacher effectiveness and student learning. If the subject of collaboration as professional development to improve collegial interactions is examined, researchers may determine what teaching techniques attract the learner to learning. Researchers may discover that a better understanding of what teaching

techniques attract a learner to learning is also a way to better understand how the learner learns. By understanding how a learner learns, and educator may be better able to improve instruction (teaching), thereby improving learning. Besides improved teaching and learning, the research community can also expect an impact via social change that is directly related to investing in local, state, national, even global teaching practices and curriculum changes that are directly related to differentiated and tailored instruction for teacher and student learning. An additional impact of differentiated and tailored instruction for teacher and student learning would be a diverse and decentralized learning organization.

The study is significant to educators who struggle to maintain effective teaching, collaborative practices, and collegial interaction. Parents may find the study important because they are assured that their children learn from teachers who use cross grade level collaboration and collegial interaction to improve their effectiveness as teachers and the process of student learning. As advantages and disadvantages of cross grade level collaboration are identified, teachers may benefit from the study as they are taught to use the advantages and disadvantages to improve collegial interactions. Once teachers are able to use identified advantages and disadvantages of cross grade level collaboration to improve collegial interactions, they can individualize their own professional development, and the pacing and pattern of teaching aimed at the student's level of need and ability can be gained. Teachers who can differentiate their own professional development need fewer props (e.g., coaches, mentors, etc.). Fewer props mean less expenditure.

The study adds to the scholarly research and literature on teacher collaboration and collegial interaction in three ways. First, teachers who consistently collaborate across grade levels and interact with each other may be more effective teachers who are also oriented towards lifelong learning and the pursuit of ways to impart learning. The whole concept of who the effective teacher is to the learning process may change or at least be expounded. New ways to educate and motivate the learner via what is deemed effective teaching may well become apparent. Second, as a result of the investigation, through collaboration and collegial interaction, a new arsenal of teaching methods, practices, and strategies to improve the process of learning and a diverse and rich quality of instructional options may be at educators' disposal. As a result, instruction could be aimed at a deeper level (an emotional drive level) of processing.

In this study, contributory research is provided to calibrate the role of emotions in effective teaching to attract the learner to learning. However, previous researchers have further research was indicated that more research is needed in the area of differentiating collaboration (differentiated collaboration) to improve collegial interaction. Integrative research to connect structural, strategic, and interactional understandings about influencing a student's level of processing information through cross grade level collaboration is needed.

Summary

This qualitative case study was conducted to attain quality, reliable, practical, and transforming knowledge on collaborative practices that improve teacher effectiveness and student learning and to obtain qualitative results from an in-depth study at the selected

schools with administrators and first-year to experienced teachers (regular and special education) at the elementary level. The second aim of the study was to investigate the ways in which teachers can use collegial interaction to improve the impact of teacher collaboration on student learning and instructional, curricular, and professional development practices.

The teachers who need cross grade level collaboration opportunities are the interest for this study. The sample size of 14 consenting teachers (regular and special education) and administrators participated. Data were collected through archival documents, qualitative surveying (a researcher composed questionnaire) and qualitative interview and observation sessions. Triangulation and member-checking (peer debriefing, and an external auditor when warranted) were the strategies that were employed to decrease the threats to quality.

The current research of Senge, Laszlo, Washburn, Katzenmeyer and Moller, and others is most related to the area of inquiry for this study as noted in the next section. For example, the research of Katzenmeyer and Moller focuses on the connection between collaboration and intensive professional development. As an illustration of the focus and the connection, Katzenmeyer and Moller (2001) stated, "To learn how to collaborate with others, conduct action research, integrate curriculum, and authentically assess students demands intensive professional development" (p. 108). Although the quote above is specific to professional development, Katzenmeyer and Moller's investigation is important to this study. First, Katzenmeyer and Moller's examination is important because of what the authors did address. The researchers addressed professional

development from the perspective that PD must be intensive. Second, Katzenmeyer and Moller discussed teacher effectiveness in relation to learning leadership skills to be more competent in their roles. Teachers who collaborate have a chance to improve their leadership skills, teaching effectiveness, and collegial interactions. Finally, the researchers focused their examination on developing teacher leaders as the means to teacher effectiveness. Teachers who conduct legitimate research (action research) can add to the existing authoritative literature thereby they become leaders. Collaboration, effective teaching, collegial interaction, learning to lead, and PD are all connected.

In the section to follow, a review of the literature includes empirical studies relating collaboration and professional development, collegial interaction, and classical and current theories of collaboration, general system, systems thinking, learning, and professional development. In Section 3, the research design and approach, data collection and analysis procedures, ethical measures, threats to validity and quality, and the context of the study are explained. Section 4 is a discussion of the data that were collected, organized, and analyzed. Section 5 is a discussion of the results, conclusions, implications, interpretation of findings, recommendations, and future research needed.

Section 2: Review of the Literature

Introduction

The literature reviewed in this section is an exploration of the advantages and disadvantages of teacher collaboration at the grade level and across grade levels as well as ways in which collegial interactions may be improved. Case study research is discussed first. Collaborative planning and cross grade level collaboration are defined to establish a vantage point for understanding how the study is bound and advanced. Higher quality collaboration is expatiated to bring into perspective collaboration as professional development, debriefing as collaboration, and the role of collaboration and debriefing as professional development (DPD) in improving collegial interactions. Classical and current theories related to cross grade level collaboration and collegial interactions are surveyed. Debriefing and systems thinking are investigated as agents of change that are necessary to improve collegial interactions. Evidence from literature and research studies provide support for the premise that identified advantages and disadvantages of cross grade level collaboration can be used to improve collegial interactions to improve teacher learning and effectiveness to improve student learning and achievement. Included also is a critical analysis of the literature reviewed. The section concludes with a summary and a brief overview of Section 3.

The literature reviewed for this study was obtained through the Walden
University Library research databases (subject area education), the books and journals of
the Questia Online Library and the TC Record database, and scholarly search engines of
the Web. The education databases used for this literature review were ERIC

(EBSCOhost), Education Research Complete (EBSCOhost), and Education: a SAGE full-text database. Also, multidisciplinary databases (Academic Search Complete/EBSCOhost, ScienceDirect, and ProQuest Central) were used to locate scholarly articles. *Teacher collaboration, collaboration, teacher collaborative planning, teacher collaborative practices, teacher talks, teacher collegial interaction, teacher interaction, collegial interaction, teacher professional development, professional development, debriefing as professional development, debriefing as collaboration, systems thinking, the general system theory, and teacher effectiveness* were the key search words and phrases used. The searches also yielded reference pages within the books and articles used in this literature review. The reference pages were used to locate more peer-reviewed journal articles and books (and primary sources) on teacher collaboration and collegial interaction.

Case Study Research

Case studies are encountered throughout the field of education and other applied social sciences. Merriam (1998) stated, "Most teachers, graduate students, and researchers in education and other applied social sciences have encountered case studies in their training or work" (p. 26). However, despite the common use of the case study approach to research, much confusion remains regarding the nature of this research and how it is done. Merriam stated that some confusion is due to equating case study research with "fieldwork, ethnography, participant observation, qualitative research, naturalistic inquiry, grounded theory, or exploratory research" (p. 26). The uncertainty associated with the nature and usage of case study research makes defining its nature and usage as a

research design for this study important. Equally important is a review of the various types of case studies and the strengths and weaknesses of this type of research. Defining the nature and usage of case study, reviewing the various types of case studies, and examining the strengths and weaknesses of this form of research study can further situate this study.

Case Study Defined

Many researchers have comparable definitions of a case study. Leedy and Ormrod (2005) stated that a case study is an in-depth investigation of an individual, a program, or an event within a bounded system for a fixed period of time (p. 135). Creswell (2007) stated that "case study research involves the study of an issue explored through one or more cases within a bounded system (i.e., a setting, a context)" (p. 73). Merriam (1998) stated that "case study research is not the same as casework, case method, case history, or case record" (p. 32). A case study is an in-depth exploration of a case or cases over a defined period of time whereby the investigator has used multiple sources of information to garner detailed data. The present study is an exploration of five cases over a 3-week period. Data were garnered from interviews, observations, and 2009, 2010, and 2011 archival documents.

A case study can also be defined by the way it is characterized. Case studies can be characterized as particularistic, descriptive, and heuristic. In a particularistic case study, a researcher "focuses on a particular situation, event, program, or phenomenon" (Merriam, 1998, p. 29). A descriptive case study ends with a product that is "a rich 'thick' description of the phenomenon under study" (Merriam, 1998, p. 29). A heuristic

case study is a study where the researcher illuminates "the reader's understanding of the phenomenon under study" (Merriam, 1998, p. 30). In this case study, I combined specific characteristics (a focus on the teacher community, rich thick descriptions, and an illumination of how and when teachers do collaborate and how they improve collegial interaction and student learning).

Appropriate Usage of Case Study

Case study research is a qualitative research methodology that is used by researchers of different disciplines and of various paradigms to holistically investigate a bounded phenomenon as empirical inquiry. Hatch (2002) stated that "researchers from many disciplines and many paradigms (qualitative and quantitative) call their work 'case studies'" (p. 30). Case study research is also considered a universal term in the literature that can be used to describe many kinds of qualitative research studies. Hatch stated, "case study research is a term that has become a catchall for identifying qualitative studies of various types" (p. 31). Therefore, the search was for "meaning and understanding" (Merriam, 2002, p. 179). I was the "primary instrument of data collection and analysis" (Merriam, 2002, p. 179). An "inductive investigative strategy" was used when warranted (Merriam, 2002, p. 179). The end product is a richly descriptive product (Merriam, 2002, p. 179).

The cases that were examined for this study on cross grade level collaboration and collegial interaction include the teacher communities of different elementary schools in rural southeast Georgia. The cases for this study were selected because they "exhibit characteristics of interest" to me (Merriam, 2002, p. 179). The significance of this study

is that the knowledge gained from investigating cross grade level collaboration and collegial interaction regarding teacher communities may well improve the practices of teachers (Merriam, 2002, p. 179). The findings of the investigation of this study were "written up as a comprehensive description" of the cases (Merriam, 2002, p. 179). There are five cases.

The appropriate usage of case study depends on what the researcher wants to know and understand and what the researcher's interests are concerning a topic, issue, program, or event. Merriam (1998) stated, "Determining when to use a case study as opposed to some other research design depends upon what the researcher wants to know" (p. 32). The case study approach was selected for this study because the approach allows for investigations where the researcher has less control over "a contemporary set of events" or where variables in a situation are "impossible to identify ahead of time" (Merriam, 1998, p. 32). Case study research can also be used as a teaching device or technique (Merriam, 1998, p. 32). For instance, the findings of this case study may serve to instruct teachers on the best implementation methods for teacher collaboration or the most effective ways to improve collegial interaction. The case study approach was used for this study because I am interested in using a process to examine and investigate a topic or situation. Moreover, Merriam stated that a case study might be used for its uniqueness, for what it can reveal about a phenomenon or knowledge that would be inaccessible (p. 33). This is another reason the case study approach was used for the present study.

Various Types of Case Study

There are various types of qualitative case studies. Case studies can be ethnographic, historical, psychological, sociological, descriptive, interpretive, analytical, evaluative, collective, cross-case, multicase, multisite, or comparative. Ethnographic case studies, as defined by Merriam (1998), are focused on "the culture of a school, a group of students, or classroom behavior" (p. 34). A case study that is a historical study is descriptive and is centered on the researcher's employment of techniques common to historiography (Merriam, 1998, p. 35). The researcher conducting a historical case study must be trained in the skills common to a historiographer. Conducting a historical case study means investigating phenomenon over a period of time. Historical case studies are prolonged or extended over time to investigate a phenomenon. The psychological case study is centered on the individual "as a way to investigate some aspect of human behavior" (Merriam, 1998, p. 36). According to Merriam (1998), "Sociological case studies attend to the constructs of society and socialization in studying educational phenomenon" (p. 37). A descriptive case study includes a detailed account of the phenomenon under study. Therefore, the researcher must be detailed-oriented. The intent behind interpretive case studies is to analyze, interpret, and theorize about the phenomenon. Analytical case studies are interpretive case studies that lean towards a greater amount of analysis. Researchers of this type of case study are analyzing more than they interpret. Evaluative case studies involve description, explanation, and judgment. Multiple case studies (e.g., collective cross-case, multicase, multisite, or comparative) include the collection and analysis of data from several cases (Merriam,

1998, pp. 34-40). Multiple case studies are studies of diverse and varied information. The present study is a rich descriptive case study.

The Strengths and Weaknesses of Case Study

Case study research can be further demystified through its strengths and weaknesses. Some of those strengths and weaknesses that reveal the true characteristics of case study research are mentioned here. The weaknesses of the present study are presented as limitations and are discussed in section one. The strengths of this study are found in the purpose, nature of the study, and validity and quality sub sections of sections 1 and 3.

According to Merriam (1998), one of the strengths of case study research is that "it offers insights and illuminates meanings that expand its reader's experiences" (p. 41). Case study research may be used to advance "a field's knowledge base" by expanding, illuminating, and sharing experiences (Merriam, 1998, p. 41). Case studies are also anchored in real-life situations. Case studies anchored in real-life situations can result in "a rich and holistic account of a phenomenon" (Merriam, 1998, p. 41). However, there are some limitations to case study research. First, case studies are limited to the "sensitivity and integrity of the investigator" (Merriam, 1998, p. 42). This limitation may result in biases that threaten the quality, validity, and reliability of the data collected. In addition, the investigator uses his or her instincts and abilities as a guideline for conducting case study research (Merriam, 1998, pp. 41-42). Thus, case study research may depend on the influences that have shaped the researcher's instincts and abilities.

Collegial Coaching

Collegial coaching is the conceptual framework for this qualitative case study of teacher collaboration and collegial interaction. Collegial coaching was used because it is an approach designed to improve teaching to improve learning. Also, collegial coaching was employed as the conceptual framework for this study because collegial coaching, like collaboration, involves application, observation, participation, reflection, and discussion as the means to improved teaching skills and practice. Dantonio (1998) defined an aspect of collaboration and collegial interaction. Dantonio stated, "Collegial coaching lets you share your expertise-and learn from the experts around you" (p. 35). The concepts of teacher collaboration and collegial interaction are aligned with the concepts of Dantonio's views of collegial coaching. Dantonio's views of collegial coaching are addressed in the four phases of collegial coaching. The four phases of collegial coaching are planning, observing, reflecting, and debriefing. During the planning, reflecting, and debriefing phases, much collaboration and collegial interaction occurs between the participants. The four phases may lead to a new way to develop a professional development plan for the participants. At present, the Georgia Teacher Evaluation Process (Appendix B) leads to the development of a professional development plan.

The first of the four phases is the planning phase which is basically a planning conference. Dantonio (1998) presented the planning phase as a period of collaboration and collegial interaction. During this phase, the coach listens to the teacher and provides collegial support when requested. At the planning phase, the coach and the participating

teacher discuss and set lesson goals and objectives. Also, during the planning phase, the best instructional strategies that maximize learning are chosen. After instructional strategies are selected, both planning phase participants determine what to observe during the lesson. At the end of the planning phase, the participants discuss and address their needs, expectations, and goals (Dantonio, 1998, p. 36). The planning phase involves collaboration and collegial interaction.

The second phase of collegial coaching is the observing phase. Dantonio (1998) defined the observing phase as an opportunity to experiment with instructional practices (p. 36). This phase provides an opportunity for the participants to learn from shared experiences. At the end of the phase, the collegial coach analyzes the participant's teaching. Information garnered through this phase is reflected on and used to develop the participant's professional growth plan (Dantonio, 1998, p. 36).

The reflecting phase, which lasts 15 minutes, is the third phase of collegial coaching. Dantonio (1998) defined this phase as "the key to collegial coaching" (p. 36). During the reflecting phase, the coach and the participating teacher write about the lesson taught to gain the insight needed to answer questions posed during the planning phase (Dantonio, 1998, p. 36). The reflecting phase, as do all of the other phases of collegial coaching, involves collaboration.

Dantonio (1998) defined the last phase of collegial coaching as debriefing.

Dantonio stated that the debriefing conference is used for problem solving. During this phase, the participants share and discuss their reflections in an effort to analyze, interpret, assess, and resolve issues. The collegial coach asks many qualitative and quantitative

questions to elicit clarification. Also, during this phase, the coach analyzes the participating teacher's teaching actions to determine if any improvements are necessary. The debriefing phase is usually 5 minutes (Dantonio, 1998, p. 37). The effectiveness of the debriefing phase may hinge on the collaborative efforts of the participants.

Dantonio (1998) stated that collegial coaching is an opportunity for participants to learn and grow together in a safe and supportive environment. Participants can decide what to work on and when "and that's what professional development should really be about" (Dantonio, 1998, p. 37). Accordingly, collegial coaching may be seen as professional development.

Collaborative Planning Defined

Collaborative planning is defined as a specified period of preparation that grade level teachers use during collaborative planning meetings to plan and create exciting authentic student learning experiences that are information and technology rich and are sustained by local and state standards. For teachers of the rural elementary schools, collaborative planning can become the means to nurturing true learning in their students. Martin-Kniep (2000) stated that "it is difficult for teachers to nurture true learning if they don't experience the learning process for themselves" (p. viii). Collaborative planning can also be defined as a way for teachers to experience the learning process which can improve their teaching skills to increase student learning and achievement.

Collaborative planning is also about a dependence on each other, surrounding conditions, experienced teachers for their professional development and survival, and professional development. Martin-Kniep (2000) stated that teachers who have access to

professional development fare better as teachers because they "learn about educational innovations and are given the tools to incorporate them into their teaching practices" (p. vii). Teachers can acquire professional development through collaborative planning.

Collaborative planning can be defined as intensive professional development focused on educational innovations that can be used to improve teaching practices for more effective teaching and increased student learning and achievement.

Collaborative planning is about asking and answering questions regarding an individual's own teaching practices as well as the practices of their fellow colleagues. Accordingly, collaborative planning can be defined in the same manner as action research. Martin-Kniep (2000) stated, "Action research is a process of asking important questions and looking for answers in a methodical way" (p. 89). By asking and answering questions, teachers are provided a type of professional development that can be meaningful and effective in improving teacher effectiveness and collegial interaction to increase student learning and achievement.

During collaborative planning, teachers are also provided opportunities for improving collegial interactions. Teachers can improve collegial interactions four different ways. First, through student and teacher assessments, teachers can determine if the method of communication during collaborative planning is effective in improving teacher effectiveness to increase student learning and achievement and in helping teachers learn and grow professionally. Second, by examining student needs, teachers can plan the discussion agenda for collaborative planning sessions. Planned discussions are focused and meaningful. Discussions that are focused and meaningful can improve

collegial interactions during collaborative planning meetings. Third, evaluating the impact (positive social changes) of collaborative planning sessions and practices is also the means to improving collegial interactions. Fourth, identifying and using the advantages and disadvantages of cross grade level collaboration to determine what improved collegial interactions should look like in collaborative planning sessions and during collaborative practices is another approach to improving collegial interactions. Knowing what the advantages and disadvantages are means knowing the strengths and weaknesses and knowing where the improvements are needed.

Collaborative Practice

The collaborative practices of teachers during collaborative planning may be described around three elements. The three elements are collaboration, reflection, and a focus on the primary task. These elements are well defined by James (2007) who stated that in the schools that were studied "there was highly developed and sophisticated joint working (collaboration), a thoughtful and careful approach (reflective practice) and a focus on a widely agreed and meaningful main task (the primary task). We have called this way of working 'collaborative practice'" (p. 33). The three elements (collaboration, reflective practice, and a focus on the primary task) make up what is known as the collaborative practice model.

In the collaborative practice model, collaboration (the first element) is an opportunity for reflection and collegial interaction, brings together expertise and resources, provides a way for practice and action, and makes teaching and learning purposeful and meaningful (James, 2007, p. 35). The second component of the

collaborative practice model is reflective practice. The two forms of reflective practice are reflection in action and reflection on action. James (2007) stated:

Reflection in action enables the optimisation of current practice and the optimisation of efforts to improve future practice. Reflection on action enables the evaluation of, and learning from, current practice. It also enables the evaluation of attempts to improve future practice and learning from attempts to improve future practice. (p. 35)

Thus, collaborative practitioners who engage reflectively may well improve their practice as individuals and as a group. Collaborative practitioners who engage reflectively to improve their practice begin with a reason for collaboration which gives purpose to the process of their reflective practice. James (2007) defined the primary task which is the third component of the collaborative practice model as the means to providing "a rationale for collaboration;" and giving purpose to "the process of reflective practice" (p. 35). A primary task has two interrelated dimensions. James (2007) stated:

The first dimension defines 'what is to be done' now—current work. The second dimension defines 'what is to be done' to improve the work that is to be undertaken on 'what is to be done' in the future — future work. (p. 35)

The three elements of collaborative practice are essential to good educational work before, during, and after collaboration. Any one element without the other two can result in limitations and regressions in any improvements that can be achieved in teaching and learning. For example, "Collaboration and a focus on the primary task without reflective practice may result in practice both in relation to the primary task and to collaboration

not being appropriate and not improving" (James, 2007, p. 35). Collaborative practice that is inappropriate and not improving can undermine any chances for good educational work that can lead to good teaching and learning.

Cross Grade Level Collaboration Defined

Cross grade level collaboration as described for this study is the collaboration of teachers across grades to improve teacher effectiveness and student learning. In a 2008 qualitative study conducted by Montiel-Overall, findings revealed that participants "believed that the process of collaborating to 'help students' improved their own teaching" (p. 153). In addition, Montiel-Overall (2008) stated that "collaborators highly valued what they learned from each other and appeared to embrace the opportunity to jointly plan lessons and co-teach to stimulate learning" (p. 153). Cross grade level collaboration also means that teachers co-plan across grades and disciplines and that they are frequently provided opportunities (which are far and few at the present) to co-plan across the school district and within their school. Montiel-Overall (2005) proposed that:

Collaboration is a trusting, working relationship between two or more equal participants involved in shared thinking, shared planning and shared creation of integrated instruction. Through a shared vision and shared objectives, student learning opportunities are created that integrate subject content and information literacy by co-planning, co-implementing, and co-evaluating students' progress throughout the instructional process in order to improve student learning in all areas of the curriculum. (p. 150)

Accordingly, when cross grade level collaboration opportunities are afforded, teachers across grades and disciplines can learn from each other and in turn all of the students in the school and in the school district benefit. As a result, improved teacher effectiveness can become a reality.

To improve teacher effectiveness, the chance to build collaborative relationships, experience collaborative practices, garner research supported knowledge, master instructional skills, and attain the capacity for authentic learning must be afforded the teacher. Cross grade level collaboration can provide teachers that chance through coplanning. As aforementioned, cross grade level collaboration is co-planning across grades and disciplines within the school and school district. Co-planning involves connecting many resources to achieve a shared goal. This means that internal (e.g., a teacher's experiences, background, intellect, and wisdom) and external (such as using a professional development facilitator) resources are connected. The shared goals vary from gaining authority as a researcher to producing students who are lifetime learners to becoming the knowledge generators of the field of education to improving collegial interactions.

As a way to improve teacher effectiveness to increase student learning, cross grade level collaboration must become professional development (PD). Upon closer examination, cross grade level collaboration has already become PD. For instance, a teacher gaining new knowledge about how to increase a student's learning potential during collaboration (e.g., collaborative planning, debriefing) across grades and disciplines is participating in professional development. A teacher who practices

mastering instructional skills in cross grade level collaboration is a PD participant. When teachers build collaborative relationships and experience collaborative practices through co-planning across grades and disciplines, they are contributing to their own professional development. This kind of collaboration as PD can have an impact on a teacher's effectiveness, and as a result, a positive influence on student learning.

Teacher Talks

In the school system of this study, district or system cross grade level collaboration is called "*Teacher Talks*." Ayers refers to this term as Teacher Talk in the literature. Ayers (2001) stated, "Teacher Talk is more than talk—it is a way for teachers to collaborate, to support each other, to push each other as teachers" (para. 18). "Teacher Talks" can also be described as planned opportunities for co-planning across grades and disciplines and schools and the school district to achieve a shared goal and to improve teacher effectiveness thereby increasing student learning.

"Teacher Talks" is also inquiry-based collaboration. Tasker, Johnson, and Davis defined "Teacher Talks" within the context of inquiry-based professional development (or cooperative development). Tasker, Johnson, and Davis (2010) stated, "Cooperative development is an inquiry-based approach to professional development that promotes self-development as it occurs within the context of a supportive group of colleagues" (p. 129). "Teacher Talks" as defined for this study is inquiry-based, practitioner driven, self-directed, and collaborative and is purposed for improving teaching practices and collegial interactions. Tasker, Johnson, and Davis (2010) stated:

Inquiry-based professional development is an overarching term for school-based professional development that is practitioner driven, self-directed, and often collaborative, with the purpose of answering questions posited by teachers themselves, improving practice, and reshaping their understanding of their professional lives. Thus, inquiry-based professional development creates an ideal setting for teacher-learning. (pp. 129-130)

Thus, inquiry-based development (or cooperative development) provides teachers the opportunity to reflectively discuss their practices to learn and improve. As Tasker, Johnson, and Davis (2010) stated, "Cooperative development allows teachers to talk their way into new understandings and new ways of thinking about and engaging in their teaching" (p. 138). Accordingly, the more teachers talk about their practice, the more effective they should become as teachers and as learners.

"Teacher Talks" is overall an opportunity afforded teachers so that they can discuss only the topics of teaching and student learning. Ayers (2001) stated that "Teacher Talk is only about students and teaching" (para. 14). "Teacher Talks" is also described as reflective discussions, self-directed and self-regulated learning opportunities, teacher collaborative planning meetings, shared decision-making and shared accountability for student learning outcomes. Randi (2004) stated, "Considering the demands of teaching, it is difficult to imagine an effective teacher who has not developed self-regulated learning strategies" (p. 1851). Therefore, if effective teachers develop self-regulated learning strategies and "Teacher Talks" can be described as self-regulated learning opportunities, then, teachers who participate in "Teacher Talks" are effective

teachers. Ayers (2001) stated that "the focus of Teacher Talk is curriculum, instruction, and evaluation—the content and conduct of teaching" (para. 14). "Teacher Talks" in this county occur at least monthly to discuss curriculum, instruction, and evaluation but more time is considered necessary to accomplish curriculum and instructional reform. In 2012, "Teacher Talks" were held January 12th and 26th, February 2nd, 16th, and 23rd, and March 1st, 8th, and 22nd. Kindergarten through first grade teachers met January 12th, February 16th, and March 8th 3:00 to 4:00. Second through third grade teachers met January 26th, February 23rd, and March 22nd 3:00 to 4:00. Fourth through fifth grade teachers met February 2nd, March 1st, and March 22nd 3:00 to 4:00. It is unclear why there are fewer meetings this year. Usually, 90% of the k-5 teachers participate. Participation in "Teacher Talks" is voluntary at this time. Ayers (2001) stated that "Teacher Talk is a form of voluntary peer staff development and can be conceived as teacher action research, formal teacher reflection, sustained appreciative inquiry" (para. 16). Although participation is voluntary, teachers have expressed the same thoughts of Ayers, Randi, and Hadar and Brody concerning the importance of engaging in "Teacher Talks." Therefore, teachers participate.

The benefits of "Teacher Talks" are significant. Teachers can obtain ideas and feedback from their colleagues to help them find solutions to instructional problems.

Ayers (2001) stated that "the message of Teacher Talk is that the people with the problems are also the people with the solutions, and that only the self-activity of teachers can, in the end, improve teaching in any fundamental or sustained way" (para. 16).

Through "Teacher Talks", teachers can learn skills that may well help them improve their

effectiveness and student learning. Additionally, teachers can gain a different point of view about student learning, development, and behavior issues. A better perspective can lead to better solutions. Teachers are also provided the chance to improve collegial interactions. Ayers (2001) stated that:

Teacher Talk is the beginning of a professional conversation, a reflective dialogue focused on the lives of particular students and the opportunities for student success in our classrooms. It points to important aspects of the teaching enterprise that teachers can control in significant ways; observing and understanding students as learners, and creating environments for learning that nurture and challenge the wide range of students in any classroom. (para. 15)

Hadar and Brody (2010) stated, "New information and ideas emanate not only from individual learning, but also from interaction with others. Moreover, collaboration creates a culture in which further learning is stimulated and supported" (p. 1642). Thus, teachers can benefit from "Teacher Talks."

Teacher benefits can and do lead to student benefits. For instance, students can benefit from instruction planned by two teachers. There is less fragmentation in instruction when teachers plan together. Ayers (2001) stated that teachers need to "fight the atomization, isolation, and alienation endemic in teaching" by planning together and to prevent "disconnection and burnout" (para. 11). Another benefit for students is the heighten sensitivity of teachers to the needs of their students as learners which in turn increases the awareness of their effectiveness as teachers. This is to say that teachers who

are conscious of how effective they are as teachers can make better instructional decisions. Benefits are advantages.

Some aspects of "Teacher Talks" merit further consideration. Teachers share the responsibility for student learning. Ayers (2001) stated that "Teacher Talk unlocks the tacit knowledge of teachers, makes that knowledge public and shared, and therefore subject to deliberate and thoughtful change" (para. 16). Unyielding administrative support provides teachers the opportunity to collaborate by decreasing work demands and increasing time availability. Ayers (2001) stated, "Teachers need opportunities to collectively engage serious questions of immediacy and urgency from their classrooms" (para. 10). Administrators need to value and promote the collaborative practices (or a practicing learning community) within their school through "Teacher Talks." Hadar and Brody (2010) stated, "Communities of practice do not occur randomly, rather they are intentionally initiated and promoted by leaders who are connected and responsive to the needs both of members and the organization" (p. 1643). Ayers (2001) stated that "Teacher Talk aims to build a professional community" (para. 18). A professional community is important because through community "learning and intellectual functioning are enhanced through social interaction rather than individual intellectual efforts" (Hadar & Brody, 2010, p. 1642). The community becomes the group and the group becomes "the primary conduit through which learning occurs" (Hadar & Brody, 2010, p. 1642). Thus, the community is important to the teacher's professional growth.

The community is also an important tool in improving in student learning. Gajda and Koliba (2008) stated that "it is when communities of practice collectively engage in

high-quality dialogue, decision making, action, and evaluation around a shared purpose, that schools increase their capacity to achieve unprecedented improvements in student learning" (p. 149). The high-quality dialogue spoken of here is well-managed dialogue that is focused on student learning and substantive issues, preplanned, prioritized through agendas, structured group discussions, and that ends in meeting minutes, feedback, and evaluation (Gajda & Koliba, 2008, p. 148). Therefore, teachers must understand the nature of high-quality dialogue to avoid dialogue that does not lead to improved teaching and student learning and school improvement. The decision-making activities of a community of practice must involve teachers determining "relative differences in instructional quality" and making "evaluative decisions about what and how to do better" (Gajda & Koliba, 2008, p. 145). Decisions made must genuinely improve teaching and learning and make school reform possible. The actions taken by a community must be a result of smart decisions that move teaching, learning, and the school community forward. Gajda and Koliba (2008) stated, "If teacher teams and their members do not take action as a result of their decisions, the cycle of inquiry ceases to move forward and school improvement falters" (p. 145). Taking action entails collaboration. Gajda and Koliba (2008) stated that the kind of collaboration that makes up an action results in "changes in pedagogical practice that entail a level of intellectual sophistication" (p. 145). The right changes in pedagogical practice may well lead to improved teaching and learning and school improvement. In the end, the dialogue, decision making, and actions taken must be evaluated to determine the effectiveness of each one. Gajda and Koliba (2008) stated that "teachers in high-functioning teams (or communities) will

systematically collect and analyze both quantitative information and qualitative information" to determine effectiveness (p. 146). Hence, evaluation is important in maintaining a well-managed community of practice that can achieve unprecedented improvements in teaching and learning.

Higher Quality Collaboration

Debriefing, as professional development, becomes higher quality collaboration that is conducted by a facilitator (a teacher) who is well rehearsed in the core skills and specific knowledge of a peer coach, mentor, and a lesson study team. Thus, DPD becomes more than a meeting. Debriefing becomes continuous, structured action that is based on attaining data driven and research based results to affect positive school reform.

As higher quality collaboration at the schools designated for the present research study, debriefing is the focused, in-depth reflection and conversation resulting in continuous and structured improvements in teacher development/effectiveness and student learning/achievement. Also, debriefing is the collaborative engagement (i.e.., during a critical review) resulting in the means for continuous improvement. In addition, debriefing is the sustained commitment to continuous improvement. Debriefing also is the reflective supervision when "the administrator poses questions that help teachers think through their instructional decisions" or when teacher leaders, mentors, peer coaches, and facilitators pose "questions that help teachers think through their instructional decisions" (Blase & Blase, 1998 as cited by Marzano, 2003, p. 31). Thus, debriefing through profound reflection and collaborative engagement becomes PD, a higher quality of collaboration.

When debriefing becomes professional development, teachers at the schools of the present research study are engaged in the transformation of debriefing into PD in three different ways. First, teachers are objectively examining any and all processes and actions to generate new plans of action and strategies that obliterate negative variables set against constructive reform and best practices. Second, teachers are committed to strengthening collegial interaction and professionalizing teaching to a level resembling the level of the medical and legal professions. Third, teachers are learning and developing "through a variety of self-defined and self-guided activities such as professional reading, writing, individual or group work, work with colleagues, community volunteerism, and personal or social creative expressions" (Cole & Knowles, 2000, p. 12). Self-defined and self-guided activities that are underpinned by peer-reviewed research allow the teacher considerable control over their professional development process.

Also as stated previously, debriefing incorporates many different aspects of what is viewed as professional development. For example, if professional development is viewed as the means to improving teacher effectiveness through highly experienced teachers who act as coaches and mentors, in like manner, debriefing can be used to improve teacher effectiveness (or teacher efficiency) using the same programs. A teacher can become effective or efficient through various meaningful professional development activities and programs. A teacher can become an effective teacher through opportunities that are readily available in or out of the classroom. Sometimes the opportunities may appear as teachable moments or teaching tips provided by a colleague. Hamzah, Mohamad, and Ghorbani (2008) stated that:

To be an effective teacher is a continuous process that stretches from the teachers' pre-service experiences in the undergraduate years to the end of their professional career path. Teachers will need ongoing opportunities to develop their knowledge, understanding, skills and abilities to keep pace with the continuously increasing and changing national education agenda. (p. 22)

Additionally, Stronge (2002) stated, "High-quality professional development activities are necessary tools for improving teacher effectiveness. In essence, teacher effectiveness is not an end product; rather, it is an ongoing, deliberate process. Teacher success is a lifelong pursuit" (p. 64). Therefore, maintaining teacher efficiency (or teacher competency, teacher effectiveness) requires continuous professional development and the opportunity to put into practice the knowledge garnered from PD activities.

In this literature review, the effects of debriefing and collaboration as professional development on teacher effectiveness were also investigated. First, debriefing is briefly defined and debriefing as professional development is noted. Responses are given to three core questions

- 1. How does the literature on collegial interactions, professional development, and teacher collaboration explain how teacher effectiveness is improved?
- 2. How can effective teaching skills developed through collegial interaction in the context and culture of teacher/school communities or communities of learning?
- 3. What skills are most effective and efficient in teacher collaboration?

Literature is cited to support the hypothesis, the core question responses, and to establish debriefing and collaboration as the most effective approach for improving teacher competency and maximizing student learning. Also, literature of a contrasting perspective is cited. In addition, a critical analysis of the literature was conducted.

Classical and Current Theories

Collaboration is the topic of investigation in many fields. Accordingly, a general theory of collaboration that provides a universal language and theoretical framework for understanding and expanding the collaborative aspects of all fields and systems is needed. Currently, a general theory of collaboration does not exist. Thus, classical and current theories with collaborative aspects that are relevant to this study were examined. By examining relevant theories, establishing a theoretical framework of collaboration as professional development and teacher collaboration as the means to improved collegial interaction, teacher effectiveness, and student learning and achievement were the focus.

Instructional Design Theory

An instructional-design theory is a theory relevant to this study. Reigeluth (1999) stated, "An instructional-design theory is a theory that offers explicit guidance on how to better help people learn and develop. The kinds of learning and development may include cognitive, emotional, social, physical, and spiritual" (p. 5). Thus, the most significant instructional-design theories applicable to this study are the ones that "customize, not standardize, the learning process" (Reigeluth, 1999, p. 27). Instructional-design theories that focus on the user-designer are also pertinent. *User-designer* can be defined as a user who plays a major role in designing his own instruction while learning (Reigeluth, 1999,

p. 27). For example, professional development (PD) can be customized and user-designed and consequently so should debriefing and collaborative planning when used as PD.

Instructional-design theories are also design-oriented (or goal-oriented) theories. Design-oriented theories are different. They are prescriptive in nature. Reigeluth (1999) stated that "design theories are prescriptive in nature, in the sense that they offer guidelines as to what method(s) to use to best attain a given goal" (p. 7). Instructionaldesign theories are prescriptive in nature, and they "describe specific events outside the learner that facilitate learning (i.e., methods of instruction), rather than describing what goes on inside a learner's head when learning occurs" (Reigeluth, 1999, p. 13). This perspective does not mean that the learner's internal dialog is not important in the process of learning. The aforementioned definition of goal-oriented theories is not as rigid as it sounds. Reigeluth (1999) stated that design-oriented theories "are not usually prescriptive in the sense of spelling out in great detail exactly what must be done and allowing no variation" (p. 7). For example, if a teacher wants to retain new teacher knowledge, the teacher must connect the new knowledge to that which the teacher already knows. Therefore, to improve collegial interaction, teacher effectiveness and student learning, the teacher must determine what new knowledge is required. This determination necessitates a review of the students' learning needs to design a way to attain what is lacking.

Debriefings and collaborative planning meetings conducted as PD, planned around design-oriented theories, and focused on learning and development driven by goals and outcomes can provide the means to attaining the new knowledge that is an

essential component in improving collegial interaction, teacher effectiveness and student learning. The design-oriented theories most appropriate for structuring debriefings and collaborative planning meetings around are the ones that center on collaboration as a key to learning. Although not mentioned here, there are many instructional-design (design-oriented or goal-oriented) theories that focus on using collaboration as the means to learning. As earlier stated, collaboration is shared decision-making and "shared construction of knowledge and understanding", and "learning most naturally occurs not in isolation but by teams of people working together to solve problems" or to garner knowledge or to improve their effectiveness or to help others improve their capacity to learn (Jonassen, 1999, pp. 228-230). Thus, collaboration brings people together, and people bring a diversity of ideas, knowledge, and skills. Also, when people come together, relationships are formed and collegial interaction can be improved.

Collaboration can therefore be defined around the developing of relationships and reflective communication to attain a common goal or outcome.

Self-Regulated Learning

Another theorist defined collaboration as an element and an act. Kovalik (1999) stated that the elements (e.g., collaboration) were created as a guideline "to help teachers translate research and theory about the biology of learning into practice" (p. 380). Also, according to Kovalik (1999) collaboration is acting on the belief that "two heads are better than one to solve problems, explore, and create" (p. 381). Thus, collaboration would mean establishing, conducting, and maintaining a partnership or a relationship

sustained by shared vision, ideas, knowledge, skills, wisdom, responsibility, interaction, and accountability.

Collaboration should also be based on self-regulated learning. Self-regulated learning involves "bringing learning-related knowledge and self-management strategies into tasks", and emphasizing "the inclination to use them appropriately" (Zimmerman & Schunk, 1989 as cited in Corno & Randi, 1999, p. 296-297). Collaboration that is based on self-regulated learning can be used to help teachers develop their "potential as innovators, problem-solvers, and experiential learners" (Corno & Randi, 1999, p. 294). Accordingly, collaboration based on self-regulated learning becomes the way to teacher professional learning that is user-designed.

Cooperative Learning

Collaboration also involves cooperative learning because collaboration is based on the premise that working together is more desirable than competing against each other. "Too often, competition undermines human relationships" (Lewis, Watson, & Schaps, 1999, p. 532). Through collaboration human relationships are encouraged, reinforced, embraced, and supported. The very word *collaboration* as I defined it means relationship, teamwork, partnership, and cooperation, as well as, interaction, interdependence, endeavors in reflective thought, and stimulating intellectual encounters. Therefore, if competition has no place in cooperative learning, it also has no place in collaboration. As cooperative learning is about building human relationships, collaboration is too.

Collaboration can thereby be described as the working together on shared goals resulting in relationships that are sustained by a caring community of learners and collegial

interaction (Lewis, Watson, & Schaps, 1999, p. 532). The resulting relationships and collegial interaction are of the utmost significance to this study. As I indicated earlier, improving collegial interaction, teacher effectiveness and student learning is the focus.

Learning Theories

Learning theories are also relevant to establishing a general theory of collaboration. Learning theories often confused with instructional-designed theories are descriptive in nature whereas instructional-designed theories are not (Reigeluth, 1999, p. 12). Learning theories because they are descriptive in nature "describe how learning occurs" (Reigeluth, 1999, p. 12). An example of a learning theory that illustrates the aforementioned description is the schema theory. Schema theory "proposes that new knowledge is acquired by accretion into existing schema, by tuning that existing schema when minor inconsistencies emerge, and by restructuring that schema when major inconsistencies arise" (Reigeluth, 1999, p. 12 as cited in Rummelhart & Norman, 1978). Collaboration is connected to the schema theory through its participants. The participants of collaboration are required to know how to integrate new knowledge into an existing schema (accretion). Thus collaboration means that its participants make connections between ideas, concepts, beliefs, and therefore must be able to congregate new knowledge (or data) into an existing schema. Identified advantages and disadvantages of cross grade level collaboration are seen as the new knowledge needed to restructure the schema of collaboration so that improving collegial interactions is achievable.

Systems Thinking Theory

The systems thinking theory is significant to teacher collaboration because the tenets of systems thinking are the tenets of teacher collaboration. One of the tenets of systems thinking is the belief that interdependent factors constitute a system not independent factors (Senge, 2006, p. 68-69). Systems thinking is also a theory based on beliefs about holism, goal seeking, inputs and outputs (and the transformation thereof) of closed and open systems, entropy, feedback, hierarchy, differentiation, equifinality, and multifinality. Senge (2006) stated that "systems thinking is a discipline for seeing wholes" (p. 68). In systems thinking, feedback "means any reciprocal flow of influence" (Senge, 2006, p. 74-75). Senge (2006) also stated that "balancing (or stabilizing) feedback operates whenever there is a goal-oriented behavior" (p. 79). In view of that, feedback thus involves regular interaction to bring about the achievement of a goal or ultimate state. Systems thinking is seeing through the detail complexity (complex wholes) to the underlying (subsystems) structures generating change (Senge, 2006, p. 124).

General System Theory

The general system theory emerged out of the belief that systems are everywhere and everything is generally a system. The general system theory is most commonly associated with Dr. von Bertalanffy who demanded a new field in science which he called the general system theory (Bertalanffy, 1968, p. 259). Bertalanffy (1968) stated that the new field would be a "logico-mathematical field, whose task is the formulation and derivation of those general principles that are applicable to 'systems' in general" (p. 259). A basic tenet of the general system theory is that all systems have particular

characteristics no matter the type or level of organization (Bertalanffy, 1968, p. 32, 38). A system is "complex interacting components, concepts characteristic of organized wholes such as interaction, sum, mechanization, centralization, competition, finality, etc., and to apply them to concrete phenomena" (Bertalanffy, 1968, p. 91). As a result, collaboration can be described as a system because a group of people (an organized whole) are brought together to interact to accomplish a common goal.

Debriefing and Systems Thinking As Agents of Change

Agents of change (as characterized for this study) are the facilitators, enablers, and catalysts. Debriefing and systems thinking are agents of change. Debriefing as employed in the schools selected for this study is defined as active discussion (to include reflection and feedback) and effective interaction among teachers during formal and informal, called or impromptu meetings. Teachers who actively discuss their teaching techniques and problems in their students' learning during their 30 minute lunch breaks are using debriefing. Teachers who are using debriefing also use systems thinking. Systems thinking as defined by Senge is "a way of organizing, or perhaps reorganizing, our knowledge in terms of systems, systemic properties, and inter-system relationships" (Laszlo, 2002, p. 10). In addition, Senge (2006) stated that systems thinking is "making full patterns clearer, and to help us see how to change them effectively" (p. 7). Teachers who see their part as part of the whole and begin to think in terms of how to improve the system or organization from their position in the organization are employing systems thinking. Similarly, to act in terms of the whole or as a part of the system instead of as a fragment of the system is to act like a systems thinker.

As I stated earlier, debriefing for the teachers participating in this study is one-onone conversation, impromptu conferencing, and casual discussion (to include reflection
and feedback). Debriefing is also the formal and called meetings (informal) between
teachers. As an agent of change, debriefing is employed by teachers at the select schools
for this study to help them find new and better perspectives on teaching and learning. As
a result, how they teach and learn is transformed. Thus, debriefing can become
professional development during conversations, conferences, and discussions if there is
teaching, learning, and assessing taking place. Through debriefing, teachers can
transform the teaching and learning environment in which they work and promote
sustainable positive school reform. Teachers can also use debriefing to improve their
teaching effectiveness and student learning.

Systems thinking as an agent of change can allow the thinking within a system or organization to be changed so that positive school reform is attainable and sustainable. Accordingly, systems thinking training is a necessity to a system or an organization in need of reform. Through systems thinking training, systems thinkers can be created before reform begins thereby minimizing the challenges that it brings. Senge (2006) stated systems thinking is "making full patterns clearer, and to help us see how to change them effectively" (p. 7). Therefore, systems thinkers know what is working and what is not working. Systems thinkers therefore see with clarity and detail so that problems, causes and effects, and issues become more transparent within a system or an organization. When problems, causes and effects, and issues are easily seen, so are their solutions. This means, for example, that cause-and-effect relationships between teacher

collaboration and student learning can be made visible thereby making possible the knowledge needed to improved teacher effectiveness and student learning. Also, this means that problems in collegial interactions that point to ways to improve collegial interactions can be exposed. As a result of the aforementioned, systems thinkers become the agents of change or change agents.

Thus, since debriefing and systems thinking are seen as agents of change, the following conclusions are practical. Debriefing conducted through conversations, conferences, discussions, and meetings is intensive professional development that is effective in building teacher knowledge, improving teacher effectiveness and student learning is feasible. Systems thinking (is to change the thinking; to change the behavior) can be used as a catalyst to transform teaching practices (essentially behavioral in nature) to improve student outcomes is reasonable. However, teachers need to be given a chance to participate in extended learning opportunities and in productive collaborative communities, so that research is conducted; issues of instruction are worked on; mentoring and peer coaching are used to pass on learning, and curriculum, assessment, and professional decisions are dealt with collectively (Darling-Hammond et al., 2009, p. 7). Further studies are needed to define what extended learning opportunities and productive collaborative communities should resemble. Presently, debriefing can offer extended learning opportunities, and systems thinking can establish community members who are productive and skilled in collaborative practices. As I mentioned earlier, systems thinking is thinking centered on achieving desirable results (being productive) and

cooperation (collaborative practices, collegial interactions). Accordingly, debriefing and systems thinking as agents of change are needed to improve collegial interactions.

Evidence from the Literature

Debriefing that is used as professional development to achieve higher quality collaboration can be used to significantly improve collegial interactions, teacher competency and maximize student learning. The research conducted by Katzenmeyer and Moller and others was used in this section to underpin the aforementioned assertion.

Some of the research is current, and some is classical. Although specific literature on debriefing as professional development (DPD) was minimal, all of the research on PD point to a need to use debriefing as PD.

Debriefing as PD is an invented solution to solving teacher competency and student achievement issues. The research to support DPD for teachers is minute.

Therefore, many perspectives defining what debriefing is as PD are attempted. In the first attempt, debriefing is viewed from the perspective of Katzenmeyer and Moller.

Katzenmeyer and Moller investigated intensive professional development. From Katzenmeyer and Moller's perspective, debriefing as intensive professional development is diverse, comprehensive, and intensive learning that extends beyond the traditional ways to acquire knowledge and skills. Other perspectives are also cited to support the focus of the present research study for which this literature review was conducted.

Debriefing as PD can be used as higher quality collaboration. To achieve higher quality collaboration that significantly improves teacher competency and maximize student learning, debriefing must become professional development that looks a lot like

the professional development described by Katzenmeyer and Moller. Katzenmeyer and Moller (2001) stated that "to learn how to collaborate with others, conduct action research, integrate curriculum, and authentically assess students demands intensive professional development" (p. 108). Debriefing as intensive professional development would include learning content and teaching skills, examining personal belief systems about how student learn to avoid teaching impediments, and devoting time to acquiring complex knowledge and skills to reach competency (Katzenmeyer & Moller p. 108-109). Debriefing used as intensive PD (or IPD) would therefore significantly improve teacher competency and maximize student learning because the goal of IPD is to increase the number of competent teachers and achieving students. If the goal is to increase the number of competent teachers and achieving students, an organization will make the necessary plans to accomplish the goal.

To further define debriefing as PD or IPD, professional development (PD) was used to discuss debriefing. Thus, from this point on PD and IPD were discussed first to establish my authority in using debriefing as PD or IPD. This means that debriefing must become PD/IPD. To establish debriefing as PD/IPD, PD/IPD must be the focus, a rationale of an explanation of what debriefing is as PD.

Professional development involves inquiry and accountability. Therefore, debriefing as PD must also engage inquisition and liability. Trachtman (2007) stated that Professional Development Standards (PDS) "require that participants and partnering organizations hold themselves accountable for the growth of all adults, children, and

young persons" (p. 202). The National Council for Accreditation of Teacher Education Professional Development Standards as cited by Trachtman (2007) are

(a) engagement in assessment to transform day-to-day teaching and learning practices, (b) participation in collaborative inquiry to determine what works best (or does not work) for students, and (c) commitment to conducting systematic assessment on the effects of the PDS on teaching and learning. (p. 202)

Since PD necessitates accountability, debriefing as PD will also require accountability. When people are held "accountable for the growth of all adults, children, and young persons," the goal to improve teacher competency and maximize student learning can be realized (Trachtman, 2007, p. 202). Without accountability, the goal to improve teacher competency and maximize student learning is unattainable.

Professional development involves both the garnering and construction of knowledge and the assuming of leadership roles. Accordingly, DPD in like manner is also about the garnering and construction of knowledge and the assuming of leadership roles. Darling-Hammond, Bullmaster, and Cobb (1995) stated that "as teachers assume leadership in co-constructing knowledge for teacher education, they also create more powerful learning cultures within their schools" (p. 96). When there are more powerful learning cultures in schools, the chances for improved teacher competency and maximized student learning are increased.

Professional development is "intended to help teachers learn how to meet the needs of learners who are diverse in terms of both abilities and backgrounds" (Doubek & Cooper, 2007, p. 412). In other words, PD is purposed for closing the achievement gap.

Likewise, DPD is purposed in the same manner. So, if the goal of PD is to close the achievement gap, the goal is also to use competent teachers who engage in assessment that transforms teaching and learning, participate in collaborative inquiry (to include collegial interactions), and commit to assessing the effects of PDS to impact student learning.

Professional development facilitators (such as mentors, peer coaches, lesson study teams) use reflective conversations (collegial interaction) to improve teacher competency. Debriefing is reflective conversation. Samuels, Rodenberg, Frey, and Fisher (2001) stated that "during field experiences and reflective conversations that ensue, not only does the student teacher's practice evolve, but also the thinking of the cooperating teacher is impacted" (p. 312). When both the student teacher and mentoring teacher are learning in the relationship, reciprocity is achieved. Through reciprocity everyone in school can be a learner as well as a teacher. Continuous, ongoing learning makes possible the chances for improved teacher competency and maximized student learning. In effect, "various authors state that professional development is itself goal-oriented and needs to be continuous, supported through a variety of techniques and contextualized to the specific needs of the group of students" or in this case teachers (Little & Houston, 2003 as cited by Harwood & Clarke, 2006, p. 32). Thus, when teacher competency and student learning are improved, one of the effects of debriefing and collaboration as PD is proven.

Professional development is data-driven. As a result, debriefing as PD is data-driven. The data that drives debriefing as PD is both qualitative and quantitative data. The data most effective and efficient for educational decision-making situations is also

qualitative and quantitative information. Educational decisions-making should be based on both qualitative and quantitative data. Qualitative and quantitative data are diverse types of data. Creswell (2003) stated that "diverse types of data best provide an understanding" of the decision to be made (p. 21). More information equals better decision-making.

Debriefing driven by qualitative and quantitative data also becomes the most effective tool to use in improving teacher competency and student learning. As I stated earlier, using qualitative and quantitative data provides a better pool of information for making better decisions. Quantitative data is usually collected as numerical data, and qualitative data is collected as text and image data. Successful debriefing requires a better pool of information to understand how to improve teacher competency and impact student learning. To create the qualitative and quantitative data pool, one must consider what constitutes appropriate data collection processes and procedures. Creswell (2003) cited implementation sequence, priority, integration, theoretical perspective, and nature of the research as the considerations (p. 209-213). Also, person must consider strategies and models and ethics.

Debriefing as PD is defined by two models, coaching and mentoring. Collegial interaction plays a key role in the two PD models. Accordingly, collegial interaction plays a significant role in debriefing. Collegial interaction can yield substantial data because many data yielding avenues such as discussion and verbal/nonverbal exchanges and contacts are made available. As, Falk (2001) stated, "The discussions that teachers have about standards, assessments, and student work in the context of scoring tests

challenge them to learn about state or district expectations for their students and to clarify how their own views differ or agree" (p. 128). Thus, collegial interaction skills can be developed through dialogue, reflection, and collaboration. To participate in the dialogue and collaboration, Teachers must participate in debriefing. Teachers must engage in reflective relationships through peer coaching and mentoring programs. Also, Teachers must participate on lesson study teams, and other comparable activities.

The best PD models are research-based. So, debriefing as PD is research-based. Debriefing that is research-based is also considered teacher lead professional development because it is self-defined and self-regulated through the collegial interaction and reflective discussions about the research. Teachers may learn and develop through self-defined and self-regulated activities because they are in control. Cole and Knowles (2000) stated that "teachers continue to learn and develop through a variety of selfdefined and self-guided activities such as professional reading, writing, individual or group work, work with colleagues, community volunteerism, and personal or social creative expressions" (p. 12). From self-defined and self-regulated PD, teacher leader development can flourish but even self-defined and self-regulated PD must be based on research. Through research, a method or an approach or a declaration is substantiated. Thus, self-defined PD and self-regulated PD based on research were substantiated. Also, teacher leader development is enhanced through using research-based models for collegial interaction and school community participation. The literature on collegial interactions, professional development, and teacher leadership in the school explain how teacher leader development is enhanced through using research-based models for

collegial interaction and school community participation. Teacher leader development is enhanced through using research-based models such as autobiographical (reflexive) inquiry for collegial interaction and school community participation. Cole and Knowles (2000) stated that "autobiographical inquiry and its representation provide a process by which teachers can gain insights into themselves as developing professionals" (p. 15). In view of that, teachers who know themselves as developing professionals and can lead self-defined, self-regulated PD may well benefit teacher collaboration.

Related Literature

A large body of evidence points to the benefits of teacher collaboration. The evidence suggests that there is "a positive relationship between teacher collaboration and student achievement" (Thomas-McClure, 2008, p. 1). This relationship means that student achievement is possible when teachers work together. Also, this relationship suggests that the idea of teachers working together to achieve a common goal has a systems thinking origin. As Thomas-McClure (2008) paraphrased "all teachers share responsibility for student success" (Kardos & Moore-Johnson, 2007, as cited in Thomas-McClure, 2008). The idea of sharing the responsibility of helping students learn and achieve is a systems thinking approach to teaching and learning.

Teacher collaboration that increases student learning and achievement and has a systems thinking influence can take many forms. In the elementary schools of this study, teacher collaboration has taken the form of shared planning time that is often referred to as collaborative planning time. During collaborative planning time, a meeting is conducted to review the quantitative and qualitative "data to guide instructional decision

making" and to "create mechanisms and supports for collaboration" (Thomas-McClure, 2008, p. 2). Collaborative planning time is also a time for reviewing "student work against standards" to select target areas in need of improvement (Thomas-McClure, 2008, p. 2). Teacher collaborative planning can also take the form of professional development that can help teachers align their lessons across grade levels (Thomas-McClure, 2008, p. 2). Thus, collaborative planning can take the form most needed.

Advantages and Disadvantages of Cross Grade Level Collaboration

Collaboration has many advantages and disadvantages. Finley (2000) stated that "reform efforts emphasize collaboration between teachers, between students, and between teachers and students. Members of the school community are better supported to change practice when they are not isolated or in competition with each other" (p. 14). Thus, collaboration makes teachers accessible one to another and promotes teamwork, partnership, and collegial interaction. This is one advantage. Also, collaboration is the means to professional support, well managed planning time, increasing talents, gifts, and strengths, learning, and generating new knowledge. There are also disadvantages (also defined as the problems) of collaboration that require the installation of safeguards.

Generally, collaboration can be defined via teamwork, partnership, cooperation, and collegial interaction. However, collaboration is also problematic (or defined in terms of its problems). For instance, there are different levels of self-sufficiency due to years of experience. Some teachers need more support than others. Conflict can arise. Politics come into play.

Collegial Interaction

Collegial interaction is the converging of teachers at their grade level and across grade levels to interact and discuss classroom teaching and student learning (Zahorik, 1987, p. 385). The interaction can be verbal, nonverbal, written, and visual communication that is reflective. Also, collegial interaction provides the opportunity for teaching and learning experiences and the generating of knowledge. Finley (2000) stated that "as teachers have more opportunities for positive, professional interactions with colleagues—interactions focused on students and their learning—they are likely to view these interactions as learning experiences" (p. 19). As a result, the teacher is given a chance to be in charge of his or her competency and professional development. Thus, collegial interaction opportunities become a time to share knowledge and refine teaching, learning, and collaborative practices.

Collegial interaction opportunities are also a time to gain guidance on how to improve teacher to teacher discourse, individual and group decision-making behaviors, and collaboration skills. As Gajda and Koliba (2008) stated

Without guidance on how to improve their dialogue, decision making, actions, and evaluation, teachers will continue to engage in 'collaboration lite' and the kind of interactions that impede the types of performance gains they seek to achieve. (p. 149)

This means that teachers need the information that makes possible the ability to know how to improve collaboration even to improve collegial interaction. In the absence of that guidance or that information, teachers cannot be expected to improve their collaborative practices or interactions.

Collegial interaction is important to teacher job satisfaction, collaborative practices, professional development, and student achievement. However, "there is little research that examines teacher interactions in professional learning communities as teachers strive to contribute to educational reform" (Dooner, Mandzuk, Clifton, 2008, p. 565; Little, 2002). Also, "relatively little research examines the specific interactions and dynamics by which professional community constitutes a resource for teacher learning and innovations in teaching practice" (Little, 2002, p. 918; Wilson and Berne, 1999). As a researcher, the hesitancy to conduct more research studies on the interactions of teachers is difficult to comprehend especially when Wilson and Berne (1999) stated that "teachers enjoy the chance to talk about their work" (p. 181). Researchers should be willing to study the interactions of teachers than not since in doing so they can learn about the teaching and learning practices of teachers. Knowing what a teacher's teaching and learning practices are like could lead to knowing how to improve them.

The participating teachers of this study were given the chance to talk about their work and the interactions that transpire during collaboration. Thus, teacher interactions were examined as well as how collaboration may well improve their interactions.

Through this study, I was also afforded an opportunity to explore a few of the nuances of teacher interaction.

Survey Research Studies

The literature reviewed on related research studies about teacher collaboration revealed that there are studies that exist as survey and case study research and not as empirical studies focused on teacher collaboration, collegial interaction, and student learning. One research study in the form of survey conducted by Cassandra Guarino and associates in 2006 revealed that there are "lower turnover rates among beginning teachers in schools with induction and mentoring programs that emphasized collegial support" (Guarino, 2006 as cited in Thomas-McClure, 2008, p. 1). The emphasis on collegial support is translated as teacher collaboration. Another research study by Futernick concluded with findings that confirmed a benefit of teacher collaboration. "Futernick (2007) after surveying 2,000 current and former teachers in California, concluded that teachers felt greater personal satisfaction when they believed in their own efficacy, were involved in decision making, and established strong collegial relationships" (Futernick, 2007 as cited in Thomas-McClure, 2008, p. 1). However, the studies were not focused on the cause-and-effect relationships of teacher collaboration and student learning neither on improving collegial interaction but on the importance of collegial support.

Research is needed on the cause-and-effect relationship between teacher collaboration and student achievement and on improving collegial interactions. As Thomas-McClure (2008) stated most of the existing research on teacher collaboration and student achievement "is in the form of surveys and case studies, which do not provide evidence of cause-and-effect relationships" (p. 2). A research study conducted by "researchers Yvonne Goddard, Roger Goddard, and Megan Taschannen-Moran (2007)

reported 'a paucity of research investigating the extent to which teachers' collaborative school improvement practices are related to student achievement" which provides the evidence considered necessary to confirm the assertion that teacher collaboration increases student learning as truth (Goddard, Goddard, & Taschannen-Moran, 2007 as cited in Thomas-McClure, 2008, p. 1). By investigating how collaborative practices are related to student achievement, Goddard, Goddard, and Taschannen-Moran (2007) found a "positive relationship between teacher collaboration and differences among schools in mathematics and reading achievement" (Goddard, Goddard, & Taschannen-Moran, 2007 as cited in Thomas-McClure, 2008, p. 1-2). The positive relationship between improved student achievement and teacher collaboration promoted around curriculum, instruction, and professional development was discovered through the survey research of Goddard, Goddard, and Taschannen-Moran.

For their research study, Goddard, Goddard, and Taschannen-Moran (2007) reviewed the literature and empirically tested "the relationship between a theoretically driven measure of teacher collaboration for school improvement and student achievement" (p. 877). The study was set in a large urban school district of the Midwestern United States (Goddard, Goddard, & Taschannen-Moran, 2007, p. 883). Of the 47 participating elementary schools, data were included from 452 teachers and 2,536 fourth grade students. To conduct the study, Goddard, Goddard, and Taschannen-Moran used a hierarchical linear modeling approach or HLM. They collected data from teachers via a survey assessing teacher collaboration, and student data were obtain from the central administrative office of the school district (Goddard, Goddard, & Taschannen-

Moran, 2007, p. 884). The results of the study indicate that higher student achievement is directly related to higher levels of teacher collaboration for school improvement (pp. 891, 892-893). This study offers evidence that there is a positive relationship between teacher collaboration and student achievement. The researchers suggested that "more research on the effects of different types of collaborative practices using more representative samples" is needed (p. 891). Also, this study indicated that further studies are warranted on the cause and effect relationships of collaborative practices that increase student learning and achievement.

In a study conducted by Leonard in 2002, survey data were collected from 238 Louisiana teachers in 10 districts and 88 schools. Through the survey data, Leonard (2002) concluded that the 238 Louisiana "teachers are dissatisfied with scheduling and appropriations of time which often serve to deter collaboration practice" and "teachers need professional development directed at improving their collaborative skills" (para. 21). Taken together, the conclusion may be that the 238 Louisiana teachers are dissatisfied with the present condition of collaboration. Leonard (2002) also concluded from the reported perspectives of the 238 Louisiana teachers that they "do not consider their schools to sufficiently exhibit expectations of or support for regular, high levels of collaborative involvement" and that their work and the work of their colleagues will continue "to be characterized by competition and individualism and lacks the type of trusting, caring environment that is more conducive to collaborative practice" (para. 21). Thus, from the 238 Louisiana teachers' perspectives, the supposition that can be made

here is that the teachers as a community need to take control of their collaborative needs and find ways to meet those needs.

Working together as a community for the 238 Louisiana teachers may prove difficult if they do not genuinely like each. From the study, Leonard (2002) surmised:

There was also the indication of a collective belief that teachers actually "collaborate better when they genuinely like each" yet there was the accompanying perception that faculty in their schools did not have as high an affinity for each other as may be required to promote optimal collaborative practices. (para. 12)

Thus, effective collaboration requires that the participants have a working relationship in which "values and beliefs about educational practice" are "tempered with respect for diverse professional opinions and practices" (Leonard, 2002, para. 21). Leonard (2002) stated that the 238 Louisiana teachers "did not seem to sufficiently like each other, that levels of shared values and beliefs were not adequate, and that diversity of opinion was not promoted to a desirable extent" (para. 18). In addition, relationships need to be wrought out of trusting and caring environments. Leonard (2002) stated that the teachers felt that "prevailing conditions in their schools did not reflect trusting and caring environments" (para. 18). Trusting and caring environments are important to collaboration and must therefore be important to the collegial interactions of collaboration. This may be one of the ways to improve collegial interaction.

To conclude this study, Leonard (2002) stated the findings suggest that what is most poignant about the data collected via survey is that the "forms of teacher joint work

and how the extent of collaborative engagement varied across school types and sizes" (para. 17). For instances, teachers at the primary and elementary levels collaborated more through "team planning and teaching, mentoring, and peer observation than do their counterparts in middle schools, junior high schools, and high schools" (para. 23). Also, Leonard (2002) found that "teachers in larger schools tend to collaborate less than their counterparts in smaller schools" and "joint or shared inservicing is the most common form of teacher collaborative practice" (para. 23). As a result, regularly scheduled and meaningful collaboration is not top priority. According to the teachers surveyed in this study, collaboration is important to their professional growth and to effectively teach their students but the conditions that enable collaboration are far and few whereas the condition that inhibit collaboration are rampant. Thus, research is needed to "determine the ideal conditions that make it possible for collaboration to take place (enabling conditions) and those that make it difficult (inhibiting conditions)" so that regularly scheduled and meaningful collaboration is possible (Montiel-Overall, 2005, para. 33). This study was also an investigation of the conditions (or the advantages and disadvantages) enabling (e.g., regularly scheduled periods of time, commitment, shared accountability for student learning, a trusting and caring environment, collegial interaction, and positive relations) and inhibiting (e.g., limited to no time, lack of support and commitment, and self-profiting competition and individualism) collaboration.

In a different investigation by researchers Damore and Murray, 118 general and special education teachers conveniently sampled from 20 urban elementary schools were surveyed regarding their perceptions of collaborative practices using a *Collaborative*

Teaching Survey. The Collaborative Teaching Survey was developed by Damore and Murray to "assess elementary school teachers' attitudes, beliefs, and perceptions of collaborative teaching practices" (Damore & Murray, 2009, p. 237). The survey has four sections. Section one has four items centered on the existence of collaborative practices of each school of the survey that require a twofold response to answer. Section two has three items that were designed to the general perceptions of participating teachers. Each item was rated on a 4-point scale (e.g., 1=strongly agree). Section three contains 40 items that were central to assessing the participants' attitudes and beliefs about collaborative teaching practices. The fourth section is composed of 14 demographic items. Surveys were placed into teachers' "mailboxes according to a pattern that would provide approximately all teachers within each school with an equal opportunity to receive a survey" (Damore & Murray, 2009, p. 239). The purpose of the investigation was to add to the growing body of research on collaborative teaching practices (Damore & Murray, 2009, p. 241). Also, the investigation was purposed to address the limitations of prior research.

The literature that Damore and Murray reviewed for their investigation revealed a number of methodological limitations. Thus, "a secondary aim was to address a number of methodological limitations evident in prior research" (Damore & Murray, 2009, p. 236). Damore and Murray (2009) stated that prior research on understanding the perceptions of teacher concerning collaborative teaching practices "suffer from a number of limitations" (p. 236). For instance, Damore and Murray (2009) found that prior research is limited to an investigation of either the elementary teachers' perception or the

secondary teachers' perception but not a mixture; provides inadequate description of the instrument or instruments used to assess the perceptions of teachers concerning collaborative teaching; provides no data regarding the reliability of the instrument used to collect the data; and is not exclusively focused on the perceptions of suburban and rural educators (p. 236). Although the investigation of Damore and Murray addressed a number of these limitations, there remained a number of limitations to investigate.

Therefore, Damore and Murray presented three future research needed statements under the limitations section. One of the future research needed statements that Damore and Murray (2009) presented reads "future research that blends survey methodology and classroom observation would help to strengthen the findings" (p. 241). Accordingly, blending the survey methodology with any other forms of data collection would strengthen the findings.

Damore and Murray conclude the investigation with findings and conclusions. In the findings section, Damore and Murray (2009) stated that their "findings regarding current collaborative practices suggest a disparity between what teachers perceived to be available in schools and what they actually implemented in their classrooms" (p. 242). Damore and Murray also found that "educators perceived that appropriate inclusive practices were important for students with disabilities" (p. 242). In addition, Damore and Murray (2009) found that "urban educators place a high value on interpersonal and structural processes related" to collaborative practice and special education teachers placed a higher value on the importance of collaborative efforts and practices (p. 243). To conclude, Damore and Murray presented various interpretations for their findings.

The researchers also concluded their inquiry by stating that their investigation to the best of their knowledge is "the first study to focus exclusively on urban educators' perceptions of collaborative teaching practices" (Damore & Murray, 2009, p. 243). Damore and Murray (2009) also concluded that "future research that explores the relationship between professional development opportunities for educators, variations in structural supports provided to educators, and the actual implementation of collaborative teaching practices" is needed (p. 243). Overall the conclusions of Damore and Murray indicate that teachers need the opportunity to learn about effective collaborative practices and to learn about how to implement effective collaborative teaching practices within the classroom.

Empirical Research Studies

The empirical research studies examined for this literature review focused on teacher collaboration, collegial interaction, and student learning. One research, an empirical study conducted by Musanti and Pence in 2010, defined *resistance* as a creative source and as "an almost unavoidable presence in professional development programs that foster prolonged collegiality and collaboration" (p. 87). The study was conducted as a longitudinal qualitative study that integrated elements of narrative inquiry and a critical incident methodology (Musanti & Pence, 2010, p. 77). Through the study the researchers were able to investigate ongoing collaboration through which they were afforded a "multi-layered understanding of how collegial and collaborative professional development affects teachers and how teachers affect professional development" (Musanti & Pence, 2010, p. 74). The participants were seven CCP Co-Facilitators who

were participants the entire length of the study. Musanti and Pence also participated.

Musanti participated as a participant observer. The Collaboration Centers Project is the CCP. The CCP partnered with a local school district and a large southwestern university.

The CCP is

a pseudonym for a three-year, federally-funded program that focused on helping in-service teachers better address the needs of English language learners (ELLs) in their classrooms. The CCP is important to study because of its clear intention to integrate real teachers—their understandings, voices, selves, and practices—into professional development by providing an experiential, collaborative and school-centered context for ongoing reflection on teachers' practice. (pp. 73-74)

CCP existed as seven collaboration centers. The seven centers were the "local classrooms in different schools where two intensively trained teachers or Co-Facilitators, team taught and served as professional development resources to other teachers in their school" (Musanti & Pence, 2010, p. 76). The Co-Facilitators were "fourteen certified and experienced bilingual or English as a Second Language (ESL) teachers from six different schools" who were selected and trained (Musanti & Pence, 2010, p. 76). Co-Facilitators acted as models, mentors, peer coaches, team teachers, and teacher-leaders.

The purpose of the study as stated by the researchers is to "add to the existing research that explains the complexity of teacher collaboration by uncovering the meaning of teacher resistance" (Musanti & Pence, 2010, p. 74). Also, Musanti and Pence (2010) stated that "this study focuses on the discourses taken up, negotiated, resisted, and adapted by teachers (CCP Co-Facilitators) as they engaged in professional development

and narrated stories about their new roles as teacher leaders" (p. 76). Accordingly, the theoretical framework for this study is situated in the concepts of the Social, Constructivist, Situated Learning, and Narrative theories. The researchers collected multiple sources of data (through Observations, interviews, and written assignments) for three years (June 2000 to July 2003). Data analysis began with open-coding and ended with the interpretation of identified themes and patterns and the identification and interpretation of critical events.

The research study concluded with findings that shifted the researchers' "focus away from seeing if teachers were meeting the expectations of the project" to "how they were interpreting and composing the space opened up by the CCP" (Musanti & Pence, 2010, p. 78). Other findings shifted the researchers' focus to what teachers viewed as the essential component in building collaborative relationships. Musanti and Pence (2010) stated that "most teachers pointed out that trust was an essential component to build collaborative relationships with other teachers" (p. 80). Still other findings shifted the researchers' attention to peer dialogue, feedback, and interaction. For instance, Musanti and Pence (2010) found that "Co-Facilitators recognized peer dialogue as a source for learning and development" (p. 80). Co-Facilitators also recognized "collaboration as peer interaction, peer dialogue, peer feedback, listening to one another, and sharing experiences and ideas" (Musanti & Pence, 2010, p. 79). The Co-Facilitators became insightful individuals. This insightfulness applied outside the boundaries of the study of Musanti and Pence may convince leaders to allow teachers to lead their own professional development.

The researchers of this study also presented several conclusions and implications. First, Musanti and Pence (2010) concluded that "collaboration challenges the existing school norms of individuality, privacy, autonomy, independent work, and distribution of power" (p. 86). Teachers need to be aware of collaboration challenges (disadvantages) so that they can decide how they can maintain collegial ties through such challenges. Musanti and Pence (2010) also concluded that a teacher's resistance to change can actually become a positive force for change; a way to foster prolonged collegiality and collaboration; and a creative source through which teachers can become agents of their own learning and professional growth (p. 87). In addition, Musanti and Pence (2010) concluded that "professional development needs to be conceived as a collaborative enterprise, where a space for learning through mutual exchange, dialogue, and constant challenge is created" (p. 87). In conclusion, Musanti and Pence (2010) stated, "More research is needed that explores how these interactions impact teachers' roles, and the way teachers negotiate identities and construct knowledge" (p. 87). The study of Musanti and Pence makes clear the power of on-going collaboration as professional development and how collegial interaction is a significant agent in teacher learning and growth.

The case study of Kazempour is another study focused on teacher collaboration, collegial interaction, and student learning. Data for the study were collected through interview and observation. Interview data were analyzed using the constant comparative method to identify themes (Kazempour, 2009, p. 58). Observation logs were analyzed to document emergent patterns (Kazempour, 2009, p. 58). Seth a high school science teacher was the case of focus (Kazempour, 2009, p. 58). "A qualitative case study

approach was deemed most appropriate" (Kazempour, 2009, p. 58). A brief questionnaire, field observations, a semistructured interview, and informal conversations were the data sources (Kazempour, 2009, p. 58). The study's three cases were classified into three categories: "1) teacher-guided inquiry and few instructional changes, 2) real world inquiry-based units and reflective teaching, and 3) controlled inquiry and cautious change" (Kazempour, 2009, p. 57). The purpose of the study was to explore changes in "the core conceptions and instructional practices" of a particular teacher (Seth) with regard to three different courses (Kazempour, 2009, p. 57). Also, "factors that aid or inhibit the implementation of inquiry-based teaching" in the different courses were investigated (Kazempour, 2009, p. 57).

The case study provides evidence that supports "the need for effective inquiry-based professional development opportunities for teachers in order to bring about the changes in their views and practices" (Kazempour, 2009, p. 66). The need to provide for on-going collaboration was also evident. Kazempour (2009) stated:

There is also an immense need to provide PD participants the means for continued communication and collaboration in an effort to 1) share ideas and inquiry-based lessons, 2) discuss frustrations, obstacles, and successes faced during the implementation of inquiry-based instruction, and 3) facilitate communal reflection on ways to further enhance students' science learning experiences. (p. 66)

To meet the need, support must be provided. Also, the opportunity and time to share ideas, discuss failures and successes, and to reflect must be provided because the ultimate goal lies in improving practices to improve learning.

Van Eekelen, Vermunt, and Boshuizen conducted a small-scale qualitative study on teachers' will to learn in workplace situations. A total of 15 participants randomly selected participated in the study. The findings of Van Eekelen, Vermunt, and Boshuizen (2006) may "provide the starting point for the construction of various instruments to measure and evaluate the will to learn" (p. 412). Also, the findings suggest that teachers are willing to learn when learning is personal and differentiated (Van Eekelen, Vermunt, & Boshuizen, 2006, p. 409). The conceptual framework of the study centers on the constructivist and motivational theories. The researchers used semi-structured interview, observation, retrospective interview, and a phenomenographic approach to analyze the data. To analyze the data, "interviews were read, re-read, and broken down into separate fragments (i.e., sentences, statements, or paragraphs) that tell us something about the behavior of the teacher" and then coded using the categorization scheme (Van Eekelen, Vermunt, & Boshuizen, 2006, p. 413). In the final step of analysis, "the profiles of the 14 teachers were compared with each other" (Van Eekelen, Vermunt, & Boshuizen, 2006, p. 414). The study contributes to the field of teacher learning and the motivational aspects of learning. As a result of the study, Van Eekelen, Vermunt, and Boshuizen (2006) found the following behaviors to be indicative of a will to learn among teachers: having the ambition to discover new practices, being open to experiences and other people, being pro-active, attribution of successes and mistakes to internal causes, question-asking after performance, undertaking action to learn, and recognition of

learning processes and results. (p. 408)

The researchers also found that there are three different manifestations of the will to learn that characterized the teachers of their study. Teachers were characterized as "those who do not see the need to learn; those who wonder how to learn; and those who are eager to learn" (Van Eekelen, Vermunt, & Boshuizen, 2006, p. 408). Based on this study, the conclusion may be that teachers must want and know how to learn to learn. As Van Eekelen, Vermunt, and Boshuizen (2006) stated, "Teachers must take an active role in order to learn, and a 'will to learn' typically precedes such active involvement" (p. 409). Active involvement would most certainly have to include collegial interaction and collaboration.

Critical Analysis

For each of the evidentiary findings in the literature review of this section, the strengths and weaknesses that solidified or invalidated the results of the research are presented here. Beginning with a look at the biases that were found in the literature reviewed above, several biases were noticed. Four of the biases are mentioned here. First, a majority of research was conducted with participants who were from the professional learning community. Parents and student participants were excluded. Second, most of the research was conducted by university-based researchers. Teacher researchers were practically excluded. At times, the targeted audiences were not the audiences of the academia. By targeting an audience, other audiences are excluded and the literature covered is limited to a certain area of focus. Many of the teacher participants of the studies in the literature review above were female. To strengthen a study, the author needs to diversify the participant pool even the field investigated.

Some of the studies were attempts to correct the shortcomings of the first study. Other studies created shortcomings. Sometimes researchers presented criticisms about their studies and reported them. By reporting the shortcomings of their study, did they make the study more reliable? The question remains unanswered at this time. Other studies produced important gains. Most of the studies were not longitudinal studies. Longitudinal studies are known to be inherently weak when random influences that lead to inconsistencies exist. Thus, the implication here is that researchers should always test the stability of their study longitudinally.

Sometimes the authors of a study were also the participants. Samuels et al. had roles at the professional development school (PDS) where they conducted their research but they were also participants in their own study. Samuel et al. (2001) stated, "Our roles in this PDS include site-based supervisor and teacher, peer coach for literacy instruction, and university methods instructor" (p. 310). If the authors were participants in the study and held positions at the research school where they conducted the study, how can they remain unbiased? How reliable is the data collected? In contrast, if Samuel et al. employed "multiple strategies of validity to create reader confidence in the accuracy of findings" their dual role would be permissible (Creswell, 2003, p. 184). "Backyard" research should be the last kind of research considered to avoid power issues and compromises.

Summary

Reviewing the literature, I found profound implications for employing collaborative planning and debriefing as professional development to improve teacher

effectiveness and student learning. However, the literature lacks findings that focus on identifying and using the advantages and disadvantages of cross grade level collaboration to improve collegial interactions. Thus, this review was conducted to explore the literature in search of research contributing to or supporting future research focused on using the advantages and disadvantages of cross grade level collaboration to improved collegial interaction, teacher effectiveness, and student learning. Discovery of phenomena connecting improved teacher effectiveness and student learning to collegial interaction would mean enormous changes and benefits in American education, and possibly international education.

To implement collaborative planning and debriefing as PD, a systems thinking approach is required. A systems thinking approach produces systems thinkers. The systems thinkers of a learning organization share the responsibility for decision-making and student learning outcomes. Systems thinkers act as a synchronized system to resolve issues of the organization and as individuals for successful transformation and reformation to improve teaching and student learning. Collaborative planning and debriefing as PD are expected to be a success when the learning organization is a synchronized system. The systems thinking approach can help create and maintain a system that is synchronized. Also, collaborative planning and debriefing are a success as PD when opportunities for planning, time, and administrative support are provided. Thus, for PD to be a success as collaborative planning and debriefing, dialogue, collaboration, shared vision and accountability, common goals, inclusive practices, appropriate

resources, time commitment, better collegial interactions and positive perceptions about professional learning are needed.

Literature relevant to the topics collaborative planning, debriefing, systems thinking, student learning, instructional-design, PD, and teacher effectiveness were reviewed in this section. As a result of the review, collegial coaching, the general system theory, and systems thinking emerged as the conceptual frameworks for this study. Additionally, innovative, meaningful, and productive professional development approaches were investigated. The resulting implications of the investigation were for improved teacher effectiveness, better collegial interactions, and authentic student learning. In Section 3, the research design and approach, data collection and analysis procedures, ethical measures, threats to validity and quality, and the context of the study are explained.

Section 3: Methodology

Introduction

The primary focus of this research study was to investigate the impact that effective teachers who develop their professional skills within a community of learners have on student learning and achievement. By conducting this case study, the opportunity to determine how rural southeast Georgia elementary school teachers use identified advantages and disadvantages of cross grade level collaboration to improve collegial interactions was actualized. The examination of collaboration from a team perspective that includes teaching both across grade levels and at grade level can help establish the most effective approaches to improving teacher learning and student learning and achievement. The factors involved in improving (advantages) teacher effectiveness and learning were revealed as well as the factors involved in impairing (disadvantages) teacher effectiveness and learning.

Collaborative planning is broadly used in the U.S. education system. However, more studies are needed to understand the short-term and long-term benefits of collaborative planning. To meet the need for more research on the benefits of collaborative planning, I focused on how teachers experience and use collaborative planning meetings to become effective teachers and learners who can and do improve student learning and achievement. Also, this study was conducted to improve and increase the benefits of collaborative planning meetings so that effective teaching and learning are maximized. Any existing gaps in collaborative planning meetings were

exposed and explored upon determining if any benefits and practical approaches can be yielded; in addition, I investigated how to involve students in collaborative planning.

The methods and procedures used in this case study are described in this section. Research design, approach and rationale; the research questions, ethics, setting and participants; instrumentations and materials, data collection, data analysis, threats to validity and quality; and role of the researcher are all discussed. The section ends with a summary.

Research Design and Approach

The nature of a qualitative case study is determined by the weight a researcher is willing to give to qualitative methods and procedures in the study. Therefore, collecting and analyzing qualitative data were given top priority. A core focus of this study was on determining how rural southeast Georgia elementary school teachers used identified advantages and disadvantages of cross grade level collaboration to improve collegial interactions. Integration of the data was performed at three places in this study. The three places of integration were at the data collection, data analysis, and data interpretation stages. At the data collection stage, I constructed open/closed question questionnaire (Appendix A) was used to further define the problem. By using an open/closed question questionnaire, the direction of the study can also be further established.

Qualitative

Qualitative data collection was used in this study to explain and interpret findings.

The qualitative data of this research study were centered on the experiences, actions,
behaviors, interactions, and intellectual views of teachers who participated in

collaborative planning meetings. During the qualitative phase, qualitative case study methods were employed to better understand the dynamics of teacher experiences, actions, behaviors, interactions, and intellectual views in collaborative planning meetings and practices that lead to improved collegial interactions that impact teacher effectiveness and learning so that student learning and achievement are improved.

Qualitative data collection procedures are the most reliable way to collect data for a case study for several reasons. Include a topic Through qualitative procedures, researchers can "employ different knowledge claims, strategies of inquiry, and methods of data collection and analysis" (Creswell, 2003, p. 179). This approach means that a researcher has to rely on text and image data, unique steps in data analysis, and draw on diverse strategies of inquiry (Creswell, 2003, p. 197). A researcher using qualitative methods has a range of strategies to use which makes possible a holistic collection of data. The main emphasis is on identifying, connecting, coding, and triangulating interrelationships, patterns, themes, and structures during qualitative analysis.

Case Study

The qualitative paradigm of case study was applied to explore how rural southeast Georgia elementary school teachers use identified advantages and disadvantages of cross grade level collaboration to improve collegial interactions. Yin (2004) stated that "the strength of the case study method is its ability to examine, in-depth, a 'case' within its 'real-life' context" (p. 1). In this study, I addressed explanatory questions. Yin stated that "the case study method is pertinent when your research addresses either a descriptive question (what happened?) or an explanatory question (how or why did something

happen?)" (p. 2). In addition, a "case study is "a type of qualitative research in which indepth data are gathered relative to a single individual, program, or event, for the purpose of learning more about an unknown or poorly understood situation" (Leedy & Ormrod, 2005, p. 108). Yin also stated that the case study approach is used "to illuminate a particular situation" or the state of collaboration at the participating schools (p. 2). Conducting a case study centered on identifying the advantages and disadvantages of cross grade level collaboration to improve collegial interactions was appropriate because I wished to inform practice so that social reform could occur.

There are many reasons a case study approach is the most credible method for conducting this study. A case study requires collecting "extensive data on the individual(s), program(s), or event(s) on which the investigation is focused" (Leedy & Ormrod, 2005, p. 135). Data were collected on collaborative practices, collaborative planning meetings, collegial interactions, and the teacher collaboration community and then were triangulated. Yin (2004) stated that "in collecting case study data, the main idea is to 'triangulate' or establish converging lines of evidence to make your findings as robust as possible" (p. 9). Data collected were congregated through interviews, observations, and archival data surveys (consisting of written policies, collaborative planning and meeting minutes and agendas, related district survey results or questionnaires, and related records) to make the findings as robust as possible. In addition, five cases were explored to make finding even more robust. According to Merriam et al. (2002) stated, "The process of conducting a case study begins with the selection of the 'case'" (p. 179). The most credible approach for conducting this study is

the case study approach because the problem of this study was explored through five cases (five teacher communities) bound by place (school), time (3 weeks), and the elementary school setting.

In addition to the aforementioned characteristics, the case study approach is also the best approach in several other ways. The case study approach is a way to explore "in depth a program, an event, an activity, a process, or one or more individuals" (Creswell, 2003, p. 15). As further defined by Merriam (1998), "I can 'fence in' what I am going to study" using the case study approach (p. 27). Thus, the case "could be a person, such as a student, a teacher, a principal; a program; a group such as a class, a school, a community; a specific policy; and so on" (Merriam, 1998, p. 27). An understanding of how teachers who do collaborate across grade levels use identified advantages and disadvantages of cross grade level collaboration to improve collegial interactions to achieve better student performance, PD, teacher effectiveness, and job satisfaction was pursued. Leedy and Ormrod (2005) stated that a case study approach is used for the purpose of learning more about an unknown or poorly understood situation (p. 108). For the reasons stated above, the case study approach was the best research design method to use for conducting this study.

Alternative Approaches

The grounded theory approach was the next plausible option for conducting this study. This approach involves "the constant comparison of data with emerging categories and theoretical sampling of different groups to maximize the similarities and differences of information" (Creswell, 2003, p. 14). However, "the primary intent of a grounded

theory study is to move beyond description and to generate or discover a theory"

(Creswell, 2007, p. 62-63). I did not wish to generate or discover a theory. The narrative approach, also an alternative, "consists of focusing on studying one or two individuals, gathering data through the collection of their stories, reporting individual experiences, and chronologically ordering (or using Life course stages) the meaning of those experiences" (Creswell, 2007, p. 54). The single individual is the focus (Creswell, 2007, p. 57). Creswell (2007) mentioned biographical, autobiographical, and life history as the three types of narrative studies. I did not use any of the above types of history because professional communities were the focus of this study. Thus, the narrative approach was inappropriate.

The next approach examined for this study was the phenomenological approach. For this approach, a researcher "identifies the 'essence' of human experiences concerning a phenomenon, as described by participants in a study" (Creswell, 2003, p. 15). The focus of this study was not on the "lived experiences of a concept or a phenomenon" (Creswell, 2007, p. 57). This study involved the study of a problem explored through cases within bounded systems (Creswell, 2007, p. 73). Therefore, the phenomenological approach was inappropriate as was the ethnographic approach.

Based on the characteristics of the ethnographic approach, the ethnographic approach was also inappropriate. The ethnographic approach is taken when the focus is on "the behavior, the language, and the interaction among members" of an entire cultural group (Creswell, 2007, p. 68-69). However, how a cultural group works was not the focal

point of this study. In addition, the ethnographic approach "involves prolonged time in the field" (Creswell, 2007, p. 72). This study was conducted within a 3-week period.

A content analysis approach was also regarded. Leedy and Ormrod (2005) stated, "Content analyses are typically performed on *forms of human communication*" (p. 142). An example of uncompetitive human communication is collegial interaction. Content analysis is also systematic and measures are taken to ensure that the process of this approach is as objective as possible (Leedy & Ormrod, 2005, p. 142). Measures were taken in this study to ensure objectivity; however, the researcher using content analysis uses "tabulation and statistical analysis to interpret the data" (Leedy & Ormrod, 2005, p. 143). Content analysis is both quantitative and qualitative (Leedy & Ormrod, 2005, p. 143). This study can be altered to accommodate quantitative and qualitative data. However, only qualitative data were collected in my study.

A mixed methods approach was also not selected for this study. Mixed methods research is holistic research. Both qualitative and quantitative research strategies are used. There are three mixed methods strategies. The three strategies are sequential, concurrent, and transformative procedures. For the sequential strategy, "the researcher seeks to elaborate on or expand the findings of one method with another method" (Creswell, 2003, p. 16). An expansion of the findings of one method with another method was not my focus. The researcher using the concurrent strategy "converges quantitative and qualitative data in order to provide a comprehensive analysis of the research problem" (Creswell, 2003, p. 16). A comprehensive analysis of the research problem was not the focus of this study, and neither was the transformative strategy. The

transformative strategy is the use of "theoretical lens as an overarching perspective within a design that contains both quantitative and qualitative data" (Creswell, 2003, p. 16).

Although the data collection method for the transformative strategy could result in using a sequential or concurrent approach, a theoretical perspective was not the perspective for this study.

Qualitative case studies are the most established kind of research in education. In part, the case study approach may be the most prevalent kind of research because case study research involves the study of an issue. The case study was delineated as the most appropriate research design approach for this study because I addressed an issue through an inquiry. The issue identified was also the research problem which is the key to any inquiry. To conduct the inquiry for the present study, research questions were formulated and reported in the next section.

Research Questions

The major research questions of this study were

- 1. How do rural southeast Georgia elementary school teachers use identified advantages and disadvantages of cross grade level collaboration to improve collegial interactions?
- 2. How do teachers, when they collaborate across grade levels, improve collegial interactions?
- 3. How do students demonstrate improved learning experiences that are based on teacher collaboration?

Other questions that are research background questions were used to undertake the biases and limitations inherent in a research design. Data were collected from regular education and special education teachers and administrators.

Ethical Measures

The ethical measures that were undertaken in this study were comparable to the measures taken in all peer-reviewed or prominent research studies involving individuals and factions of specific or general populations or participants. Informed consent and a detailed explanation of the study were afforded the participants of the study. Confidentiality was maintained for both the participating individual and group. The integrity of participants was sustained throughout the study which included the times when data collection, data analysis, and reporting of the research findings were being performed. The informed consent form (Appendix C) was used in this study to secure the participants' integrity and right to be protected and informed.

Permission to conduct the study was attained from the county superintendent (Appendix D) and the school principals. Prior to beginning the study and after attaining permission, the study was introduced (through an oral presentation or an e-mailed PowerPoint presentation) to all stakeholders including potential participants. During the oral introduction, all of the stakeholders (potential participants) were given a chance to ask questions about the study to gain a better perspective. For the e-mailed PowerPoint presentation option, stakeholders (potential participants) had a chance to ask questions via e-mail or in person if the presentation was delivered orally. Ten participants were given an opportunity (and were asked) to participate in the study. All of the 10

participants (and the four to eight group participants) were given as much information as possible about the nature of the study. The 10 participants were also informed about confidentiality and given a consent form (Appendix C) to sign. The 10 participants (and the four to eight group participants) were also informed about what it means to consent to participate in a research study. Informed consent included a review of the purpose of the study, participants' participation, research benefits, researcher expectations, expectations of the participants, and questionnaire, interview, observation, and archival proceedings.

The data that were collected, analyzed, and reported are stored in a secure location (in a locked file cabinet of my home office until it was converted into computer [saved on a Laptop, DVD+RW, or CD-RW] and hardcopy files). Computer (on a Laptop, DVD+RW, and CD-RW) and hardcopy files are stored in a locked file cabinet of my home office. All handwritten notes were converted into electronic and hardcopy files and will be kept for 5 years after the study has been concluded. Audio recorded data were converted into computer (DVD+RW, and CD-RW) and hardcopy files and will be kept for 5 years after the study has been terminated. Handwritten notes, computer (DVD+RW, and CD-RW), electronic and audio recorded data will be securely stored for 5 years and then will be shredded or erased. Data stored on the hard drive of the computer (Laptop) will be maintained for 5 years then will be properly disposed (wipe or erase files off hard drive). The true identity of participants is protected indefinitely through the use of numbers during sampling, through the use of pseudo names during the study, and through the use of amalgamation and integration of entities rather than the use of distinctiveness and eccentricity of entities. From the commence of the study until its conclusion, the

participants received informed consent, detailed knowledge of the study, sustained confidentiality, and access to the research design and data collection procedures.

The names of the people and places were changed (and numbers assigned when appropriate) to protect the identity of the participants involved (Merriam et al., 2002, p. 228). By so doing, an ethical issue involving a breach of confidentiality was prevented. By concealing the names of the participants, a researcher can protect participants from harm and maintain their right to confidentiality. However, if a researcher maintains confidentiality by tailoring his personal appearance and research tools so that they are more appropriate for a rural, impoverished setting, the approach could be deemed biased and deceptive which would lead to ethical issues in the study (Merriam et al., 2002, p. 233). As a result, participants may not be quite as forthcoming with the information if a researcher has not masked the participant's true identity. This brings up the ethical issue of the use of trust to gain entry into the lives of unsuspecting participants. If the participants know a researcher's true intentions of "going native" to become a member of their community, they may not be quite as transparent. Thus, care was taken to keep my intentions for this research transparent so that the study is devoid of bias and deception.

The ethical issue of reciprocity (or the exchange of favors and privileges) was dealt with appropriately. Reciprocity, as Hatch (2002) stated, "is an ethical issue in any research effort" (p. 66). The issue of reciprocity for this study was resolved through volunteering to help in any way that is perceived as appropriate and warranted. Hatch (2002) stated that "no matter the anticipated relationships with participants, giving back something of substance needs to be considered as qualitative projects are planned" (p.

66). As to whether reciprocity should be planned or not, giving back something of substance is highly esteemed. Additionally, Creswell (2003) recommended "involving individuals collaboratively in the design and research questions prior to data collection, as well as actively seeking their support during all phases of the research" (p. 65). Creswell's recommendation provides the researcher with a way to empower research participants. Empowered participants are less likely to be abused or coerced or provide unreliable information.

Another ethical issue that I faced was how to leave the scene once the research process is finished. Hatch (2002) stated that typically the researcher would just abruptly pull out "but this is unacceptable when participants have made themselves vulnerable through close personal contact with researchers" (p. 66). As a member of the community, there was no need to depart. Participants only need to know when the study concluded and to decide whether or not to volunteer to attend closure sessions thereafter if warranted.

Departing from a research site or concluding a research study will no doubt cause some distress or disturbance. To minimize the disturbance, Creswell (2003) suggested that intrusions be timed so that the flow of activities within the research site are rarely impacted or intruded upon (p. 65). In this case study research design, data were collected by conducting interviews and observations and reviewing archival data. To minimize the impact of possible disruptions within the physical setting, interviews took place during noninstructional periods of the school day. Observations were conducted as predetermined timed visits. To reduce the length of time involved in data collection

which is the main weakness of this design, a plan of how time was used and an accounting of time used was established at the start of the study. Time management was a key factor in this study. When time is managed well, the length of time taken to gather data is decreased. If the time taken to gather data is lengthy, data can become corrupted, tainted.

In addition, most of the participants were European American and female. This made the presentation of findings to nonparticipants (other teachers and administrators) somewhat difficult. In part, the difficulty was directly related to the participants' position, surroundings, circumstances, experiences, beliefs, influences, traditions, convictions, and commitments. To compensate for this ethical issue, standards (following the standards of effective teaching and collaborative planning is required of all teacher and administrative populations and groups) for effective teaching and learning and collaborative planning were used to relate findings of this study to other teacher and administrative populations and groups. By using standards to relate findings to other populations and groups, the ethnic disproportions of the study were diminished and the establishment of the relevancy of findings to other teacher and administrative populations and groups was not only achievable but accomplished.

To counter the threat of other ethical issues, a gatekeeper was used and protocol for good qualitative research was followed. Answers were provided for questions regarding why the study was being conducted, why the study site was chosen, who would benefit from the study, what the participant and researcher relationship would be, who may be at risk, when to intervene on behalf of the individual, and how data would be

collected and analyzed. By answering the questions, the chances of having to deal with the ethical issues above were greatly reduced. If ethical issues evolved, immediate attention was given to finding a solution or employing one of the aforementioned strategies. Efforts were taken to prevent ethical issues from occurring.

Participants and Sampling

Teachers and administrators (of special and regular education) who have many grade level collaboration opportunities were the population of interest for this study.

Teacher participants (also known as the respondents during the questionnaire phase) were sampled from prekindergarten through fifth grade classrooms of selected elementary school campuses. Many participants have previously indicated orally a need and desire to collaborate across grade levels. The participants (teachers and administrators) were selected using maximum variation sampling. The population for this study included 50 selected (via maximum variation sampling) administrators and teachers of which 10 teachers and administrators are expected to participate in the study.

The participants who were considered for inclusion in this case study were colleagues who are experienced in collaborative planning, teaching, and attracting students to learning. The participant pool for this study was 10 consenting administrators and teachers who were drawn using the maximum variation sampling method from a population of 50 elementary administrators and prekindergarten to fifth grade teachers for this study. The population of 50 was selected via maximum variation sampling from a total teacher/administrator population of 250. Most of the participants were European American and female because the faculty of the school district is primarily European

American and female. The participants' ages ranged from 36 to 56. Many of the participants have children (various ages) of their own. The participants are from the rural South and have completed the same or similar teacher education programs through the same or a similar southern university or college. The participants selected did not change throughout the study. Creswell (2006) stated that selecting different individuals will introduce personal characteristics that might confound the comparison (p. 119). Therefore, the participants share the same characteristics. All of the participants have received training in the same teaching strategies, techniques, and methods. Therefore, all of the participants use the same or similar teaching strategies, techniques, and methods.

The teacher collaboration community was the focus at Schools A, B, C, D, and E. Therefore, five teacher collaboration communities were examined as five different cases. As Merriam (1998) stated, the case "could be a person, such as a student, a teacher, a principal; a program; a group such as a class, a school, a community; a specific policy; and so on" (p. 27). Accordingly, Case 1 is the teacher collaboration community at School A. Case 2 is the teacher collaboration community at School B. Case 3 is the teacher collaboration community at School D. Case 5 is the teacher collaboration community at School E. Each of the five cases was bound by place (school), time (3 weeks), and the elementary school setting.

Case 1 is the teacher collaboration community at School A with a student population of over 391 students. The number of full-time teachers is 27. The student to teacher ratio is 15 to 1. The percentage of White students attending this school is 57%. Hispanic students attending are at 26%. The Black students' population is at 11%.

Multiracial students comprise 5% of the student body. The Asian population at this school is at <1%. The American Indians/Alaska Natives population is 0.0%.

Case 2 is the teacher collaboration community at School B with 784 students and 53 full-time teachers. The student to teacher ratio is 15 to 1. The percentage of White students attending this school is 47%. Hispanic students attending are at 22%. The Black students' population is at 28%. Multiracial students comprise 3% of the student body. The Asian population at this school is at <1%. The American Indians/Alaska Natives population is 0.0%.

Case 3 is the teacher collaboration community at School C of 517 students and 37 full-time teachers. The student to teacher ratio is 14 to 1. The percentage of White students attending this school is 42%. Hispanic students attending are at 11%. The Black students' population is at 46%. Multiracial students comprise 2% of the student body. The Asian population at this school is at <1%. The American Indians/Alaska Natives population is <1%.

Case 4 is the teacher collaboration community at School D which houses 449 students. There are 36 full-time teachers. The student to teacher ratio is 13 to 1. The percentage of White students attending this school is 47%. Hispanic students attending are at 14%. The Black students' population is at 36.6%. Multiracial students comprise 2% of the student body. The Asian population at this school is at <1%. The American Indians/Alaska Natives population is 0.0%.

Case 5 is the teacher collaboration community at School E which has 357 students of the four schools (population at each of the four schools: 401at one, 288 at another, 622

at yet another, and 357 at the fourth school). Between the four schools there are 115 fulltime teachers. The student to teacher ratio is an average of 14 to 1 at each of the four schools. The percentage of White students attending the schools is 55% to 70%. Hispanic students attending are at 10% to 25%. The Black students' population is at 20% to 30%. Multiracial students comprise 2% to 10% of the student body at the schools. The Asian population at the four schools is at <1%. The American Indians/Alaska Natives population is 0%. School E has a student population that is 67% White, 20% Black, 11% Hispanic, 5% Multi-Racial, <1% Asian, and 0.0% American Indians/Alaska Natives. The student to teacher ratio is 13 to 1. There are 27 full-time teachers. Many of the students participate in the free or reduce lunch program. The overall test score performance for 2011 is 86.9% proficiency in math and 92.4% proficiency in reading. Teachers average 13 years of experience and 41% have a bachelor's degree, 34% a master's degree, 21% a specialist's degree, and 3% a doctoral degree. The economically disadvantaged students compose 76% of the student population. Students with disabilities comprise 12% of the population. The limited English student is 4% of the student population.

Setting

This research study was conducted with administrators and prekindergarten through fifth grade teachers on the campuses of selected elementary schools in rural southeast Georgia. The elementary schools chosen for this study are situated in rural southeast Georgia communities within the same county. All of the schools participate in state and federal Title I programs. The teacher participants were the same at the start and conclusion of the study.

The student population of one of the elementary schools is over 391 students. The number of full-time teachers is 27. The student to teacher ratio is 15 to 1. Many of the students participate in the free or reduce lunch program. The overall test score performance for 2011 is 86.4% proficiency in math and 93.1% proficiency in reading. Teachers average 13 years of experience and 44% have a bachelor's degree, 41% a master's degree, 16% a specialist's degree, and 0% a doctoral degree. The percentage of White students attending this school is 57%. Hispanic students attending are at 26%. The Black students' population is at 11%. Multiracial students comprise 5% of the student body. The Asian population at this school is at <1%. The economically disadvantaged students compose 84% of the student population. Students with disabilities comprise 16% of the population. The Limited English student is 14% of the student population.

A second school of the study houses 784 students. There are 53 full-time teachers. The student to teacher ratio is 15 to 1. Many of the students participate in the free or reduce lunch program. The school is a Title I school. The overall test score performance for 2011 is 91.8% proficiency in math and 92.7 % proficiency in reading. Teachers average 15 years of experience and 30% have a bachelor's degree, 46% a master's degree, 25% A specialist's degree, and 0% a doctoral degree. The percentage of White students attending this school is 47%. Hispanic students attending are at 22%. The Black students' population is at 28%. Multiracial students comprise 3% of the student body. The Asian population at this school is at <1%. The American Indians/Alaska Natives population is 0.0%. The economically disadvantaged students compose 73% of the

student population. Students with disabilities comprise 11% of the population. The Limited English student is 11% of the student population.

Another participating school houses 517 students. There are 37 full-time teachers. The student to teacher ratio is 14 to 1. Many of the students participate in the free or reduce lunch program. This school has Title I status. The overall test score performance for 2011 is 84.8% proficiency in math and 92.2% proficiency in reading. Teachers average 10 years of experience and 32% have a bachelor's degree, 63% a master's degree, 5% a specialist's degree, and 0% a doctoral degree. The percentage of White students attending this school is 42%. Hispanic students attending are at 11%. The Black students' population is at 46%. Multiracial students comprise 2% of the student body. The Asian population at this school is at <1%. The American Indians/Alaska Natives population is <1%. The economically disadvantaged students compose 81% of the student population. Students with disabilities comprise 18% of the population. The Limited English student is 3% of the student population.

The fourth school of the study houses 449 students. There are 36 full-time teachers. The student to teacher ratio is 13 to 1. Many of the students participate in the free or reduce lunch program. This school has Title I status. The overall test score performance for 2011 is 92.8% proficiency in math and 98.6% proficiency in reading. Teachers average 14 years of experience and 20% have a bachelor's degree, 56% a master's degree, 24% a specialist's degree, and 0% a doctoral degree. The percentage of White students attending this school is 47%. Hispanic students attending are at 14%. The Black students' population is at 36.6%. Multi-Racial students comprise 2% of the student

body. The Asian population at this school is at <1%. The American Indians/Alaska Natives population is 0.0%. The economically disadvantaged students compose 72% of the student population. Students with disabilities comprise 14% of the population. The Limited English student is 7% of the student population.

The population of students at the four remaining schools is 401 at one, 288 at another, 622 at yet another, and 357 at the fourth school. Between the four schools there are 115 full-time teachers. The student to teacher ratio is 14 to 1 at each of the four schools. Many of the students participate in the free or reduce lunch program. All of the schools have the Title I status. The overall test score performance for 2011 is 80% to 90% proficiency in math and reading. Teachers average 13 to 14 years of experience between the four schools and 30% to over 40% have a bachelor's degree, 40% to over 50% a master's degree, 5% to 10% a specialist's degree, and between two of the four schools 7% hold a doctoral degree. The percentage of White students attending the schools is 55% to 70%. Hispanic students attending are at 10% to 25%. The Black students' population is at 20% to 30%. Multi-Racial students comprise 2% to 10% of the student body at the schools. The Asian population at the four schools is at <1%. The American Indians/Alaska Natives population is 0%. The economically disadvantaged students compose 70% to 80% of the student population at the four schools. Students with disabilities comprise 12% to 18% of the population. The Limited English student is 4% to 14% of the student body. The school of 357 students was chosen as the fourth school.

Instrumentation and Materials

The questionnaire is the preferred data collection tool because there is a "rapid turnaround in data collection" (Creswell, 2003, p. 154). I designed the questionnaire for this study. The entire instrument is provided in Appendix A and was used to confirm responses collected during the individual and group interview sessions once participants have granted consent. Also, the questionnaire of this study targets the teacher and consists of 10 open and closed items to which respondents (study participants) rated "truth of" statements using a 5-point scale. The respondent's (administrators excluded during the questionnaire phase) participation is completely voluntary, and responses are strictly confidential.

The other data collection tools (interview questions and observations) used for this study are centered on gathering data related to teacher effectiveness. These were discussed in greater detail in the data collection section and are also found in Appendixes C and I.

Data Collection

Data collection was conducted on the campus of the selected elementary schools in rural southeast Georgia; approximately some 27 or more teachers work at each school, prekindergarten to fifth grade. Data were collected at the beginning of the 2011-2012 school year for 3 weeks. Data were collected first through a qualitative questionnaire (researcher composed questionnaire and other archival data sources) and subsequently through observations and individual and group qualitative interview sessions. A qualitative interview with each individual participant and with a group of four to eight

participants was then conducted to gain more insight into the questionnaire responses given by the respondents and to answer the research questions. The 30 minutes interview session was conducted each individual (the expected 10 participants) and with a group of four to eight volunteer participants (formed from the initial participant population of 50 and discriminately sampled). Data were also be concurrently collected through a 30-minute to 60-minute observation conducted with each participant involved in this study. Archival data were collected from the beginning of the study to its completion.

To safeguard the quality of information that participants provided and to ensure that participants provide relevant information, the kind of participants selected for this study is paramount. Therefore, participant selection was based on the following specific criteria. First, participants were experienced in teacher collaboration and various collaborative practices. Participants were also unpaid but willing participants (volunteers). In addition, participants were currently practicing goal centered, inquiry based collaboration. Thus, participants are purposefully selected. This means that the participants were selected "because they can purposefully inform an understanding of the research problem and central phenomenon in the study" (Creswell, 2007, p. 125).

The Questionnaire Phase

The paper and pencil administered questionnaire of this study was designed by the researcher and consists of 10 open and closed items to which respondents (participating teachers) rate truth of statements using a 5-point scale. The questionnaire was administered to the teachers of the initial 10 participants after the study begins at the start of the 2011-2012 school year (within the first week of the study) to further define and

refine the problem and the direction of the study. The questionnaire was administered again after the individual and group interview sessions (within the second week of the study) to the teachers of the initial 10 participants and the four to eight group participants to confirm responses collected during the individual and group interview sessions. The questionnaire was also administered to the teachers of the initial 10 participants and the four to eight group participants at the end of this study (within the third week of the study) to determine the professional development and collegial interaction needs, desires, and interests of the teacher participants. All questionnaire participants signed a questionnaire consent form (Appendix F) before participating in the questionnaire phase.

Each time the questionnaire was administered the respondents (participating teachers) first received an e-mail about the date and time of administration and administration options. The date and time of the administration were in accordance with the date and time of collaborative planning meetings (or other noninstructional times). An administration location for individual administrations depended on available space. For the first questionnaire administration, the respondents were administered the questionnaire individually or through self-administration. On the second and third administrations, the respondents were given the option of self or individual administration. Participating teachers who choose self-administration could also opt to complete the questionnaire on their own time. I administered the questionnaire with the option of using a designated administrator if warranted. Responding to the questionnaire was strictly voluntary. All questionnaire responses were kept confidential.

At individual administrations, I conducted, introduced (providing the purpose of the questionnaire, the sponsor, the role of the respondent, and informed consent), and collected the questionnaire in person. The questionnaire was placed in the respondent's school mailbox when respondents opted to self-administer the questionnaire.

Questionnaires that are self-administered were returned to my school mailbox or mailed

to me via county mail (mail for the school system).

A cover letter accompanied the paper and pencil self-administered questionnaire. The cover letter includes the directions, purpose, benefits, and administrator of the questionnaire. Also, the letter covered how the respondent is ensured confidentiality; how and why the respondent was selected; the deadline for returning; and the instructions for completion. The respondent returned the self-administered questionnaire to me in a self-addressed, stamp adhered envelope provided by the administrator, or in a privacy envelope addressed to me and placed in county mail (or mail for the school system) to be delivered to my school mailbox.

Administrators did not participate in the questionnaire phase. Administrators participated in the individual and group interview sessions and in the archival phase. Teachers were asked to participate in all of the phases. Information collected from archival documents (written policies, collaborative planning meeting minutes and agendas, related public documents, related district survey results or questionnaires, or related records) was coded using Ethnograph v6.0 and QDA Miner v3.2 (updated to 4.0).

The completed questionnaires (hardcopies) were collected and are stored by me in a secure location (in a locked file cabinet of my home office). Tangible data (handwritten

notes, hardcopies, computer (DVD+RW, and CD-RW), electronic, and audio recorded files) are securely stored for 5 years and then will be shredded or erased. The data from each administration of the questionnaire were collated and coded. Questionnaire results are available to participants. In the data analysis section, how collected questionnaire data was processed is further discussed.

The Interview Phase

For this study, a group interview was conducted with four to eight participants. The group interview participants statements were (formed from the initial 50 participants and discriminately sampled) used to see "if the assertions made by the first participants hold "true for these additional participants" (Creswell, 2007, p. 68). The individual and group interviews were approximately 30 minutes. Noninstructional time was used to conduct individual and group interviews. All interviews were audiotaped. A timer was used at all interviews to track the 30 minutes; however, if participants request more time, then more time was granted at a later date. A calendar/time schedule was used to keep up with the day, date, and time of each interview.

Individual interview sessions were held first. Each individual interview was 30 minutes. An audiotape recorder was placed between the interviewer and interviewee on a table at "elbow resting" height. An interview introduction (to include the purpose, sponsor, participation and research benefits, researcher expectations, expectations of the participants, and interview proceedings) was presented by the interviewer to the interviewees at the start of the session. The interviewer then began asking the interview participants each of the interview questions outlined in Appendix E. Probing questions

were asked when warranted. Once data were collected and transcribed, each of the participants were provided a hardcopy report of the interviewer's findings to review so that corrections and confirmations can be made.

The second part of the interviewing process involving a group interview was conducted following the individual interviewing phase. Group interviewees (four to eight) were arranged in a circle with the audiotape recorder positioned in the middle on a table. The interviewer presented an interview introduction (to include the purpose, sponsor, participation and research benefits, researcher expectations, expectations of the participants, and interview proceedings) to the group. The participants of the group were also told that findings will be reported to them after the interview sessions via me in a hardcopy report. The interviewer then began asking the group participants each of the interview questions of Appendix E. Probe questions were asked at the end of each main question. The interview participants of the group were discriminately sampled. Discriminant sampling was used as the secondary sampling method to gather when warranted "additional information from individuals similar to those initially" interviewed to determine if the assertions made by the first participants hold "true for these additional participants" (Creswell, 2007, p. 68). Thus, individual participants member-checked the interview data collected from group participants. The group participants member-checked the interview data collected from individuals.

Brief field notes were taken during the all interview sessions to capture the data (e.g., gestures, facial expressions, and other nonverbal expressions) that audiotaping cannot. Member-checking and/or peer debriefing were used immediately after each

interview to enhance the accuracy of notes taken. Then all participants of the group interviews were also provided a hardcopy report of the interviewer's findings. Interviews were transcribed, coded, and analyzed.

Relationship of Research Questions to Interview Questions

The data collected at the interview phase of this study were collected as responses to open ended interview questions. In addition, the data collected through the interview questions were presented in relation to the interview and research question that it answers. Table 1 identifies the exact interview questions and the research questions that the interview participant responses answered. The interview questions in Table 1 are the main questions that were asked during the interview to obtain the specific information needed to answer the research questions. Rubin and Rubin (2005) stated that "when you know what information you need to answer your research puzzle, working out the main questions is straightforward. You create separate main questions that ask about each of the pieces of missing information" (p. 153). The interview questions were also worded precisely to elicit "the understandings and experiences of the interviewees in ways that speak to the research problem" and questions (Rubin & Rubin, 2005, p. 156-15). Thus, the interview questions of this study were designed to obtain information needed to answer research questions one, two, and three and were structured thus so to elicit responses specific to the research topic.

Table 1

The Relationship of Research and Interview Questions Research Questions Interview Questions Question: 1. How do rural southeast Georgia elementary 1. How many years have you been teaching? Tell me about school teachers use identified advantages and disadvantages of your teaching experiences. Tell me about your teaching career. cross grade level collaboration to improve collegial Tell me about your professional experiences as a teacher. What is the highest degree that you hold? How are all of your interactions? collaborative practices? The corresponding interview questions were

- designed to elicit responses that reveal the advantages and disadvantages of collaboration and to answer research question one.
- Data were audiotaped, transcribed, and entered into The Ethnograph v6.0 and QDA Miner v3.2 (updated to 4.0) to reveal codes. Then, the coded data were sorted into two main categories (advantages and disadvantages).

Question 2: How do teachers, when they collaborate across grade levels, improve collegial interactions?

- The corresponding interview questions were designed to elicit responses that reveal what teachers are doing to improve collegial interaction when they collaborate.
- Data were audiotaped, transcribed, and entered into The Ethnograph v6.0 and QDA Miner v3.2 (updated to 4.0) to reveal codes so that the patterns, themes, issues, topics, ideas, relationships, cases, events, and concepts related to improving collegial interactions are easily identified.

Question 3: How do students demonstrate improved learning experiences that are based on teacher collaboration?

- The corresponding interview questions were designed to elicit responses that reveal a connection between improved student learning experiences and teacher collaboration.
- Data were audiotaped, transcribed, and entered into The Ethnograph v6.0 and QDA Miner v3.2 (updated to 4.0) to reveal codes so that the patterns, themes, issues, topics, ideas, relationships, cases, events, and concepts related to student learning experiences and collaboration are exposed.

- aforesaid experiences related to the success and failure of your 9. What are the disadvantages of cross grade level collaboration? How are the disadvantages utilized to improve
- collegial interaction during collaboration? 10. What are the advantages of cross grade level collaboration?
- How are the advantages utilized to improve collegial interaction during collaboration?
- 12. How is collaborative planning used as professional development? How is collaborative planning used as professional development an advantage and disadvantage? How is collaborative planning used as debriefing an advantage and disadvantage?
- 14. What does professional development look like at this school?
- 15. What does debriefing as professional development look like at this school?
- 18. Is there anything else that you would like to share with me on the topic of collaborative practices that I have not asked you about or that you would like to have an opportunity to say?
- 2. How many times this year have you been involved in collaborative planning?
- 3. Tell me about a typical collaborative planning session.
- 4. Tell me about cross grade level collaborative practices at your school.
- 5. Explain what collegial interactions are like before, during, and after collaborative planning sessions. How can teachers and administrators improve collegial interactions?
- 6. Tell me about collaborative practices at this school? 18. Is there anything else that you would like to share with me on the topic of collaborative practices that I have not asked you about or that you would like to have an opportunity to say?
- 7. What kind of relationship is shared between teacher collaboration and student learning?
- 8. Explain the impact of collaborative practices on student learning and teacher effectiveness at this school.
- 11. What do you think are the effects of a positive relationship between teacher collaboration and student learning?
- 13. What is the relationship between collaborative planning and teacher effectiveness?
- 16. What is the relationship between collaborative planning and student learning?
- 17. How is improved teacher effectiveness and improved student learning a direct result of collaborative planning? 18. Is there anything else that you would like to share with me on the topic of collaborative practices that I have not asked you about or that you would like to have an opportunity to say?
- *Note. Probe Questions were also used.

The Observation Phase

Observations served as the means to examine the interactions, behaviors, strategies, mannerisms, and emotional and intellectual acuity that exist and do not exist in an effective and ineffective teaching and learning environment. Each participant was observed for a half-hour to an hour during instructional time in the classroom (and during collaborative planning meetings to observe collegial interaction) for a day. The participant and observer decided on an observation time. Thus, observations were conducted as predetermined timed visits. Again, a calendar/time schedule was used to keep up with the day, date, and time of each observation. Maximum care was taken to eliminate distractions during the observation. Brief field notes were also taken during the observation and recorded on the chart located in Appendix G. A log of the classroom observations was kept. Also, the observations were recorded as descriptive and reflective notes to include demographic information. During each classroom observation the observer sat in the back of the classroom. The observer sat with participants during observations in collaborative planning meetings. The observer remained an observer at all times.

All observation notes were coded, interpreted, and analyzed. Rubin and Rubin (2005) stated, "Coding allows you to sort statements by content of the concept, theme, or event rather than by the people who told you the information" (p. 219). Words that portray action or influence were chosen as the codes since interaction is communication, action or influence, and behavior. The observation phase began at the beginning of the 2011-2012 school year. Observations were conducted by me as observer during

collaborative planning meetings (instructional and noninstructional times when warranted) to minimize interruptions and distractions. Also, to observe how collaborative planning impacts student learning, observations were conducted during instructional time via predetermined visits. The Ethnograph v6.0 and QDA Miner v3.2 (updated to 4.0) were used to reveal codes so that patterns, themes, issues, topics, ideas, relationships, cases, events, and concepts are easily identified. The individual participants were provided a hardcopy report of the observer's findings.

The Archival Data Phase

Archival data were used to define and refine, monitor and evaluate teacher collaboration. Archival data were also used to reveal issues in teacher collaboration and to establish a reason for creating new or keeping existing teacher collaboration methods. Additionally, archival data were used to analyze how teachers communicate to collaborate. Hatch (2002) stated that for school based research archival data also known as artifact data "might include school records, official documents, children's work, teachers' lesson plans, parent newsletters, or any materials used in the setting being studied" (p. 25). For this study due to time, archival data were reviewed and collected through related public documents, related records, related district survey results, collaborative planning and meeting minutes, collaborative planning meeting agendas, and written policies. Some archival documents (records or existing data) were obtained through the principal of each of the participating schools.

The archival data collection process began at the start of the study until the end.

Archival data were collected from the administrators and teachers before, during, and

after their collaboration planning sessions (and during noninstructional times and instructional times when observing if warranted) at school by me. Archival data from 2009, 2010, and 2011 were reviewed and collected. Notes were taken on the data, and data were quoted directly from the documents into the chart in Appendix H. Also, care was taken to record the details about the context surrounding the archival data collected (Leedy & Ormrod, 2005, p. 135). This approach means that information about the physical surroundings, and historical, economic, and social factors that have bearing on the archival data were included so that the data were connected to relevant contexts so that interpreting meaning and significance is easier (Hatch, 2002, p. 25; Leedy & Ormrod, 2005, p. 135).

From the notes and the data quoted directly from the documents, patterns, themes, issues, topics, ideas, relationships, cases, events, and concepts were identified through frequency counts and percentages to examine the advantages and disadvantages of teacher collaboration, collaborative practices, and collaborative planning to arrive at an understanding of what the advantages and disadvantages of cross grade level collaboration are. Hatch (2002) stated that patterns can be reported based on frequency counts and percentages (p. 25). Once more the Ethnograph v6.0 and QDA Miner v3.2 (updated to 4.0) were used to reveal codes so that patterns, themes, issues, topics, ideas, relationships, cases, events, and concepts were easily identified and counted. The chart in the appendices (Appendix H) was used to document codes revealed and the matching text.

Data Analysis

Qualitative analysis was used to decipher the data. This means that the data were organized categorically and chronologically, reviewed, repeatedly and continually coded (Creswell, 2003, p. 203) to interpret it. The method of quality control and validation was achieved through triangulating data sources, external audit (when warrant), peer auditing, or peer debriefing if warranted. Methodological triangulation and data triangulation techniques were employed. The methodological triangulation approach was used to determine if the findings or results from each of the qualitative methods (interviewing, observing, analyzing documents, and use of a questionnaire) draw duplicate or similar conclusions. The triangulated data approach was used to garner information from multiple sources to ascertain the proficiency of teachers and the effectiveness of the learning organization's professional development methods. Also, the data triangulation approach was used to find outcomes that are agreed upon by all participants of this study. A data triangulation chart (Appendix I) was used to perform the task of triangulating data. For the methodological triangulation phase, multiple methods (e.g., interviews, observations, and documents) to gather data were used. The Ethnograph v6.0 and QDA Miner v3.2 (updated to 4.0) were used to categorize, code, and manipulate qualitative data. Hatch's Typological Approach was used to analyze the data.

The data from each administration of the questionnaire were collated and coded.

A simple grid to organize and maintain the data was created when necessary. The closed questions (or items) were coded using a numerical scale. The scale was also used to code the data of closed questions. Also, an Excel spreadsheet was used to make any

calculations on the proportions of all respondents replying in each category. Data from closed questions provided information on what is most important to the respondent (also known as the study participant). The open questions (or items) were categorized into small sets of general categories so that patterns, themes, issues, topics, ideas, relationships, cases, events, and concepts can be explored.

Each interview/interviewee was assigned numbers. Themes, cases, events, relationships, patterns, topics, ideas, issues, and concepts were identified within the interview and observation notes and documents significant to the study. The codes were based on cases, events, relationships, patterns, themes, topics, ideas, issues, and concepts (other keywords if warranted). Descriptive (to describe what is in the data) and/or analytic/theoretical (to determine why what is occurring in the data is happening) coding were employed when appropriate. SPSS statistical software was used for any and all statistical analysis. Any omitted data were reviewed for systematic avoidance response. The main emphasis was to identify, connect, code, and triangulate interrelationships, patterns, themes, and structures during qualitative analysis.

Member-checking and/or peer debriefing were used to enhance the accuracy of interview transcriptions. The letter and chart in the appendices (Appendix J and K) were used when member-checking is performed. The open-ended questions in Appendix E were used to conduct the interview as well as probing questions to attain more information.

Member-checking and/or peer debriefing were used immediately after each observation to enhance the accuracy of observations conducted and field notes taken.

Also, the Ethnograph v6.0 and QDA Miner v3.2 (updated to 4.0) were used to reveal codes so that patterns, themes, issues, topics, ideas, relationships, and concepts were easily identified. The chart in the appendices (Appendix G) was used to document codes revealed and the matching text. Finally, archival documents were used to substantiate the interview and observation data.

Data analysis for this study began with organizing the details about the case(s) in a logical order. Categories of data were formulated next to gather the data into meaningful groups. Hatch (2002) stated that "data analysis starts by dividing the overall data set into categories or groups based on predetermined typologies" (p. 152). The predetermined typological areas for analysis in this study were collaborative practices, collaborative communities, state of collaboration, collaborative planning, collegial interaction, purposes of collaboration, goals and objectives of collaboration, approaches to collaboration, delivery system for collaboration, advantages of collaboration, and disadvantages of collaboration.

After the initial set of typologies was identified, the data were read through again to mark entries related to the pre-identified typologies (Hatch, 2002, p. 153). To mark entries, I was "limited to asking, does this information relate to my typology?" (p. 154). Ethnograph v6.0 and QDA Miner v3.2 (updated to 4.0) were used at this point to assist in managing the data. The original data set was left intact. Interpretation of single instances was accomplished. Hatch (2002) suggested reading entries (or instances) by typology first and then "recording the main ideas in each entry on a summary sheet" for each informant (p. 154). A note was made "on the summary sheet of the place in the data that

is being summarized" (Hatch, 2002, p. 154). The summary sheet was a sheet of ruled legal pad paper (shredded and discarded after each use) or a summary sheet when warranted was created and filed in a locked file cabinet of my home office until it is shredded and discarded. Then, identification of issues, relationships, concepts, patterns, themes, topics, cases, events, and ideas were achieved, and interpretations were made.

Next, the data marked for the typologies under investigation were read through to code entries according to relationships, concepts, issues, patterns, themes, topics, cases, events, and ideas. Hatch (2002) recommended "coding entries according to patterns identified and keeping a record of what entries" (p. 156). The same coding system (using the worksheet in Appendix M) was used for patterns, issues, concepts, relationships, themes, topics, cases, events, and ideas. The coded data were also organized into sets. Each set had a title. The titles most useful are teachers, administrators, communities, and practices. After the data were reread, coded, and organized into sets, the data were searched for supporting examples and nonexamples of patterns, themes, topics, cases, events, and ideas (Hatch, 2002, p. 157). When the patterns are identified, Hatch (2002) stated that the task now is to "look for connections across what has been found" (p. 158).

Finally, synthesis was conducted so that an overall picture of the case is established and conclusions are drawn to identify any and all implications. Hatch (2002) also recommended writing one-sentence generalizations to expose connections and organize findings (p. 159). To support generalizations, Hatch (2002) stated that powerful examples can be used to make generalizations come alive (p. 159). Qualitative research does not accommodate the generalizing of findings but some of the concepts of

generalizing can be used in qualitative research studies. For this study the idea that powerful data excerpts can be used to relate findings to other populations is applicable. Thus, powerful data excerpts were selected and marked, and a record of where the excerpts can be found was maintained.

Data Collection and Analysis Method by Research Question

The data collected at different phases of the data collection process were presented in Table 2 with the corresponding research question and appropriate data analysis method used. Following is a discussion of the content of Table 2 beginning with research question one. Hatch's nine steps in typological analysis were employed to analyze the data collected at each phase of the study.

Research Question 1

How do rural southeast Georgia elementary school teachers use identified advantages and disadvantages of cross grade level collaboration to improve collegial interactions?

The questionnaire data were used to further define and refine the problem, purpose, and research questions and further established the direction of the study. Also, questionnaire items one and seven were used to identify an answer to research question one because questionnaire items one and seven require the responder to reflect on the pros and cons (the advantages and disadvantages) of collaborative practices and the present state of teacher collaboration to answer. The answers to questionnaire items one and seven were used to focus the study on the participants' perceptions of what the advantages and disadvantages of teacher collaboration are in respect to their needs, desires, and interests. Also, questionnaire responses were used to confirm responses

collected during the individual and group interview sessions. At the end of the study, the questionnaire was used to determine the professional development and collegial interaction needs, desires, and interests of the teacher participants.

Table 2

Data Collection and Analysis Method by Research Question

Research Question	Data Collection Method	Data Analysis Method
How do rural southeast Georgia elementary school teachers use identified advantages and disadvantages of cross grade level collaboration to improve collegial interactions?	Questionnaire, Interview (Individual and Group), Observation, Archival Documents	Questionnaire Items 1 and 7 Interview Questions 1, 9, 10, 12, 14, 15, 18 Hatch's Nine Steps in Typological Analysis Ethnograph v6.0 and QDA Miner v3.2 (updated to 4.0/to reveal codes)
How do teachers, when they collaborate across grade levels, improve collegial interactions?	Questionnaire, Interview (Individual and Group), Observation, Archival Documents	Questionnaire Items 2, 3, 5, 7, and 8 Interview Questions 2, 3, 4, 5, 6, 18 Hatch's Nine Steps in Typological Analysis Ethnograph v6.0 and QDA Miner v3.2 (updated to 4.0/to reveal codes)
How do students demonstrate improved learning experiences that are based on teacher collaboration?	Questionnaire, Observation, Interview (Individual and Group), Archival Documents	Questionnaire Items 2, 10 Interview Questions 7, 8, 11, 13, 16, 17, 18 Hatch's Nine Steps in Typological Analysis Ethnograph v6.0 and QDA Miner v3.2 (updated to 4.0/to reveal codes)

The data collected from interview question items 1, 9, 10, 12, 14, 15, and 18 at the interview phase of the study were reviewed for patterns, themes, issues, topics, ideas, relationships, cases, events, and concepts. Information collected from individual and group interviews was coded using Ethnograph v6.0 and QDA Miner v3.2 (updated to

4.0). Any patterns, themes, issues, topics, ideas, relationships, cases, events, and concepts that were revealed were analyzed and interpreted as advantages or disadvantages in relation to collaboration. Then, I defined improved collegial interaction according to the participants' responses from the interviews and the questionnaire to see if improved collegial interaction can be connected to the identified patterns, themes, issues, topics, ideas, relationships, cases, events, and concepts or not. If improved collegial interaction can be connected with the identified patterns, themes, issues, topics, ideas, relationships, cases, events, and concepts, then improving collegial interactions would be a matter of engaging those identified patterns, themes, issues, topics, ideas, relationships, cases, events, and concepts.

The data collected at the observation phase were reviewed for patterns, themes, issues, topics, ideas, relationships, cases, events, and concepts. Information collected from observations (during collaborative planning meetings or when observing participants during instructional time.) was coded using Ethnograph v6.0 and QDA Miner v3.2 (updated to 4.0). Any patterns, themes, issues, topics, ideas, relationships, cases, events, and concepts that were revealed were analyzed and interpreted as advantages or disadvantages in relation to collaboration. Then, I again defined improved collegial interaction according to the data (based on participants' interactions with each other) collected from collaborative planning meetings to see if improved collegial interaction can be connected to the identified patterns, themes, issues, topics, ideas, relationships, cases, events, and concepts or not. If improved collegial interaction can be connected with the identified patterns, themes, issues, topics, ideas, relationships, cases, events, and

concepts, then improving collegial interactions would be a matter of engaging those identified patterns, themes, issues, topics, ideas, relationships, cases, events, and concepts during collaborative planning meetings.

The data collected at the archival data phase were reviewed for patterns, themes, issues, topics, ideas, relationships, cases, events, and concepts. Information collected from archival documents (written policies, collaborative planning meeting minutes and agendas, related public documents, related district survey results or questionnaires, or related records) was coded using Ethnograph v6.0 and QDA Miner v3.2 (updated to 4.0). Any patterns, themes, issues, topics, ideas, relationships, cases, events, and concepts that were revealed were analyzed and interpreted as advantages or disadvantages in relation to collaboration. Subsequently, I defined improved collegial interaction according to the data garnered from collaborative planning meeting minutes and agendas, related district survey results, written policies on collaboration, related records and public documents on collaboration to see if improved collegial interaction can be connected to the identified patterns, themes, issues, topics, ideas, relationships, cases, events, and concepts or not. If improved collegial interaction can be connected with the identified patterns, themes, issues, topics, ideas, relationships, cases, events, and concepts, then improving collegial interactions would be a matter of engaging those identified patterns, themes, issues, topics, ideas, relationships, cases, events, and concepts.

Research Question 2

How do teachers, when they collaborate across grade levels, improve collegial interactions?

Questionnaire items 2, 3, 5, 7, and 8 were used to identify an answer to research question two because questionnaire items 2, 3, 5, 7, and 8 by design ask the responder to reflect on what happens during collaboration. To answer, the responder had to evaluate the activities (e.g., how they interact) of their collaborative efforts. The responder's evaluation gives credence to this study because their evaluation of the activities of their collaborative efforts exposes that which is needed. This study was based on the collaborative needs of the participants. The collaborative needs of the participants are what determined how the problem was recognized, the purpose was determined, and the research questions were constructed. Also, questionnaire items 2, 3, 5, 7, and 8 are significant to answering research question two because responders were asked to evaluate their collaborative efforts. An evaluation can reveal that which is right and wrong with an event, program, activity and the like. An evaluation can lead to improvements when that which is right and wrong with an event, program, activity and the like is revealed.

The data collected at the interview (using questions 2, 3, 4, 5, 6, and 18), observation, and archival phase were coded using Ethnograph v6.0 and QDA Miner v3.2 (updated to 4.0). The coded data were reviewed for patterns, themes, issues, topics, ideas, relationships, cases, events, and concepts. Teachers can choose to use the identified patterns, themes, issues, topics, ideas, relationships, cases, events, and concepts during their collaborative efforts to enrich their collegial interactions activities or to evaluate the way they interact to improve their interactions.

The data collected at the observation phase were reviewed for patterns, themes, issues, topics, ideas, relationships, cases, events, and concepts. Information collected

from observations (during collaborative planning meetings or when observing participants during instructional time.) was coded using Ethnograph v6.0 and QDA Miner v3.2 (updated to 4.0). Any patterns, themes, issues, topics, ideas, relationships, cases, events, and concepts that were revealed were analyzed and interpreted as the means to understanding how teachers can improve collegial interactions when they collaborate across grade levels.

The data collected at the archival data phase were reviewed for patterns, themes, issues, topics, ideas, relationships, cases, events, and concepts. Information collected from archival documents (written policies, collaborative planning meeting minutes and agendas, related public documents, related district survey results or questionnaires, or related records) was coded using Ethnograph v6.0 and QDA Miner v3.2 (updated to 4.0). Any patterns, themes, issues, topics, ideas, relationships, cases, events, and concepts that were revealed were analyzed and interpreted as the factors involved in collegial interactions that teachers can use to make improvements in their collegial interactions.

Research Question 3

How do students demonstrate improved learning experiences that are based on teacher collaboration?

Questionnaire items 2 and 10 were used to identify an answer to research question three because questionnaire items 2 and 10 by design ask the responder to reflect on the end results of collaboration and collaborative practices. To answer, the responder had to determine how teacher collaboration and collegial interactions impacted student learning.

The responder had to also determine the connection between improved student learning experiences and teacher collaboration and collegial interactions.

The data collected at the interview (using questions 7, 8, 11, 13, 16, 17, and 18), observation, and archival phase were coded using Ethnograph v6.0 and QDA Miner v3.2 (updated to 4.0). The coded data were reviewed for patterns, themes, issues, topics, ideas, relationships, cases, events, and concepts. Teachers may choose to use the identified patterns, themes, issues, topics, ideas, relationships, cases, events, and concepts of their collaborative practices to create student learning goals that they can use to directly influence student learning experiences. Teachers may possibly decide to also use student learning goals to change the direction of students' learning experiences to improve those experiences. The teacher's choice may well determine the way students demonstrate improved learning experience that are based on teacher collaboration. The answer may well be determined by the data gathered through this case study.

The data collected at the observation phase were reviewed for patterns, themes, issues, topics, ideas, relationships, cases, events, and concepts. Information collected from observations (during collaborative planning meetings or when observing participants during instructional time or noninstructional time) was coded using Ethnograph v6.0 and QDA Miner v3.2 (updated to 4.0). Any patterns, themes, issues, topics, ideas, relationships, cases, events, and concepts that were revealed were analyzed and interpreted as the means to understanding how teachers can impact student learning through collaboration.

The data collected at the archival data phase were reviewed for patterns, themes, issues, topics, ideas, relationships, cases, events, and concepts. Information collected from archival documents (written policies, collaborative planning meeting minutes and agendas, related public documents, related district survey results or questionnaires, or related records) was coded using Ethnograph v6.0 and QDA Miner v3.2 (updated to 4.0). Any patterns, themes, issues, topics, ideas, relationships, cases, events, and concepts that were revealed were analyzed and interpreted as the aspects involved in impacting student learning through collaboration.

Validity and Quality

The primary method of quality control was to triangulate different data sources for the justification of themes that lead to defining the organizational structure necessary for improved collegial interaction, effective teaching, and establishing debriefing and collaboration as professional development (Creswell, 2003, p. 196). The triangulation of data approach was used to validate the data that were "collected through multiple sources to include interviews, observations, and document analysis" (Creswell, 2003, p. 204). Member-checking and/or peer debriefing was used for the interviews and observations. By using triangulation, the reliability and internal validity of the study was strengthened (Creswell, 2003, p. 204). To enhance triangulation, data collection and analysis strategies were "reported in detail in order to provide a clear and accurate picture of the methods used" in this study (Creswell, 2003, p. 204). Triangulation is just one of the strategies to be employed to decrease the threats to quality.

The way teacher effectiveness was denoted in the study could have become a limitation. If teacher effectiveness is defined more inclusively, the definition boundaries of what effective teaching is are expanded thereby extending the possibilities of what teacher effectiveness is. This means that either the study became unstable and compromised or generated a myriad of outcomes prompting future studies. Furthermore, the investigation was conducted with Title I schools. Conducting a study with Title I schools presented the possibility of another limitation.

Title I schools are schools with a higher number or higher percentage of poor children. Financial assistance through state educational agencies (SEAs) is given to Title I schools to help them ensure that all their students meet challenging state academic standards. (Author, personal communication, June 5, 2008)

Focusing on a population of teachers and administrators who teach mostly disadvantaged children could have distorted the data collected but one cannot change the true makeup of a population. Conversely, distorted data can also be bias data (Leedy & Ormrod, 2005, p. 208). Biases in data are limitations. Therefore, member-checking and/or peer debriefing was used to safeguard the reliability and validity of the study.

To ensure that the study is reliable, employment of the following strategies was necessary. An external audit was used when warranted to maintain the integrity of data as it is recorded and collected so that impartiality was not an issue. Also, from the start, possible and known biases were clarified in writing in the proposed study under the heading "Researcher's Role" to avoid the issue of unfairness due to the researcher's expressions of favoritism towards students with whom there is rapport. To guarantee

external validity, rich, thick detailed descriptions to convey more accurately the findings were used (Creswell, 2003, p. 196). The use of rich, thick description to convey findings allows a researcher the chance to present the opportunity for shared experiences through the data collected (p. 196). When the researcher and participants share experiences, they can better understand the findings of the study. Keeping the threats down in this study was an ongoing process during the research.

Role of the Researcher

During the study, I was the researcher and the school counselor at one of the research sites (an elementary school). I have performed the role of school counselor over the past 9 years (once at a high school and currently at an elementary school) in the school system. As school counselor, I execute a standards based guidance program that is the result of collaborating with students, teachers, administrators, and community. I have maintained a professional relationship with colleagues at all participating research sites. Also as school counselor, I have participated in collaborative planning meetings (e.g., the local consortium, regional meetings) with colleagues of the counseling profession and used collaborative practices to provide a strong guidance and counseling program.

To assist the teachers and students, my role as researcher of this study was to first examine collaborative planning documents; make multiple visits to the field (the classroom) to observe how teachers use the knowledge, skills, ideas gained from cross grade level collaboration and collegial interaction to help students experience the process of learning in real time and to observe collaborative planning meetings; and then to actively collect interview data. Also, my role as the researcher, data collector and

observer was to intentionally reduce any possible disruptions that conducting the study may cause. Reducing disruptions was achieved through sameness and commonalities. For example, the participants did not change their daily routines during observations. This approach also means that participants who participate daily in any other learning program activities are expected to continue their daily activities.

Another role of the researcher is to become reporter. To fulfill the role of reporter, the results were also reported as a visual model (in the same PowerPoint presentation used to present the results and findings to participants and nonparticipants; where warranted the visual model was reported in the written report as well) that is called a theoretical model for improving collegial interaction, teacher effectiveness, and student learning. The model is expected to assist teachers and administrators in improving student learning, professional development, collegial interaction, and teacher collaboration. The researcher's role also includes employing "multiple strategies of validity to create reader confidence in the accuracy of the findings" (Creswell, 2003, p. 184). Also, a researcher must obtain permission from the institutional gatekeepers such as the institutional review board, as well as from the school system and school principals. Lastly, "Gaining entry to a research site and ethical issues that might arise are also elements of the researcher's role, as well as, identifying biases, values, and personal interests about their research topic and process" (Creswell, 2003, p. 184). For instance, due to previous experiences working with the administrators, teachers, and students as school counselor, certain biases abound, such as subjective analysis. To deal with the biases, every effort was made to ensure objectivity. In addition, safeguards were engaged

to protect the participants. For example, the research objectives were "articulated verbally and in writing" (Creswell, 2003, p. 202). At times, a researcher even needs to "mask names of people, places, and activities" (Creswell, 2003, p. 185). When warranted, names of people, places, and activities were masked. Within the context of the aforementioned duties and responsibilities, one can conclude that the role of the researcher is arduous and not to be taken lightly.

Summary

This qualitative case study (conducted with participants from different sites) required the integration of data collected through individuals and documents to understand how to use the advantages and disadvantages of cross grade level collaboration to improve collegial interaction. Accordingly, the qualitative case study method was employed to better understand the dynamics of teacher experiences, actions, behaviors, interactions, and intellectual views in collaborative planning meetings that lead to improved collegial interaction, and teacher effectiveness and learning to improve student learning and achievement. Qualitative data collected through interviews and observations were transcribed, coded, analyzed and triangulated and interpreted. Interviews were conducted to examine relationships, topics, issues, themes, ideas, patterns, cases, events, or concepts centering on using debriefing and collaboration as professional development to improve collegial interaction, and teacher effectiveness and learning to improve student learning. Observations served as the means to examine the interactions, behaviors, strategies, mannerisms, and emotional and intellectual acuity that exist and do not exist in an effective and ineffective teaching and learning environment.

Interviews provided the means to investigating the mindsets that exist and do not exist in determining the advantages and disadvantages of cross grade level collaboration that improve collegial interactions.

The impact that effective teachers who learn as a community of learners have on student learning and achievement was one of the points of focus. The main research question for the study is: How do rural southeast Georgia elementary school teachers use identified advantages and disadvantages of cross grade level collaboration to improve collegial interactions? Finding an answer to the question depended profoundly on the role of the researcher as the primary research tool. The participants were the same throughout the study so that the data can be more easily congregated or contrasted. The study was conducted with administrators and prekindergarten through fifth grade teachers (regular and special education teachers) on the campus of the selected elementary schools in rural southeast Georgia. The sample size was 10 consenting administrators and teachers who were drawn using the maximum variation sampling from a population of 50 administrators and teachers. The population of 50 was selected via maximum variation sampling from a total teacher/administrator population of 250. Ethical measures were taken to resolve ethical issues. Member-checking and/or peer debriefing (or peer auditing), and when warranted, an external auditor were used to safeguard the validity and quality of this study.

Data analysis procedures, conclusions, and implications were discussed in the following sections. The research methods of Creswell (2003, 2007); Hatch (2002); Merriam (2002); and Yin (2004) were used to protect the validity and quality of this

study. The data collected were organized, analyzed, and discussed in Section 4. In Section 5, the results, conclusions, implications, interpretation of findings, recommendations, and future research needed were discussed.

The findings of this qualitative case study are limited to a specific population of teachers. The relevancy of findings is limited only by how well the findings relate to similar teacher populations or groups. However, the methodology of this study is applicable to similar studies that examine impact of collaborative planning, collaborative practices, and collegial interactions on teaching and learning.

Section 4: Results

Introduction

Section 4 for this qualitative case study includes the presentation of the collection process and an analysis of the data generated, gathered, and recorded via interviews, observations, field notes, and 2009, 2010 and 2011 archival documents. Any research design deviations that I found I also outlined in this section. The purpose is duly reiterated and delineated in relation to the results. I discuss each of the phases and research questions according to the findings for each case. The three questions addressed in this study are

- 1. How do rural southeast Georgia elementary school teachers use identified advantages and disadvantages of cross grade level collaboration to improve collegial interactions?
- 2. How do teachers, when they collaborate across grade levels, improve collegial interactions?
- 3. How do students demonstrate improved learning experiences that are based on teacher collaboration?

Section 4 is also presentation of emergent and dominant themes, patterns, issues, topics, ideas, relationships, cases, cross-cases, and concepts drawn from triangulated data. In addition, this section includes a triangulation of the methods used.

Overview

This qualitative case study, a composition of multiple data sources and phases, was conducted on the campuses of five elementary schools that used the Tennessee

Model (Tennessee Educator Acceleration Model or T.E.A.M.), School Keys (a data driven system), Georgia Assessment of Performance on School Standards (GAPSS), differentiated learning, and teacher collaboration. Four phases (questionnaire phase, interview phase, observation phase, and archival phase) made up this study. I collected data through interviews, observations, and archival documents from regular education and special education teachers and administrators. The purpose of this study was to identify how the participating teachers use the advantages and disadvantages of cross grade level collaboration to improve collegial interactions to achieve better student performance, PD, teacher effectiveness, and job satisfaction. The primary focus of this research study was on the impact that effective teachers who develop their professional skills within a community of learners have on student learning and achievement. Central to this study was the prospect of gaining an understanding of how teachers improve collegial interactions when they do collaborate across grade levels. Three research questions guided this inquiry.

Framework of Study

Collegial coaching, the general system theory, and systems thinking were the conceptual frameworks used to guide this study. I framed this study around the tenets of systems thinking (interdependence, holism, goal seeking, input and outputs, entropy, regulation, hierarchy, differentiation, equifinality, and multifinality), the tenets of collegial coaching (collaborative development, refinement and sharing of professional knowledge and skills, and developing alternative behavior), and a basic tenet of the general system theory (all systems have particular characteristics no matter the type or

level of organization; Bertalanffy, 1968, p. 32, 38). Teacher collaboration, framed around the aforementioned tenets, is confirmation of the conceptual frameworks aforementioned applicability to this qualitative case study. A detailed discussion of the theories mentioned in this section and the various tenets can be found in Section 2.

Introduction of Participants

The faculty members of the school district in which I conducted this study were primarily European American and female. Therefore, I expected mostly European American females to participate in the study. Of the European Americans who participated in the study, only three of them were male. There were no African American, Hispanic American, Asian American, or Native American participants. African American, Hispanic American, Asian American, Native American, and other ethnic groups (of each participating school) given the opportunity to participate (via an e-mailed invitation with an attached recruitment letter) did not. The participants' ages ranged from 36 to 56. The participants selected via maximum variation were from the rural South. They completed the same or similar teacher education programs through the same or a similar southern university or college. The selected participants remained the same throughout the study. The replacement of any participant transpired at the participant recruitment stage. The participants (teachers and administrators) were from different elementary schools. Prior to selecting the participants for the study using maximum variation sampling, potential participants viewed a PowerPoint presentation of the study via e-mail. Fourteen participants volunteered to participate in the study. Two were fifth grade teachers. One was a special education teacher. Four were academic coaches. Three

were assistant principals and four were principals. Ten of the participants participated as individuals and four participated as a group. The participating teachers and administrators averaged 6 to 29 years of experience. The participants included in this qualitative case study were colleagues experienced in collaborative planning, teaching, and attracting students to learning.

Study Goals, Expectations, Challenges, Limitations, Commonalities, and Variations

In this qualitative research study, I focused on teacher collaboration based on interview, observation, and archival data instead of survey data. The social change goal for this study was to identify how the participating teachers used the advantages and disadvantages of cross grade level collaboration to improve collegial interactions to achieve better student performance, PD, teacher effectiveness, and job satisfaction.

Investigating cross grade level collaboration and debriefing as PD to improve collegial interaction became the third study goal since the topic, cross grade level collaboration and DPD to improve collegial interaction, has not yet been investigated. The fourth goal was to address an identified local school issue and the gap in the literature concerning teacher collaboration. Researchers have not examined the use of identified advantages and disadvantages of cross grade level collaboration and the collaborative needs and desires of teachers to improve collegial interactions to achieve better student performance, PD, teacher effectiveness, and job satisfaction.

As a result of these goals, I expected three outcomes. First, teachers would understand the connection between professional development and collegial interaction in relation to their own learning. Second, teachers would understand that collaboration

through collegial interaction can be used as PD. Finally, teachers would acquire knowledge of the practical approaches that make regularly scheduled cross grade level teacher collaboration possible.

I also expected various challenges. A significant challenge conducting this study was in recruiting committed participants. Prompt participant reply was also a challenge. Eliminating or even minimizing many of these challenges was particularly difficult. One key factor in meeting the challenges of this study was persistence. Sometimes persistence warranted sending several recruitment e-mails to potential participants. Participants also received numerous e-mails requesting a return on completed questionnaires or member-checked interviews and observations. I used many scheduled and unplanned opportunities to collect data via interviews, observations, and archival documents. I was persistent while being flexible, resourceful, persuasive, and inspired.

The limitations of this study were also a challenge to me. For instance, the data collected were limited to the female European American teacher population. Nonetheless, this is a true reflection of the county's population which is 62.0% European American, 26.8% African American, 9.6% Hispanic American, and 0.9% other. Also, conducting the study within a limited time frame was a challenge. I conducted this study in 3 weeks. According to the general academia, longitudinal studies yield the best results but take a great deal of time. Conducting a longitudinal study takes longer than 3 weeks. In addition, confidentiality can also be a limitation. Confidentiality can limit complete disclosure, minimize availability, restrict access, and prevent the continuation of valuable research (American Psychological Association [APA], 2001, p. 387). Participants were

assured that their participation in this study would remain confidential. Any data or information that could potentially identify a participant was not included or was eliminated. Furthermore, the participants' diverse backgrounds as related to how they collaborated and interacted can be considered as limitation. The diverse backgrounds of the participants as related to their experience and how they collaborated and interacted could have been a limitation if the diversity fragmented the findings and thereby hindered the conclusion of the study. Background diversity did not fragment the findings nor hinder the conclusion of the study. Lastly, participant control can also be an issue. In a study, beginning teachers can easily become veterans and veterans can easily become retired teachers. In this study, some of the participants had to be replaced due to various reasons.

In addition to the limitations, there were commonalities and variations surrounding the cases. For instance, at each of the schools, the academic coach conducted teacher collaboration using an activator, an essential question, modeling, practice, task assignments, next steps (implementation and follow up), and administrative/peer observation and evaluation. Also, teacher collaboration at each school was established on AdvancEd Standards for Quality Schools, Standard 3: Teaching and Assessing for Learning. Standard 3: Teaching and Assessing for Learning reads "the school's curriculum, instructional design, and assessment practices guide and ensure teacher effectiveness and student learning" (AdvancEd, 2011, p. 4). Of particular interest is Indicator 3.5 of Standard 3. Indicator 3.5 reads "teachers participate in collaborative learning communities to improve instruction and student learning" (AdvancEd, 2011, p.

4). This indicator is evidence that the ultimate goal of the collaborative is to improve student learning via improved instruction.

The goals that the teachers set for collaboration resulted in variations in how each elementary school community conducted teacher collaboration. Teachers established the goals via an assessment of the individual needs of students and teachers. Teachers also based the goals on the needs of the school's community of learners. The number of teachers participating in collaborative planning at each elementary school varied. Some of the schools had more teachers than others. More teachers bring a greater diversity of ideas, knowledge, and skills to the collaborative. This also means that the number of content teachers participating in collaborative planning also varied. Variations could positively or negatively alter the collaborative process for each school. Further study could allow for the examination of how variations (similar to the aforementioned) impact the collaborative process.

Data Collection Procedures

I initiated the data collection process before collecting any data. The first step began with gaining approval to conduct the research study. This meant attaining proposal approval from the doctoral committee and the University Research Reviewer (URR), completing the proposal oral defense and gaining approval, securing IRB approval (approval # 08-24-11-0109149) to recruit participants and collect data, attaining permission from the superintendent and potential participating principals to conduct the study on each of their campuses, and acquiring a letter of cooperation from the superintendent (Appendix D) and potential participating principals. Step 2 began with

introducing and presenting the study via an oral presentation or e-mailed PowerPoint presentation which included inserts of recorded information (additional study information) from me. The introduction included the purpose and nature of the study, risks and benefits, procedures, expectations, phases and length of the study, and the meaning of minimal risks and informed consent. If participants selected the oral presentation, I secured a date, time, and place for presenting the research study to potential participants. However, participants chose the e-mailed PowerPoint presentation as the means to obtain information about the study. This way the potential participants could view the presentation on their own time or choose not to participate in the viewing. This method of presentation also eliminated uncommitted participants and revealed participants committed to the study from beginning to the end. Also, this method of presentation eliminated the time traveling to each school to present the study. In addition, the aforementioned method of presentation reduced the time taken from work, as well as minimized the participation time devoted to the study. In addition, this manner of presentation allowed for flexibility in participation. Participants attended a Q&A session (via e-mail and at their convenience) after the e-mailed PowerPoint presentation. I afforded all potential participants adequate time to review the research study and ask questions. Step 2 also included recruiting participants and obtaining informed consent.

Participant recruitment began with a recruitment letter (Appendix L) sent to potential participants via e-mail with a study and/or questionnaire consent form (Appendix C and F). Participating participants signed and returned the study and questionnaire consent forms to me via county mail in a sealed envelope or in-person.

Consenting participants confirmed their participation in the study via an e-mailed confirmation notice sent to each person who agreed to participate. Each participant received an e-mail notification at the start of the study. Participants also received notification of the scheduled start of the phases. Also, all of the participants received a schedule confirmation. In addition, I used a study agenda to keep all participants on course. The phases began with the administration of the questionnaire and the collection of archival data, the third and fourth steps of the study. I collected and reviewed archival records throughout the study. Participants participated in interviews and/or observations individually or in a group. When warranted, I used interview and observation follow-up meetings to check or obtain more data. The interview and observation stages were the fifth, sixth, and seventh steps. Hatch's (2002) nine steps in typological analysis helped me to analyze and decipher data. This was the eighth step. Step 9 was the interpretation of the results and findings. For Step 10 of the study, all stakeholders (participants and nonparticipants) received information from me concerning the results and findings at the end of the study. All study participants received a "Thank You" card and e-mail and an email officially informing them of the conclusion of the study.

Discrepant Cases

In the data garnered for each phase of each case, I found variant information. For instance, participants' responses differed on Questions 4 and 8. Item 4 reads "I am familiar with the use of debriefing as professional development," and Item 8 reads "I use cross grade level collaboration opportunities to redefine and regulate professional development/learning standards at the local level." The questionnaire is in Appendix A.

During the interviews, participants presented variant perspectives on defining debriefing. Some asked me to define debriefing while others gave their own definitions. However, the participants gave relevant examples of debriefing as PD. Also, in the observations and interviews, I found more discrepant data concerning the use of collaborative planning meetings as debriefing or as PD. For instance, when I examined archival records, I found that the meeting minutes and responses from interviews contrasted slightly on the goal and use of collaborative planning meetings. A brief discussion of each of the discrepant cases follows.

Questionnaire discrepant data. I used the questionnaire to further define and refine the problem and the direction of the study; to confirm responses collected during individual and group interview sessions; and to determine the professional development, collegial interaction, and collaborative needs, desires, and interests of the teacher participants. However, an existing discrepancy concerning interview responses on the topic of debriefing is worth noting. For example, most participants responded with "agree" as a questionnaire response to Item 4. Item 4 reads "I am familiar with the use of debriefing as professional development" (Appendix A). During the interview sessions, participants responded with a different answer. The participants responded with "define what you mean by debriefing." Some of the participants who defined debriefing for themselves were sometimes unsuccessful in their attempt and were provided clarification and a definition. This indicated that participants did not understand debriefing (sometimes even when clarification and examples were given) but answered as if they did on the questionnaire. One probable explanation is that participants used prior knowledge

to formulate a personal definition of debriefing. Also, a possible reason is that participants were use to a broader definition of debriefing. In addition, participants may have found it easier to respond from their definition of debriefing than from a definition that they were given.

Interview discrepant data. During the interviews, most participants asked me to define debriefing or presented their own definition before answering interview questions 12 and 15. Interview questions 12 and 15 read "how is collaborative planning used as debriefing an advantage and disadvantage" and "what does debriefing as professional development look like at this school" (Appendix E). The participants' responses to questions 12 and 15 revealed a discrepancy within the data. Participants seemed to indicate that they did not have a clear understanding of collaborative planning as debriefing and DPD. However, the participants responded nonetheless with answers that indicated a general understanding of what collaborative planning as debriefing and DPD look like at their school and examples thereof. One probable explanation would be that a clear definition for debriefing as professional development (and debriefing as defined in and around collaborative planning) has not been determined. Without a clear definition, participants debrief differently and this yields different and varying results.

Observational discrepant data. The lack of observational data for School B does not make for a discrepancy. Inconsistent data can cause discrepancies. Observational data for School B do not exist for this study. Therefore, comparisons with observational data from Schools A, C, D, and E to establish discrepancies were improbable. However, observations conducted during Schools A, C, D, and E collaborative planning meetings

revealed a discrepancy in how often participants used collaborative planning as debriefing or as PD or as a cross grade level collaborative. One possible explanation is that teacher needs (as related to teaching effectiveness and student achievement) across schools differ.

Archival discrepant data. After I reviewed archival records, discrepant data became evident. For instance, participants noted during their interview session that the ultimate goal of collaborative planning is to improve student learning experiences and to increase student achievement. However, recorded in the meetings minutes for several different collaborative planning meetings were times when the participants used collaborative planning as faculty meetings to make announcements. Also, indicated in the collaborative planning meeting minutes were down times when participants did not use the time for collaborative planning. During the interviews, participants indicated that they used every minute of the collaborative planning time to collaboratively plan. Also, during the interviews, participants expressed the need for more time. They stated that a lack of time was the number one disadvantage of grade level and cross grade level collaboration. One probable reason for this discrepancy is that participants were eliminating afterschool meetings by combining the two different meetings. Also, there may have been a reduction in agenda items to be discussed for the collaborative planning meetings.

Data Collection Process

Data collected over a 3 week period in four phases included questionnaires, interviews, observations, and archival documents. Thus, outlined in this section is the intended and actual data collection and recording process for this study. The

methodological triangulation approach used assisted me in determining if the findings or results from each of the qualitative methods (interviewing, observing, and analyzing documents) drew duplicate or similar conclusions. The triangulated data approach used helped me to garner information from multiple sources to ascertain the proficiency of teachers and the effectiveness of the learning organization's PD methods.

Phase I: Questionnaire Phase

I conducted the questionnaire phase with the teachers of the initial 10 participants (the individual participants excluding administrators but not academic coaches) the first week to further define and refine the problem and the direction of the study. During the second week of the study and after interview sessions, I administered the questionnaire to the initial 10 participants and the four group participants to confirm responses collected during individual and group interview sessions. The third week of the study I administered the questionnaire to the initial 10 participants and the four group participants to determine the professional development, collegial interaction, and collaborative needs, desires, and interests of the teacher participants. Administrators did not participants the questionnaire phase. The questionnaire (researcher-designed) consisted of 10 open and closed items to which respondents (participating teachers) rated truth of statements using a 5-point scale. The questionnaire is the preferred data collection tool because there is a "rapid turnaround in data collection" (Creswell, 2003, p. 154). I administered the paper and pencil version of the questionnaire (Appendix A). Other versions do not exist at this time and reliability has not been established. I used this questionnaire to define and refine the study but not to collect data.

Before administering the questionnaire, I obtained consent from all teacher participants via a questionnaire consent form. Participating teachers received a questionnaire consent form through county mail. They returned the completed questionnaire in the same manner. Upon the return of all signed questionnaire consents, I prepared questionnaire administration materials and secured a location for individual administrations for participants who preferred completing the questionnaire with me. Participants received an e-mail before each questionnaire administration that informed them of the date, time, and options for the first, second, and third administrations. For the first administration, teachers of the 10 individual participants completed the questionnaire. I conducted second and third questionnaire administrations with the 10 individual participants and the four group participants. Participants who chose the self-administration option received 8x11 envelopes and directions/cover letters for completing (self-administration) and returning the questionnaire. The cover letter also served as an introduction to the questionnaire.

E-mailed follow-ups increased the rate of return on the self-administered questionnaires. The total return of questionnaires was 24. This means that eight participants returned a questionnaire for each of the three administrations. As participants returned questionnaires, I tabulated the Likert-type questions (1-10). Also, I reviewed and sorted comments provided as additional information to Likert-type questions into one or more of the three categories (define/refine the problem/direction of study, confirmation of interview responses, and determines professional development and collegial interaction

needs, desires, and interests). Participants answered questions 1, 2, 7, 9, and 10 as both open and closed (Likert-type and comment questions combined).

Table 3 displays how each of the questionnaire (Likert-type) items were answered. Most of items were answered strongly agree or agree. Also, with each administration, the participants did not change their responses to any of the items. Some of the comments on questions 1, 2, 7, 9, and 10 that respondents wrote at the first questionnaire administration were slightly modified at the second and third administration.

What I found interesting about the data recorded in Table 3 was that the data is a substantiation of the teachers' compliance and "buy-in" concerning the state standards, implementation, usage, and effectiveness of collaboration. Also, I confirmed via the data the existence of a systems thinking perspective shared by teachers concerning collaboration, professional learning, collegial interaction, and teacher effectiveness and student learning. I also found via the data that not all teacher participants agreed or strongly agreed concerning the state standards, implementation, usage, and effectiveness of collaboration. A few of the participants answered disagree or undecided. This indicated that there is yet more work to be done convincing teachers that collaboration is necessary and it works.

In addition, after examining the responses, I noticed that four participants responded strongly agree and four participants responded agree to the item read as regular cross grade level collaborative planning meetings are needed. This indicated that the direction of the study based on the problem earlier stated is valid. Participants

responded to item four in similar manner. All questionnaire participants either strongly agreed or agreed. I charted responses as two strongly agree, five agree, and one undecided.

Table 3

Tabulated Questionnaire Chart

(Key: Q = Question [The number indicates how many answered the same way.])	
RATINGS	QUESTION TOTALS
STRONGLY	Q1=2, Q2=5, Q3=1, Q4=2, Q5=4,
AGREE	Q6=3, Q7=2, Q8=1, Q9=4, Q10=6
AGREE	Q1=5, Q2=3, Q3=6, Q4=5, Q5=4,
	Q6=4, Q7=6, Q8=4, Q9=4, Q10=2
DISAGREE	Q1=1, Q3=1, Q6=1, Q8=1,
STRONGLY	
DISAGREE	
UNDECIDED	Q4=1, Q8=2

Note. For questionnaire questions see Appendix A.

In this lies the discrepancy concerning interview responses on the topic of debriefing. Most participants selected the agree response on the question concerning item four. Item four reads "I am familiar with the use of debriefing as professional development" (Appendix A). Interview responses revealed a different answer. Most participants asked me to define debriefing or they presented their own definition before answering interview questions twelve and fifteen. Interview questions 12 and 15 read "how is collaborative planning used as debriefing an advantage and disadvantage" and "what does debriefing as professional development look like at this school" (Appendix E). Nonetheless, using the questionnaire helped me to determine the PD and collegial interaction needs, desires, and interests of the teacher participants.

The disagree and undecided responses are important in determining professional development and collegial interaction needs, desires, and interests. The agree responses are important in determining effectiveness and standards to maintain for professional development (learning) or the collegial interactions thereof. Therefore, training in DPD may become a professional learning goal for the participants of this study to accomplish.

The questionnaire responses also clearly defined a systems thinking mindset among the participants of this study that is the participants' responses matched. The indication here is that the participants through their thinking behaved as a synchronized system in answering the questions. This may be the case since all of the participating teachers received the same training in teacher collaboration and operate from the same AdvancEd Standards for Quality Schools, Standard 3 in particular. Also, a participant's interview statement "whatever's going on in collaborative, they'll all get" and other similar statements allowed for this conclusion as well.

Four of the questionnaires from the first, second, and third administrations came back with a change made to the position identification section of the questionnaire which reads circle one: a teacher/an administrator. The participants wrote in their current position title to deal with the omission. Corrections to this section transpired before conducting future administrations of the questionnaire. I allowed participants to write in their title as well or when warranted.

Phase II: Interview Phase

The interviews conducted allowed for the examination of relationships, topics, issues, themes, ideas, patterns, cases, events, and concepts centering on using debriefing

and collaboration as professional development to improve collegial interaction, and teacher effectiveness and learning to improve student learning. In addition, interviews provided the means to investigating the mindsets that exist and do not exist in determining the advantages and disadvantages of cross grade level collaboration that improve collegial interactions. The interviews provided me an opportunity to elicit facts, viewpoints, theories, and other qualitative data independent of observations and archival data

The interview phase transpired during the week of the first questionnaire administration. The responses garnered from the second questionnaire administration confirmed responses collected during the individual and group interview sessions. I conducted and audiotaped individual interview sessions first and group interview sessions thereafter. A timer used at all interviews helped me keep track of the 30 minutes allotted for the sessions; however, if participants requested more time, they received more time at a later date. When warranted, the interview lasted an hour. A clock used as the timer when a timer was not available helped interview sessions stay on track. A calendar/time schedule helped me keep up with the day, date, and time of each interview. When each interview concluded, I placed an "X" in the adjacent column labeled completed on the calendar/time schedule. Individual and group interview participants interviewed with me during their noninstructional time.

The interviews began with an introduction (to include the purpose, sponsor, participation and research benefits, researcher expectations, expectations of the participants, and interview proceedings). Thereafter, I asked the interview and probe

questions located in Appendix E. All interview sessions concluded with a thank you and a reminder about follow-up and member-checking. A discussion of the interview findings follows. The interview findings of each of the study participants identified perceptions, practices, commonalities, and differences as central to connecting student learning experiences and teacher effectiveness to grade level and cross grade level collaboration.

Many of the participants perceived grade level and cross grade level collaboration as the means to improving a student's learning experiences via the teacher and the instructional tools (e.g., strategies, practices) used. The purpose of collaboration in collaborative planning establishes their perceptions (or the way participants perceive grade level and cross grade level collaboration). The ultimate purpose of collaboration (and is therefore the main purpose of collaborative planning) is to improve student achievement. All of the participants (the 10 individuals and the group of four) interviewed indicated the ultimate purpose of collaborative planning is to improve student achievement as an answer when asked tell about a typical collaborative planning session, or they responded with a similar answer. This means that teachers committed all of their efforts to fulfilling said purpose. In addition to this assertion, the findings regarding the interviews also revealed that participants perceived collaboration as means to their professional growth, increased and continued effectiveness, and shared sustainable accountability.

Also, I revealed via the interview data instructional practices that may improve and increase student learning. The participants indicated that they are constantly evaluating their students' academic performance in terms of strengths and weaknesses in

collaborative planning meetings to improve instruction, student learning experiences, and their effectiveness. Participants also stated that they look at student work samples, assessments, and academic and behavioral problems to determine what worked and what needs work when deciding how to improve their practices and student learning experiences. The interviewees disclosed other practices, collaborative practices.

Participants stated that teachers collaborate all the time. Participant 2 of School A stated "all of our collaborative practices are an opportunity to grow in instruction. Everything we work on focuses on betterment of the classroom" when asked about cross grade level collaborative practices in the interview.

During individual and group interviews, study participants also acknowledged commonalities and differences that are constant in grade level and cross grade level collaboration planning meetings conducted at their schools. In this section, I discuss time, resources, and purpose as the commonalities and needs, interests, strengths and weaknesses as the differences. Participants cited the lack of time as the most common disadvantage of collaboration. Next to time, participants mentioned the lack of available resources as the second disadvantage. Participants cited purpose as the third most important commonality. All of the participants interviewed stated that the ultimate purpose of collaboration is to improve student achievement. When addressing their needs, interests, strengths and weaknesses, the participants stated that this is where the differences in collaboration are apparent. Schools (e.g., the student population, teacher communities) are different. Collaboration must address those differences to accomplish what collaborators (e.g., teachers) purposed it to accomplish.

Dominant and emergent themes emerged from the individual and group interviews. I discuss these themes later in this section of the study and under findings of each case. Also, in the following paragraphs under findings, there is a discussion of the themes deduced primarily from the interview data collected. The data collected genuinely answered the questions (found in Appendix E) asked during the interviews.

Phase III: Observation Phase

Observations served as the means to examine the interactions, behaviors, strategies, mannerisms, and emotional and intellectual acuities that exist and do not exist in an effective and ineffective teaching and the learning environment. Within the school day, I observed each participant a half-hour to an hour during instructional time in the classroom (and during collaborative planning meetings to observe collegial interaction). For the classroom and meeting observations, I made every attempt to remain the observer and to minimize disruptions. During classroom observations, individual participants observed were teaching a lesson influenced in some way by collaborative planning. For the duration of the collaborative planning meetings of Schools A, C, and D, I observed study participants (the collaborative planning meeting facilitators) conducting the meeting as planning, PD, or debriefing. At School E, the teachers met to plan lessons on their observation day. School B did not have any collaborative planning meetings during the observation phase. The teachers of School B were viewing Common Core Georgia Performance Standards (CCGPS) Webinars during their collaborative planning meetings. I observed teachers of School A one of the days they divided their meeting time between collaborative planning and professional learning. Schools C and D were each conducting

a collaborative planning meeting as professional learning/debriefing the day that I observed.

Through the observations that I conducted I answered the 2nd and 3rd research questions of this study. The accuracy of the observation data was member-checked (or peer audited or peer debriefed) to attain feedback on the accuracy of the data collected, the analysis of the data, and the interpretation thereof. I recorded descriptive and reflective notes about the observations conducted, analyses of observation data, and interpretations of observations completed on the field notes worksheet in Appendix G. Creswell (2007) recommended recording observations to include "both descriptive and reflective notes" (p. 134). Also, I coded observation notes using Ethnograph v6.0 and QDA Miner v3.2 (updated to 4.0). Using the Ethnograph v6.0 and QDA Miner v3.2 (updated to 4.0) revealed codes that helped me identify patterns, themes, issues, topics, ideas, relationships, cases, events, and concepts. Observations focused on the interactions, behaviors, strategies, mannerisms, and emotional and intellectual acuity of observed study participants. Hatch's nine steps in typological analysis helped me analyze the data collected.

I scheduled observations for the third week of the study after completing interviews. However, participants scheduled and rescheduled during the months of October and November according to what worked for them and their schedules. This made scheduling observations and keeping observation appointments difficult because scheduling observations depended on the participants' professional and personal obligations. I conducted a total of seven observations. Three of the observations were

classroom observations. The other four observations were of collaborative planning meetings.

During the observations, I took notes regarding the immersion of practices in the classroom that teachers learn and plan for in collaboration and the immersion of practices in collaboration that teachers use in the classroom. The idea was to make the connection between student learning experiences and teacher collaboration (at grade level and across grade levels). Through the observations, I made the connection between student learning experiences and teacher collaboration through the strategies that teachers acquire in collaboration and pass on to their students. Teachers acquire learning strategies via collaborative planning to improve student learning experiences. They teach the learning strategies to their students. Then, students use the strategies to improve their own learning experiences. This was the process observed.

Other connections can be established between collaboration and student learning experiences. Equally, there are many other variables not directly related to teacher collaboration that can be attributed to improving student leaning. Participant 2 of School A stated "well, it's not 100% a direct result, many other variables do affect it but it helps improve student learning in many ways. It's all positive" when asked "how is improved teacher effectiveness and improved student learning a direct result of collaborative planning" in the interview. The other variables may range from the way students apply the strategies; to how they modify the strategies to meet their learning needs; and to how attracted they are to learning what they need to learn. In the following observations, I

disclosed the connection between student learning experiences and collaboration as well as variables that are not directly related to collaboration where possible.

The first classroom observation was of Participant 3of School A. The participant was reteaching/reviewing a lesson on identifying the main idea of a story. The second classroom observation was with Participant 2 of School A who was also reteaching/reviewing a lesson on identifying the main idea in nonfiction using thinkaloud with a group of students during flex group time. The participant also referenced the use of the Traffic Light strategy (a strategy acquired through collaborative planning) and the use of 4 stations. Students at one of the stations worked on Study Island assignments. Study Island is differentiated, collaborative planning related, and targets specific areas of need. For the third classroom observation, I observed Participant 1 of School A. During this observation, the teacher gave students a problem of the day and asked them to share their answers. To assist students in finding the answer to the problem of the day, the participant used questions to guide students using a technique acquired through collaborative planning called Higher Order Thinking Skills (H.O.T.S.).

The four observations conducted during collaborative planning meetings were at Schools A, C, D, and E. School B conducted webinars when I conducted the observation phase. All of the observations took an hour. I conducted one observation as two 30 minute observations.

The observation conducted at School A was of a fourth grade collaborative planning meeting for 30 minutes. During this time, teachers discussed benchmarks in relation to earth science (the discussion included terminology, order of planets, their

relationship to each other, natural resources, and place vs. unit). Also, teachers discussed test-taking skills (in relation to the process of elimination strategy or P.O.E.). Teachers reviewed, discussed, and evaluated weaknesses through benchmark results. This was their data analysis phase of the session. Teachers discussed retesting to know if the interventions worked. The study participant facilitated the meeting. At the same school for another 30 minutes the next day, I observed the participant conducting collaborative planning as professional learning. The English for Speakers of Other Languages (ESOL) teacher presented strategies for use with ESOL students as well as regular education and special education students.

The observation at School C was of a cross grade collaborative planning meeting with third through fifth grade math teachers for an hour. Teachers brainstormed on how to teach fractions; shared how teachers teach fractions at different grade levels; and posted comments after each explanation of strategies that grade level teachers shared to a chart tablet. Written on the chart tablet was the following reminder. "Remember: You get out what you put in . . ." Teachers also discussed the pros and cons of teaching fractions. The agenda for the meeting read: 5 Minutes - Discuss what strategy you took back and implemented for multiplication/division; and 10 Minutes - Discuss the strategies you use consistently to teach fractions. The agenda also included teachers presenting assignments and discussing next steps. To conclude the meeting, the facilitator presented the next assignment.

The observation at School D was of a kindergarten and first grade collaborative planning meeting. During the meeting, the teachers learned about tiered instruction:

planning for mixed ability groups based on GAPSSI 2.3. GAPSSI 2.3 reads "instruction is differentiated to meet student readiness levels, learning profiles, and interests" (GDOE, 2008, p. 22). The collaborative facilitator asked the EQ (Essential Question): "How do I develop tiered activities for small group direct instruction" at the start of the lesson presentation. The facilitator used a PowerPoint presentation entitled *Tiered Instruction Part 2* to teach the 8 steps that answered the question. This collaborative planning meeting used as professional learning was a look at sample flexible group plans to decide which plans show true differentiation. Teachers also discussed how to develop tiered assignments based on Bloom's taxonomy for flex groups and worked on developing tiered math, reading, science, and social studies flex group assignments. To follow up, teachers developed differentiated flex group plans based on what they learned about tiered instruction and committed to sharing their plans at the next collaborative planning meeting. A differentiated flex group lesson plan checklist given to each teacher served as a guide as they developed their differentiated flex group plans.

The observation conducted at School E was of a group of kindergarten teachers who met to plan their lessons during a collaborative planning meeting. During this meeting, the teachers reviewed the last meeting minutes and followed-up on items due. Teachers used the computer to create activities, compose lesson plans, and design the materials (e.g., handouts) that they use for the lessons. Teachers, the day observed, were sharing ideas about the lessons that they were planning and were reflecting on last week's lessons and results to plan lessons for the next week.

Throughout all of the observations it was evident that collaborative planning impacted teaching and learning by equipping the teacher with ideas, strategies, techniques, methods, best practices, skills, synergism, behaviors, mannerisms, emotional and intellectual acuity, and a perspective conducive to yielding actions that improve instruction and student learning experiences. In contrast, when examining the observations, it was also apparent that other variables influence teaching and learning as well. Nonetheless, variables when identified can be dealt with in collaborative planning as changes to achieve. As Gravetter and Wallnau (2008) stated, a variable is "something that can change or have different values" (p. 4). Therefore, variables can be characteristics, attributes, individuals, organizations, weaknesses, strengths, advantages, and disadvantages.

Also evident were the categories that observations revealed when I reviewed observation data for patterns, themes, issues, topics, ideas, relationships, cases, crosscases, events, and concepts. In addition, by separating the observations into categories, I established a clear relationship, a connection between teacher collaboration and student learning. The three categories that I used to sort the observation data were: Student learning experiences impacted by best practices acquired through teacher collaboration; instructional practices used in the classroom that were acquired through teacher collaboration, and measurable teacher effectiveness and student learning impacted by teacher collaboration. I sorted the aforementioned observations in one or two of the three categories.

Phase IV: Archival Phase

For this study, I used archival data to define and refine, monitor and evaluate teacher collaboration. The archival data for this study also revealed issues in teacher collaboration and established reasons for creating new or keeping existing teacher collaboration methods. The archival data collected for this study helped me analyze how teachers communicate to collaborate. In addition, to substantiate the interview and observation data, I used archival documents.

Within 3 weeks of conducting the study, I collected archival data from the beginning to the end. For this study, I defined archival data as written policies, collaborative planning and meeting minutes and agendas, related district survey results or questionnaires, and related records. I coded archival phase data using Ethnograph v6.0 and QDA Miner v3.2 (updated to 4.0). From the data that I collected and reviewed at the archival data phase emerged patterns, themes, issues, topics, ideas, relationships, cases, cross-cases, events, and concepts.

Most of the archival data collected is in the form of agendas and collaborative planning meeting minutes. The agendas outline the discussion contents of each of the collaborative planning meetings. The minutes detail decisions, discussion, collegial interaction, proceedings, actions taken, summaries, follow ups, and next steps. Therefore, the focus of the collaborative planning meetings can be found in the contents of the minutes and on the agendas.

Listed on the August, September, and October agendas of School A 2011were the topics: organizational culture, writing norm statements, covenants, SMART Goals,

identify strengths and weaknesses, identify changes in teaching strategies, benchmark data analysis protocol, differentiated instruction using World-Class Instructional Design and Assessment (WIDA) and Georgia Professional Standards (GPS) standards, and solidifying the learning. The 2009, 2010, and 2011 agenda topics of School B were: standards-based instruction, emergent to proficient educator, a framework to plan lessons, an organizing framework to engage learners during instruction, guided practice, assisted practice, independent practice, grouping/differentiation, and formative assessments. For School C the 2009, 2010, and 2011agenda topics were: protocol and norms and covenants, C.R.C.T. data collection, components of a successful unit, best practices over the past several years, missing standards within units, Response to Intervention (RTI) expectations, formative and summative assessment, target areas, resources, balanced scorecard, self-efficacy in lesson plans, and goal setting. Topics included on the 2009, 2010, and 2011 agendas of School D were Bloom's taxonomy, tiered math and reading flex groups, tiered science and social studies flex groups, tiered activities for differentiated instruction, teaching vocabulary words-looking for patterns, C.R.C.T. data analysis and reflection, ways to differentiate, using written commentary to help student master the standards, research-based instruction, RTI process and H.O.T.S., and Say-Mean-Matter technique for instruction. The topics addressed in the collaborative planning meetings of School E were: norms and covenants, professional learning protocol, look at student work, discuss next week's lesson plans, standards-based classroom, unit revisions, math GPS content changes, C.R.C.T. data and goals, math fact fluency, and

keeping students engaged. As indicated via the agenda topics of Schools A, B, C, D, and E, teachers either addressed directly or indirectly student learning experiences.

The collaborative meeting minutes provided documentation of the collegial interactions that transpired and how teachers followed up to improve their instructional effectiveness and student learning experiences. For instance, the fourth grade collaborative planning meeting minutes for School A dated August 23, 2011 under notes for discussion read "discussed how to hold students accountable for the learning." The fourth grade collaborative planning meeting minutes of School A dated September 21, 2011 read "discussed learning needs, learning strategies, categories of strategies." Other minutes recorded for the collaborative planning meetings of School A and collected for this study were discussion notes for grades kindergarten, first, second, third and fifth. For kindergarten, the notes taken on September 27, 2011 read "everyone shared their self-efficacy strategies that they are implementing in their classrooms." Third grade teachers' collaborative planning meetings notes recorded on September 1, 2011 read "we viewed goal setting ideas and discussed the importance of them." All of the notes confirmed the purpose of collaboration and document collaboration as PD and debriefing.

Also recorded in the collaborative planning minutes of School A is a note about the viewing of a PowerPoint entitled "Top Ten + 6 Summarizing Ideas: Solidifying the Learning" dated November 7, 2011. From the presentation, kindergarten through fifth grade teachers received information on the strategies (displayed in a three column table) that impact student achievement. The three columns have the following labels. Category was the label of the first column. Rank and percentile gain were the labels at the top of

the other columns. The categories were identifying similarities and differences (rank 1 percentile gain 45), summarizing and note-taking (rank 2 percentile gain 34), reinforcing and recognizing effort (rank 3 percentile gain 29), homework and practice (rank 4 percentile 28), and nonlinguistic representations (rank 5 percentile gain 27). The recorder cited at the bottom of the table the words "based on Robert Marzano." The aforementioned PowerPoint presentation was one of many examples documenting collaborative planning as PD (or professional learning).

Collaborative planning meeting minutes recorded for School B also document collegial interactions that focus on improving teacher effectiveness and student learning experiences. When kindergarten teachers met on September 13, 2011 for collaborative planning, they met to share teaching strategies. They talked about ways to motivate students to learn and to engage students in learning. The first grade teachers on the same day met to share instructional strategies for engaging learners. They discussed activators, summarizers, and components of a lesson. Second grade teachers used collaborative planning as professional learning. The teachers discussed the 3 components of instructional framework (opening, work, and closing). The third grade teachers on September 13, 2011 discussed instructional problems at their collaborative planning meeting. Fourth grade teachers used September 13, 2011 to hold collaborative planning as professional learning. During the meeting, teachers compared previous learning focus techniques to the instructional class keys framework objectives. Fifth grade teachers also used their collaborative planning time as professional learning time during which they discussed class keys in terms of curriculum and planning. The essential question for all of the meetings on September 13, 2011 was: "How does using an organizing framework help us engage learners during instruction?" All of the teachers on September 13, 2011 viewed a PowerPoint presentation entitled "Instructional Strategies for Engaging Learners." Thus, it can be concluded that improving teacher effectiveness and student learning experiences are the focus of every collaborative planning meeting at School B.

Documented in the collaborative planning meeting minutes at School C were numerous accounts of teacher discourse about improving instruction and learning. For instance, on August 23, 2011, teachers discussed including self-efficacy and H.O.T.S.in lesson plans to impact instruction and learning by improving how students think and feel. Teachers also discussed planning lessons to include components from the nonnegotiable list or the list of lesson expectations. Teachers as noted in the minutes on October 4, 2011 "discussed and/or reviewed missing standards within the subject area units." This is important because teachers can address those missing standards to improve instruction and learning. On September 27, 2011, teachers discussed analyzing ACCESS data for differentiated instruction. The minutes confirmed that the teachers of School C and the other schools of this study know that they need the opportunity to talk about their practice, to evaluate what they do, and to learn what works to improve instruction and learning and the minutes are documentation that they make every effort to do so.

The collaborative planning meetings at School D also substantiated the purpose of collaboration. Recorded in the meeting minutes are several instances of teachers discussing how to improve instruction and learning. For instance, on January 14, 2009, teachers reviewed H.O.T.S. research. On October 28, 2010, teachers discussed

differentiation through learning styles and shared student work samples to determine the effectiveness of instruction and the impact on learning. August 23, 2011, teachers reviewed C.R.C.T. data and discussed strategies/techniques that contribute to student success. They also discussed way to differentiate and planned for flex groups. September 20, 2011, the teachers discussed developing tiered assignments for flex groups based on Bloom's taxonomy. October 25, 2011, teachers reviewed steps for generating tiered assignments. The minutes of School D and other schools provide the evidence that teachers are sharing ideas, teaching each other, observing one another, and working to solve problems in instruction and learning at their schools to improve how they teach and how their students learn.

The collaborative planning meeting minutes of School E provided further evidence that the ultimate purpose of collaboration, improving instruction and learning, also defines the activities of teacher collaboration. For instance, on March 11, 2009, teachers discussed ways to improve instruction and learning by examining student work samples to determine necessary instructional changes that can improve learning experiences. Teachers also shared on November 11, 2009 that some students were progressing where as others were in need of intervention based on recent test scores.

Also, teachers discussed the writing rubric in relation to student work samples on January 13, 2010. On August 24, 2011, teachers shared ideas and the organizational writing traits that they previously modeled with their students. Based on the minutes of School E and the minutes of the other schools of this study, teachers as a result of said actions learned how to improve teaching and learning through collaborative planning activities.

Therefore, activities via their designed obtained desired result, to improve instruction and student learning experiences.

In all of the collaborative planning meetings of Schools A, B, C, D, and E, the minutes recorder noted three or all of the following behaviors listed here as collegial interaction, sharing ideas, learning from one another, shared accountability, analyzing data, research, observing, debriefing, and reflective practice in the minutes as key actions taken to achieve improved instruction and learning. Also, I noted in the meeting minutes the perception that teachers have concerning the focus of collaborative planning meetings. As established through the perception of teachers and as recorded in the minutes, collaborative planning meetings are student-teacher centered. Based on what teachers discussed in the meetings as recorded in the minutes, this researcher's perception is that collaborative planning meetings are student focused to be teacher focused. The perception thus conveyed in the minutes is that students are the most important factor in improving teaching and learning.

Findings of Each Case

Five cases bound in the present time, place, and setting constituted the scope of the study. Each case was defined as a teacher community situated in an elementary school in southeast Georgia. The school district has eight elementary schools. Five of those schools participated in the study. Each participating school became an alphabet and a case number. School A/Case 1 has more than 391 students, with 27 full-time teachers. School B/Case 2 has a population of 784 students, with 53 full-time teachers. School C/Case 3 has 517 students, with 37 full-time teachers. School D/Case 4 houses 449

students, with 36 full-time teachers. The population of students at the four remaining schools is 401 at one, 288 at another, 622 at yet another, and 357 at the last school. Between the four schools, there are 115 full-time teachers. I chose School E and Case 5 from the four. School E/Case 5 has a population of 357 students, with 27 full-time teachers.

All the elementary schools made AYP and have endorsed the School-wide Title I program. Schools that have endorsed the School-wide Title I program have identified areas of greatest need, strengthened the core academic program, and increased the amount and quality of learning time (Coffee County Schools and Title I, 2012). The aforementioned schools are also meeting the needs of underserved populations, addressing the needs of all, but particularly low-achieving students, recruiting highly qualified teachers to instruct, providing professional learning for teachers, and using parent involvement strategies (Coffee County Schools and Title I, 2012). The schools lie within a southeast Georgia county of approximately 37, 850 people. The median household income in the county is \$49, 536. Thirteen percent of the county's residents (age 25+) hold a college degree (Public School Review, 2012). The county has 62% European American residents, 26.8% African American residents, and 9.6% Hispanic residents and 19% of the residents are below the poverty line (City-Data, 2012).

Case I: School A

Questionnaire Phase

School A participants had two options for completing the questionnaire each of the three times I administered the questionnaire. Any of the respondents taking the

questionnaire in this study could complete the questionnaire with me or via self-administration. The respondents at School A chose to complete the questionnaire via self-administration. Six participants completed the questionnaire. However, I did not use data collected through the questionnaire to answer the research questions. As previously stated, I used the questionnaire to further define and refine the problem and the direction of the study; to confirm responses collected during the individual and group interview sessions; and to determine the professional development and collegial interaction needs, desires, and interests of the teacher participants.

The questionnaire participants of School A responded to the Likert-type questions in the following manner. One participant responded strongly agree to question one. Three responded agree to question one. Thus, four participants did not see a need to change the collaborative process. Whereas, one responded disagree to question one. Therefore, this participant saw a need for change. To question two, two participants responded strongly agree and three responded agree. Hence, for five of the participants, collegial interaction was important in promoting improved professional learning, teacher competency, and student achievement. On question three, one participant responded strongly agree and four responded agree when they responded to the questionnaire item "teachers and administrators utilize cross grade level collaboration on a regular basis." For question four, one participant responded strongly agree; three responded agree; and one responded undecided. The participants indicated via their responses various understandings of DPD. However, the same participants who answered question four differently answered similarly to question five. To question five, one participant responded strongly agree and

four responded agree. They were confirming that they used collaborative planning as professional development. On question six, two respondents answered strongly agree and three answered agree. Once more, participants confirmed that they frequently used cross grade level collaborative practices. For question seven, one participant replied strongly agree and four responded agree. The participants indicated via their responses that they recognized that the collaborative process is always in need of improvement. To question eight, three replied agree and two replied undecided. The participants' responses were interesting since some participated in using cross grade level collaboration opportunities to redefine and regulate professional development/learning standards but others knew nothing of the practice. On question nine, two responded strongly agree and three answered agree. This means that all of the participants recognized the need for collaborative planning. For question ten, three participants answered strongly agree and two replied agree. Accordingly, the participants acknowledged that student achievement is improved through effective collegial interaction. The questionnaire can be found in Appendix A of this study.

Participants provided written responses (brief statements) to open-ended questions. One participant stated on the first and third questionnaire administrations "collaboration with 3rd and 4th grade teachers is very beneficial because I know what is expected of the students in these grades and I can plan accordingly." For the second administration, the participant stated, "I love to plan with other teachers. Sometimes I feel I don't have enough time to plan with them as much as I would like to." A second participant stated:

Cross grade level planning is very beneficial. It helps the teachers understand what is expected of their students in future years. It also is a great oppurtunity [sic] for teachers to see strengths and weaknesses. Teachers are able to share ideas and carry back helpful strategies to implement in their own classrooms.

A third participant stated

. . . in order to understand what other grade levels need to know and are expected to learn cross grade level planning meetings are needed. Teachers share ideas and helpful strategies. The practices are effective because they are targeting weaknesses that were identified. I am learning new strategies that help with student achievement, as well as share ideas. During collaboration we are taught new strategies, as well as resources we can use. Useful strategies are reviewed. Self-evaluation is helpful in discovering strengths and weaknesses. Weaknesses are being addressed in order to improve teacher competency.

A fourth participant explained on question one with "I am not satisfied only because there is always room for improvement. I think we do a great job with collaboration, but we can make improvements." On question seven, the fourth participant replied "data is analyzed and used to inform instruction. Professional development is provided and monitored. Teachers have an opportunity to work together to improve instruction and increase student achievement. Best practices are shared and modeled." To question nine, the fourth participant responded with the written response "they are needed to ensure that instruction is being supported above and below grade level, and to eliminate gaps and misconceptions in curriculum." The participant was responding to the question item

"regular cross grade level collaborative planning meetings are needed." For question 10, the fourth participant wrote "effective collegial interaction involving the use of data to inform instruction and determine interventions for struggling students has been shown to increase student achievement." On the second administration, the fourth participant replied differently. This time to question one, the participant replied "I wouldn't say I am satisfied because no matter how well we may think . . ." For the second question, the participant answered:

I'm not sure this makes sense. We can all learn from each other. It's just like it is in the classroom with our students, they often learn more (or better) from peers than from the teacher. Peers are on a level playing field and can explain in terms easily understood.

On the ninth question, the participant responded with "this is true, especially with Common Core looming in our very immediate future, where quite a few standards have crossed grade levels." On question 10, the participant stated "sharing knowledge, strategies, skills, and different experiences and expertise is necessary for improving student learning." For the third administration, the fourth participant had nothing to add or change. Accordingly, the participant wrote "nothing to add or change" at my request. The fifth participant answered question one with the reply "meetings are focused on planning and learning rather than focusing on admin. c management details." On question two, the participant stated in writing that "collegial planning allows teachers to work together thus broadening their knowledge and allows learning strategies other teacher [sic] successfully implement." This participant also explained that "it helps connect

teacher learning with student learning therefore making a positive impact on student achievement." Also, the fifth participant wrote "it ensures that skills are taught in all grades and shows teachers how knowledge is continuously developed by building on the skills taught prior to and afterwards" as an answer to question nine. For question 10, the participant replied "schools that connect teacher learning to student learning often have a better chance of making a positive impact on student/school achievement."

Interview Phase

Five participants participated individually in the interview sessions that I conducted at School A. The interviews conducted elicited "the understandings and experiences of the interviewees in ways that speak to the research problem" and questions (Rubin & Rubin, 2005, p. 156-157). I transcribed, coded, and analyzed individually recorded interviews. Participants member-checked the transcribed, coded, and analyzed interviews. I reviewed data collected from the individual interview sessions for patterns, themes, issues, topics, ideas, relationships, cases, events, and concepts. The following excerpts taken from those sessions provide the data that substantiate themes and relationships.

For instance, the theme that alignment directly affects teaching and learning emerged from an excerpt provided by Participant 1 of School A. In the interview session, Participant 1 stated:

If you work with teachers that you get along with it is a direct effect on your teaching. It is hard to work with people you cannot get along with. A positive atmosphere has a direct effect on the student learning.

Here, the participant defined an alignment between a positive atmosphere and teaching with impacting student learning. Teachers can find an alignment between a positive atmosphere and teaching that can impacts student learning through collaboration. Collaboration allows for the building of a positive atmosphere and alignments. Participant 3 stated, "Well, I believe that it improves student learning because what we learn like I said we try to take it back to the classroom and apply it in the classroom." This is alignment of teacher learning and student learning experience provided by the teacher. Participant 4 stated, "As a result of teacher collaboration, looking at data, analyzing strengths and weaknesses, and creating smart goals, there has been a greater alignment between collaboration and student achievement." Here, the participant clearly defined the theme of alignment. Also, Participant 4 stated, "Teachers work together, on grade level teams, to plan instruction. In 3rd-5th grade, content-area teachers meet weekly with content-area teachers at other schools." The goal of teachers who work together in this school system is to align curriculum, instruction and learning. Participant 5 stated, "Cross grade level collaboration is advantageous to instruction. It allows teachers to discuss standards and strategies to use to close gaps that may occur." Closing the gaps may well lead to the alignment of curriculum, instruction and learning.

Collaboration also provides an atmosphere conducive to building professional relationships. The theme that professional relationships may well produce effective teachers who can improve student learning also emerged from an excerpt provided by Participant 1. Participant 1 stated:

I feel you are a better teacher when you plan with other teachers. I feel so much better when I plan with the other 5th grade teachers in my county. I get ideas from them and they get ideas from me. We talk about what works and what does not work in our classes.

Furthermore, Participant 1 stated, "I think planning with other teachers makes you a more effective teacher." An educator's professional relationship can be defined around helping teachers help each other become effective teachers. Also, Participant 1 stated, "Then as a 5th grade team we meet daily to discuss problems." In a professional relationship, teachers do discuss problems and how to resolve them. As Participant 2 stated, "It encourages team work, and it takes a team to teach a child. Not just one person." Here, the teacher defined the professional relationship around being a team and the support attain through team effort. In addition, Participant 2 stated:

Over the years it has become very important to work closely with your fellow teachers. Even though in fifth grade we teach different subjects we still share the same students. It helps to discuss the different problems that you have with different students. Maybe one thing that works with you might help another teacher with this same student.

Working closely with other teachers in the profession also defines what a professional relationship entails. Participant 3 stated, "We share ideas, and we talk about our upcoming lessons." A professional relationship includes the sharing of ideas and discussion of plans (lesson plans). Participant 4 stated, "Professional development occurs weekly during collaboration. As teachers learn together, they collaborate and define what

it (best practices) looks like at their grade level." A professional relationship involves collaboration and the exchange of knowledge, wisdom, and experience. Participant 5 stated, "Teachers working together to build a stronger curriculum...units to increase student achievement." The teacher confirmed the theme of professional relationship here by stating that teachers are working together to build a stronger curriculum. In addition, Participant 5 stated, "Teachers work together to improve their instruction and student achievement." Participant 5 also stated, "Collaborative planning gives teachers a support group to work together to build effectiveness instruction, state requirements and student achievement." Here, the participant defined collaborative planning as the means to working together to build a professional relationship centered on effective instruction to improve student achievement.

The data also yielded another theme, a theme of accountability. In short, teachers held accountable for effective teaching and improved student learning use collaboration to receive the professional learning and support they need. The theme of accountability arose out of the data of which five participants made contributions. As a contribution, Participant 2 stated, "We follow agendas, and we set rules and we norms to go by for each meeting, and each meeting always follows the same protocol. So, that helps." In addition, Participant 2 stated, "We follow . . . you set the guidelines for that meeting and so everyone has to stick and follow the guidelines." Teachers use guidelines to create an atmosphere of accountability. Participant 3 stated, ". . . we start off reading the norms then we go over our promise statements that we've made . . ." The norms act as rules and standards. Here again the theme of accountability is evident. Participant 4 stated,

"Teachers are supportive of each other. There is very little, if any, competition among teachers. I think that a shared vision and mission, as well as development of norms and covenants has [sic] helped." The use of norms and covenants confirm the importance of accountability and evidence of the theme of accountability. Participant 4 also stated that "an agenda is used to keep everyone focused. Norms and covenant [sic] are followed to keep everyone prepared, on task, responsible, and involved." Thus, an agenda also keeps teachers accountable and provides further confirmation of the theme of accountability.

As evident in the excerpts aforementioned, teachers intentionally aligned collaboration with improving and increasing student learning. Also, revealed in the excerpts is an apparent attention to collegial interaction (shared communication), team effort (working together), accountability (the idea of being responsible for the success of all students), effective instruction, peer to peer learning, reciprocal relationships (also described as close, positive, and supportive), data usage, and analyzing strengths and weaknesses to decide on where teaching and learning need improvements. From the excerpts, patterns, themes, issues, topics, ideas, relationships, cases, events, and concepts (such as shared vision, supportive leadership, professional practices, and collective learning) also began to emerge which I discuss later in this section and in Section 5.

Observation Phase

Through four participant observations, I examined the interactions, behaviors, strategies, mannerisms, and emotional and intellectual acuity that exist and do not exist in an effective and ineffective teaching and learning environment at School A. The four participants are members of the teacher community of School A. I observed the four

participants either in their classroom or during a collaborative planning meeting for an hour or during two 30 minute observations. I discuss participants referred to as Participants 1, 2, 3, and 4 in this section in relation to their interactions, behaviors, strategies, mannerisms, and emotional and intellectual acuities associated with the classroom and collaborative planning setting.

Participant 1 has years of teaching experience. The participant began working as a paraprofessional before accepting a teaching position. After 1 year of teaching at another school in rural southeast Georgia, the participant accepted a teaching position at School A. I observed Participant 1 in the classroom teaching a math review lesson on least common multiples. The lesson included scaffolding for differentiated learning. The study participant used questions to guide students using the H.O.T.S. technique and praised students with comments such as "You are on the right track." The participant conducted the math review using the active board upon which was an essential question. The essential question for the review read "E.Q.: How does review help me be a better math student?" The lesson continued with the study participant asking P.O.E. questions such as "Can I eliminate . . .?" Also, the participant asked, "Why did you say b?" Throughout the lesson, the participant explained and assessed to bring her students to a clear understanding for mastery. The participant completed the lesson with a summary.

Participant 2 has taught for years and has a master's degree. This participant was an accomplished and highly regarded teacher as evidenced by several awards over the past few years. When I observed Participant 2 teaching a group of students in the classroom, the lesson taught by the participant focused on identifying the main idea. The

lesson included scaffolding for differentiated learning. Other groups observed worked independently and on LA/English activities and games. During the main idea lesson with the group, the participant asked students for a "'thumbs up' if you feel good about understanding what the main idea is and a 'thumbs down' if you don't understand." The participant referenced the use of the Traffic Light strategy. Participants learned the strategy in collaborative planning. The participant used the Traffic Light strategy to help students stop and look at the "before I read" checklist; to slow down and look at the "while I read" checklist; and to look at the "go after I have read" the checklist. Also, the participant asked H.O.T.S. questions to extract best thinking practices on behalf of the students.

Participant 3 has several years of teaching experience in the public and private education sector. The participant has taught both regular and special education students. Thus, this participant works with a diverse group of students cognitively, physically, and socially challenged and uses various resources (e.g., community ceramic class and swimming lessons) to help the students reach their fullest potential. During a classroom observation of a lesson taught by Participant 3, Participant 3 expressed a deep passion for helping students. Throughout the lesson, the participant focused on helping students find the main idea in a story. The lesson included scaffolding for differentiated learning. In addition, the participant anchored instruction to everyday life and things familiar (associative learning) to the student.

For the observation of Participant 3, I mostly documented the participant's actions and interactions with the students. The objective to get the lesson taught is clear.

However, there is emphasis on helping the students learn through understanding via questions and discussion. Whether the teacher acquired any of the strategies used in the execution of the lesson through collaborative planning or not, remains unclear at this point. In the interview, the participant stated, "Well, it's to me again like I said when we take the strategies back to the classroom. It increases our student achievement, our student learning, you know." This statement may well indicate that the strategies used at the time of the observation the participant attained through collaborative planning.

Nevertheless, the statement does corroborate the use of strategies in the classroom acquired through collaborative planning thereby connecting teaching and learning to teacher collaboration. Accordingly, the students' acquisition of the concepts of the lesson depends on the strategies used. The participant of this observation used self-efficacy and differentiated learning strategies.

Participant 4 has many years of teaching experience. The participant leads and participates in vertical collaboration at the county level. The parent resource center is one of this participant's responsibilities. Managing the data room, collegial coaching, and facilitating collaboration consumes most of this participant's time. I observed Participant 4 in two different collaborative planning meetings (30 minutes each) as the facilitator. During the first observation of Participant 4, the participant was conducting a discussion with fifth grade teachers about benchmarks in relation to earth science (the discussion included terminology, order of planets, their relationship to each other, natural resources, and place vs. unit). The teachers discussed test-taking skills (such as P.O.E.). The teachers reviewed, discussed, evaluated weaknesses through benchmark results. This was

their data analysis phase of the session. The teachers discussed re-testing to know if the interventions worked. The teachers discussed seeking consultation about benchmarks, pacing guides, standards, and benchmark tests. For the second observation, an ESOL teacher discussed strategies for ESOL and regular education students and the six ACCESS stages (reaching, bridging, examining, developing, beginning, and entering) with second grade teachers during a collaborative planning meeting which also served as professional development.

At the conclusion of the observation, I generated a transcript and used Ethnograph v6.0 and QDA Miner v3.2 (updated to 4.0) to code it and then asked the participants to member-check it. When examining the observation for patterns, themes, issues, topics, ideas, relationships, cases, events, and concepts, a pattern and themes emerged. The pattern emerged out of the participants' instructional discourse and performance.

Participant 4 used meaningful conversation (instructional discourse) with the teachers.

The themes emerged out of interview responses, observations, and archival data focused on topics such as debriefing, collegial interaction, the collaborative process, teacher effectiveness, and student achievement. Therefore, the patterns and themes focused on participants' actions and interactions with teachers and students.

Archival Phase

Reviewing archival data allowed me the opportunity to analyze and interpret how teachers defined, refined, monitored, and evaluated teacher collaboration to improve instruction and learning. When examining archival data, I looked for potential issues in the collaborative process at School A and a reason for creating new or keeping existing

teacher collaboration methods. Also, reviewing archival data helped me analyze how teachers communicate to collaborate. Collaborative planning meeting minutes and agendas and excerpts from School A's continuous improvement plan (or CIP) were the archival documents collected and analyzed.

The agendas examined were all dated 2011. Agendas from previous years were inaccessible. Some of the agenda topics were Developing Norms and Covenants, SMART Goals, Benchmark Data Analysis, Making Student Learning Maps Interactive, and Solidifying the Learning. From these topics, a connection can be made between collaboration and learning, and the topics can help identify the means to improving collegial interaction. The agendas can also provide a quick assessment of the collaborative planning process. The collaborative planning agendas of School A begin with an essential question and listed thereafter are several key items of focus. The items listed are: review grade level norms and covenants, review next steps, activator, opening, work session, closing, and next steps. An agenda may well be the best way to revise the collaborative planning meeting and process.

I also examined collaborative planning meeting minutes. Through this examination, I realized that the minutes may well be the tool to use when identifying potential issues and defining and refining, monitoring and evaluating teacher collaboration. In the minutes, I also noted how teachers communicate to collaborate, how teachers interact, how teachers collaborate, and how effective the collaborative process is or can be. The minutes recorder reported minutes taken at the meetings of School A on a form. To complete the form, meeting participants shared the results of "next steps" from

the previous week, discussed agenda topics, and concluded with questions (What are your next steps? What do we want to happen in the classroom?) and a timeline. The K-5 collaborative planning meeting minutes transcribed on the forms dated 8/23/11, 8/29/11, 9/1/11, 9/6/11, 9/21/11, 9/26/11, 9/27/11 included discussion on self-efficacy. The recorder also noted discussion on differentiated strategies and instruction in the minutes for 8/23/11, 9/6/11, 9/26/11, and 9/27/11. With so much emphasis on self-efficacy and differentiated instruction, collaborative planning became professional learning. Also, in collaborative planning, teachers participate as expected. Therefore, teachers participate as expected in collaborative planning as professional learning (or professional development) as well. Teacher participation includes sharing, reflecting, and conferring with other teachers to become effective. This is how teachers communicate to collaborate.

The last archival document examined was the continuous improvement plan (School A's CIP). After examining the CIP for information that substantiates using collaboration to enhance teaching and learning, Goal III of the plan (*Program Effectiveness & Resource Management* specifically Goal III/c which reads *Improve instructional engagement and processes*) offers the confirmation sought. Goal III/c reads:

Focus on weak areas based on CRCT domains in Reading, ELA, Math and Science during Collaboration to enhance instruction. Conduct 3 LT (Leadership Team) Focus Walks to ensure Standards-based Instruction in all classrooms.

Adm. Team 5 X 5 monthly...debrief...address issues. (School A CIP, 2012, p. 4) This excerpt from School A's CIP indicates that collaborative planning participants will dedicate time and effort to addressing weak areas based on CRCT domains in Reading,

ELA, Math and Science to enhance the instruction. If the goal is to enhance instruction, the goal must also be to increase a student's performance in those areas. The excerpt also connects the work (to be focused on the weak areas based on CRCT domains in Reading, ELA, Math and Science) that the participants will perform in collaboration to enhancing instruction. If the goal is to enhance instruction, the goal must also be to improve teacher effectiveness and student learning.

Summary

The interviews, observations, and archival data revealed that the teacher community of School A is a venue for new learning, continuing intellectual development, cultivating leadership, and improving student learning and classroom practices. Observations confirmed that teachers consistently practice differentiated instruction as the means to meeting the instructional and learning needs of the students. Observations also substantiated the use of student self-efficacy strategies (e.g., goal setting, follow through, and attainment) to help students succeed in school and in life. Through the interviews, study participants reported that teachers regularly hold collaborative planning meetings on Tuesdays to analyze areas of need and data and to develop strategies, review units and instruction. Participants also stated that teachers hold common planning on Thursdays to address content area effectiveness at grade level. Also, the participants stated that teachers have vertical planning on Wednesdays to address content area effectiveness across grade levels, and use professional development during collaboration to address the learning, intellectual, and leadership needs of the teacher to promote effectiveness. However, study participants stated that teacher do not reportedly conduct

cross grade level collaboration where grade level teachers meet with above grade level and below grade level teachers regardless of content area taught on a regular basis.

The archival data that I collected from School A consisted of records of the events, actions, measures, and procedures taken. Through the archival data of School A, I connected collaboration to improving student learning, instruction, and collegial interaction through focusing on needs and weaknesses. As indicated earlier, a focus on student and teacher needs and weaknesses based on CRCT domains in Reading, ELA, Math and Science connects collaboration to improving student learning, instruction, and collegial interaction. Using qualitative analysis software, Ethnograph v6.0 and QDA Miner v3.2 (updated to 4.0), I coded data collected from archival documents (collaborative planning meeting minutes and agendas, related district survey results and excerpts from School A's continuous improvement plan), interviews, and observations. Accountability, professional relationships, and alignment were a few of the codes identified.

Case II: School B

Ouestionnaire Phase

A participant at School B had two options for completing the questionnaire each of the 3 questionnaire administrations. The respondent could have completed the questionnaire with me or via self-administration. The respondent at School B chose to complete the questionnaire via self-administration. Only one participant completed the questionnaire at School B. However, I did not use the respondent's questionnaire responses to answer the research questions. As I stated earlier, the questionnaire further

defined and refined the problem and the direction of the study; confirmed responses collected during the individual and group interview sessions; and determined the professional development and collegial interaction needs, desires, and interests of the teacher participants. Also, the participant's questionnaire responses speak to the problem that I defined this study around.

The questionnaire participant of School B responded to the Likert-type questions in the following manner. Participant 2 responded agree to question 1 to indicate a state of satisfaction with the present state of collaboration. To question two, the participant responded strongly agree. The response was a reaction to the questionnaire item "collegial interaction promotes adult learning, improved teacher competency, and impact student achievement." On question three, the participant responded disagree. In this participant's opinion, teachers not administrators used cross grade level collaboration on a regular basis. For question 4, the participant responded strongly agree. The participant was confirming a familiarity with using DPD. To question five, the participant strongly agreed to the use of collaborative planning meetings as opportunities for professional development. On question six, the respondent answered disagree as the reply. Thus, during the course of this study, the participant did not use cross grade level collaborative practices on a regular basis. For question seven, the participant replied agree as a response to the questionnaire item "the present collaborative practices are effective." To question eight, Participant 2 replied disagree. The response answered the Likert-type question "I use cross grade level collaboration opportunities to redefine and regulate professional development/learning standards at the local level." On question nine,

Participant 2 responded agree. The participant agreed to the need for regular cross grade level collaborative planning meetings. For question ten, the participant answered strongly agree. Thus, the participant confirmed experiencing improved student learning via effective collegial interaction. The questionnaire that the participant responded to is located in Appendix A.

Participants responded to the open-ended questions of the questionnaire with brief comments. Furthermore, for the first, second, and third questionnaire administrations, Participant 2 of School B answered the same to the open-ended questions. For the first, second, and third questionnaire administrations, Participant 2 answered, "Time restraints have limited the depth of our professional learning this year. Teachers are working extremely hard during collaborative planning to share and compare" to question one. On question two, Participant 2 replied "when teachers plan together and then debrief on how the lessons were carried out, they grow from other's experiences! They learn from each other, grow as individuals and increase student achievement during the process." For question nine, the participant responded:

I do think cross grade level planning is needed periodically throughout a school year. Having the expertise of the each grade level teacher makes the learning objectives more clear! What are the students weak in when they come from 1st grade? What are we doing well to prepare them for 2nd grade? In what depth do we need to teach ____ in 1st grade so that they are prepared for 2nd grade, etc? The participant wrote "student learning is improved through effective collegial interaction. Teachers are able to learn and share experiences with each other. They are

able to examine student work and define what 'example' looks like" under comments after question ten.

Interview Phase

I interviewed 2 School B participants as members of the group. The interviews conducted elicited "the understandings and experiences of the interviewees in ways that speak to the research problem" and questions (Rubin & Rubin, 2005, p. 156-157). Group participants member-checked the recorded, transcribed, coded, and analyzed group interview. I reviewed data collected from the group interview session for patterns, themes, issues, topics, ideas, relationships, cases, events, and concepts. The following excerpts taken from those sessions substantiate themes and relationships.

The first theme substantiated in the interviews is the theme accountability. In an interview, Participant 2 stated, ". . . establish norms, covenants for grade level planning so it will not turn into a gripe session. Stick to the topic. Be punctual. Be prepared. We got them posted in our data room." Also, in another interview, Participant 3 stated, "And, it's really holding teachers accountable to the norms and covenants and not letting their personal opinion rule the conversation." Norms and covenants help teachers demonstrate accountability in collaborative planning meetings. Participants also mentioned other ways teachers demonstrate accountability.

The second theme verified by the excerpts is alignment. Participant 2 stated, "... we definitely want to make sure that they understand that there is a big connection between teacher collaboration and student learning, and that you know the purpose is to increase student learning." This means that teachers can align teaching and learning

through the connections they make. Therefore, the connection between teacher collaboration and student learning that the participant spoke of further confirms a theme of alignment. In addition, Participant 3 further confirmed the theme of alignment.

Participant 3 stated:

Well I think full circle your collaborative planning agendas come straight from your target areas from your continuous improvement plan. So you're targeting your weak areas, you're making the teacher stronger and as a result of that student achievement is going to go up. You have a focus from the...

Teacher communities target their weak areas to make the teacher more effective and to improve student learning. By targeting weak areas, alignments are probable. Thus, I again confirmed the theme of alignment.

The third theme confirmed via the interviews is professional relationship. I established the theme via an excerpt from an interview with Participant 3. In the interview, Participant 3 stated

... our teachers do a really good job planning together and looking at that student work piece each week together, a meets piece and then exceeds. You know and they can draw on the teacher strengths and weaknesses. You know, giving each other feedback. Uh, each grade level sets smart goals you know. It's to see how their students are meeting those goals and what the individual teacher is doing to make those students... To share those experiences with the other teachers and you know gaining input from each other. That makes the goal more effective.

Professional relationship as defined by Participant 3 is working together, providing each other feedback, and sharing experiences.

As evident in the excerpts aforementioned, teachers intentionally aligned collaboration with improving and increasing student learning. Also, the excerpts reveal an apparent attention to collegial interaction (shared communication), team effort (working together), accountability (the idea of being responsible for the success of all students), effective instruction, peer to peer learning, reciprocal relationships (also described as close, positive, and supportive), data usage, and analyzing strengths and weaknesses to decide on where teaching and learning need improvements. From the excerpts, patterns, themes, issues, topics, ideas, relationships, cases, events, and concepts (such as shared vision, supportive leadership, professional practices, and collective learning) also began to emerge which I discuss later in this section and in Section 5.

Observation Phase

I conducted participant observations to examine the interactions, behaviors, strategies, mannerisms, and emotional and intellectual acuity that exist and do not exist in an effective and ineffective teaching and learning environment at School B. School B did not have any participants to participate in the observation phase from the teacher community due to CCGPS Webinars. Study participants of Schools A, C, D, and E who did participate were observation participants either in the classroom or during a collaborative planning meeting for an hour or during two 30 minute observations. Also, the observed participants of Schools A, C, D, and E received a participant number. Numbering the participants allowed the discussion of participants and their interactions,

behaviors, strategies, mannerisms, and emotional and intellectual acuities associated with the classroom and collaborative planning setting without disclosing their identity.

Observing study participants watching a CCGPS Webinar is not the same as observing them in the classroom or during collaborative planning meetings. CCGPS Webinars are professional learning opportunities. However, the CCGPS Webinars are not professional learning opportunities that study participants used as collaborative planning endeavors. CCGPS Webinars are informative and instructional. Observing participants partaking in such a venture yields nothing about the observed that I can analyze as observational data for this study. Participation in CCGPS Webinars can be considered as preparation for collaborative planning meetings and teaching students.

CCGPS Webinars also provide teachers meaningful topics to address during grade level and cross grade level collaboration. Teachers also gain instruction on how to improve teaching and student learning experiences. Teacher effectiveness may well increase because the strategies and techniques taught via CCGPS Webinars are research based. CCGPS Webinars position teachers to perform at a systems thinking approach to teaching because teachers learn the same strategies, techniques, and best practices. CCGPS Webinars heighten a teacher's effectiveness via CCGPS standards centering on how teachers should teach and students should learn.

The lack of observational data for School B does not make for a discrepancy.

Inconsistent data can cause discrepancies. Observational data for School B do not exist for this study. Therefore, comparisons with observational data from Schools A, C, D, and E to establish discrepancies are improbable.

Archival Phase

Reviewing archival data may well disclose how teachers and researchers can use it to define and refine, monitor and evaluate teacher collaboration. The data can be examined for potential issues in the collaborative process at School B to establish a reason for creating new or keeping existing teacher collaboration methods. Archival data can also be reviewed to analyze how teachers communicate to collaborate. Collaborative planning meeting minutes and agendas and excerpts from School B's continuous improvement plan (or CIP), as well as, the county's CIP were the archival documents that I collected and analyzed.

I examined agendas dated 2009, 2010, or 2011. Some of the topics of the agendas examined were Think, Pair and Share, EQ (Essential Question), T-A-D (Transitions-Actions-Details), 4 Square Writing Method, Developing Norms and Covenants, and SMART Goals. From these topics, one may easily make a connection between collaboration and learning and identify the means to improving collegial interaction.

Also, from the agendas, one can attain a quick assessment of the collaborative planning process. For example, the collaborative planning agendas of School B began with an essential question and listed thereafter were several key items of focus. The items listed were type of meeting, job responsibilities, agenda topics, notes, and next steps. The headings listed on the collaborative planning overview agenda were planning items discussed, grade level instructional concern/opportunity, solution to make a difference for students, and results/effect of the solution (share at next meeting). An agenda may therefore be the best way to revise the collaborative planning meeting and process.

I also examined collaborative planning meeting minutes. The minutes may well be the tool to use when identifying potential issues and defining and refining, monitoring and evaluating teacher collaboration. In the minutes, one can note how teachers communicate to collaborate, how teachers interact, how teachers collaborate, and how effective the collaborative process is or can be. The minutes recorder reported the minutes taken at the meetings of School B on a form. To complete the form, meeting participants shared the results of "next steps" from the previous week, discussed agenda topics, and concluded with questions (What are your next steps? What do we want to happen in the classroom?) and a timeline. On September 30, 2009, a kindergarten meeting minutes recorder wrote "all teachers brought back a writing activity. Teachers shared with each other" on the planning minutes form under notes. A first grade minutes recorder on the same date wrote "teachers paired with each other and shared results from implementing the organization and voice traits in their classroom." Through the aforementioned excerpts, a connection between collaboration and learning is evident. Also, the connection that teachers as expected take what they learn in the collaborative back to the classroom is clear.

Teachers participated in collaborative planning as expected. Therefore, teachers as expected participated in collaborative planning conducted as professional learning (or professional development). Teacher participation means sharing, reflecting, and conferring with other teachers to become effective. This is how teachers communicated to collaborate and how teachers improved collegial interactions.

Teacher participation would also include debriefing with other teachers to become effective. Documented in the peer math observation debriefing minutes under the headings strategies that reflect a standards based classroom, communicating learning expectations, appropriate use of differentiation, flexible grouping, strategies that keep instruction focused at a higher level of learning, use of technology to enhance student learning, assessment of student learning (formative/summative), student engagement, 6 components of an exemplary math lesson, and next steps are accounts that substantiate a connection between collaboration and learning. Beginning with an example from October 6, 2009, the peer observer wrote under flexible grouping "evident and used to differentiate instruction-changes according to assessment results." Flex grouping and differentiated instruction are topics often listed for professional development meeting and collaborative planning meetings at School B. For instance, collaborative planning meeting minutes dated September 22, 2010 read "3rd grade planned together and created a differentiated lesson plan for Reading and Math using questions and standards to guide us." At a collaborative planning meeting on September 13, 2011, the facilitator presented a PowerPoint entitled *Instructional Strategies for Engaging Learners*. The facilitator listed Grouping/Differentiation as a topic for discussion on the work session slide of the PowerPoint. In the next steps section of the minutes for September 13, 2011, the recorder wrote "differentiation-during whole group." Thus, as indicated in the minutes aforementioned, collaborative planning meetings held as debriefing or as professional development can help teachers improve student learning experiences.

The last archival document examined was the county's continuous improvement plan (County CIP). After examining the CIP for information that substantiates using collaboration to enhance teaching and learning, Goal I/b of the plan (*Student Achievement*) offered the confirmation sought after. Goal I/b reads "increase performance of subgroups," and Goal IV/d reads "enhance collaboration." The excerpts from the county's CIP indicated that collaborative planning participants dedicated time and effort to addressing weak areas based on the performance of subgroups to enhance the instruction. If the goal is to enhance instruction, the goal must also be to increase a student's performance and learning in those areas. The excerpt also connects the work that the participants will perform in collaboration to enhanced instruction. If the goal is to enhance instruction, the goal must also be to improve teacher effectiveness and student learning.

Summary

The interview and archival data revealed that the teacher community of School B is a venue for new learning, continuing intellectual development, cultivating leadership, and improving student learning and classroom practices. Through the interviews, study participants reported that teachers regularly hold collaborative planning meetings on Wednesdays during extended P.E. Participants also stated that teachers hold common planning to address content area effectiveness at grade level. Also, the participants stated that teachers use vertical planning to address content area effectiveness across grade levels, and use professional development conducted during collaboration to address the learning, intellectual, and leadership needs of the teacher to promote effectiveness.

However, study participants stated that teachers rarely conduct cross grade level collaboration meetings where grade level teachers meet with above grade level and below grade level teachers regardless of content area taught. Participant 2 stated, "Well, as of right now, we have not had, done any cross grade level collaboration."

I collected archival documents as data. The archival data collected from School B were in the form of records of the events, actions, measures, and procedures taken.

Through the archival data of School B, I connected collaboration to improving student learning, instruction, and collegial interaction through focusing on needs and weaknesses. As indicated earlier, a focus on student and teacher needs and weaknesses connects collaboration to improving student learning, instruction, and collegial interaction. I coded data collected from archival documents (collaborative planning meeting minutes and agendas, related district survey results and excerpts from the county's continuous improvement plan) and interviews using the qualitative analysis software, Ethnograph v6.0 and QDA Miner v3.2 (updated to 4.0).

Case III: School C

Ouestionnaire Phase

When completing the questionnaire each of the 3 times questionnaire administration times, a participant at School C had two options. The respondent could have completed the questionnaire with me or via self-administration. The respondent at School C chose to complete the questionnaire via self-administration. One participant completed the questionnaire at School C. The participant's responses collected through the questionnaire were not used to answer the research questions of this study. As

previously indicated, I used the questionnaire to further define and refine the problem and the direction of the study; to confirm responses collected during the individual and group interview sessions; and to determine the professional development and collegial interaction needs, desires, and interests of the teacher participants. However, the participant's responses like all other participant responses did contribute to substantiating the reason I conducted this study.

The questionnaire participant of School C responded to the Likert-type questions in the following manner. First, Participant 3 responded agree to question 1. Therefore, the participant sees the present state of the collaborative as acceptable. To question two, the participant responded strongly agree to the positive effect of collegial interaction on adult learning, teacher competency, and student achievement. On question three, the participant responded agree. The participant was agreeing to the regular use of cross grade level collaboration by teachers and administrators. For question 4, the participant responded agree as a response to "I am familiar with the use of debriefing as professional development." To question five, the participant responded strongly agree to the use of collaborative planning to conduct professional development. On question six, the respondent answered strongly agree as the reply. Here, the participant was indicating how often cross grade level collaborative practices were used. For question seven, the participant replied agree to the effectiveness of the present collaboration practices. To question eight, Participant 3 replied strongly agree. The response indicated that the participant used cross grade level collaboration opportunities to redefine and regulate professional development/learning standards. On question nine, Participant 3 responded

strongly agree to needing regular cross grade level collaboration. For question ten, the participant answered strongly agree to "student learning is improved through effective collegial interaction." The questionnaire is in Appendix A.

The questionnaire participants provided brief comments in writing to open-ended questionnaire questions. Participant 3 of School C answered the same to the open-ended questions for the first, second, and third questionnaire administrations. At the first, second, and third questionnaire administrations, Participant 3 answered, "School C's faculty has always worked collaboratively in providing the best for our students" to question one. On question two, Participant 3 replied "we are learn [sic] from each other no matter the age." For question seven, the participant responded "any time teachers are focused on learning and communicating that learning is will always be effective collaborative practices." To question nine, the participant wrote:

Vertical planning is vital for all teachers to understand what their students know and how the teachers in previous grades are teaching the information. This allows the group to identify where the gaps are in curriculum, instruction, and assessments. Also, . . . in professional learning.

As a reply to question ten, the participant answered, "When teachers collaborate and take ideas and information back to the classroom it increases student learning. However, the teachers must apply it in their classroom before any positive student learning takes place."

Interview Phase

At School C, I interviewed one participant individually and two participants as members of the group. I conducted interviews to elicit "the understandings and experiences of the interviewees in ways that speak to the research problem" and questions (Rubin & Rubin, 2005, p. 156-157). The participants member-checked the recorded, transcribed, coded, and analyzed individual and group interviews. I collected data from the individual and group interview sessions and reviewed the data for patterns, themes, issues, topics, ideas, relationships, cases, events, and concepts. The following excerpts taken from those sessions provide the data that substantiate themes and relationships.

For instance, the theme "professional relationship" can be corroborated by a response made by Participant 1 in an interview. Participant 1 stated:

Teachers are collaborating all the time. It's either informally where they are stepping next door. They're pulling three or four in a grade level or either it's formal where it's a set time with a set agenda and purpose you know for collaboration but uh I think it's just you just have a culture where teachers are open to share and talk about what they do and about what works and what doesn't work.

Participant 1 defined professional relationships well in this excerpt. Here, a professional relationship is defined as a collaborative effort between two or more teachers.

The theme "alignment" also emerged from the interviews. In an interview with Participant 2, the theme was evident when Participant 2 stated, "Teachers going in and

taking a look at other teachers' classrooms and learning from them. To see you know what I can do differently. Professional development you know and you know that colleague, peer observations." Participant 2 further corroborated the theme of alignment. Participant 2 stated, "... just their professional dialogue, the practices that they use in the classroom has just strengthened their performance and you know we have made AYP again . . ." In addition, the participant stated:

And, every school has their different needs. I mean you know they're similar needs but they're still differences based on the demographics, based on teacher experiences, and whatnot but we have just really tried to take a look at the needs of . . . and define the professional learning that fits us.

Through the participant, alignment can be seen as the alliance that teachers establish to improve teaching and learning for themselves and their students. The theme "alignment" can also confirmed through interview responses by Participant 3. Participant 3 stated, "... in order for a teacher to see what they've talked about (ideas or things that they've learned to see if it worked) they do have to go back into the classroom and apply it." Teachers who apply what they have learned in the collaborative make evident the theme of alignment.

The theme of accountability became evident when Participant 3 stated, "Well and then another advantage is uh that it's not always coming from us. It's them deciding what they need." Teachers like Participant 3 who are deciding what they need are also deciding to be accountable for what they teach and what students learn. According to the participants interviewed, accountability is an integral part of teaching and learning.

As evident in the excerpts aforementioned, teachers intentionally aligned collaboration with improving and increasing student learning. Also, the excerpts reveal an apparent attention to collegial interaction (shared communication), team effort (working together), accountability (the idea of being responsible for the success of all students), effective instruction, peer to peer learning, reciprocal relationships (also described as close, positive, and supportive), data usage, and analyzing strengths and weaknesses to decide on where teaching and learning need improvements. From the excerpts, patterns, themes, issues, topics, ideas, relationships, cases, events, and concepts (such as shared vision, supportive leadership, professional practices, and collective learning) also began to emerge which I discuss later in this section and in Section 5.

Observation Phase

Participant observations provided me an opportunity to examine the interactions, behaviors, strategies, mannerisms, and emotional and intellectual acuity that exist and do not exist in an effective and ineffective teaching and learning environment at School C. I observed one participant from the teacher community of School C. Participant observations occurred either in the classroom or during a collaborative planning meeting for an hour or during two 30 minute observations. In this section, when I discussed the participant's interactions, behaviors, strategies, mannerisms, and emotional and intellectual acuities associated with the classroom and collaborative planning setting, the participant discussed is Participant 3.

I observed Participant 3 in a collaborative planning session held in the data room.

During the session, teachers brainstormed how to teach fractions; shared how they teach

fractions at their grade level; and posted after each explanation of strategies shared. The teachers also discussed the pros and cons of teaching fractions. Written on a chart tablet at the front of the data room was "Remember: You get out what you put in . . ." The facilitator also had written agenda on the chart tablet. The agenda read "5 Minutes - Discussed what strategy you took back and implemented for multiplication/division.10 Minutes - Discussed the strategies you use consistently to teach fractions (Poster and Share)." The meeting continued with the study participant adding to the minutes of the meeting by addressing number sense and asking the question: What can I do to fill in the number sense gap?

After the observation concluded, I generated a transcript. The Ethnograph v6.0 and QDA Miner v3.2 (updated to 4.0) provided me a way to code the transcript. The participant member-checked the transcript. When examining the recorded observation for patterns, themes, issues, topics, ideas, relationships, cases, events, and concepts, a pattern and themes emerged. The pattern emerged from the participant's instructional discourse and performance. Participant 3 used meaningful conversation (instructional discourse) with the teachers. The themes emerged from observation, interview, and archival data predominantly about the participants' actions and interactions with teachers and students.

Archival Phase

Collaborative planning meeting minutes and agendas and excerpts from School
C's continuous improvement plan (or CIP) and the county's CIP were the archival
documents collected and analyzed. By reviewing archival data from collaborative
planning meetings, I can determine how teachers define and refine, monitor and evaluate

teacher collaboration. Also, I can examine archival data for potential issues in the collaborative process at School C to establish a reason (or reasons) for creating new or keeping existing teacher collaboration methods. In addition, reviewing archival data helped me to analyze how teachers communicate to collaborate.

The agendas examined by me dated 2009, 2010, and 2011. Some of the agenda topics were *Diving Deeper with Self-efficacy and H.O.T.S., Class Key Module 5, and Power Teaching strategies and techniques.* From these topics, I can easily make a connection between collaboration and learning and identify the means to improving collegial interaction. The agendas also provided a quick assessment of the collaborative planning process. The collaborative planning agendas of School C begin with an essential question and listed thereafter are several key items of focus. The items listed were job responsibilities, agenda, notes, and next steps. An agenda may well be the best way to revise the collaborative planning meeting and process.

I also examined collaborative planning meeting minutes. The minutes may well be the means to identifying potential issues in the collaborative process. The minutes can also be used to define and refine, monitor and evaluate teacher collaboration. In addition, reviewing the minutes helped me determine how teachers communicate to collaborate, how teachers interact, how teachers collaborate, and how effective the collaborative process is or can be. The minutes that I reviewed were recorded on a form by the meeting minutes recorder. To complete the form, meeting participants shared the results of "next steps" from the previous week, discussed agenda topics, and concluded with questions (What are your next steps? What do we want to happen in the classroom?) and a timeline.

The collaborative planning meeting minutes transcribed on the form dated March 12, 2011 for each grade level read "teachers discussed self-efficacy and H.O.T.S. in lesson plans and implementation in classroom." The next steps for the collaborative planning meeting dated March 12, 2011 read "continue self-efficacy and H.O.T.S. in lesson plans and in classroom." Thus, reflected in the minutes is a clear connection between collaboration, learning, and teaching.

During this study, teachers participated as expected in collaborative planning. Thus, there was no reason to doubt their participation in collaborative planning conducted as professional learning. Therefore, teachers as expected also participated in collaborative planning conducted as professional learning (or professional development). Teacher participation whether in collaborative planning or collaborative planning as professional development usually involved sharing, reflecting, and conferring with other teachers to become effective. This is how they communicated to collaborate.

The last archival document examined was the county's continuous improvement plan (County CIP). After examining the CIP for information that substantiates using collaboration to enhance teaching and learning, I found that Goal I/b of the plan (*Student Achievement*) offers the confirmation sought. Goal I/b reads "increase performance of subgroups," and Goal IV/d reads "enhance collaboration." The excerpts from the county's CIP indicate that collaborative planning participants will dedicate time and effort to addressing weak areas based on the performance of subgroups to enhance instruction. If the goal is to enhance instruction, the goal must also be to increase student performance and learning in those areas. The excerpts also connect the work that the

participants will perform in collaboration to enhance instruction. If the goal is to enhance instruction, the goal must also be to improve teacher effectiveness and student learning.

Summary

The interview and archival data revealed that the teacher community of School C is a venue for new learning, continuing intellectual development, cultivating leadership,

and improving student learning and classroom practices. Through the interviews, study participants reported that they regularly hold collaborative planning meetings on Tuesdays. Participant 2 stated, "We have collaborative planning weekly. It's every Tuesday of every week. It's our scheduled time for all of the grade levels to plan, so every Tuesday since the beginning of the school year." Participants also stated that teachers hold common planning to address content area effectiveness at grade level. Also, the participants stated that teachers conduct vertical planning to address content area effectiveness across grade levels, and use professional development conducted during collaboration to address the learning, intellectual, and leadership needs of the teacher to promote effectiveness. However, study participants stated that they need to engage in cross grade level collaboration (where grade level teachers meet with above grade level and below grade level teachers regardless of content area taught).

From archival documents, I collected archival data as well. The archival data collected from School C were records of the events, actions, measures, and procedures taken. Through the archival data of School C, I connected collaboration to improving student learning, instruction, and collegial interaction through focusing on needs and weaknesses. As indicated earlier, I found that a focus on student and teacher needs and weaknesses connects collaboration to improving student learning, instruction, and collegial interaction. Also, I coded data collected from archival documents (collaborative planning meeting minutes and agendas, related district survey results and excerpts from the county's continuous improvement plan) using Ethnograph v6.0 and QDA Miner v3.2 (updated to 4.0). I used the same qualitative analysis software to code interview data.

Case IV: School D

Questionnaire Phase

A participant at School D had two options for completing the questionnaire each of the 3 times I administered the questionnaire. The respondent could complete the questionnaire with me or via self-administration. The respondent at School D chose to complete the questionnaire via self-administration. One participant completed the questionnaire at School D. Nonetheless, I did not use the data collected through the questionnaire to answer the research questions. As formerly stated, I used the questionnaire to further delineate the problem and the direction of the study; to verify responses collected during the individual and group interview sessions; and to determine the professional development and collegial interaction needs, desires, and interests of the teacher participants.

The questionnaire participant of School D responded to the Likert-type questions in the following manner. Participant 2 responded strongly agree to question 1. Thus, the participant was not dissatisfied with the present state of the collaborative process. To question two, the participant responded strongly agree to the questionnaire item "collegial interaction promotes adult learning, improved teacher competency, and increased student

achievement." On question three, the participant responded agree. This participant evidently recognized that teachers and administrators used cross grade level collaboration in some form on a regular basis. For question 4, the participant responded agree that they were aware that debriefing can be used as professional development. To question five, the participant responded strongly agree that collaborative planning meetings are used as professional learning. On question six, the respondent answered agree as the reply because the participant used cross grade level collaborative practices often. For question seven, the participant replied strongly agree to rating the present collaborative practices as effective. To question eight, Participant 2 replied agree. Therefore, the participant has had a chance to use cross grade level collaboration opportunities to redefine and regulate local professional development/learning standards. On question nine, Participant 2 responded strongly agree because the participant saw a need for regular cross grade level collaborative planning meetings. For question ten, the participant responded strongly agree to using collegial interaction as the means to improved student learning. The questionnaire is located in Appendix A.

Brief comments penned by participants provided the answers to open-ended questions. Many of the brief comments that participants provide on the first, second, and third questionnaire administrations were the same. For instance, Participant 2 of School D answered the same to the open-ended questions for the first, second, and third questionnaire administrations. For the first, second, and third questionnaire administrations, Participant 2 answered, "Our teachers are working together to develop differentiated plans that have resulted in increased student achievement" to question one.

On question two, Participant 2 replied "the combined knowledge of teachers far surpasses that of any one educator." For question four, the participant responded in writing "this process is used when analyzing benchmark data." To question seven, the participant wrote "teachers work together." As a reply to question nine, the participant answered, "To ensure that there are no gaps between grade levels." The participant replied with "teachers learn new strategies and add ideas to their 'tool belts' that enable them to better meet the needs of their students" to question ten.

Interview Phase

I interviewed two participants individually at School D. The interviews conducted elicited "the understandings and experiences of the interviewees in ways that speak to the research problem" and questions (Rubin & Rubin, 2005, p. 156-157). I recorded, transcribed, coded, and analyzed the interviews, and participants member-checked interview transcripts. I reviewed data collected from the individual interview sessions for patterns, themes, issues, topics, ideas, relationships, cases, events, and concepts. I took the following excerpts from those sessions to substantiate themes and relationships. The three themes evident in the excerpts to follow were accountability, alignment, and professional relationship.

I confirmed the theme accountability when Participant 1 stated, ". . . the big piece on the teacher piece again is that they know they are held accountable because their own peers are coming in there to see." Also, in an interview, Participant 2 stated, "So, we're at the point basically now where they actually peer assess each other's lesson plans. They are required to turn in their reading flex group plans and their math flex group plans that

show differentiated instruction." Accountability in this case is peers assessing peers to achieve and maintain teacher effectiveness and improved student learning experiences.

The theme of alignment became evident when Participant 1 stated:

Of course, they're going to bring their personalities... but they all have the same concept of what that means . . . Well, if you said go forth and differentiate by content, well what does that mean? Right! ... so we are on the same page with our meaning . . . So, the students benefit from that . . . If you had twins, one in teacher A and one in teacher B, you're getting an equitable education because this teacher understands and this teacher understands the best practice strategies for differentiating with the children. So, that's how they benefit, the children benefit from collaborative.

Also when Participant 1 stated, "... One collaborative leads to another. It's not like you stop this topic or whatever and it moves to another. They all are related" the theme became clearer. Also, Participant 1stated

... you know like flex groups that we are working on. Making sure you're differentiating by content, product, and process first of all. ... you got to make sure everybody is on the same page with that (differentiation that is) ... and so that child that's sitting at that flex group table (in one class has the same as the child in the other classes of that same grade level) ... that the equity is there.

For this participant, equity means alignment. The theme of alignment runs deeper than providing an equitable education for all students. Alignment also means making alliances, using systems thinking, and establishing connections to close the achievement

gap between students. Alignment also means adhering to expectations. As Participant 2 stated, "I have a standard and an essential question just as they are expected to do in their classroom so that they actually see it in practice the way that we expect to see their instruction in their classroom." Alignment also means closing the gap. For instance, Participant 2 stated:

They're planning together and sharing together and ... data together. We have evidence to support what we been doing really makes a difference. Probably the most impressive thing to me was, we look at our data our African American sub group, (and) you know we had this gap to close. We closed the gap last year. There is like 1 percentage point difference between our African American sub group and any other sub group. And, it just happened to be that was the group that we targeted based on the data. I just think that these teachers deserve so much recognition for closing the gap . . . "

Excerpts from the interviews of Participant 1 and 2 also support the theme of professional relationships. As evidence of the theme professional relationship in an interview excerpt, Participant 2 stated, "They're planning together and sharing together and . . . data together." Professional relationships are defined by the planning of instruction and student learning experiences, the sharing of ideas, and the analysis of data. The theme professional relationship is also evident in an excerpt from an interview with Participant 1. The excerpt reads "collaborative planning is used as professional development." If collaborative planning is about professional development, it is also about building

professional relationships. Teachers grow professionally (professional development or learning) through each other (professional relationships).

As evident in the excerpts aforementioned, teachers intentionally aligned collaboration with improving and increasing student learning. Also, the excerpts reveal an apparent attention to collegial interaction (shared communication), team effort (working together), accountability (the idea of being responsible for the success of all students), effective instruction, peer to peer learning, reciprocal relationships (also described as close, positive, and supportive), data usage, and analyzing strengths and weaknesses to decide on where teaching and learning need improvements. From the excerpts, patterns, themes, issues, topics, ideas, relationships, cases, events, and concepts (such as shared vision, supportive leadership, professional practices, and collective learning) also began to emerge which I discuss later in this section and in Section 5.

Observation Phase

Participant observations conducted allowed for the examination of interactions, behaviors, strategies, mannerisms, and emotional and intellectual acuity that exist and do not exist in an effective and ineffective teaching and learning environment at School D. I observed one participant from the teacher community of School D. I observed the participant either in the classroom or during a collaborative planning meeting for an hour or during two 30 minute observations. I discussed the participant in this section as Participant 2 when discussing the participant's interactions, behaviors, strategies, mannerisms, and emotional and intellectual acuities associated with the classroom and collaborative planning setting.

Participant 2 has 15 years of teaching experience. The participant taught first grade for ten years, kindergarten for two years, and second grade before the current position. The participant has an Education Specialist degree. Participant 2 stated, "One person cannot do half of what a team can do. So, I value learning from others. And, I think I interfuse into collaborative planning, how important it is to learn from one another." This point of view denotes the kind of teacher community that exists at School D.

Participant 2 participated in two observations during two different collaborative planning sessions held in the data room. During the one of the sessions, first grade teachers discussed differentiated instruction: tiered instruction part 2. For the other session, kindergarten teachers discussed differentiated instruction: tiered instruction part 2. During both sessions, the teachers worked on GAPSSI 2.3. GAPSSI 2.3 reads "Instruction is differentiated to meet student readiness levels, learning profiles, and interests." During the observation, Participant 2 stated, "Differentiated instruction changes the thinking of the teacher concerning student needs, abilities, intelligence, etc. Students don't get stuck in teacher stigmatizing them due to their abilities."

The lesson continued with the study participant talking about how to engage students and keep students in the hands-on mode, and how to look at student needs, and hone in on individual needs. Participant 2 talked about providing direct instruction (differentiate by content, process, and product, enriching/re-teaching to meet needs, directing students to whole group lesson summary (knowledge, connections, and understandings), and planning the exit assessment to see if their students met the

objectives and plan for future flex groups (formative assessment/ticket out the door). Participant 2 stated, "We differentiate to avoid behavior problems and to help each student reach his or her full potential. Destination Graduation!" Teachers that were present at both sessions actually began working on lesson plans and the facilitator provided support. Teachers worked in the data room where materials were accessible.

After concluding the observation, I generated a transcript of the observation and coded the transcript using Ethnograph v6.0 and QDA Miner v3.2 (updated to 4.0). Next, I presented the transcript to the participant for member-checking. When examining the observation for patterns, themes, issues, topics, ideas, relationships, cases, events, and concepts, a pattern and themes emerged. The pattern emerged from the participant's instructional discourse and performance. Participant 2 used meaningful conversation (instructional discourse) with the teachers. Also, themes emerged from the participants' actions and interactions with each other, as well as with their students.

Archival Phase

I reviewed archival data to determine how teachers used it to define and refine, monitor and evaluate teacher collaboration. By examining archival data I deduced potential issues in the collaborative process at School D and reasons for creating new or keeping existing teacher collaboration procedures. Reviewing archival data also helped me to analyze how teachers communicate to collaborate. Collaborative planning meeting minutes and agendas and excerpts from School D's continuous improvement plan (or CIP) were the archival documents collected and analyzed.

The agendas examined dated 2009, 2010, and 2011. Some of the agenda topics were Tiered Instruction: Planning for Mixed Ability Groups, Quick Tips for Teaching Vocabulary Words-Looking for Patterns, Higher Order Thinking Skills in Instruction, Ways to Differentiate, Forming flex Groups/Differentiating Instruction, Review of R.T.I. Process/H.O.T.S. in Student Work, Effective Teacher Commentary, Writing Traits: Ideas and Organization, H.O.T.S. and Questioning, and Differentiated Instruction: Session 6. From these topics, one may easily make a connection between collaboration and learning and identify the means to improving collegial interaction, the agenda topics. The agenda also provided a quick assessment of the collaborative planning process. The collaborative planning agendas of School D begin with an essential question and listed thereafter are several key items of focus. The items listed are: GAPSS Assessment Strand, bell ringer, E.Q. (Essential Question), activator, lesson, summarizer, homework, and follow-up. Thus, an agenda may well be the best way to revise the collaborative planning meeting and process.

I also surveyed collaborative planning meeting minutes. The minutes may well be the tool that the researcher can use when identifying potential issues and defining and refining, monitoring and evaluating teacher collaboration. In the minutes, one can note how teachers communicate to collaborate, how teachers interact, how teachers collaborate, and how effective the collaborative process is or can be. The meeting minutes recorder reported the minutes taken at the meetings of School D on a form. To complete the form, meeting participants shared the results of "next steps" from the previous week, discussed agenda topics, and concluded with questions (What are your

next steps? What do we want to happen in the classroom?) and a timeline. The K-5 collaborative planning meeting minutes transcribed on the form dated October 25, 2011 document how the teachers of each grade level interacted to collaborate. First, as written in the minutes for October 25, 2011, the teachers looked at "samples of flexible group plans" and determined which exhibited "true differentiation." The teachers then reviewed "steps for creating tiered activities for differentiated instruction." They "discuss how to develop tiered assignments for flex groups based on Bloom's Taxonomy." Finally, as recorded in the minutes, teachers were to "develop differentiated flex group plans based on what we learned today about tiered assignments, and be prepared to share them with the group during our next meeting." In collaborative planning, teachers as expected participate. Therefore, teachers as expected also participated in collaborative planning as professional learning (or professional development). Teacher participation typically included sharing, reflecting, and conferring with other teachers to become effective. This is how teachers communicated to collaborate in the collaborative planning meetings of School D.

The last archival document that I examined was the continuous improvement plan (School D's CIP). After examining the CIP for information that substantiates using collaboration to enhance teaching and learning, Goal I of the plan (*Student Achievement* specifically Goal I/b which reads *Increase performance of subgroups*) offers the confirmation sought. Goal I/b reads:

Increase proficiency in the subgroups of 1st-5th grade Students with Disabilities and African American Students on the CRCT in Reading, ELA and Math; African

American Students/Reading: AYP (Grades 3-5) Increase from 94% to 96%; Math: AYP (Grades 3-5) Increase from 77% to 82%

This excerpt from School D's CIP indicates that collaborative planning participants will dedicate time and effort to addressing weak areas based on CRCT domains in Reading, ELA, and Math to enhance instruction. If the goal is to enhance instruction, the goal must also be to increase student performance in those areas. The excerpt also connects the work (to be focused on the weak areas based on CRCT domains in Reading, ELA, and Math) that the participants will perform in collaboration to enhance instruction. If the goal is to enhance instruction, the goal must also be to improve teacher effectiveness and student learning.

Summary

The interviews, observations, and archival data revealed that the teacher community of School D is a venue for new learning, continuing intellectual development, cultivating leadership, and improving student learning and classroom practices.

Observations confirmed that teachers consistently practiced collaboration as the means to meeting the instructional and learning needs of the students. Participant 1 stated, "We definitely have the time we never skip collaborative . . . We may not jump the first week into collaborative." Observations also substantiated the use of differentiated instruction and student self-efficacy strategies (e.g., goal setting, follow through, and attainment) to help students succeed in school and in life. Through the interviews, study participants reported that collaborative planning meetings are regular and held on Tuesdays to analyze areas of need and data and to develop strategies, review units and instruction. Participant

1 stated, "This year we have collaborative on Tuesday, common planning on Wednesday, and then the next week we give them two commons and then go back to the collaborative . . ." Teachers conduct common planning to address content area effectiveness at grade level. Also, the participants also stated that teachers conduct vertical planning to address content area effectiveness across grade levels, and use professional development conducted during collaboration to address the learning, intellectual, and leadership needs of the teacher to promote effectiveness. However, study participants stated that teachers infrequently participated in cross grade level collaboration (where grade level teachers meet with above grade level and below grade level teachers regardless of content area taught).

The archival data for School D were records of the events, actions, measures, and procedures taken. Through the archival data of School D, I connected collaboration to improving student learning, instruction, and collegial interaction through focusing on needs and weaknesses. As I formerly indicated, a focus on student and teacher needs and weaknesses based on CRCT domains in Reading, ELA, and Math can connect collaboration to improving student learning, instruction, and collegial interaction. I collected data and used Ethnograph v6.0 and QDA Miner v3.2 (updated to 4.0) to code archival documents (collaborative planning meeting minutes and agendas, related district survey results and excerpts from School D's continuous improvement plan). Also, I used the same qualitative analysis software to code interview and observation data.

Case V: School E

Questionnaire Phase

To complete the questionnaire each of the 3 times I administered the questionnaire, I gave the participant at School E (all participants) a chance to choose between two options. The respondent could complete the questionnaire with me or via self-administration. The respondent at School E chose to complete the questionnaire via self-administration. One participant completed the questionnaire at School E. The data that I collected through the questionnaire was not used to answer the research questions. As earlier stated, I used the questionnaire to further define and refine the problem and the direction of the study; to confirm responses collected during the individual and group interview sessions; and to determine the professional development and collegial interaction needs, desires, and interests of the teacher participants.

The questionnaire participant of School E responded to the Likert-type questions in the following manner. Participant 2 responded strongly agree to question 1. Therefore, the participant was satisfied with the present state of collaboration. To question two, the participant responded strongly agree. The participant was agreeing to what collegial interaction promotes. On question three, the participant responded disagree because the participant recognized that teachers use cross grade level collaboration in some way on a regular basis but administrators do not. For question 4, the participant responded agree. Answering agree to question 4 indicated that the participant was familiar with the use of DPD. To question five, the participant responded strongly agree to using collaborative planning as professional development. On question six, the respondent answered disagree

as the reply. The participant's answer indicated the infrequent use of cross grade level collaborative practices. For question seven, the participant replied strongly agree.

Through this response, the participant was agreeing to the effectiveness of the present collaborative practices. To question eight, Participant 2 replied disagree. The participant responding in this manner indicated that there is little to no opportunity to redefine and regulate professional development/learning standards at the local level. On question nine, Participant 2 responded strongly agree to having regularly scheduled cross grade level collaborative planning meetings. For question ten, the participant responded with strongly agree to being able to impact student learning through effective collegial interaction.

Appendix A contains the questionnaire.

Participants responded to open-ended questions with brief comments. Participants did not change their comments for all 3 questionnaire administrations. Thus, Participant 2 of School E answered the same to the open-ended questions for the first, second, and third questionnaire administrations. For the first, second and third questionnaire administrations, Participant 2 answered, "We have a dedicated time each week for collaboration. Teachers take an active role and document each week with minutes and an agenda" to question one. On question two, Participant 2 replied "with increased duties and demands teachers can no longer do everything by themselves. They must participate in a learning community within their school to be effective." For question three, the participant responded "this is an area we are weak in. It is not because teachers do not want to. It is a scheduling problem." To question seven, the participant wrote "all grade levels are able to plan together on a weekly basis." As a reply to question nine, the

participant answered, "We simply do not do this enough. Our $3^{rd} - 5^{th}$ grade teachers need this because they are the only teacher of their content in their grade level." For question ten, participant replied with "test data has improved since collaboration has begun."

Interview Phase

I interviewed two participants individually at School E. Through the interviews I elicited "the understandings and experiences of the interviewees in ways that speak to the research problem" and questions (Rubin & Rubin, 2005, p. 156-157). After I recorded, transcribed, coded, and analyzed the interviews, participants member-checked transcripts. I reviewed the interview data collected for patterns, themes, issues, topics, ideas, relationships, cases, events, and concepts. Following are excerpts from the interview sessions that substantiate themes and relationships.

The first theme substantiated by the excerpts from interview participants at School E is alignment. In the following excerpt, Participant 1 defines alignment as being on the same page. As Participant 1 stated, "They I think it's one of the key things that we do that make an effect on learning and effectiveness because through that discussion well you know everyone's on the same page." Also, Participant 2 stated, "Also, every grade level teacher is on the same page because they plan together as a grade level . . ." When teachers are on the same page, an equitable education is probable for all students.

The second theme to emerge from the interviews conducted was accountability. In an interview, Participant 1mentioned shared responsibility. The Participant 1 stated, "Everyone's got shared responsibility. We are trying to build teacher leaders where they

have strengths and weaknesses and they understand the strengths and weaknesses of one another." Here, accountability is defined as shared responsibility. In another interview, Participant 2 stated, "They know what process to follow each week. This saves time and ensures that planning is taking place." From this response, accountability can be defined as consistency, reliability, and as responsibility.

The third theme to emerge from the interview data is professional relationships. Corroborating this theme is an interview response of Participant 1. Participant 1 stated, ". . . . if you're doing things whether it be best practices or teachers sharing ideas that really work for them. Then, they say well this is what I did and I had lots of success with it." Teachers who share ideas that really work on a regular basis are building professional relationships. As Participant 1 stated, "The old days of isolation where the teacher closed the door and did her best job and maybe they wouldn't share those special techniques those are gone. So, you know that we have to work together . . ." Developing professional relationships require teachers working together and sharing ideas. The theme professional relationship also emerged from an interview response made by Participant 2. In the interview, Participant 2 stated:

The main advantage that I see with cross grade level collaboration is the understanding of the curriculum above and below the grade level that you teach. This could only enhance one's instruction. Also, sharing of ideas is another advantage in that teachers get to listen to ideas from colleagues that they normally do not plan with.

Through this excerpt professional relationship is the key to enhancing one's instructional effectiveness

As evident in the excerpts aforementioned, teachers intentionally aligned collaboration with improving and increasing student learning. Also, the excerpts reveal an apparent attention to collegial interaction (shared communication), team effort (working together), accountability (the idea of being responsible for the success of all students), effective instruction, peer to peer learning, reciprocal relationships (also described as close, positive, and supportive), data usage, and analyzing strengths and weaknesses to decide on where teaching and learning need improvements. From the excerpts, patterns, themes, issues, topics, ideas, relationships, cases, events, and concepts (such as shared vision, supportive leadership, professional practices, and collective learning) also began to emerge which I discuss later in this section and in Section 5.

Observation Phase

Through the participant observations conducted, I examined the interactions, behaviors, strategies, mannerisms, and emotional and intellectual acuity that exist and do not exist in an effective and ineffective teaching and learning environment at School E. I observed one participant from the teacher community of School E. The observation occurred either as a classroom or during a collaborative planning meeting for an hour or during two 30 minute observations. I identified the participant as Participant 2 in this section when discussing the participant's interactions, behaviors, strategies, mannerisms, and emotional and intellectual acuities associated with the classroom and collaborative planning setting.

I observed Participant 2 in a collaborative planning session held in the data room. During the session, teachers reviewed the last meeting minutes and followed-up on items due at this meeting. Teacher used the computer to create activities, compose their lesson plans, and design the materials (handouts, etc.) that they would use for the lessons that they planned. During the session, teachers discussed student work they brought to the meeting. The hosting teacher displayed student work throughout the classroom and commentary on the work samples. On many of the samples, the hosting teacher had written praise commentary. Student work that reflected the teacher's collaborative planning experiences adorned the walls of the hosting teacher. Teachers worked as a team to compile lessons, activities, and lesson materials for the next week. Teachers used the Internet to search for research-based resources (lessons, activities, and materials). The teachers were using the Internet the day of the observation to help them with ideas. Teachers, the day of the observation were busy sharing thoughts about the lessons that they were planning and reflecting on last week's lessons and results as a means to planning the lessons for next week.

I generated a transcript and coded it using Ethnograph v6.0 and QDA Miner v3.2 (updated to 4.0) after the observation concluded and then gave the transcript to the participant for member-checking. When examining the observation for patterns, themes, issues, topics, ideas, relationships, cases, events, and concepts, a pattern and themes emerged. A pattern emerged from the participant's instructional discourse and performance. Participant 2 used meaningful conversation (instructional discourse) with the teachers. Themes emerged from the study participants' interview responses. Themes

also emerged from observations conducted and archival data examined. Many of the themes centered on participants' actions and collegial interactions with each other, the collaborative process, teacher effectiveness, and the impact of collaboration on student learning.

Archival Phase

By reviewing archival data I can conclude how teachers define and refine, monitor and evaluate teacher collaboration. By examining the data, I can also ascertain potential issues in the collaborative process at School E and establish reasons for creating new or keeping existing teacher collaboration methods. Also, I reviewed archival data to analyze how teachers communicate to collaborate. This means that collaborative planning meeting minutes and agendas and excerpts from School E's continuous improvement plan (or CIP) and the county's CIP were the archival documents collected and analyzed.

The agendas examined dated 2009 and 2011. Some of the agenda topics were Review Norms and Covenants, Professional Learning Protocol, Flex Plans, Examining Student Work and Teacher Commentary, Math GPS Content Changes, and Math Fact Fluency. From the topics aforementioned, I made a connection between collaboration and learning through which I identified the means to improving collegial interaction. Also, the agendas provided a quick assessment of the collaborative planning process. The collaborative planning agendas of School E begin with an essential question and listed thereafter are several key items of focus. The items listed are: look at student work, share: results of "Next Steps," Next Steps: How will we get there, unit revisions, and notes. An

agenda may well be the best way to revise the collaborative planning meeting and process.

I also analyzed collaborative planning meeting minutes. The minutes may well be the tool to use when identifying potential issues and defining and refining, monitoring and evaluating teacher collaboration. In the minutes, a researcher can note how teachers communicate to collaborate, how teachers interact, how teachers collaborate, and how effective the collaborative process is or can be. Therefore, I examined the collaborative planning meeting minutes taken by the minutes recorder for School E. The minutes recorder reported minutes taken at the meetings of School E on a form. To complete the form, meeting participants shared the results of "next steps" from the previous week, discussed agenda topics, and concluded with questions (What are your next steps? What do we want to happen in the classroom?) and a timeline for the minutes recorder to log on the form. Moreover, through the meeting minutes, I recognized that teachers as expected participated in collaborative planning. They were not only attending the meetings but participating in the meetings. This means that teachers as expected also participated in collaborative planning conducted as professional learning (or professional development). Teacher participation ordinarily included sharing, reflecting, and conferring with other teachers. This is how the participating teachers of this study became effective teachers. This is also how participating teachers communicated to collaborate.

The county's continuous improvement plan (County CIP) was the last archival document that I examined. Once I had examined the CIP for information that validated using collaboration to improve teaching and learning, I realized that Goal I/b (*Student*

Achievement) of the plan (the CIP) offered the validation sought. Goal I/b reads "increase performance of subgroups," and Goal IV/d reads "enhance collaboration." These excerpts (taken from the county's CIP) indicate that collaborative planning participants will dedicate time and effort to addressing weak areas based on the performance of subgroups to enhance instruction. And, if the goal is to enhance instruction, the goal must also be to increase student performance and learning in those areas. The excerpts also connect the work that the participants will perform in collaboration to improving instruction.

Therefore, if the goal is to improve instruction, the goal must also be to improve teacher effectiveness and student learning.

Summary

The interviews, observations, and archival data revealed that the teacher community of School E is a venue for new learning, continuing intellectual development, cultivating leadership, and improving student learning and classroom practices.

Observations confirmed that collaboration consistently practiced as the means to meeting the instructional and learning needs of the students. Observations also substantiated the use of differentiated instruction and student self-efficacy strategies (e.g., goal setting, follow through, and attainment) to help students succeed in school and in life. Through the interviews, study participants reported that collaborative planning meetings are regular and held on Wednesdays to analyze areas of need, data, develop strategies, and to review units and instruction. Participants also stated that they conduct common planning to address content area effectiveness at grade level. Also, the participants stated that they conduct vertical planning to address content area effectiveness across grade levels, and

they use professional development conducted during collaboration to address the learning, intellectual, and leadership needs of the teacher to promote effectiveness. Participant 2 stated:

Collaborative planning meetings are on Wednesdays and professional development meetings are on Thursdays. Collaborative planning meetings are 45 minutes, and professional development meetings are 55 minutes. The collaborative planning meetings usually began with a review of the last meeting. Collaborative planning meetings take place in one of the teachers' classroom as a means to time management. This way time is used more efficiently. We address topics, issues, concerns, and problems that are pertinent to effective teaching and learning. At the present, we are learning about common core. Also, we follow up on items due at the time of the meeting. We set dates for future meetings. We discuss tasks to complete before the next meeting. At that time also, we make adjustments to the next meeting agenda. Teachers plan ahead what they will do in collaborative planning meeting over the summer months through our leadership team and surveys and previous collaborative planning meetings and via data (C.R.C.T. data). Also, every grade level teacher is on the same page because they plan together as a grade level.

However, study participants stated that cross grade level collaboration (where grade level teachers meet with above grade level and below grade level teachers regardless of content area taught) is reportedly not happening on a regular basis. Participant 2 stated, "Cross grade level planning was held once this year thus far."

Archival documents provided an opportunity for data collection as well. The archival data for School E are records of the events, actions, measures, and procedures taken. Through the archival data of School E, I connected collaboration to improving student learning, instruction, and collegial interaction through focusing on needs and weaknesses. As the data indicated earlier, a focus on student and teacher needs and weaknesses based on CRCT domains in Reading and Math emerged as key to connecting collaboration to improving student learning, instruction, and collegial interaction. I coded data collected from archival documents (e.g., collaborative planning meeting minutes and agendas, related district survey results and excerpts from County's CIP) using Ethnograph v6.0 and QDA Miner v3.2 (updated to 4.0). I coded interview and observation data using the same qualitative analysis software. Accountability, professional relationships, and alignment are a few of the codes identified.

Research Questions

The data collected from the interviews, observations, and available archival documents (preferably archival documents of 2009, 2010 and 2011) provided answers to the research questions of this qualitative case study. I designed the research questions to align with the methodology of this study and specifically to address the identified problem and reason for conducting this study. Direct comments, quoted from interviews and observations, corroborated and contributed to my interpretations and analysis. The research literature that I cited substantiated the evidence of quality and maintained data triangulation continuity. I will discuss this in some level of detail in Section 5.

In addition, themes emerged from the data that I collected to answer the research questions. The themes helped provide clarity and support to the findings of this study. Those major themes are: lack of time, trust, the ultimate goal of collaboration, student-centered collaboration, collaborative relationships, and relationship between collaboration and student learning. I will bring these themes together as part of the overall analysis later. Also, the data that I presented in each of the following cases for each research question highlight those major themes and contribute clarity and support to the findings of this study.

Research Question I

How do rural southeast Georgia elementary school teachers use identified advantages and disadvantages of cross grade level collaboration to improve collegial interactions?

The study participants of the teacher communities of Schools A, B, C, D, and E identified feedback, sharing ideas, learning new ideas, problem-solving and bridging gaps as advantages and lack of support, time and resources as disadvantages in individual interviews. The participants also equated advantages with strengths and disadvantages with weaknesses. They explained that they used the identified strengths and weaknesses to decide on agenda topics for collaborative planning meetings, to promote professional learning, and to determine what they would be discussing concerning teacher effectiveness and learning and student learning and academic success. Also, the participants discovered as a result of this study that they could use the agenda topics that they decided on to improve collegial interactions. This meant that they had to be cognizant of the kinds of topics that would improve their interaction. Establishing criteria

for topic selection became a priority. They decided that the topics had to be engaging, informative, research-based, practical, and provide an opportunity for teachers to improve their collegial interaction skills as well as foster professional growth.

Participants also noted that they use the identified strengths and weaknesses to address and satisfy their needs for collaboration and to assess whether collaboration was accomplishing what it needed to accomplish in teaching and learning. If they found that the weaknesses decrease and the strengths increase, they assessed that collaboration, collaborative planning worked. In addition, participants indicated that they used the identified strengths and weaknesses to define collaboration and collaborative planning to meet the needs of their students. As previously indicated, an interview participant stated that the "ultimate purpose is to improve student achievement," and another participant stated during the interview that ". . . the ultimate goal of collaborative planning is to increase your student achievement." Here, participants defined collaboration as purposed for improving and increasing student achievement. Thus, collaboration (grade level or cross grade level) is about improving student achievement to include student learning and academic success, and must therefore also be about increasing teacher effectiveness and learning to accomplish the first task.

Case I: School A

The study participants of the teacher community of Schools A identified sharing ideas, learning new ideas, problem-solving and bridging gaps as advantages and time and resources as disadvantages in individual interviews. Participant 5 of School A corroborated the aforementioned when responding with "time and resources are the

biggest disadvantages" to the interview question: What are the disadvantages of cross grade level collaboration? To the same question, Participant 1 responded, "Disadvantages would be finding enough time to meet with all teachers have to do now." Participant 4 stated, "The only disadvantage that I see with cross grade level collaboration would be time." Participant 3 stated, "... biggest disadvantage because you know time ..." When asked "what are the advantages of cross grade level collaboration," the participant responded, "Cross grade level collaboration is advantageous to instruction. It allows teachers to discuss standards and strategies to use to close gaps that may occur." Participant 1 replied, "Advantages would be finding solutions to problems you are having by being able to discuss it with your colleagues." Participant 4 answered, "The main advantage of cross grade level collaboration is what is taught above and below the grade level that you teach. Also, teachers sharing of ideas with colleagues that they normally do not plan with are an advantage." Participant 3 stated, ". . . to me in my eyes it would be like bridging the gap between the grades you know because that way the teachers are geared to meeting the expectations of the other grade levels you know."

Through classroom observations, I observed participants implementing best practices that they acquired through collaborative planning meetings and via informal collaboration. During collaborative planning meeting visitations, I also observed participants actively discussing their success implementing best practices. They looked at their strengths and weaknesses to determine how successful they were at implementing best practices. The participants perceived this kind of deliberation as a way to improve the way they communicated with each other and with their students and as a way to

improve what they communicated about in collaborative planning. At one of the collaborative planning meetings, participants and their colleagues decided that they should maintain a focus on differentiated instruction and student self-efficacy to profit long-term from its benefits. Addressing topics such as differentiated instruction and student self-efficacy may well force the communication between colleagues to be grounded in professional learning and improvement than in complaints and turf guarding.

From the available archival documents, examined collaborative planning meeting minutes and agendas substantiated the interview and observation data and provided more data to answer the first research question. Agendas reviewed first provided a snapshot of the purpose of the meeting, roles and responsibilities, expectations, actions taken, follow ups, updates, outcomes, and next steps. Afterwards, reading collaborative planning meeting minutes provided details of the aforementioned and a better understanding of how teachers improve collegial interactions. Reviewing archival documents of School A for 2009, 2010 and 2011 made comparisons and establishing evolutions in collaboration probable. School A made archival documents (agendas and meeting minutes) for 2011 accessible. Archival documents for 2009 and 2010 were inaccessible when I conducted this study.

In addition, the covenants and norms from the 2011 agendas for grades K through 5 provided an answer to research question one. Norms and covenants identify weaknesses that existed and strengths that have replaced those weaknesses. The covenants and norms of School A hold all participants personally accountable for maintaining shared and quality communication. At the start, participants began improving their collegial

interactions through norms and covenants. A kindergarten covenant reads "we agree to keep each other informed and share ideas" and a norm reads "stay on topic and task." From the covenant, one may well infer that teachers interact with each other while one can deduce that to stay on a topic or task includes interacting with others about the topic or task. Hence, teachers practice shared communication or collegial interaction when they present and discuss topics and perform and assess tasks. When teachers choose important topics to discuss and tasks that help them work together towards the educational success of all students, they are choosing to improve how they interact with each other. All of the grades at School A have established covenants and norms for collaborative planning that focus on topic and task relevancy and personal and professional accountability.

The 2011 collaborative planning minutes for School A were the only documents from which I drew detailed information about the norms and covenants and other archival data. Beginning with kindergarten, the recorder of the September 27, 2011 collaborative planning meeting wrote "everyone shared their self-efficacy strategies that they are implementing in their classrooms" in the notes from the discussion section of the meeting minutes reporting form. Earlier this year, K through 5 teachers concluded that they needed to work on student self-efficacy. Thus, self-efficacy became one of the topics addressed in collaborative planning meetings.

Case II: School B

The study participants of the teacher community of School B identified planning together and feedback as advantages and time, resources, and lack of support as disadvantages in a group interview. Participant 3 of School B substantiated the

aforementioned by stating "it really boils down to having people cover those classes." The participant was responding to the question: What are the disadvantages of cross grade level collaboration? When Participant 2 at School B was asked "what are some of the enablers of collaboration," the participant responded, "... administration (Principals allowing scheduling). There may be not enough time in the schedule but allowing it to happen. And, another thing that could be an inhibitor would be also lack of support." When I asked interview participants at School B to explain the impact of collaborative practices on student learning and teacher effectiveness at this school (School B), Participant 3 replied, "... our teachers do a really good job planning together and looking at that student work piece each week together ... You know and they can draw on the teacher strengths and weaknesses. You know, giving each other feedback."

From the available archival documents, I examined collaborative planning meeting minutes and agendas to substantiate the interview data and to acquire additional data to answer the first research question. By reviewing agendas, I obtained a snapshot of the purpose of the meeting, roles and responsibilities, expectations, actions taken, follow-ups, updates, outcomes, and next steps. Afterwards, reading collaborative planning meeting minutes helped me acquire details of the aforementioned and a better understanding of how teachers improved collegial interactions. I used 2009, 2010 archival documents of School B for to make comparisons and to search for evolutions in collaboration.

From the 2011 agendas for grades K through 5, the covenants and norms thereof supplied an answer to research question one. Norms and covenants identify weaknesses

that existed and strengths that have replaced those weaknesses. The covenants and norms of School B hold all participants personally accountable for maintaining shared and quality communication. At the start, participants began improving their collegial interactions through norms and covenants. In the January 13, 2010 collaborative planning meeting minutes for grades K through 5 under planning items discussed, the minutes recorder for each grade made a note about developing or establishing norms and/or covenants. From the norms and covenant, one may well infer that teachers interact with each other while one can deduce that to stay on a topic or task includes interacting with others about the topic or task. Hence, teachers practice shared communication or collegial interaction when they present and discuss topics and perform and assess tasks. When teachers choose important topics to discuss and tasks that help them work together towards the educational success of all students, they are choosing to improve how they interact with each other. All of the grades at School B have established covenants and norms for collaborative planning that focus on topic and task relevancy and personal and professional accountability.

The 2011 collaborative planning minutes for School B were the only documents from which I drew detailed information about the norms and covenants. I drew additional archival data from 2009, 2010, and 2011 agendas and minutes to substantiate the identified advantages and disadvantages. Beginning with the minutes of September 30, 2009, a minutes recorder of the kindergarten collaborative planning meeting wrote "shared 'ideas' used in classroom last week" in the notes from discussion section of the meeting minutes reporting form. A first grade recorder wrote "teachers paired with each

other and shared results from implementing the organization and voice traits in their classroom" in the meeting minutes for the same date. The second grade recorder wrote on September 30, 2009 "teaching ideas and activities presented." On the same date, the fifth grade recorder wrote "teaching ideas: Probable Passage Four Square Method." Earlier this year, K through 5 teachers also concluded that they needed to work on student self-efficacy. Thus, self-efficacy became one of the topics addressed in collaborative planning meetings.

Case III: School C

The study participants of the teacher community of School C identified sharing ideas, learning new ideas, problem-solving and bridging gaps as advantages and time and resources as disadvantages in a group interview. Participant 1 confirmed time as one of the disadvantages stating "time is the big... That's the obstacle." Participant 1 also stated, "Time is what we battle against." Participant 3 stated, "Well one disadvantage could be ...the time because I mean cross grade collaboration takes time to really discuss and sit down and get into to some deep conversations . . ." Participant 2 in response to what the identified advantages are stated, "...some gaps and weaknesses that you know we can talk about and share and say okay let's talk about how can we do things differently." This is meaningful discussion and sharing and the means to improving collegial interactions.

During a collaborative planning meeting visitation, observed participants actively discussed how to teach fractions. Teachers brainstormed on how to teach fractions; shared how they taught fractions at different grade levels; and posted after each explanation of strategies shared by each grade level teacher. Also, teachers discussed the

pros and cons of teaching fractions. The participants perceived this kind of deliberation as a way to improve the way they communicated with each other and with their students and as a way to improve what they communicated about in collaboration. Written on a chart tablet at the front of the data room where this meeting occurred was "Remember: You get out what you put in . . ." At an earlier collaborative planning meeting, participants and their colleagues decided that they should also maintain a focus on student self-efficacy to profit long-term from its benefits. On an agenda dated January 21, 2011, teachers and the collaborative planning meeting facilitator listed self-efficacy (in lesson plans and evident in classroom) as an agenda item. In the meeting minutes regarding the agenda dated January 21, 2011, the recorder wrote "teachers shared self-efficacy strategies used in classroom." In the meeting minutes of March 12, 2011, the recorder wrote "teachers discussed self-efficacy and H.O.T.S. in lesson plans and implementation in classroom." Addressing topics such as H.O.T.S. differentiated instruction and student self-efficacy may well force the communication between colleagues to be grounded in professional learning and improvement which in turn could improve collegial interactions.

From the available archival documents, collaborative planning meeting minutes and agendas substantiated the interview and observation data and provided additional data that answered the first research question. I reviewed agendas first because this type of document provides a snapshot of the purpose of the meeting, roles and responsibilities, expectations, actions taken, follow ups, updates, outcomes, and next steps. Afterwards, I read collaborative planning meeting minutes to acquire details about the aforementioned and to gain a better understanding of how collegial interactions improve. By reviewing

archival documents of School C for 2009, 2010 and 2011, I could make comparisons and establish evolutions in collaboration.

Through the 2011 agendas for grades K through 5, the covenants and norms thereof made possible an answer to research question one. Norms and covenants identify weaknesses that existed and strengths that have replaced those weaknesses. The 2009-2011 covenants and norms of School C hold all participants personally accountable for maintaining shared and quality communication. At the start, participants began improving their collegial interactions through norms and covenants. The norms for School C read "Be on time! Be prepared. Give undivided attention to facilitator. Participate and share ideas. Stay on topic. No or limited outside interruptions" and the covenants read "Work together. Be responsible. Encourage each other. Love! Be supportive. Be positive." From the norms and covenants, one may well infer that teachers interact with each other while one can deduce that to stay on a topic or task includes interacting with others about the topic or task. Hence, teachers practice shared communication or collegial interaction when they present and discuss topics and perform and assess tasks. When teachers choose important topics to discuss and tasks that help them work together towards the educational success of all students, they are choosing to improve how they interact with each other. All of the grades at School C have established covenants and norms for collaborative planning that focus on topic and task relevancy and personal and professional accountability.

I drew detailed information about the norms and covenants from 2009, 2010, and 2011 collaborative planning meeting minutes documents for School C. Also, to

substantiate identified advantages and disadvantages, I drew additional archival data from 2009, 2010, and 2011 agendas and minutes. Beginning with the agenda of September 28, 2010, the meeting minutes recorder noted that the teachers reviewed their strengths/weaknesses regarding teacher commentary on student work. The recorder for each grade (K through 5) wrote in the notes for that day "weakest – teacher commentary (Possibly not enough time)." By reviewing their strengths/weaknesses where warranted, the teachers heightened their own awareness of the advantages and disadvantages inherent in the solutions, approaches, methods, techniques, and strategies used to improve teaching and learning.

Case IV: School D

The study participants of the teacher community of School D identified sharing ideas, learning new ideas, problem-solving and bridging gaps as advantages and time and resources as disadvantages in individual interviews. To confirm the aforementioned disadvantages, Participant 1 stated, "So, that's going to be a weakness for us this year not having the time." The participant also stated, "Once again, the time you know and paying for subs with the shortest of funds right now, it's very difficult to do that . . ." Participant 1 was referring to cross grade level collaboration. Concerning sharing ideas as one of the identified advantages, Participant 2 shared an interesting example. In the interview, Participant 2 stated:

This is amazing. She was teaching 2 and 3 digit multiplication. Where you have to do all of the steps... She didn't know (I was just amazed with her.) . . . She said I didn't know if the problem was that they didn't know their basic facts or that they

didn't know how to cross multiply. So, she gave them 2 tests. She gave them a test one time just all by itself. The second time she gave them a multiplication table where they can find the answers. So, if they did poorly both times, it was probably that they did not know how to cross multiply. But, if they did really well the second time, she knows that they didn't know their basic facts. So, then she formed her flex groups (based on what she found). So, one group drilled basic facts. One group practiced the strategy, the actual steps to cross multiply. And, she shared that. And, we would not have known that if we didn't meet collaboratively. But, she shared that... I shared that with every grade level.

This is a perfect example of how sharing can improve collegial interaction.

When I conducted a collaborative planning meeting visitation, observed participants actively discussed differentiated flex plans (tiered assignments for Reading, Math, Science, and Social Studies). During the collaborative planning meeting visitation, I observed participants actively discussing how to develop tiered assignments for flex groups based on Bloom's Taxonomy. They looked at their strengths and weaknesses to determine how successful they were at conducting tiered differentiated flex groups based on Bloom's Taxonomy. The participants perceived this kind of deliberation as a way to improve the way they communicated with each other and with their students and as a way to improve what they communicated about during the collaborative process. At another collaborative planning meeting, participants and their colleagues decided that they should also maintain a focus on student self-efficacy to profit long-term from its benefits.

Addressing topics such as differentiated instruction and student self-efficacy may well

force the communication between colleagues to be grounded in professional learning and improvement which in turn could improve collegial interactions.

From available archival documents, I examined collaborative planning meeting minutes and agendas to substantiate interview and observation data and to obtain additional data to answer the first research question. I reviewed agendas first because this type of document can provide a snapshot of the purpose of the meeting, roles and responsibilities, expectations, actions taken, follow ups, updates, outcomes, and next steps. Afterwards, I read the collaborative planning meeting minutes to acquire details of the aforementioned and to gain a better understanding of how teachers improve collegial interactions. The archival documents of School D for 2009, 2010 and 2011 provided an opportunity for comparisons to be made and evolutions in collaboration to be established.

Also, I was able to obtain an answer to research question one via the 2011 agendas for grades K through 5 from the covenants and norms thereof. Norms and covenants identify weaknesses that existed and strengths that have replaced those weaknesses. The covenants and norms of School D hold all participants personally accountable for maintaining shared and quality communication. At the start, participants began improving their collegial interactions through norms and covenants. The covenant reads "we agree to keep each other informed and share ideas" and a norm reads "stay on topic." From the covenant, one may well infer that teachers interact with each other while one can deduce that to stay on a topic or task includes interacting with others about the topic or task. Hence, teachers practice shared communication or collegial interaction when they present and discuss topics and perform and assess tasks. Also, the meeting

minutes confirmed that teachers constantly reviewed covenants and norms as topics for discussion. In the minutes for September 2, 2009, the recorder documented that the teachers reviewed the norms and covenants at the start of one of their collaborative planning meetings. On the agenda for September 2, 2009, the meeting minutes recorder listed "Review norms and covenants" as a discussion item. When teachers choose important topics (a discussion item) to discuss and tasks that help them work together towards the educational success of all students, they are choosing to improve how they interact with each other. All of the grades at School D have established covenants and norms for collaborative planning that focus on topic and task relevancy and personal and professional accountability.

The 2011 collaborative planning minutes for School B were the only documents from which I drew detailed information about the norms and covenants. I drew additional archival data from 2009, 2010, and 2011 agendas and minutes to substantiate the identified advantages and disadvantages. Beginning with the agenda of November 10, 2010, "Review strengths/weaknesses of readiness for differentiation from completed teacher survey" is one of the items listed. By reviewing their strengths/weaknesses where warranted, the teachers were also looking at the advantages and disadvantages inherent in the solutions, approaches, methods, techniques, and strategies used to improve teaching and learning.

Case V: School E

The study participants of the teacher community of School E identified sharing ideas, learning new ideas, problem-solving and bridging gaps as advantages and time and

resources as disadvantages in individual interviews. Participant 2 of School E identified sharing ideas as an advantage in an interview by responding "sharing of ideas is another advantage in that teachers get to listen to ideas from colleagues that they normally do not plan with" to the questions: What are the advantages of cross grade level collaboration? How are the advantages utilized to improve collegial interaction during collaboration? Participant 2's response also addresses how teachers improve collegial interactions. Collegial interaction can be improved through the sharing of ideas. When teachers share ideas back and forth meaningful discussion can happen. Meaningful discussion can improve collegial interaction because meaningful discussion requires the participant cognizant of how they dialogue with others when acquiring what they need to learn and what they need in terms of support. As Participant 2 stated, "Collaborative planning meetings take place in one of the teachers' classroom as a means to time management. This way time is used more efficiently. We address topics, issues, concerns, and problems that are pertinent to effective teaching and learning."

When I conducted a collaborative planning meeting visitation, observed participants were actively discussing how successful they were at implementing last week's lesson plans. They looked at their strengths and weaknesses to determine how successful they were at implementing best practices. The participants perceived this kind of deliberation as a way to improve the way they communicated with each other and with their students and as a way to improve what they communicated about when they collaborated. Also at the collaborative planning meeting, participants were also deciding next week's lessons. They reviewed the last meeting minutes and followed-up on items

due at this meeting. They used the computer to create activities, compose their lesson plans, and design the materials (handouts, etc.) that they would use for the lesson. They were using the Internet to locate research-based resources that they would use to support their efforts. They were discussing student work that they brought to the meeting. The hosting teacher displayed student work and her commentary on the work samples throughout her classroom. On many of the work samples, the teacher had written praise commentary. There was much dialogue about how they would assess their students and how they would address failed student learning experiences. The teachers talked about how they wanted to impact student learning.

To answer the first research question, I examined collaborative planning meeting minutes and agendas to substantiate the interview and observation data and to obtain additional data. I reviewed agendas to obtain a snapshot of the purpose of the meeting, roles and responsibilities, expectations, actions taken, follow ups, updates, outcomes, and next steps. Afterwards, collaborative planning meeting minutes provided me details of the aforementioned and a better understanding of how teachers improve collegial interactions. I reviewed archival documents of School E for 2009, 2010 and 2011 to make comparisons and to establish possible evolutions in teacher collaboration.

From the 2009, 2010, and 2011 agendas for grades K through 5, I answered research question one via the covenants and norms. Norms and covenants identify weaknesses that existed and strengths that have replaced those weaknesses. The covenants and norms of School E hold all participants personally accountable for maintaining shared and quality communication. At the start, participants began improving

their collegial interactions through norms and covenants. From the covenant, one may well conclude that teachers interact with each other while one can deduce that to stay on a topic or task includes interacting with others about the topic or task. Hence, teachers practice shared communication or collegial interaction when they present and discuss topics and perform and assess tasks. One of the agenda topics for August 12, 2009 is "Review Norms and Covenants." The teachers review norms and covenants as meeting topics and tasks until they know and practice them. When teachers choose important topics to discuss and tasks that help them work together towards the educational success of all students, they are choosing to improve how they interact with each other. All of the grades at School E have established covenants and norms for collaborative planning that focus on topic and task relevancy and personal and professional accountability.

The 2009, 2010, and 2011 collaborative planning minutes for School E also document data that can provide an answer to question one. For instance, in the collaborative planning meeting minutes of August 24, 2011, the recorder wrote "we shared some ideas and organization writing traits that we modeled with our students" in the notes from the discussion section of the meeting minutes reporting form. On October 13, 2011, the recorder wrote "we shared strategies that we learned from . . . about writing" in the minutes. The notes clearly substantiate that teachers share ideas often in collaborative planning. As previously stated, teachers used sharing ideas earlier identified as an advantage to decide on agenda topics for collaborative planning meetings conducted as professional learning and to determine what they would discuss concerning teacher effectiveness and learning and student learning and academic success. Earlier this

year, the K through 5 teachers of School E also concluded that they needed to work on student self-efficacy. They addressed self-efficacy in collaborative planning meetings to determine how to implement it in their lessons. All of the elementary schools were addressing self-efficacy at the time of this study.

Self-Efficacy refers to a person's confidence that he/she can carry out a behavior necessary to reach a desired goal (MacGregor et. al., 2006, p. 216). To reach desired goals, one must first have the control to produce an outcome. The power to generate a result warrants acting out certain behaviors. The ability to produce desired results also necessitates efficiency and minimum expenditure of energy, time, and resources.

Research question one had many possible answers but the ones given here in reply are indicative of teachers who have increasing student achievement as their collaborative purpose. The answers also substantiate how teachers used identified advantages and disadvantages to improve their collegial interactions with each other.

Research Question II

How do teachers, when they collaborate across grade levels, improve collegial interactions?

Teachers improve collegial interactions when they collaborate across grade levels by making their experiences interacting with each other focused on meaningful discussion about their visions, ideas, strengths and weaknesses, norms and covenants, data analysis, teaching and learning issues, and current topics in pedagogy regarding across grades teaching and learning. Confirmations of the aforementioned answer to question two follow. Also, in the following paragraphs, I separated the cases to establish

how all the schools of this study have implemented teacher collaboration using a systems thinking approach while maintaining a collegial coach's perspective.

Case I: School A

The study participants of the teacher community of School A indicated that when they collaborated across grade levels they improved collegial interactions through a shared vision and mission and norms and covenants. Participant 4 of School A substantiated the aforementioned by stating "I think that a shared vision and mission, as well as development of norms and covenants has helped" when asked the interview question: How can teachers and administrators improve collegial interactions? To the question, Participant 5 of School A stated, "All teachers are involved in setting these norms, and adhere to them. Therefore, the interactions among them are healthy. Teachers work together to improve their instruction and student achievement." Others within the teacher community who were also study participants identified meaningful discussion, trust, research, sharing ideas, problem-solving issues, addressing current topics in pedagogy, and data analysis as their means to improving collegial interaction. Contributing to the aforementioned, Participant 1 at School A stated, "When we meet we listen to each other without putting anyone down about the way they are teaching a concept. We offer help and I think we are not afraid to say that we need help from each other." This participant was indirectly talking about trust, openness, acceptance, respect for differences, shared responsibility, and cohesion. Teachers who trust each other feel free to disclose their weaknesses, fears, and inadequacies and find asking for help supportive not demeaning. Participant 3 (same school) stated, "... we learn new

strategies, address our weaknesses . . ." Here, the participant indicted that collegial interactions can be improved through addressing weaknesses. If teachers use their weaknesses to improve collegial interaction, collegial interactions can also be improved through strengths, advantages, and disadvantages.

During an observation at School A, I observed three of the 10 study participants. In one of the observations, I observed Participant 1 teaching a math lesson on the least common multiple in the classroom. An observation of Participants 2 and 3 in the classroom allowed me the chance to see them teaching a lesson on identifying main ideas. I observed Participant 4 in a collaborative planning meeting for fourth and second grade teachers. In the collaborative planning meeting for fourth grade, teachers were discussing benchmarks in relation to earth science (the discussion included terminology, order of planets, their relationship to each other, natural resources, and place vs. unit). Teachers discussed test-taking skills (P.O.E.). Teachers reviewed, discussed, evaluated weaknesses through benchmark results. This was their data analysis phase of the session. Teachers discussed re-testing to know if the interventions worked. They were in real time improving collegial interaction by making their communication meaningful and useful. When looking at the agendas and minutes, it was clear that School A dedicated many meetings to feedback, data analysis and interpretation, questioning, and follow-up. This format for dialogue (feedback, data analysis and interpretation, and follow-up) would create the environment and opportunities for meaningful and useful interaction. The meeting minutes recorder documented this format for collaborative planning meetings most clearly in the November 11, 2011 fourth grade teachers' collaborative planning

minutes for School A. The recorder wrote "benchmark data analysis – Reading; ELA - looked at weaknesses (below 70%)" as analysis and interpretation; "simile, hyperbole, alteration, personification, onomatopoeia (teach them together)" as feedback; and implementation as follow-up was inferred.

Case II: School B

The study participants of the teacher community of School B indicated that when they collaborated across grade levels they improved collegial interactions through meaningful discussion about their strengths and weaknesses, norms and covenants, data analysis, teaching and learning issues, and current topics. Participant 2 of School B contributed to the assertion by stating ". . . establish norms, covenants for grade level planning so it will not turn into a gripe session. Stick to the topic. Be punctual. Be prepared. We got them posted in our data room." Participant 3 stated, "As far as effective collaboration . . . it's really holding teachers accountable to the norms and covenants and not letting their personal opinion rule the conversation." Also, teachers may well improve collegial interactions through examining student work and test scores because teachers can have meaningful discussion about weak areas, data, and issues in teaching and learning. As Participant 3 stated, "They examine student work. They look at the scores. You know overall, was this an effective test? Did it evaluate what we were trying to assess?" Here, Participant 3 reiterates that teachers can find a variety of way to improve collegial interactions when they collaborate across grade levels.

During the time I executed this study, School B was not conducting collaborative planning meetings for observation visitations. I did not conduct classroom observations

because there were no consenting volunteers. The agendas and meeting minutes were the only accessible means to ascertaining what constitutes a collaborative planning meeting.

When looking at the agendas and minutes, it was clear that School B dedicated many meetings to feedback, data analysis and interpretation, questioning, and follow-up. This format for dialogue (feedback, data analysis and interpretation, and follow-up) would create the environment and opportunities for meaningful and useful interaction. The meeting minutes recorder documented most noticeably this format for collaborative planning meetings in the October 20, 2009 collaborative planning minutes for first grade School B. The minutes recorder wrote "determine what instructional strategies will be used to help reach smart goals" as feedback; "track data" as follow-up; and "does the goal address all students, so that all students are expected to increase their ORF?" as a question to ask to analyze and make interpretations to determine next steps. ORF means Oral Reading Fluency.

Case III: School C

The study participants of the teacher community of School C indicated that when they collaborated across grade levels they improved collegial interactions through meaningful discussion about their strengths and weaknesses, teaching and learning issues, and current topics. Confirming the assertion is Participant 1 who stated, "You're sharing ideas about what works and those teachers implement those ideas and strategies."

Participant 1 also stated, "They improve plans and brainstorm, and together come up with plans to teach a lesson so that's going to improve them you know as an educator."

Adding to the confirmations of Participant 1, Participant 2 stated:

Like at our last meeting the Kindergarten teachers were assigned pages to read and to come back and discuss and share. First grade and second grade teachers as well you know they were asked to read these pages and then to come back and share and to create activities based on you know what you had to read.

Here, this participant introduces feedback as a way to improve collegial interaction. Feedback can be meaningful discussion.

When I observed participants at School C, I observed study participants on November 3, 2011 discussing the strategy that they took back from collaborative planning and implemented for multiplication/division with third and fifth grade teachers. They discussed the strategies that they used consistently to teach fractions. They were in real time improving collegial interaction by making their communication meaningful and useful. When looking at the agendas and minutes, it was clear that School C dedicated many meetings to feedback, data analysis and interpretation, questioning, and follow-up. This format for dialogue (feedback, data analysis and interpretation, and follow-up) would create the environment and opportunities for meaningful and useful interaction. The meeting minutes recorder documented most lucidly this format for collaborative planning meetings in the September 28, 2010 collaborative planning minutes for grades K through 5 School C. The recorder wrote "weakest-teacher commentary" as feedback; "will discuss results" as follow-up; and "why self-assess" and "why reflect on practices" as the questions that they asked to analyze and make interpretations.

Case IV: School D

The study participants of the teacher community of School D indicated that when they collaborate across grade levels they improve collegial interactions through meaningful discussion about their strengths and weaknesses, norms and covenants, data analysis, teaching and learning issues, and current topics. Contributing to this claim, Participant 2 at School D stated, "We do a lot of data analysis... Really stopping and thinking about what happened, why did it happen, what can we do to continue our successes and to correct our failures." The participant also stated, "... and data drives collaborative planning." Participant 1 substantiated discussing strengths and weaknesses to improve collegial interactions by stating "we'll meet next week and we'll look at our strengths and weaknesses." The participant also stated, "... know they talk about their strengths, weaknesses, acceleration pieces that they can do." Also, Participant 1 stated, "We talked about the data and the different types of data. You know, you've got your leading and lagging data. You know, the C.R.C.T. would be the lagging data." Having data analysis discussions is yet another way to improve the talk (the collegial interaction) in collaborative planning meetings. Contributing to this declaration, Participant 2 stated, "Well, we do a lot of data analysis... Really stopping and thinking about what happened, why did it happen, what can we do to continue our successes and to correct our failures." Accordingly, there are numerous and different ways to improve collegial interaction.

In an observation at School D, I observed the study participant on October 25, 2011 discussing differentiated instruction: tiered instruction part two with first grade and kindergarten teachers. During the observation, Participant 2 stated, "Differentiated

instruction changes the thinking of the teacher concerning student needs, abilities, intelligence, etc. Students don't get stuck in teacher stigmatizing them due to their abilities." They discussed the strategies that they used consistently to differentiate learning/instruction. In real time, teachers improved collegial interaction by making their communication meaningful and useful. When looking at the agendas and minutes, the teachers at School D dedicated many meetings to feedback, data analysis and interpretation, questioning, and follow-up. This format for dialogue (feedback, data analysis and interpretation, and follow-up) would create the environment and opportunities for meaningful and useful interaction. The meeting minutes recorder documented most clearly this format for collaborative planning meetings in the August 23, 2011 first grade and kindergarten teachers' collaborative planning minutes for School D. The recorder wrote "look at samples of flexible group plans-determine which shows true differentiation" as analysis and interpretation; "review steps for creating tiered activities for differentiated instruction" as feedback; and "develop differentiated flex group plans based on what we learned today about tiered assignments" as follow-up. The recorder also documented minutes as the agenda.

Case V: School E

The study participants of the teacher community of School E indicated that when they collaborated across grade levels they improved collegial interactions through meaningful discussion about their strengths and weaknesses, norms and covenants, data analysis, teaching and learning issues, and current topics. For instance, Participant 1 stated "we share things that are successful for our schools" when asked: What can you do

as an administrator to affect change in the district through collaboration across grade levels? If the participant is sharing the success of School E, the participant also has to share how the school got there. This means that the sharing includes discussion about strengths and weaknesses in relation to the success of the school. Teachers also conducted book studies on current topics to improve collegial interactions. Participant 1 stated, "We do the book review, and we spend three afternoons discussing this book and everybody have [sic] their own chapter to present per their understanding about what they were looking at." Meaningful discussion can also improve collegial interaction. When I asked the interview question "how are the advantages utilized to improve collegial interaction during collaboration," Participant 2 responded, "... sharing of ideas is another advantage in that teachers get to listen to ideas from colleagues that they normally do not plan with." Teachers who share ideas can have some of the most meaningful, revealing discussions. To the interview question "tell me about a typical collaborative planning session," Participant 2 replied, "We address topics, issues, concerns, and problems that are pertinent to effective teaching and learning." The participant's response confirms what they discussed in collaborative planning meetings. This kind of discussion can improve collegial interactions.

During an observation at School E, I observed study participant on October 26, 2011 meeting with kindergarten teachers. The teachers of this observation reviewed the last meeting minutes and followed-up on items due at this meeting. The teachers used the computer to create activities, compose their lesson plans, and design the materials (handouts, etc.) that they would use for the lesson. Teachers were discussing student

work that they brought to the meeting. The hosting teacher displayed student work and her commentary on the work samples throughout her classroom. On many of the samples she wrote praise commentary. The hosting teacher adorned the walls of her classroom with student work that when examined reflected the teacher's collaborative planning experiences. Teachers worked with the hosting teacher as a team to compile lessons, activities, and lesson materials for the next week. Teachers used the Internet to search for research-based resources (lessons, activities, and materials). The teachers were using the Internet to help them with ideas the day I observed. Teachers, the day I observed were busy sharing thoughts about the lessons that they were planning and were reflecting on last week's lessons and results as a means to planning the lessons for next week. They were in real time improving collegial interaction by making their communication meaningful and useful. When looking at the agendas and minutes, it was clear that School E dedicated many meetings to feedback, data analysis and interpretation, questioning, and follow-up. This format for dialogue (feedback, data analysis and interpretation, and follow-up) would create the environment and opportunities for meaningful and useful interaction. The meeting minutes recorder most noticeably documented this format for collaborative planning meetings in the November 11, 2009 kindergarten teachers' collaborative planning minutes for School E. The recorder wrote "some need interventions based on recent scores" as feedback; "students are making progress" as follow-up; and "why self-assess" and "how will we get there" to analyze and make interpretations to determine next steps.

To answer research question two, I asked teachers to think in terms of improving collegial interaction when they collaborated across grade levels. When teachers collaborate across grade levels, they collaborate with teachers above and below were they teach. However, the basic purpose/goal of collaboration remains the same, to increase student achievement. Therefore, I determined that what the teachers practiced in grade level collaboration is also acceptable for across grade level collaboration. Realizing the aforementioned makes it easier to understand that collegial interactions in cross grade level collaboration can be improve the same as collegial interactions in grade level collaboration. The difference would be in the perspective from which teachers improved collegial interaction.

Research Question III

How do students demonstrate improved learning experiences that are based on teacher collaboration?

Students were not participants in this study. Teachers and administrators were. However, teachers can tell us a lot about the students they teach and their students' learning experiences. In the paragraphs to follow, I discuss answers to the question "how do students demonstrate improved learning experiences that are based on teacher collaboration" and identify those answers through cases. I also cite interview data to substantiate each assertion. In addition, I did not cite any previously cited observation and archival data for questions one and two and applicable to question three here to avoid redundancy.

Case I: School A

Students can use strategies to improve how they are learning. Strategies that can help a student learn make the student's learning experiences better. The strategies that students learned to use the teacher acquired first in collaborative planning or via shared learning. Classroom teachers usually learn the strategies that they teach their students through teacher collaboration. Students who do demonstrate improved learning experiences based on teacher collaboration do so by using various strategies during the learning experience that they have gained from the teacher. Thus, students can demonstrate improve learning experiences through effective application of skills and strategies that they have acquired from their teacher. Contributing to the aforementioned assertions, Participant 5 of School A stated, "All students should have the opportunity to learn the same information. CP allows teachers to plan together and learn new strategies while looking at student work/data. This helps with instruction and student learning." CP is collaborative planning. Also, Participant 3 at School A stated, "... it improves student learning because what we learn . . . We . . . take it back to the classroom and apply it in the classroom. And, those are proven strategies, you know research based that'll help improve student learning." When this participant was asked "what's the relationship between collaborative planning and student learning," the participant stated, "Well, it's to me again like I said when we take the strategies back to the classroom. It increases our student achievement, our student learning, you know." Participant 2 of School A stated, "We meet with our academic coach to work on standards based classroom strategies . . ." Furthermore, Participant 2 at School A stated "definitely, the new ideas that you gain

from the meetings. New strategies to help support academic success. Those are all helpful" when asked: What do you think are the effects of a positive relationship between teacher collaboration and student learning? To the question "what are some of the enablers of collaboration," Participant 2 of School A stated, ". . . gaining new strength, new ideas, and strategies; uh, things that can be carried over into your classroom."

Case II: School B

Teachers learn how to improve learning experiences through teacher preparation programs and continue learning how to improve learning experiences on the job via teacher collaboration. To improve learning experiences, Participant 3 of School B stated that teachers "examine student work. They look at the scores. You know overall, was this an effective test? Did it evaluate what we were trying to assess?" Effective teachers could also include their students in the equation when they teach their students how to improve their own learning experiences. Participant 3 of School B stated

... each grade level sets smart goals you know. It's to see how their students are meeting those goals and what the individual teacher is doing to make those students... To share those experiences with the other teachers and you know gaining input from each other. That makes the goal more effective.

Checking to see if students are "meeting those goals" is one way to include students in the equation. Also, teaching students how to improve their own learning experiences depends in part on the teacher learning how to help students become responsible for their own learning. For instance, Participant 2 at School B stated, "You want to see a carryover from what . . . does in collaborative planning, professional learning into the

classroom. And then in turn, you know it should spill over into student achievement by having an increase in student achievement." Teaching students how to use strategies to learn and to improve their own learning can help students take charge of their learning experiences. As Participant 3 stated, "I think when you've you know when you've given the teachers a focus; in return you've given the students a focus and a goal." Setting a goal is one way to help a person take charge of their experiences and how they experience them. In addition, students can learn to tailor the strategies that they use to learn to their own needs and interests thereby improving their learning experiences.

Case III: School C

Students demonstrate improved learning experiences impacted by teacher collaboration when they perform above expectations. Performing above expectations means achieving and succeeding above grade level. When students perform above expectations, they no longer perform below them. This may be attributed to improved learning experiences. Also, teachers can and do improve the learning experiences of their students by teaching them how to use various strategies, techniques, approaches, and methods. All of which teachers can and do acquire through collaboration. If collaboration centers on student achievement (and it does), it likewise focuses on improving students' learning experiences through strategies, techniques, approaches, and methods. Participant 1 of School C stated

... but if students aren't learning you are not teaching. That's part of the definition of teaching you've got to have someone learning. So, it's maximizing student learning; maximizing student achievement. That's why you plan. That's

why you prepare and take your data. Plan out where you got to go. What these children need to learn. How we are going to make sure they've got it. What'll we do when you know they haven't learned it? And, that's all part of that teacher collaboration and how it's connected to student learning. Student needs has to drive your collaboration.

Also, Participant 1 likewise stated, "Well you know that the impact of collaborative practice on student learning the whole you know point is that we're improving student learning and maximizing their learning." Here, the participant addressed the students' learning experiences in relation to collaboration. As indicated here, what the students need to learn to have improved learning experiences impact their learning experiences and can improve those experiences. Students need to be equipped with strategies, techniques, approaches, and methods. Students need to know what the teacher expects of them. By addressing students' need, a teacher can help students perform at expectations even rise above expectations. Hence, the students' needs drive collaboration. Participant 2 of School C contributed to this claim by stating "looking below and above to see what the students should, should be coming in knowing and then what they need to leave with to be prepared for the next grade level." The same participant stated, "We take a look at what our school needs. We don't just pull things out of the air. We really take account of what our students' need, what our teachers need." Similarly, Participant 1 stated, "We got evidence that when our teachers plan and come up with a shared plan and idea it's making a change in student learning and it's increasing." Thus, as determined here,

effective teachers and collaboration play a significant role in how students demonstrate improved learning experiences impacted by teacher collaboration.

Case IV: School D

Students demonstrate improved learning experiences impacted by teacher collaboration by meeting or exceeding local and state standards. When students performing below where they should on assessments began performing (through improved learning experiences) at or above grade level on assessments, they are demonstrating that their learning experiences have improved. For instance, Participant 1 of School D stated

... it took us 3 years to close the gap. I would say our African American group and our students with disabilities, 100%. Yes. So, there is a correlation and it's working. These teachers are applying ... And, I think holding them accountable for the assignments and see evidence and that kind of thing. They're doing it. I think because they're doing it they see it works. Just phenomenal what we did but those were the same kids without the new ones yet. It was just like unbelievable that three year ... at the top and a 100% with students with disabilities and our African Americans in math 94%. (Researcher: So, what you're doing is working.) Yeah! So collaborative is ... in all that.

The participant was indicating that teachers through collaboration did improve the learning experiences of two subgroups performing below grade level so that they performed exceedingly above expectations. Confirming the comments of Participant 1, Participant 2 at School D stated, "Your ultimate evidence of success with collaborative

planning should be student achievement. Last year in our AYP grades, we had the highest C.R.C.T. scores in the county average." Participant 2 of School D also indicated how teachers were improving learning experiences. The participant stated, "... what they learn in collaborative planning will make a difference in student achievement, and we use research to support it ... We have research to prove that it (differentiation) is the most effective strategy to increase student achievement ..." The participant continued with "and, we've stuck with differentiation for almost two years. And, they really have a strong understanding. And, they really know what it means and how to apply it." Thus, as this participant indicated, teachers who master an approach to improving learning experiences obtain the best results. Also, teachers can provide their students improved learning experiences if they are on the same page that their colleagues are regarding an approach. Participant 1 stated

... so we are on the same page with our meaning ... So, the students benefit from that ... If you had twins, one in teacher A and one in teacher B, you're getting an equitable education because this teacher understands and this teacher understands the best practice strategies for differentiating with the children. So, that's how they benefit, the children benefit from collaborative.

Teacher collaboration can keep teachers on the same page. As Participant 2 stated, "We analyze our students' achievement and that's how we judge the effectiveness of our collaborative planning."

Case V: School E

Students also demonstrate improved learning experiences impacted by teacher collaboration when they achieve that which was once unachievable, to learn to the fullest without limits through their own style of learning. In other words, meet students at their potential and help them learn from there. This is what the participants of School E say collaboration is all about. They say that teachers learn through collaboration that its ultimate purpose is to improve student achievement. Likewise, when a student finally achieves success or performs well, the student has achieved success or performed well from where he or she was to arrive at a place where he or she should be. Hence, the student is achieving despite all obstacles great and small. The teachers at School E spoke extensively about the aforementioned. Contributing to this claim was Participant 1.

Well our goal is to, as I mentioned at the beginning, meet the teachers' needs, I mean the pupils' needs. So if we're successful in doing that, if we're successful in helping these kids to reach another level, if we are finding ways to help them find success, then that's what I see as the most important thing we can do of helping them through collaboration.

Also, Participant 1 of School E stated ". . . the ultimate purpose is to improve student achievement" when asked the open interview question: Tell me about a typical collaborative planning session. Participant 2 of the same school also indicated that the purpose of collaboration is to improve student achievement but this participant also included teacher effectiveness.

For each answer identified and discussed, the study participants indicated that they knew when a student's learning experiences improved because the student performed better on tests, homework, and in class overall. Also, participants indicated that students could work independent of them more often than not. Students achieved higher test scores. Students could meet or exceed teacher expectations before they struggled to do so. Students applied strategies according to their own needs and interests to learn new knowledge and to understand new concepts. Study participants also indicated that students demonstrated and experienced improved learning experiences through minimized or eliminated weaknesses and strategy enhanced skills and abilities.

A Conclusion to Research Questions and Cases

In conclusion, concerning the aforementioned participants' answers to the research questions for this qualitative case study, I realized that pursuant of this research there needs to be research conducted to address the personality archetypes (regarding patterns and potential and personality and behavior) that make for effective teaching, learning, collegial interaction, and collaboration. In addition, the evolution in collaborative planning meetings through the agendas decided on, topics discussed, data reviewed, standards focused on, and student and teacher needs addressed would also be an interesting and worthy study. Furthermore, I realized that there is no one true answer to each of the three research questions of this study. However, there were various significant interview responses from the participants that provided answers to the research questions for this study. In addition, I recognized that the participants' answers to interview questions quoted in the cases aforementioned personally and professionally

connected them to this study. Also, the participants' answers to the interview questions of this study are highly applicable because they are common and practical answers. So, if I conducted this research with different participants and schools in the county, there would be similar or duplicate answers to the research questions posed in this study. In addition, I discovered answers to other pertinent questions (e.g., How does the literature on collegial interactions, professional development, and teacher collaboration explain how teacher effectiveness is improved? How can effective teaching skills developed through collegial interaction in the context and culture of teacher/school communities or communities of learning? What skills are most effective and efficient in teacher collaboration?) via the data collected and the literature reviewed in Section 2.

Themes and Patterns Evident from Interviews and Observations

Themes and patterns were evident throughout the interviews and observations. However, the volume of interview and observation data limited the citing of interview quotes and observations notes to those that clarify and support the themes and patterns and best embody the interviews and observations of this study. Therefore, I used the interviews and observations of School A to discuss the themes and patterns. An interview with Participant 1 was the first interview conducted. During the interview, Participant 1 of School A stated, "Over the years it has become very important to work closely with your fellow teachers. Even though . . . we teach different subjects we still share the same students. It helps to discuss the different problems that you have with different students. Maybe one thing that works with you might help another teacher with this same student." This point of view denotes the kind of teacher community that exists at the schools and

emphasizes previously mentioned themes and topics such teamwork, shared accountability, collegial coaching, cross grade level collaboration, professional relationships, and collective learning.

During the observation, Participant 1 of School A reviewed, instructed, and modeled and had the students practice and work independently after which Participant 1 checked for understanding and provided praise. This was the instructional pattern found when the participant taught the whole group or individuals. The pattern made scaffolding for differentiated learning possible. For this study, scaffolding for differentiated learning means that teachers provide students the support they need to master something new while conceding to their students' prior knowledge and learning style. In addition, a theme emerged from the observation. The emerging theme from the observation was that students learn through effective teaching. Previously, the participant contributed to the aforementioned emerging theme by stating "when collaborative planning is done correctly, there is going to be improved teaching and this is going to affect student learning." Other participants made similar comments as well during their interview session. Improved teaching may well lead to effective teaching. Also, effective teaching as expected may well lead to improved student learning. Students as expected and according to research can learn through effective teaching. Another theme that emerged from the observation was that students and teachers are allies in learning and that students are also responsible for their own learning. This was evident when the participant asked a student "Why did you say b" and when the participant reiterated the student's explanation and elaborated on the student's answer. The participant was directing the student's

response. So, teacher expectations direct student learning, behavior, and attitudes is yet another theme that emerged. From the beginning of the observation to the end, the study participant used strategies such as review, an essential question, quick checks for understanding, demonstrations, praise, modeling, and peer sharing to guide (direct) and increase the students' learning.

To know if the strategies used were successful, Participant 1 would assess the implementation of those strategies, teaching effectiveness (teacher effectiveness), and student assessment results in collaborative planning. The Participant would also take student work samples, the assessment instrument, and the assessment results to the collaborative planning meeting and talk about problems that occurred during the lesson. During the collaborative planning meeting, participants (the participant, academic coach, and grade level colleagues) would devise next steps that can help Participant 1 make teaching more effective to maximize learning experiences for students. This is how collaborative planning impacts teaching and learning and how the teacher community responds to teaching and learning issues.

For the period of an interview with Participant 2 of School A, Participant 2 stated "I love teaching. It's my passion." Likewise, other study participants demonstrated the emotional acuity of Participant 2. The participant's teacher community also demonstrated emotional acuity through similar expressions and observed behaviors. Accordingly, emotional acuity became one of the emergent themes of this study. During the observation, Participant 2 reviewed, instructed, and modeled and had the students practice and work independently while checking for understanding and giving praise. The

participant also used meaningful conversation (instructional discourse) with the students. Meaningful conversation began with Participant 2 using the Traffic Light strategy (talking the students through each step). Think alouds (to include when warranted the P.O.E. strategy and other deduction strategies) and discussion to check the students' understanding followed meaningful conversation. This was the instructional pattern found when the participant taught the whole group or individuals. The pattern made scaffolding for differentiated learning possible. The emerging theme from the observation was that students learn from effective teaching. All study participants agreed with the theme. However, during an interview at School A, Participant 2 stated, "Well, it's not 100% a direct result (referring to collaborative planning), many other variables do affect it (learning) but it (again referring to collaborative planning) helps improve student learning in many ways. It's all positive." Another theme that emerged from the observation was that students and teachers are allies in learning and that students are also responsible for their own learning. The theme "students and teachers as allies in learning" was evident when during the observation the participant helped students check their own understanding of what they read. The theme "students and teachers as allies in learning" was also evident when the group with the participant worked together on identifying the main idea. I realized the second half of the theme when Participant 2 stated, "You have to work when reading non-fiction." This statement makes being responsible for learning a student's task, as well. Also, "teacher instructional discourse can direct student learning, behavior, and attitudes" is yet another theme that emerged. From the beginning, study

Participant 2 used meaningful discourse to assist and direct students in thinking and understanding.

The observation example made clear the connection between collaborative planning, teaching, and learning. For instance, during the observation, Participant 2 stated, "Flex groups are collaborative planning related and target student needs according to pretest to determine what they need to work on." The participant also noted that Study Island (a flex group station) is collaborative planning related and differentiated for targeting specific areas of need. The participant also referenced the use of the Traffic Light strategy. The participant stated, "This is a strategy learned in collaborative planning."

For the duration of the observation, Participant 3 of School A reviewed, instructed, and modeled and had the students practice and work independently during which the participant also checked for understanding and gave praise. The participant also used meaningful conversation (instructional discourse) with the students that began with using questions followed by think alouds (to include when warranted the P.O.E. strategy and other deduction strategies) and check points for understanding. This was the instructional pattern found when the participant taught the whole group or individuals. The aforementioned instructional pattern made scaffolding for differentiated learning possible. Also, another emerging theme from the observation was students learn from effective teaching. To this theme, Participant 3 in an interview stated, "Well, I feel like when the teacher goes to collaborative planning, our weaknesses are being addressed. So, we take those, and we go back to the classroom; we implement that and through that it

improves our effectiveness as a teacher and therefore, improves our students' effectiveness too." Another theme that emerged from the observations was students and teachers are allies in learning and students are also responsible for their own learning. Students and teachers as allies in learning was a theme made evident during an observation of a participant. During the observation, I observed the participant monitoring students' work, using guided instruction, and demonstrating what to do on each step. The second half of the theme became evident when the participant reminded the students about behavior expectations by asking "Are you sitting like Leo?" The participant was helping the students choose to be accountable for their own behavior. Students who choose to behave well are not allowing their behavior to interfere with their learning. Also, students who choose to behave well are choosing to be accountable for the way they behave. Accordingly, "teacher instructional discourse can direct student learning, behavior, and attitudes" was another theme that emerged. From the beginning, the study participant used questioning and discussion to support student thinking and understanding. Thus, the theme of instructional discourse became highly probable.

In the sections to follow, I discuss themes and patterns substantiated by the data of interviews and observations conducted with participants of Schools A, B, C, D, and E. I triangulate the data as well. I also draw conclusions and make interpretations.

Emergent Themes, Patterns, Issues, Relationships, Cases, Cross-Cases, and Data Triangulation

In this subsection, identified emergent themes, patterns, issues, topics, ideas, cases, cross-cases, events, and concepts further clarify and validate interview,

observation, and archival data. I coded (using Ethnograph v6.0 and QDA Miner v3.2 [updated to 4.0]) and/or categorized interview, observation, and archival data obtained through individuals, the group members, collaborative planning meetings, the classroom, and related records and documents and collected by means of asking open-ended interview questions, observing participants, and analyzing and interpreting meeting minutes and agendas. Study participants reviewed coded interview and observation transcripts and interpretations thereof for accuracy of findings (e.g., themes and patterns) and accounts. In the following paragraphs beginning with emergent themes, I individually discussed each of the emergent themes, patterns, issues, topics, ideas, cases, cross-cases, events, and concepts taken from the coded and/or categorized interview, observation, and archival data.

There were several emergent themes identified during data analysis. The emergent themes identified during data analysis are: systems thinking collaboration, coaching relationships, collegial relationships, gaps in collaboration, student centeredness, instructional variability, professional learning commitment, conducive to learning environment, and efficiency. Each of the themes reported here speak to the research questions of this study and confirm previously discussed answers to the research problem. Rubin and Rubin (2005) stated, "Following up on themes that speak to your research questions is vital, but you need not follow up on every theme you hear and do not fully understand" (p. 182). Therefore, although there are several themes acknowledged here, I addressed only the ones most fully understood. I addressed the theme "efficiency" because I can link efficiency to the issue, lack of time. When I

interviewed and observed participants, the participants mentioned a lack of time first and foremost as the number one issue concerning teacher collaboration. After reviewing archival documents, I found that participants confirmed the time issue and the need to practice efficiency to gain time for additional or extended collaboration sessions. As the issue with time and the need to practice efficiency became more evident, the theme efficiency became more evident.

The theme efficiency emerged from interview responses to the questions "what are the disadvantages of cross grade level collaboration, how are the disadvantages utilized to improve collegial interaction during collaboration, and what are some of the inhibitors of collaboration" to which the participants answered time as the ultimate disadvantage. As Participant 2 of School A stated, "Time is the biggest disadvantage because it's so hard for everybody to meet on a regular basis . . ." Participant 1 of School A stated, "Disadvantages would be finding enough time to meet with all teachers have to do now." Participant 2 at School D stated, ". . . finding the time." Participant 1 of School E stated, ". . . number one, time." Participant 1 of School C stated, "Time is what we battle against." Participant 2 at School B stated, "We always have this time crunch." All of the participants confirmed a lack of time. Therefore, I believed that the teachers spend little to no time on the topic of efficiency to address the time issue.

In collaborative planning meeting minutes and agendas, the issue with time resurfaced. Recorded collaborative planning minutes corroborated that many of the minutes read as announcements and discussions of concerns and complaints that would be more acceptable to other forums. For instance, School E recorded in its kindergarten

collaborative planning meeting minutes under other items discussed for November 11, 2009 turkey for tables, ... Xmas Card 16th, and Dec. 4th Christmas program. The agenda for that meeting read: Look at Student work; Share: Results of Next Steps; Plan: Discuss next week's lesson plans; Next Steps: How will we get there; Unit revisions: Unit Revision form complete; and Other (see notes below). Here, other ranged from making announcements to discussing matters appropriate to other forums. To minimize or eliminate time dedicated to announcements and concerns more appropriate for discussion in faculty meetings, participants can omit the agenda topic "other" or redefine it more specifically in relation to collaboration. Another example, recorded on September 27, 2011 in the kindergarten collaborative planning meeting minutes under notes from discussion for School A, was an announcement which read "Parent-Teacher Conference Materials (Parent Surveys in box)." Time given to announcements means time taken from teacher collaboration. The aforementioned e-mail and faculty meeting announcement represents a record of the time taken from grade level and cross grade level collaboration. Collaborative planning meetings need to be free from faculty meeting announcements and agenda topics. Also, collaborating teachers need to adhere to meaningful time allotments. For instance, School B exhausted a considerable amount of time on discussing and making common planning templates. Teachers expended time on January 20, 2010 and September 22, 2010 discussing and making common planning templates. The following example illustrates the allocation of time to announcements. The minutes of a collaborative planning meeting (conducted as professional learning on September 27, 2011) for School C read "FTE count next week – Please get these students [sic] names to

B D for testing." This is yet another announcement that was e-mail worthy. If collaboration is about time well spent, then the recommendation is to implement a time efficiency system for teacher collaboration of diverse settings.

From the data emerged another important emergent theme that I termed the professional learning commitment theme. I identified the theme after recognizing the teachers' proactive dedication to improving teaching and learning via grade level and cross grade level collaboration used as professional learning. Also, I realized the theme when study participants demonstrated their commitment to professional learning through the sharing of ideas, reflective practice, self-assessment, research informing practice, and keeping abreast of pedagogical advancements. Participants also demonstrated their commitment to professional learning through the norms and covenants that they keep. Participant 4 at School A stated, "Covenants are agreements, and norms are meeting standards." Participant 4 at School A also stated, "Norms and covenants are followed to keep everyone prepared, on task, responsible, and involved." Participant 2 of School B stated, "... establish norms, covenants for grade level planning so it will not turn into a gripe session. Stick to the topic. Be punctual. Be prepared. We got them posted in our data room." Participant 3 at School B stated, "..., it's really holding teachers accountable to the norms and covenants and not letting their personal opinion rule the conversation . . . regardless of what you think this is what research shows." Thus, covenants and norms are oaths that teachers make, take, and keep to preserve their commitment to professional learning. Therefore, covenants and norms may well make the collaborative planning meeting environment conducive to professional learning.

Participant 4 of School A contributed to this assertion by stating "professional development is an ongoing practice at We study a variety of topics every year, which are research-based and aligned to our school goals." Another participant (Participant 1 of School A) stated, "We have professional development on a weekly basis. During the spring we fill out a survey and from this survey problems are found and our professional development is developed." A professional learning commitment was evident at every school of this study. The meeting agendas and minutes of the schools of this study reflected this commitment to professional learning. The collaborative planning meetings I observed also reflected this commitment to professional learning. For instance, teachers listed sharing as an agenda topic for all meetings. In addition, there were discussion notes frequently taken on dialogue concerning pedagogical advancements.

Student centeredness is another theme identified as an emergent theme from the data collected via interviews, observations, and archival documents. I realized the theme primarily through the observations. After observing study participants in the classroom during a lesson and in collaborative planning meetings, an emphasis on a student-centered (learning-centered) classroom was evident. Also evident was the emphasis on students as lifelong learners, student empowerment, cooperative learning, H.O.T.S., essential questions, standards, reflective thinking, goal setting, and problem-solving. For instance, Participant 3 at School B stated, ". . . each grade level sets smart goals you know. It's to see how their students are meeting those goals and what the individual teacher is doing to make those students . . ." Participant 1 of School C stated, "We can

measure how effective professional learning is in some terms as to the student achievement or the goal that was set . . ." Participant 4 of School A further contributed to the student-centered theme stating "working together for a common goal, which in our case is student achievement." Participant 2 at School D stated, ". . . and you differentiate to help them all reach their goal." This indicated that even the teacher's classroom behaviors can be described as student-centered. Likewise, teacher behaviors in collaborative planning meetings can be described as centered on the student. As evident in a statement taken in one of the interviews, Participant 1 of School A replied, "It helps to discuss the different problems that you have with different students." When I asked the same participant "tell me about a typical collaborative planning session," the same participant answered, "With the across grade level teachers, we discuss the math problems we are having and try to come up with solutions that will help the students." Also, teachers recorded in the minutes discussions centered on student concerns, problems, and successes, and on the agendas they included student-centered related topics.

Instructional variability surfaced as yet another emergent theme. I deduced this theme primarily from the classroom and collaborative planning observations where teachers addressed and/or employed different learning styles strategies, diverse teaching tactics, and a generation of learning activities to improve student learning and maximize student learning experiences. Confirmation of the theme was evident in the statement "they are required to turn in their reading flex group plans and their math flex group plans that show differentiated instruction" (Participant 2 of School D). Differentiated

instruction as reported in the literature accommodates the diverse needs of all students. Differentiated instruction is one of many teaching tactics used. Participant 2 of School D also stated, ". . . because every child deserves the same education and you differentiate to help them all reach their goal." A teacher differentiates to address the different student learning styles. Teachers also substantiated the theme in collaborative planning meetings that I observed being conducted as professional learning in which teachers addressed teaching strategies and learning styles.

The other emergent themes of this study were systems thinking collaboration, coaching relationships, collegial relationships, gaps in collaboration, differentiated professional learning, and conducive to learning environment. The theme systems thinking collaboration as revealed through the triangulated data of this study emerged from the collaborative connection that exists between the schools and participants. Existing peer to peer learning through the sharing of ideas, experiences, and strategies allowed for a deducing of the coaching and collegial relationships themes. How the teachers resolved issues, problems, and weaknesses presented in collaboration and the results thereof helped me to determine another theme, the gaps in collaboration. Differentiated professional learning became a probable theme when Participant 2 at School C stated, "We are even thinking about differentiated professional learning. Teachers that are struggling... We're going to devise a professional learning just for them ..." Conducive learning environment is a theme that resulted from the discussion and actions of participants that helped establish and sustain an environment conducive to learning at all times.

Dominant Themes, Patterns, Issues, Relationships, Cases, Cross-Cases, and Data Triangulation

The dominant themes, patterns, issues, topics, ideas, cases, cross-cases, events, and concepts that I identified and discussed in this subsection further explain and substantiate interview, observation, and archival data. Using Ethnograph v6.0 and QDA Miner v3.2 (updated to 4.0), I coded and/or categorized interview, observation, and archival data obtained through individuals, the group members, collaborative planning meetings, the classroom, and related records and documents and collected by means of asking open-ended interview questions, observing participants, and analyzing and interpreting meeting minutes and agendas. Study participants reviewed coded interview and observation transcripts and interpretations for accuracy of findings (e.g., themes and patterns) and accounts thereof. In the following paragraphs, I discussed the dominant themes, patterns, issues, topics, ideas, cases, cross-cases, events, and concepts garnered from the coded and/or categorized interview, observation, and archival data.

Themes are an indication of "how people feel," "offer explanations for why something occurs," or "show how two or more concepts are related" (Rubin and Rubin, 2005, p. 179). Several identified themes emerged as dominant themes. These themes are lack of time, trust, the ultimate goal of collaboration, student-centered collaboration, collaborative relationships, and relationship between collaboration and student learning. The themes aforementioned speak to the research questions of this study and substantiate previously discussed answers to the research problem. Rubin and Rubin (2005) stated, "Following up on themes that speak to your research questions is vital, but you need not

follow up on every theme you hear and do not fully understand" (p. 182). Therefore, although there are several themes acknowledged here, I addressed only the ones that I most fully understood.

A common theme throughout the entire study was the lack of time. The lack of time is a theme that recurred repeatedly as an answer that corresponded to the interview question: What are the disadvantages of cross grade level collaboration? Many of the participants interviewed replied "lack of time" as one of the answers or as the answer. Participant 1 of School C stated, "Time is what we battle against." Participant 1 of School C also replied with a request "we take this much time for our teachers to collaborate and it produces these results . . . Give us more time for teachers to plan" in the same interview to the question: What can you do . . . to affect change in the district through collaboration across grade levels? Participant 1 of School D responded, "So, that's going to be a weakness for us this year not having the time" when asked: What are the disadvantages of cross grade level collaboration? Participant 1 of School E stated, "I think those are the major ones: number one, time and number two, money" when asked: What are some other inhibitors of collaboration? Participant 4 of School A answered, "The only disadvantage that I see with cross grade level collaboration would be time" to the question concerning the disadvantages of cross grade level collaboration. Participant 2 of School A contributed to Participant 4's answer with the response "time is the biggest disadvantage because it's so hard for everybody to meet on a regular basis." Likewise, Participant 1 of School A stated, "Disadvantages would be finding enough time to meet with all teachers have to do now." Participant 2 of School D answered, ". . . finding the

time." Participant 3 of School A answered, "... my biggest disadvantage because you know time because when you go there, and then when you get back you know that time is over" to the question: What are the disadvantages of cross grade level collaboration? However, this participant was referring to the instructional time expended to attend collaborative planning meetings. The participant has a point since time taken away from instruction may well create issues that teacher collaboration purportedly resolves.

Other participants also contributed to the theme, the lack of time. For instance, Participant 2 of School E stated, "Our practical approaches to collaboration include setting aside a time each week devoted to planning. This saves time and ensures that planning is taking place." This participant was responding to the question: What practical approaches of collaboration do you practice? The participant was also contributing to previous statements that time is always the issue. To the question "what are the disadvantages of cross grade level collaboration," Participant 2 of School E replied, "The only disadvantage that I see with cross grade level collaboration would be if one grade level attacked or blamed another grade level for the problems that students experience." The participant is right to point to discord as a disadvantage. With discord, collaboration can become difficult. Here in lies the disadvantage. Also, Participant 3 of School B responded similarly to the question "what are the disadvantages of cross grade level collaboration" with "if I had to pick the biggest disadvantage it would be not allowing it to turn into a gripping session. ... and really making it a collaborative approach to problem solving." This participant identified another disadvantage, the misappropriation of collaborative time by offering a recommendation to use the collaborative time to

problem solve instead of gripping. To the same question, Participant 3 of School C replied, "Well one disadvantage could be . . . the scheduling and the time because I mean cross grade collaboration takes time to really discuss and sit down and get into to some deep conversations . . ." The main point here being time. Without quality time to collaborate, participants indicated that collaboration became meaningless.

Another dominant theme that I identified was trust. Trust, identified as a dominant theme, may be the means to improving the collaborative process and collegial interaction. Without relational trust, the freedom to share ideas and not turf guard, to evaluate each other's teaching practices without fear, and to truly expose one's weaknesses to attain help is improbable. Weinbaum et al. (2004) stated, "It is clear that collaborative inquiry cannot occur without 'relational trust' and that it can, in turn, deepen that trust' (p. 29). When I asked the follow up question "what level of trust is needed to collaborate" in an interview with Participant 2 of School A, the participant responded, "... and the trust is never an issue here. But, if it is an issue that's where those norms and standards and rules ..." Although participants did not mention trust in the interviews as the number one advantage of cross grade level collaboration, participants observed in collaborative planning meetings demonstrated their trust in one another through their actions towards one another. For instance, participants shared issues in their practice without reservation and asked for help in resolving those issues. Participant 4 of School A stated, when referring to collaborative planning meetings, "We share ideas and discuss issues." Participant 2 of School E stated, "We address topics, issues, concerns, and problems that are pertinent to effective teaching and learning." Another participant (Participant 1 of

School A) stated, "We discuss the math problems we are having and try to come up with solutions that will help the students." Thus, as it seems trust is key to collaboration that works.

As another dominant theme, the ultimate goal of collaboration (to improve student achievement and the student's learning experiences by improving teacher effectiveness) resonates throughout this study. First in the interviews, the theme corresponded to the question "tell me about collaborative practices at this school" to which participants responded "Ultimate goal of collaboration is to increase student achievement." Participant 2 of School D stated, "... but, that's the ultimate goal of collaborative planning is to increase your student achievement." This participant also replied with "your ultimate evidence of success with collaborative planning should be student achievement." When asked the question "what kind of relationship is shared between teacher collaboration and student learning," Participant 1 of School C answered, "So, it's maximizing student learning; maximizing student achievement." Participant 3 of School A responded, "... some of our collaborative planning we do teacher needs but it's usually focused towards student achievement." Another participant of School A (Participant 4) stated, "As a result of teacher collaboration, looking at data, analyzing strengths and weaknesses, and creating smart goals, there has been a greater alignment between collaboration and student achievement." To another question (What does collaboration mean to you?), the same participant replied, "Working together for a common goal, which in our case is student achievement." Participant 3 of School B answered, ". . . collaborative planning agendas come straight from your target areas . . .

student achievement is going to go up." Second, in the observations, I observed participants in collaborative planning meetings sharing ideas, learning skills and strategies, and discussing and reflecting on their practice in order to improve and increase student achievement and learning. During collaborative planning meetings, I also observed the participants reading aloud archival documents. The documents were the recorded meeting minutes. The recorded collaborative planning meeting minutes for each school of this study were discussion notes regarding ideas shared on teaching and learning, strategies taught, data analyzed, weaknesses targeted, and next steps taken. The focus of most meetings (increasing student achievement through effective teaching) as recorded in the minutes was clearly evident upon examination. The focus was on increasing student achievement. Therefore, based on the focus of most meetings, I identified the assertion that student-centered collaboration has as its goal increased student achievement as a theme.

As aforementioned, student-centered collaboration as defined by the ultimate goal of collaboration is one of the dominant themes in this study. Contributing to this theme were participants who indicated that student-centered collaboration emphasizes improving instruction and learning experiences based on the needs of the student. Also, in an interview, Participant 1 of School E declared, "Well our goal is to, as I mentioned at the beginning, meet the teachers' needs, I mean the pupils' needs" to the question: What do you hope to change at the local level through collaboration at the school level?

Another participant (Participant 1 of School C) responded, "Student needs has to drive

your collaboration" when asked: What kind of relationship is shared between teacher collaboration and student learning? Participant 2 of School B stated, "... mainly, about student needs and then some of our collaborative planning we do teacher needs but it's usually focused towards student achievement" when directed in an interview to tell about a typical collaborative planning session. A participant at School A (Participant 3) replied with "well, it means to me teachers getting together, learning, sharing strategies. Trying to improve themselves, improve their students' learning and students' needs" when asked: What does collaboration mean to you? Participant 2 at School D substantiated the other responses stating "when you analyze your data, you look to see if there's a particular group of students who you are not meeting their needs." Similarly, in observations, I observed participants focusing on student work samples and other data regarding student performance in class and on assessments. I observed these participants resolving issues pertaining to students and addressing student needs. Documented in the agendas and meeting minutes of the aforementioned observed meetings were the discourse and actions taken. The topics discussed and the actions taken centered on student needs and their learning experiences.

A different dominant theme centers on collaborative relationships. Collaborative relationships are relationships built on a collective responsibility for teaching and learning. Collective responsibility for teaching and learning is as defined by participants and their colleagues the shared or group effort involved in accounting for the meaningful education of all students. As determined in the interviews, observations, and archival recordings, participants and their colleagues indicated that they were collectively

responsible for student learning. For instance, Participant 3 of School B in an interview stated, "... they're responsible for implementing it, following up, and following through with next steps and bringing evidence back that they are implementing that." Participant 4 of School A stated, "Norms and covenants are followed to keep everyone prepared, on task, responsible, and involved." Participant 2 of School A replied, "Working with others as a team to reach success" when asked the question: What does collaboration mean to you? When the same participant was asked, "What do you hope to change at the local level through collaboration at the school level," the reply was "it encourages team work, and it takes a team to teach a child. Not just one person." Participant 2 of School D answered, "One person cannot do half of what a team can do" to the question: How are all of your aforesaid experiences related to the success and failure of your collaborative practices? This participant also stated, "We have better seeking team meetings once a month where all grade levels are represented." Also, Participant 3 of School C contributed by stating, "So, it gets kind of fearful when you don't have that team support and you're out there by yourself trying to make things happen." This would be the truth; however, there are leadership teams on the campuses of the schools of this study that conduct focus walks to assess the quality of education at the site. Observation visitations were where I observed leadership teams conducting focus walks, and where I observed the teachers at each of the schools of this study taking collective responsibility by working as teams to compile lessons, activities, and lesson materials. Also, recorded in the collaborative planning meeting minutes are notes regarding participants and their colleagues addressing instructional issues and concerns that impact all students. This

collective effort as demonstrated by the study participants and their colleagues is a theme that participants identified via interviews, observations, and meeting minutes and with cross grade level collaboration.

An additional dominant theme, the relationship between teacher collaboration and student learning, is a theme based on shared accountability. I addressed shared accountability earlier under collective responsibility. Here, shared accountability connects teacher collaboration to student learning so that there is a relationship in which one depends on the other. Collaboration depends on addressing the needs of the students to help teachers become effective at improving and increasing student learning. Student learning depends on collaboration to be fully understood, improved, and increased. This theme corresponds to the interview question: What kind of relationship is shared between teacher collaboration and student learning? Participant 4 of School A responded, "As a result of teacher collaboration, looking at data, analyzing strengths and weaknesses, and creating smart goals, there has been a greater alignment between collaboration and student achievement." Looking at data, analyzing strengths and weaknesses, and creating smart goals are activities completed in collaborative planning meetings (to include the ones conducted as professional learning and debriefing). Participant 2 at School A stated, "Well, students benefit from more effective teaching so that's the direct relationship" to the same question. Also, Participant 2 of School D answered, "We analyze our students' achievement and that's how we judge the effectiveness of our collaborative planning." Accordingly, the participants' descriptions of the relationship reflect their understanding of the meaningfulness and quality and effectiveness in teaching and learning.

Also, a dominant theme centered on teachers and students as allies in learning emerged. Teachers and students as allies in learning is a dominant theme pursuant to the dictates of collaboration as the means to effectiveness in teaching and improved and increased experiences in learning. Participant 2 at School A contributed to this theme by responding ". . . the new ideas that you gain from the meetings. New strategies to help support academic success." The participant's reply was to the interview question: What do you think are the effects of a positive relationship between teacher collaboration and student learning? The reply also confirmed that when teachers support academic success, they become the students' allies in learning. Teachers substantiated the theme "teachers and students as allies in learning" in collaborative planning meetings and classroom observations via continual and consistent acts of support. For instance, participants observed in the classroom acted like the learner's partner (an ally) in the classroom and as the student's voice in collaboration and faculty meetings where they vied (through meaningful dialogue and action) for the best learning environment where students genuinely learn and transfer that learning to other areas of their lives. During additional classroom observations, I observed students in one classroom using three different smiley faces (a strip of smiley faces on their desk tops; the first smiley face on the strip indicated help needed, the middle smiley face indicated did not understand, and the last smiley face indicated got it) and in another classroom using red and green cups (a red cup equals no and a green cup equals yes) to indicate their level of understanding. If any of the students or all of the students gave a "thumbs down" (a red cup or first or second smiley face), the participant would reteach the concept and provide support. The students who understood

moved on to independent practice and received support when warranted. Student support was a constant when students did and did not understand. In addition, recorded in the collaborative planning meeting minutes and agendas is an account of study participants sharing ideas, acquiring knowledge, and taking next steps that support student learning. Also, recorded in the minutes and agenda topics related to supporting student learning are the recorded times when participants were learning how to be allies, partners in learning (and in teaching).

Emergent and Dominant Patterns

The identified emergent and dominant patterns also speak to the research questions of this study and corroborate previously discussed answers to the research problem. As defined here, a *pattern* is a theme of recurring issues, topics, ideas, cases, cross-cases, events, and concepts. Therefore, when I addressed the emergent and dominant themes, I also discussed patterns but separate the themes and in relation to the study participants using interview, observation, and archival data as confirmation. Also, as earlier stated, I wrote identified patterns as one-sentence generalizations to bring closure to the analysis phase of the study. Writing the patterns as one-sentence generalizations helped this researcher to organize her thoughts about the data (Hatch, 2002, p.158-159). In the following paragraphs, I discuss patterns in as much detail as possible.

Pattern of instruction. An emergent pattern that emerged from the classroom observation data centered on using self-efficacy to preserve students' self-esteem. This emergent pattern revealed through observations was a pattern of instruction that I

observed in all classroom observations I conducted. The pattern began with each observed participant introducing the topic, objective/goal, standard, and an essential question. Each time all of the observed participants continued the instruction modeling the concept (e.g. how to identify the main idea) that students were to learn. After modeling the concept, each participant asked students for a "thumbs up" if they feel good about understanding (e.g., what the main idea is) and a "thumbs down" if they don't understand. During other classroom observations, I observed students in one classroom using three different smiley faces (a strip of smiley faces on their desk tops; the first smiley face on the strip indicated the student needs help, the middle smiley face indicated the student did not understand, and the last smiley face indicated the student got it), and in another classroom a study participant used red and green cups (a red cup equals no and a green cup equals yes) to assess their students' level of understanding. If any of the students or all of the students gave a "thumbs down" (e.g., presented a red cup or pointed at a first or second smiley face), the teacher participant (also the study participant) would reteach the concept and provide support. The students who understood would move on to independent practice and received support when warranted. Student support was a constant when students did and did not understand. Observed study participants learned in grade level and cross grade level collaborative planning meetings how to promote and use self-efficacy to improve their students' learning experiences in the classroom and how to use self-efficacy with each other to improve instruction.

Pattern of collegial interaction. A dominant pattern, established through archival data, emerged also from the observations conducted during collaborative

planning meetings and through the meeting agendas examined. The dominant pattern as revealed in the collaborative planning meeting agendas examined and observations conducted was the pattern of collegial interaction. The pattern of collegial interaction as documented in the agendas begins with meeting participants reviewing the minutes of the last meeting, discussing follow-ups, sharing ideas, generating inquiry/participating in work sessions, and ends with deciding on next steps (decision-making). On days when collaborative planning meeting members conducted collaborative planning as peer debriefing or professional learning days, the agendas reflected changes that warranted conducting collaborative planning as peer debriefing and professional learning. The pattern of collegial interaction as observed in collaborative planning meetings entailed the sharing and elicitation of ideas, discussion (analytic and social scaffolding), feedback, questioning, answering, analyzing, lecturing (lengthy dialogue about a subject), summarizing, emotional and intellectual acuity, certain professional behaviors, and professional mannerisms, and an adherence to norms and covenants. Accordingly, collegial interactions therefore followed a basic inquiry-discussion-reflection-evaluation cycle.

Pattern of discourse. Another dominant pattern that emerged from the observations conducted during collaborative planning meetings (to include meetings conducted as professional learning and peer debriefing) was confirmed through the meeting agendas examined. The dominant pattern as revealed in the collaborative planning meeting agendas examined and observations conducted was the pattern of discourse. During the collaborative planning meeting observations, the pattern of

discourse followed a planned agenda. A collaborative planning meeting conducted as professional learning began like a lesson in the classroom. The meeting began with introducing the topic, objective/goal, standard, and an essential question then moved on to modeling to include an oral check for understanding and ending with a hands-on activity followed by an evaluation. The evaluation conducted helped determine the impact of the meeting and its facilitator. A collaborative planning meeting conducted as peer debriefing started like a feedback session. Peer debriefing usually involves reflecting, reviewing, analyzing, assessing, and discussing. Collaborative planning meetings, peer debriefings, and professional learning sessions therefore followed a basic review-question-answer-comment-feedback-follow up pattern of discourse.

The aforementioned patterns are the three patterns that emerged. There were also emergent and dominant issues. The main emergent issue for this study is defined as efficiency warranted. The primary dominant issues are clearly a lack of time (to include scheduling) and resources. These issues are notably the disadvantages of grade level and cross grade level collaboration. I addressed both emergent and dominant issues earlier in this section.

In conclusion, identified emergent and dominant themes and patterns thereof as substantiated by triangulated data collected via interviews, observations, and archival documents allowed me to develop the framework for a cross grade level collaboration implementation plan and a decision matrix to help teachers in different settings establish techniques tailored to their collaboration and collegial interaction needs. At the end of this study, under recommended actions, are the implementation plan and the matrix. The

decision matrix featured in this study is a SmartDraw creation. SmartDraw is a visual processor, a diagramming application for Windows operating systems. SmartDraw can be used to create flowcharts, mind maps, decision trees, matrixes (tables and graphs), hubs, engineering diagrams, accident reconstruction diagrams, network diagrams, landscape plans, timelines, presentations, forms, and other visuals. SmartDraw is the World's First Visual ProcessorTM.

Methods Triangulation of the Interview, Observation, and Archival Findings

In this section, I employed a triangulation of methods approach to determine if the interview, observation, and archival findings or results drew duplicate or similar conclusions and to minimize the threats to quality but strengthen the reliability and internal validity of the study. The major finding to draw duplicate or similar conclusions emerged first as a recorded response in the interviews, then as an observed action in the classroom and in collaborative planning meetings, and later as an archival document read as meeting minutes. Following are three examples of the aforementioned. First, when I conducted the interviews, individual and group study participants responded that the purpose of collaboration is to improve student achievement when asked about a typical collaborative planning session. Second, when I observed participants in the classroom and during collaborative planning meetings, I observed participants focusing on the student and student learning experiences. Third, when I reviewed meeting minutes, documentation of a focus on student learning and student-centered instruction was clearly evident in every meeting. Thus, whether an interview, an observation, or a written

recording of meeting minutes, I drew duplicate or similar conclusions from the data collected via the interviews, observations, and archival records.

In addition, after examining the interview transcripts, observation notes, and collaborative planning meeting minutes regarding teacher and student self-efficacy as a means to improving instruction and learning, a strong intersection between the data collection methods of this study was evident. In the interview sessions, participants stated that they were targeting self-efficacy with each other and their students. Other participants talked about using self-efficacy to assess and motivate each other and their students. Participants gave examples of using self-efficacy in the classroom. In one instance, study participants referred to three smiley faces used to check their students' understanding of concepts while preserving their students' self-esteem. During the teaching of a concept, students used smiley faces to discreetly tell the teacher (when the teacher checked for understanding) if they needed help, did not understand, or got it. As recorded in the observation notes, I observed participants in the classroom using the smiley face method and an adaption of the method using red and green cups. When students placed a red cup on top of their desks, they were telling the teacher that they did not understand. A green cup indicated that the students got it so the teacher could move on in the lesson. However, the red and green cup method was not as discreet for the user as was the smiley face method. Students who used the smiley faces could discreetly point to a smiley face (earlier described) that best described where they were in the process of learning a concept during instruction. Also, self-efficacy as noted in the meeting minutes was a meeting agenda topic, a professional learning focus, shared ideas and discussed

examples. During the collaborative planning meetings, teachers learned how to promote and use self-efficacy to improve their students' learning experiences in the classroom and how to use self-efficacy with each other to improve instruction, collegial interaction, professional learning, and relationships (teacher to teacher and student to teacher).

Also, there is a strong consistency between the interview, observation, and archival findings regarding instituting change through collaborative planning and professional development without resistance. Throughout the interviews, participants conveyed a true change in their attitude concerning local reform. For instance, Participant 2 of School C stated, "I like the way our faculty responds to professional learning. I like that . . . And, I think truly that they have changed their viewpoint . . . They actually see the value in it." Participant 2 further discussed how teachers at School C changed from resistance to complete and total "buy in" when they realized the value of reform. Moreover, observation and archival findings were consistent with interview findings. Observations revealed participants implementing ideas shared and strategies in the classroom that they acquired through collaborative planning and professional development. I observed Participant 2 of School A on October 31, 2011 using flex group (e.g., Think-Tac-Toe) strategies acquired through collaborative planning as professional learning (or PD) on September 26, 2011 to solidify learning. This confirmed the participant's complete and total "buy in." In reviewing archival documents (collaborative planning meeting minutes), the September 26, 2011 fifth grade notes from discussion minutes recorded read: offering choices~choices increase motivation~teacher is in charge of what she offers as a choice; Examples: -Think-Tac-Toe, -2-5-8 List Menu, -Dinner

Menus, -Find Teacher Blogs. This example corroborates using collaboration as professional development to minimize resistance to reform, change and confirms the assertion that change can be instituted through collaborative planning and professional development without resistance.

The interviews, observations, and archival findings (results) of this study also drew duplicate or similar conclusions concerning identified advantages and disadvantages of grade level and cross grade level collaboration used to improve collegial interaction to improve instruction and learning. Participants identified six major advantages and disadvantages that I garnered from the interviews, observed during the observations, and noted in the meeting minutes. The six major advantages and disadvantages that study participants identified were time, resources, and scheduling as the major disadvantages, and sharing ideas, solving problems, and peer learning (e.g., learning what is taught above and below grade level to improve instruction and learning) as the advantages. From the interviews, observations, and recorded data, participants indicated that the sharing of ideas was one of the most important factors in improving teaching and student learning experiences. The participants also indicated that the sharing of ideas may well keep turf guarding and professional isolation down and diffuse or minimize threats to quality instruction and learning.

Time is the most significant factor in improving teaching and student learning.

Teachers given the time to collegially interact and to discuss their profession, instruction, and learning can improve teaching and learning. However, teachers did not record a discussion on efficient use of time and time management in any of the meeting minutes.

Instead, participants documented time allotments based on priority designated to each agenda topic in the meeting minutes. Also, meeting agendas do show a conscious effort to use time wisely and efficiently. Teachers discussed and addressed (and assigned a specific amount of time to do so) topics related to identified strengths and weaknesses as a way to use time wisely. Participants used an agenda in the classroom and during collaborative planning meetings to efficiently manage time. The agenda (called a lesson plan in the classroom) helped participants stay on track and to achieve the goal (known as the essential question in the classroom) of the meeting. Participants always described time in the interviews in terms of a lack thereof. Participants stated time as the number one disadvantage to grade level and cross grade level collaboration. When asked the question "what are the disadvantages of cross grade level collaboration," participants answered time more often than not.

Additionally, I identified a clear intersection of data collection methods relating to AdvancEd standard 3 specifically indicator 3.5 (Teaching and Assessing for Learning). Indicator 3.5 reads "teachers participate in collaborative learning communities to improve instruction and student learning" (AdvancEd, 2011, p. 4). During the interview sessions, participants consistently referred to implementing, maintaining, and achieving a standards-based classroom. For instance, Participant 2 of School A stated, "We meet with our academic coach to work on standards based classroom strategies . . . Well, we know our expectations. We understand standards based classrooms, and it allows us, it prepares us for more effective teaching." Participant 2 of School C stated, ". . . I would say that the majority of our teachers have a standards based classroom . . ." Aligned with

the aforementioned interviews are the observations. During an observation, Participant land 2 of School A mentioned as part of the introduction to their lesson a standard and an essential question that the students would address. In collaborative planning meetings conducted as professional development, teachers and facilitators used standards (usually from School Keys Professional Learning) and essential questions in the same way that they used them with students in the classroom. For instances, during a collaborative planning meeting conducted as professional learning at School D on October 25, 2011, I observed teachers working on GAPSSI 2.3. The teachers also recorded this meeting in the minutes. I found the meeting to be consistent with the interview and observation data collected on standards-based instruction in the classroom. Research has proven that standards-based instruction can increase and improve student learning acquisition and experiences. Also, research has proven that standards-based instruction can engage and attract the learner to learning so that authentic learning and learning transference is possible.

To conclude, the triangulation methodology applied here is two-fold. First, triangulating data sources to minimize the threats to quality and strengthen the reliability and internal validity of the study was first and foremost the reason to triangulate. Second, by examining the data from three different sources, I minimized biases and maximized data substantiations. Moreover, triangulating multiple sources (data collection methods) can lead to new research questions (e.g., concerning patterns in routines central to collaboration, collegial interaction, and professional learning). The future study and research needed subsections of this study are where I addressed new research questions.

Furthermore, acknowledging the limitations of each data collection method was paramount since in so doing I could minimize threats to quality. I consulted Creswell's *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* the second edition in this matter. Creswell (2003) stated that in observations the "researcher may be seen as intrusive" (p. 186). Also, the observer may not be privy to all data. The researcher may lack "good attending and observing skills" (Creswell, 2003, p. 186). In the case of interviews, Creswell (2003) stated, "People are not equally articulate and perceptive" (p. 186). I found Creswell's view of archival documents equally important. Creswell (2003) stated, "Materials may be incomplete" and "documents may not be authentic or accurate" (p. 187). However, in view of this, researchers can minimize such limitations via triangulation and multiple data sources.

Summary

In Section 4, I presented the results of this study by means of four phrases, five cases, and three research questions. Each phase emerged as a delineation of the data collection process of this section. A discussion of the findings for each case provided answers to the research questions. Research questions discussed in relation to each case further defined the direction of the study. Also, I presented dominant and emergent patterns, themes, issues, topics, ideas, relationships, cases, cross-cases, events, concepts, and data triangulation in relation to findings. In addition, a methods triangulation of the questionnaire, interview, observation, archival data collection phases followed the triangulation of data conducted throughout the study. A discussion of the interpretations

and conclusions drawn from the data collected and recommendations for action, future research, further study, and implications for social change follow in the next section.

Section 5: Summary, Conclusion, and Recommendations

Overview of the Research Study

Collaboration is one of the many practices teachers employ to obtain professional and content knowledge, share ideas, review research and data to improve teaching and learning, train in best practices, and develop materials and lessons. However, as revealed in the literature, to collaborate effectively, scheduled time, support, and more opportunities are essential. Many teachers of rural southeast Georgia verbally expressed a desire at school functions (e.g., faculty meetings and PD training) for more time to not just collaborate but to collaborate across grade levels with the expressed aim of accomplishing the task of preparing students for future grades and improving the state of collaboration. In addition, there is a gap in the literature on using identified advantages and disadvantages of cross grade level collaboration and the collaborative needs and desires of teachers to improve collegial interactions. Therefore, the purpose of this qualitative case study was to identify how the participating teachers use the advantages and disadvantages of cross grade level collaboration to improve collegial interactions to achieve better student performance, PD, teacher effectiveness, and job satisfaction. I addressed three research questions in this study. The three questions were

- 1. How do rural southeast Georgia elementary school teachers use identified advantages and disadvantages of cross grade level collaboration to improve collegial interactions?
- 2. How do teachers, when they collaborate across grade levels, improve collegial interactions?

3. How do students demonstrate improved learning experiences that are based on teacher collaboration?

The questions from the questionnaire helped me to formulate my interview questions. Through the questions of the questionnaire, I was able to refine the interview questions to attain responses from participants that answered the research questions and contributed to defining themes and patterns, as well as, clarifying and supporting findings for this study. The participants' responses to questionnaire questions that I used to further define the problem and the direction of the study also provided information through which interview questions emerged. In addition, I used the participants' responses to questionnaire questions to tailor interview questions to the interviewees and to secure qualitative data. To secure qualitative information, I formulated open-ended interview questions to ask participants. I also formulated interview questions that were relevant to the way participants responded to questions on the questionnaire.

I conducted the study in five rural elementary schools in southeast Georgia. The five schools participated as five cases (five teacher communities) bound by place (school), time (3 weeks), and setting (the elementary school setting). The school district has eight elementary schools. The following were the characteristics of each school.

- School A/Case 1: houses 391 students, with 27 full-time teachers;
- School B/Case 2: houses 784 students, with 53 full-time teachers;
- School C/Case 3: houses 517 students, with 37 full-time teachers; and
- School D/Case 4: houses 449 students, with 36 full-time teachers.

The population of students at the four remaining schools was 401 at one, 288 at another, 622 at yet another, and 357 at the last school. Between the four schools, there were 115 full-time teachers. From the four, I chose the school that housed 357 students as school E and case 5.

The participants were elementary school teachers and administrators in rural southeast Georgia (special and regular education teachers and administrators) who had many grade level collaboration opportunities over the years. Teacher participants (also known as the respondents during the questionnaire phase) came from prekindergarten through fifth grade classrooms of selected elementary school campuses. Most of the participants were European Americans and female because the faculty of the school district was primarily European American and female. The participating teachers and administrators averaged 6 to 29 years of experience. The participants' ages ranged from 36 to 56. Many participants that I considered for inclusion in this case study had also previously indicated orally a need and desire to collaborate across grade levels. Additionally, participants were experienced in collaborative planning and teaching, as well as attracting students to learning participated in the study. All of the participants received training in the same teaching strategies, techniques, and methods. Therefore, all of the participants used the same or similar teaching strategies, techniques, and methods. The participants also completed the same or similar teacher education programs through the same or a similar southern university or college.

Through maximum variation sampling, I selected participants (both teachers and administrators). The population for this study included 50 selected (via maximum

variation sampling) administrators and teachers of which 10 teachers and administrators (and the four teachers and administrators who participated as a group) participated in the study. I used discriminant sampling as the secondary sampling method to gather when warranted "additional information from individuals similar to those initially interviewed to determine" if the assertions made by the first participants hold "true for these additional participants" (Creswell, 2007, p. 68). In addition, I used discriminant sampling to select participants for peer auditing and debriefing when warranted.

I conducted this study in four phases (the questionnaire phase, interview phase, observation phase, and the archival phase) and administered a questionnaire during the questionnaire phase three different times. I used the first administration of the questionnaire to define and refine the problem and the direction of the study. In the second administration of the questionnaire, I confirmed responses collected during the individual and group interview sessions. The third administration of the questionnaire assisted me in determining the PD and collegial interaction needs and the desires and interests of the teacher participants. The interview phase was structured to elicit information specific to the research topic and provided me with information to answer Research Questions 1, 2, and 3. In the observation phase, I examined the interactions, behaviors, strategies, mannerisms, and emotional and intellectual acuity that existed or cease to exist in an effective and ineffective teaching and the learning environment. During the archival phase, I reviewed and collected archival data through related public documents, records, district survey results, collaborative planning and meeting minutes, collaborative planning meeting agendas, and written policies. The archival data helped

me to define and refine, monitor, and evaluate teacher collaboration. In the archival data, I also found issues in teacher collaboration which helped me to establish a reason for creating new or keeping existing teacher collaboration methods. Additionally, the archival data provided me an opportunity to analyze how teachers communicate to collaborate.

Primarily, Hatch's (2002) nine steps in typological analysis provided me with a way to decipher the interview data. The triangulation of data sources and member-checking provided me with a method of quality control and validation. I transcribed and coded interviews and observations and wrote interpretations in the margins of all coded transcripts. Categorized and organized data for this study yielded common themes, patterns, topics, issues, concepts, cases, events, relationships, and ideas. From the aforementioned, I conducted data analysis and drew conclusions.

Evidence of Quality

I used methodological triangulation and data triangulation techniques to help me establish credibility, validity and quality. I also used the methodological triangulation approach to determine if the findings or results from each of the qualitative methods would draw duplicate or similar conclusions. The triangulated data approach provided me with a way to garner information from multiple sources (agendas, meeting minutes, and archival documents) to ascertain the proficiency of teachers and the effectiveness of the learning organization's PD methods. Also, I used the data triangulation approach to find the outcomes agreed upon by all of the participants of this study. A data triangulation chart (located in Appendix I and designed by me) helped me perform the task of

triangulating data. For the methodological triangulation phase, I used multiple methods (e.g., interviews, observations, analyzing documents, and use of a questionnaire) to gather data.

I used member-checking to further establish the validity and quality of this study. Participants received a copy of their interview transcript to confirm the accuracy of the interview and my interpretations thereof. A letter and the interview questions accompanied the interview transcript. The letter was a request to review the interview transcript for accuracy of the interview (the information and my interpretations). Participants who found accurate information placed a check and their initials in the member-checking column in the space provided for each question. If the information required correction, participants used the notes column in the space provided for each question to make corrections. Participants also commented on my interpretation of the findings. These participants made all comments within the margins of the transcript provided and initialed their comments. In addition, I asked the participants to suggest some fine-tuning to better capture their perspectives. When participants reviewed observation notes, I asked them to write their comments, suggestions, and questions in the column (designated as member-checking) provided and to initial their comments. Group participants received a copy of their interview transcript (to include the letter and interview questions) to review for accuracy of the group interview (the information and researcher's interpretations). A few participants responded with some additions and corrections. Finally, to substantiate the interview and observation data, I used archival documents because archival documents provide evidence. Appendices E, J, and K located at the end of this study consist of the interview questions, member-checking letter, and the interview notes and guide. In addition, the appendices include sample transcripts, researcher's logs (in Appendix N), and field notes.

I used peer debriefing at the conclusion of group and individual interviews and observations to guard against researcher-bias, verify conclusions, and challenge researcher's findings. I also asked group and individual study participants to focus on the correctness and accuracy of their interview and/or observation transcripts and reflect on the researcher's interpretations (accounts), conclusions, and codes thereof to provide me an objective perspective of the data. I conducted peer debriefing with member-checking. I conducted peer debriefing for "accuracy of the account," and member-checking for "accuracy of the qualitative findings" (Creswell, 2003, p. 196). Spillett (2003) stated that "there are no right or wrong ways to conduct peer debriefing, but rather choices that are more or less effective to address the validity threats that exist under particular research conditions" (para. 21). Member-checking is also flexible.

Member-checking can be conducted during or after an interview with the interviewer. However, to conduct peer debriefing, I used impartial colleagues to complete the task. I asked study participants to act as objective colleagues. They would be a "knowledgeable source" on the research topic (Hail, Hurst, & Camp, 2011, p. 74). When I asked participants to member-check their interview and observation transcripts, I also asked them to check for the correctness and accuracy of their interview and/or observation transcripts and reflect on my interpretations (accounts), conclusions, and codes. Based on these requests, participants became peer debriefers at the request of me.

Participants who acted as peer debriefers became insider debriefers. Insider debriefers are often able to connect with the researcher (Hail et al., 2011, p. 76). Spillett (2003) stated that "an insider refers to someone who has prior understanding or experience with the topic or setting under study, while an outsider is unfamiliar with these" (para. 5). All of the study participants have prior understanding and experience with the topics: collaboration, professional learning, and collegial interaction.

I used Hatch's (2002) nine steps in typological analysis primarily to analyze the interview data collected. As an early step, I read and disaggregated the interview data from beginning to end (Hatch, 2002, p. 152). For the first step, I identified typologies and used them to frame and anchor the analysis and to ascertain each participant's perspective concerning the topics of interest. After I identified the typologies, I read and marked (using Hatch's highlighting technique for marking excerpts) the interview participants' transcripts for excerpts related to the identified typologies. I completely read through the interview data of each participant with one typology in mind at a time (Hatch, 2002, p. 153-154). To keep track of marked excerpts, I created a summary sheet for each participant's marked excerpts. I read each participant's marked interview excerpts by typology to determine main ideas. When I determined a main idea from a participant's marked interview excerpts, I wrote a brief summary statement on the summary sheet of that participant.

As soon as the participants completed checking their summary sheets, I reviewed the summary statements for patterns, relationships, and themes within typologies (to include the conceptual framework, research questions for this study, and established

codes via the Ethnograph v6.0 and QDA Miner v3.2 [updated to 4.0] software). As a side note, after I coded the interview data, I realized a change in typologies and decipherable themes. For the fifth step, I read through "all of the data marked for inclusion in the typology under investigation" from beginning to the end (Hatch, 2002, p. 156). I coded entries according to patterns identified and kept a record of what entries go with what elements of the patterns (Hatch, 2002, p. 156). At the sixth step, I reread and coded data and confirmed patterns supported by the data. I reported and discussed nonexamples of the confirmed patterns. After I completed the sixth step, I substantiated irregularities, relationships, and connections from the patterns that were earlier identified (Hatch, 2002, p. 158). This was the seventh step. To complete eighth step, I wrote the identified patterns as one-sentence generalizations to bring closure to the analysis phase of the study. Also, writing the patterns as one-sentence generalizations helped me, as the researcher to organize my thoughts about the data (Hatch, 2002, p.158-159). Finally, I used data excerpts (powerful examples) to support the generalizations previously established. Also, I followed and implemented Hatch's steps as closely as possible to maintain quality.

To maintain and ensure that the results are reliable, Merriam (1998) recommended several techniques. The techniques are: investigator's position, triangulation, and audit trail. Following Merriam's recommendation, I discussed an explanation of this study's investigator's position in Section 1 under assumptions, limitations, and conceptual framework and in Section 3 under the role of the researcher. I employed triangulation through multiple sources of data and methods. I authenticated an

audit trail for this study through a detailed explanation of "how data were collected, how categories were derived, and how decisions were made throughout the inquiry" (Merriam, 1998, p. 207). Also, I have retained documents, transcripts, field notes, and other pertinent materials that can substantiate my conclusions and findings in a locked filed cabinet in my home. I will keep said documents, transcripts (in Appendix O), field notes (in Appendix P), and other pertinent materials for five years.

Sustaining and enhancing internal validity warranted using Merriam's six basic strategies. Merriam (1998) stated that the researcher can "use six basic strategies" (p. 204). The six basic strategies are: triangulation, member checks, long-term observation, peer examination, participatory or collaborative modes of research, and researcher's biases. For this study, I addressed expected and unexpected biases in assumptions and limitations. I discussed the execution of member checks in Section 1 under nature of the study and in Section 3 under data collection, validity and quality, and data analysis. I employed triangulation through multiple sources of data (interviews, observations, and archival documents) and methods (structured interviewing, direct observation, and case study). I satisfied peer examination through peer debriefing using an insider debriefer. Peer examination transpires naturally in the doctoral study process via the committee each time they critique findings as they emerge (Merriam, 1998, p. 204). Researchers usually conduct long-term observations in studies longer than 3 weeks. Also, most studies will not have long-term observation as the only means to collect data. I conducted this study for 3 weeks and during that time collected multiple sources of data. Participatory or collaborative modes of research for this study involved participants completing a

and to confirm responses collected during the individual and group interview sessions. In addition, I asked participants to member check and peer debrief. I also addressed discrepant data and expected and unexpected findings.

Also, Merriam (1998) stated, "To enhance the possibility of the results of a qualitative study generalizing in any of these senses (working hypotheses, concrete universals, naturalistic generalization, user generalization)" a researcher can use rich, thick description, typicality or modal category, and multisite designs (p. 211). I accomplished rich, thick description in this study via detailed descriptions of the setting and participants (to include supporting data from interviews, observations, and archival documents) so that findings can be transferred. I achieved typicality (or modal category) by using participants experienced in collaborative planning, teaching, and that were from different professional learning communities. I consummated multisite designs by using five different sites and cases to maximize diversity and maximum variation sampling (purposeful sampling).

Findings of the Study

The findings of this qualitative case study are an explanation of how teachers improve collegial interactions when they collaborate across grade levels. Additionally, the findings are an explanation of how, when teachers do collaborate across grade levels, they use identified advantages and disadvantages of cross grade level collaboration to improve collegial interactions to achieve better student performance, professional development, teacher effectiveness, and job satisfaction. Equal to the importance of the

aforementioned explanations is the similarity between the findings of this study and the literature review findings of this study. The findings are similar to the literature review findings regarding effective collaboration requiring regularly the scheduling and appropriation of time and more opportunities to take place. From the findings, I was able to establish two frameworks for improving the state of collaboration (to include the collegial interactions thereof) and for supporting the collaborative efforts of teachers across grade levels to accomplish the task of preparing students for future grades.

By applying the findings of this study, I was able to establish practical approaches that can make regularly scheduled cross grade level teacher collaboration possible.

Through the findings, I found an explanation as to how collaboration through collegial interaction can be used as professional development, and how teachers may understand the connection between professional development and collegial interactions in relation to their own learning. Moreover, through the findings, I found an explanation of how teachers are able to use identified advantages and disadvantages of cross grade level collaboration to improve collegial interactions, individualize their own professional development, and use the pacing and patterns of teaching aimed at addressing the student's level of need and ability. Also, I found an answer to the major research questions.

Expected Findings

Several findings that study participants discussed as advantages and disadvantages warranted discussion as expected findings in the following paragraphs.

The lack of time was an expected find. Throughout the course of this study, participants

mentioned time as the main disadvantage to collaborative planning and cross grade level collaboration. Participant 3 of School A stated, "That's my biggest disadvantage because ... you know time ..." Participants cited inadequate human resources as the second disadvantage to collaboration. Finding qualified substitutes to replace the teacher when he or she attends collaborative planning meeting or cross grade level collaboration is difficult. Most of the time paraprofessionals replaced the teacher in the classroom during collaborative planning or cross grade level collaboration. Participant 3 at School B stated, "It really boils down to having qualified people cover those classes." The lack of funds is another disadvantage because money compensates qualified substitutes hired to cover classes. Without the money, hiring qualified substitutes cannot happen. Also, with the state finding ways to cut the cost of maintaining a school down, the request for more money is likely to go unheard. Schools must therefore find other means of attaining that which is necessary. Participant 1 at School D stated, "Once again, the time you know and paying for subs with the shortest of funds right now, it's very difficult to do that but those are some..." Scheduling and changes in collaborative planning agenda plans were the other disadvantages to collaborative planning meetings mentioned by study participants. For instance, Participant 2 at School D stated, "Due to scheduling, it's difficult for us to frequently have cross grade level (collaborative) planning." Another participant (Participant 2 of School C) also stated, "Well one disadvantage could be ... is the scheduling and the time because I mean cross grade collaboration takes time to really discuss and sit down and get into to some deep conversations." Scheduling is a disadvantage when including teacher collaboration within the school day is inconceivable or the administrator does not know how to free up time or restructure or reschedule time. To create the prerequisite time for collaboration, principals could use parallel scheduling, adjust the start and end time of the contractual day, bank time, use in service and faculty meeting time, make better use of existing time, and coordinate shared classes, group activities, events, and testing. Collaborative planning agenda changes is also a disadvantage when viewing state department of education webinars takes precedence over sharing, reflecting, and planning to achieve effective teaching and student learning on the agenda. Participant 3 at School C stated:

But, in professional learning also looks like right now common core webinars (CCGPS). I mean we have to focus on what our school, our kids, and our teachers need but we also have to find time to focus on what our state and our county says we have to implement.

State department of education webinars are important. However, time set aside for collaboration should be guarded and nonnegotiable. Otherwise, collaborative planning loses its effect, its impact.

Preparedness, new teachers, support, research, data-driven sessions, formal and informal collaboration, and teacher buy-in were all seen as advantages by the participants. *Preparedness* (as an advantage to collaboration and as defined in this study) is a readiness for collaborative work or collaborative planning. Participant 1 at School C contributed to this assertion by stating:

That's why you plan. That's why you prepare and take your data. Plan out where you got to go. What these children need to learn. How we are going to make sure they've got it. What'll we do when you know they haven't learned it?

At Schools A, B, C, D, and E, collaborative planning meetings are data-driven sessions. Collaborative planning meetings take place in the data room. The data room helps teachers, administrators, and collaborative planning facilitators or academic coaches keep track of student progress and performance and the overall success of the instructional program. Data rooms set up for displaying, tracking, analyzing, and applying information help keep teachers, administrators, and academic coaches maintain their focus on the vision, mission, and goals to plan for effective teaching, learning, and collaborating. Participant 1 at School E stated, "We'll meet in the, we have a planning room where we meet. We have all of our data and information in there." Participant 1 at School D stated, "We talked about the data and the different types of data. You know, you've got your leading and lagging data. You know, the C.R.C.T. would be the lagging data." Participant 2 at School D stated, "... and data drives collaborative planning." This participant also stated, "Well, we do a lot of data analysis . . . Really stopping and thinking about what happened, why did it happen, what can we do to continue our successes and to correct our failures." Also, I have found that new ideas can be advantageous to the collaborative process because new ideas can result from thinking, reconsidering, altering the perspective, and extending a thought beyond the obvious. Participant 1 at School C stated, "Teacher effectiveness is going to correlate to how effective your collaboration is. You're sharing ideas about what works and those teachers implement those ideas and

strategies." Furthermore, although not mentioned here by the participant, the new ideas that new teachers can bring to the collaborative process can be advantageous. New teachers can be teachers from other school systems or first year teachers. The new ideas that they bring with them are what may be an advantage to the collaborative process.

Support in the form resources, time, and meaningful changes to the collaborative can be an advantage to collaboration. Having the resources and time to make the collaborative process effective is an advantage. Making the changes necessary for improving the collaborative is also an advantage. Therefore, it was no surprise that the administration at School A, B, C, D, and E fully support the collaborative through participation, guarded and fixed time, resources, and meaningful changes. For instance, Participant 1 at School C stated in an interview "Tuesdays is the teacher collaboration where they plan together." Participant 4 of School A stated, "We have collaborative planning meetings on Tuesdays . . . " Participant 2 of School E stated, "Collaborative planning meetings are on Wednesdays . . . " Research also provides support to the collaborative and as previously established support is an advantage. As a support, research can be used to substantiate the effectiveness of the collaborative. Participants explained that any strategy or practice learned in collaborative planning and used in the classroom has a research-based prerequisite. Research-based strategies or practices have proven effective results. Participants stated that they expect the same results from research-based strategies or practices. For instance, Participant 4 at School A stated, "We study a variety of topics every year, which are research-based and aligned to our school goals." This is an example of teacher buy-in. The teacher uses a strategy/practice

expecting the same results. Effective results can convince the teacher to use the strategy/practice. The participants stated that many of the strategies/practices used in the classroom they acquired through collaborative planning (formal collaboration).

Participant 2 at School D stated:

We want teachers to realize that what they learn in collaborative planning will make a difference in student achievement, and we use research to support it . . . we have research to prove that it (differentiation) is the most effective strategy to increase student achievement . . . we want them to realize that it is not just something else that we do.

Teachers can also acquire strategies/practices through informal collaboration (e.g., meetings in the hallway, the teacher's lounge, etc.). Teacher buy-in and formal and informal collaboration are advantageous to the collaborative process. Informal collaboration can be conducted at any time and within any setting thereby making collaboration more attainable and the lack of time to collaborate becomes less of an issue. Teacher buy-in can eliminate resistance to reform. Collaboration can promote teacher buy-in. Thus, collaboration can be the means to reform.

Instructional time missed teaching students while attending collaborative planning, the frequency in which distractions occur during collaborative planning, politics permeating the professional learning communities, and the volume of information processed and dealt with within a limited amount of time during the collaborative process were all expected as well. Depending on their perspective, teachers considered few of the aforementioned advantageous to the collaborative process. Contributing to the

aforementioned is Participant 1 of School A. Participant 1 of School A stated, "The only way I think this can be improved is to give us more time to meet without any distractions" when I asked the interview question: How can teachers and administrators improve collegial interactions? Another participant, when I asked "what do you think the disadvantages of cross grade level collaboration are," stated:

Well, I feel like they're time consuming to me because a lot of times when we have those meetings there are so many other things that you could be doing during the meetings. During the meeting time, especially outside myself having to go back and then you know play catch up or maybe stay late because we spent our planning during the meeting with other teachers that I really could use doing other things in my classroom. (Participant 3 of School A)

This participant has a valid point. Using a paraprofessional or a substitute teacher to replace the teacher in the classroom is not the same as the teacher. Further study concerning the impact of missed instructional time, interferences that cause disconnects within the collaborative process, the politics of a professional learning community, and efficiently processing data in less collaborative planning time warrants inquiry.

Unexpected Findings

Administrators meet monthly. The administrators' monthly meetings depend on an agenda dictated by the state department of education, the local board of education, and state standards and policies. Administrators' meetings are from time to time called meetings as well. However, the monthly meetings are not collaborative planning meetings for administrators. A participant's (Participant 1 of School C) interview

response contributed to this observation. The participant stated in an individual interview "..., as an administrator, I want to have opportunities for collaboration ... Just as you have teachers collaborating on what they're teaching you know within school and within the system. Have that same availability for administrators too." The comments were unexpected. Moreover, the comments indicated the importance placed on collaborative planning, and as inferred through the comments, the administrator valued collaborative planning possibly for its effectiveness. Evidently, this administrator has seen how effective collaborative planning is in the school setting for teachers and students. The participant contributed to this assertion by stating "teacher effectiveness is going to correlate to how effective your collaboration is. You're sharing ideas about what works and those teachers implement those ideas and strategies. They're going to become more effective teachers by learning from each other."

Unexpectedly, I found little to no turf guarding at any of the schools of this study. Teachers contributed this to collaborative planning. Collaboration brings people together for the purpose of sharing ideas and learning from each other. Turf guarding has no stronghold where there is sharing and peer learning and teaching. Participant 5 of School A contributed to the aforementioned idea (where there is sharing there is no turf guarding) with the statement "at . . . , norms are set for collaboration meetings. All teachers are involved in setting these norms, and adhere to them. Therefore, the interactions among them are healthy. Teachers work together to improve their instruction and student achievement." Participant 4 of School A stated, "Teachers are supportive of each other. There is very little, if any, competition among teachers. I think that a shared

Another participant (Participant 2 of School A) contributed to this when she stated that ".

... trust is never an issue here. But, if it is an issue that's where those norms and standards and rules and all that come in that we've set." The participant also stated, "As a group when you meet to collaborate, you set the guidelines for that meeting and so everyone has to stick and follow the guidelines." Here, the participant was referring to the norms and covenants written by the teachers for collaborative planning meetings. The norms and covenants of School A, B, C, D, and E hold all collaborative planning participants personally accountable for maintaining a collaborative environment free from turf guarding. A covenant adopted at School A reads "we agree to keep each other informed and share ideas." Teachers adopted similar covenants at the other schools of this study.

Another unexpected and surprising finding is the role that the demographics of a school setting play in collaborative planning. Teachers address the demographics of the school setting as defined by the needs of the students as topics of interest in collaborative planning. For example, if at-risk students compose most of the population of a school, much of what the teachers address as topics in collaborative planning would be based on the needs of the at-risk students. During an interview, a participant contributed to the aforementioned by stating:

When you analyze your data, you look to see if there's a particular group of students who you are not meeting their needs. It's not a reflection necessarily of the students. It's whatever you've been doing may not be working for the students. So, it just happened to be last year that it was our African American sub

group and our students with a disability. They ended up a 100% across the board . . . (Participant 1 of School D)

Race and disability are two of the specific demographic categories discussed in collaborative planning. Gender is the third. However, a focus on different instead of specific demographics may create a collaborative climate in collaborative planning meetings that is most conducive to addressing the comprehensive needs of the student population. As Participant 5 of School A stated, "Collaborative planning is used as professional development and PLUs are earned. During these planning sessions, the topics that are addressed are solely based on data and the needs of our school."

Participant 2 of School C stated, "... and, every school has their different needs. I mean you know they're similar needs but they're still differences based on the demographics ..." To summarize, a focus on the demographics of a school in collaborative planning meetings is a focus on better understanding the needs, strengths, weaknesses, challenges of the students to better serve them.

Interpretation of Findings

The purpose of this qualitative case study was to identify how the participating teachers and administrators use the advantages and disadvantages of cross grade level collaboration to improve collegial interactions to achieve better student performance, professional development, teacher effectiveness, and job satisfaction. By conducting this study, I expected that a greater understanding of how, when teachers do collaborate across grade levels, they improve collegial interactions would be achieved and an insight about how to improve the state of collaboration to support the collaborative efforts of

teachers across grade levels for the task of preparing students for future grades would be gained. A better understanding of the connection between professional development and collegial interactions in relation to their own learning was also an expected find. Also, I expected an impact on social change directly related to investing in local, state, national even global teaching practices and curriculum changes directly related to differentiated and tailored instruction for teacher and student learning.

Empirical inquiry approach used in this qualitative research study allowed the gathering of rich, thick descriptive data via interviews, observations, and archival documents. The participants of this study included 10 teachers and administrators (and four group participants). I transcribed, coded, analyzed, organized, and interpreted the data first using the research questions and then via categories created by means of the conceptual framework of Section 1. The construction of categories exposed themes, patterns, topics, concepts, issues, cases, events, cross cases, relationships, and ideas.

Using the Ethnograph v6.0 and QDA Miner v3.2 (updated to 4.0) revealed codes that helped me easily identify patterns, themes, issues, topics, ideas, relationships, cross cases, cases, events, and concepts. I used Hatch's typological analysis primarily to decipher the interview data. The study centered on the following three research questions

- 1. How do rural southeast Georgia elementary school teachers use identified advantages and disadvantages of cross grade level collaboration to improve collegial interactions?
- 2. How do teachers, when they collaborate across grade levels, improve collegial interactions?

3. How do students demonstrate improved learning experiences that are based on teacher collaboration?

The findings in this section and Section 4 satisfied the aforementioned questions. The prevailing finding for this study is that teachers and administrators perceived collaboration differently. Teacher study participants perceived collaboration as the means to effective teaching and professional learning to improve a student's chances for academic success, whereas administrator study participants perceived collaboration as the means to effective teachers who can improve a student's chances for academic success. The teachers and administrators' professional goals and challenges, local and state standards, and day-to-day demands and experiences further compounded this perceived difference between them (teachers and administrators). Also, collaboration in this school district appears to be based more on the teacher's perspective than on the administrator's perspective. Nevertheless, there is one aspect of collaboration that they perceived the same way. All participants stated that they perceived the main goal or the purpose of collaboration (to improve teacher effectiveness; to improve student achievement; and to increase student learning) the same way.

In the following paragraphs, I organized findings into categories and then analyzed, interpreted, and synthesized those categories. I created categories using the research questions. The categories created follow:

1. The identified advantages and disadvantages of cross grade level collaboration used to improve collegial interactions.

(Research Question 1)

- Across grade level collaborative practices that improve collegial interactions.
 (Research Question 2)
- 3. The connection between improved student learning experiences and teacher collaboration.

(Research Question 3)

In Section 4, I discussed data and findings previously coded and presented using the aforementioned categories and other analytical categories (e.g., themes, patterns). Themes and patterns connected to the categories created rich descriptive analyses. In addition, the inclusion of any relevant theory and research literature substantiated data and findings and maintained objectivity. Also, in Section 4, I presented the findings for each case and research question.

Section 5 is an interpretation of the findings to provide a holistic understanding and an analysis that illustrates a rich integrated description of the findings. In addition, this section is a disclosure of a tiered synthesis of the findings. A discussion of the factors presented continues to define the analysis of the findings. I used the factors, participant perspectives and experiences, refuting and corroborating literature, connections and disconnections, and relationships, to frame the analysis.

Category 1: The identified advantages and disadvantages of cross grade level collaboration used to improve collegial interactions.

The first research question posed for this study helped identify how participants used the advantages and disadvantages of cross grade level collaboration to improve collegial interactions. The participants of this study defined advantages as strengths,

connections and disadvantages as weaknesses, disconnections. They used the advantages and disadvantages that impact and emerge from collaborative planning and their collaborative efforts focused on teaching and learning as indicators of what needs change and how to change it (a) to identify problems in teaching and learning; (b) to find solutions to teaching and learning; (c) for attaining direction and guidance when improving and evaluating teaching and learning; (d) to achieve better student performance, professional development, teacher effectiveness, and job satisfaction; and (e) to establish and develop their skills as teacher and learner. Also, participants stated that the identified advantages and disadvantages of cross grade level collaboration can be used to improve collegial interactions. As I earlier stated, one way to improve collegial interactions in collaborative planning is through the topics discussed. The topics discussed can either help or hinder collegial interactions during the collaborative and can therefore become advantages or disadvantages.

Interview participants cited a number of advantages and disadvantages that can be used to improve collegial interaction. In an interview at School A, a participant (Participant 4) stated, "The only disadvantage that I see with cross grade level collaboration would be time." The participant later indicated that it is the lack of time to collaborate across grades that is the issue. When there is no time to collaborate across grades, teachers are at a disadvantage. They lose the opportunity to collaborate with teachers above and below the grade level at which they teach. Participant 4 of School A corroborated the assertion by stating that "the main advantage of cross grade level collaboration is what is taught above and below the grade level that you teach. Also,

teachers sharing of ideas with colleagues that they normally do not plan with are an advantage."

Teachers can learn to be creative and wise about the time that they use. They can

(a) prioritize topics on the agenda; (b) be prepared and organized to work; (c) set goals,
objectives, norms, and covenants; (d) establish a mission and vision; and (e) manage the
time that they are given to include cross grade level collaboration. To improve collegial
interactions, using the aforementioned identified disadvantage of cross grade level
collaboration, teachers must think in terms of how the time is spent interacting and what
that time is expended on while interacting during the collaborative. This means that they
will need to choose to spend their time using a researcher's level of thinking and
questioning, a systems thinking approach, data-driven and research-based topics,
meaningful discussion and reflection, and peer debriefing to learn from each other. When
teachers choose better ways to collegially interact, they can improve their collegial
interactions.

Participant 1 at School E stated in the interview that the lack of time and money are the major disadvantages of cross grade level collaboration. The lack of money is a disadvantage because without it hiring qualified substitute teachers (human resource) to teach students in the absence of a teacher attending collaborative planning or cross grade level collaboration proves impossible. However, the lack of money remains a disadvantage only when teachers (and administrators) fail to replace it with ingenuity and knowledge. Also, money pays for professional learning conducted by professional facilitators and speakers considered by academia as the authority in the field. Teachers

can conduct their own professional learning but they remain unrecognized as the authority in the field.

The lack of money can be a problem for any school but teachers (and administrators) given a problem will act to resolve it. Teachers (and administrators) can and do problem-solve. Teachers who participate in problem-solving in the collaborative can and do improve their interactions with each other. Thus, problem-solving is yet another way to improve collegial interaction inspired by a lack or a need or a disadvantage.

Participants also cited the scarcity of human resources as a disadvantage. When there is a lack of qualified substitutes to replace the classroom teacher attending collaboration, a disadvantage exists. To compensate for this lack, the schools of this study have resulted to using qualified volunteers (usually retired teachers or other qualified professionals) and competent student teachers (to act as volunteer substitute teachers or substitute paraprofessionals) to replace the teacher in the classroom during the collaborative planning meeting. The county has a training program for substitute teachers and paraprofessionals. Also, student teachers can be trained to replace the teacher in the classroom during the collaborative.

As to how teachers use this identified disadvantage to improve collegial interactions, I had to consider what resulted because of the lack. If teachers cannot attend collaboration because of the lack of human resources they cannot interact collegially. This is what results due to a lack of human resources (substitutes) to replace teachers attending collaboration. How teachers use this disadvantage to improve collegial

interactions begins with communication without boundaries and without the convolutions of dialogue. Teachers must learn to keep it simple to improve collegial interaction.

Teachers must learn that collegial interactions can be improved with the use of various mediums and execution of dialogue. Attending cross grade level collaboration in-person is important but when teachers cannot attend, they need to find other ways to collaborate with their colleagues beyond the designated collaborative site while remaining the teacher to their students.

Creative scheduling such as extended P.E. was also mentioned by participants at Schools B, C, and D but as an advantage and the means to providing more time for cross grade level collaboration and collaborative planning meetings. As an example, participant 2 of School B answered that they have "extended P.E. on Tuesdays and Wednesdays for fifty minutes and the other three days for thirty minutes" to the question "how do you find time to collaborate." Extended P.E. provides more time, opportunity for collegial interaction. The more teachers are given the opportunity to collaborate, to collegially interact; the more time, opportunity they have to practice collegial interaction and to determine what changes are warranted in the way they collegially interact. Any needed changes that are revealed can be acted upon to improve collegial interactions.

As one participant (Participant 2) at School E stated, "The main advantage that I see with cross grade level collaboration is the understanding of the curriculum above and below the grade level that you teach. This could only enhance one's instruction. Also, sharing of ideas is another advantage in that teachers get to listen to ideas from colleagues that they normally do not plan with." Sharing ideas can improve collegial

interactions. When teachers are sharing ideas across grade levels and can talk about the curriculum above and below the grade level that they teach, they can explore topics of quality and participate in meaningful discussion about teaching, learning, and students. Exploring topics of quality and participating in meaningful discourse can improve collegial interaction if that is the goal. As I have observed the participants and events of this study, there is one clear interpretation or understanding. Setting and achieving the goal to improve collegial interaction through various means (via advantages and disadvantages or strengths and weaknesses or topics or the sharing of ideas) works.

Another participant (Participant 2 of School D) when asked "what are the advantages of cross grade level collaboration" in the interview stated that one advantage is "... second and third grade transition meeting and acceleration ... to lay the foundation for the next grade level ..." The participant was referring to collaborative planning meetings that are held nearer the end of the school year to discuss second and third grade transitioning and acceleration. During acceleration, students (K-5) are introduced to above grade level subject matter content. When teachers talk about acceleration and transitioning in the collaborative, they are discussing quality topics that can improve their collegial interactions.

Participant 2 of School A explained in the interview that the advantage is "learning new ideas." Teachers can use the advantage of "learning new ideas" to define the "what" that they discussed in the collaborative. When a teacher defines the new ideas discussed, they can choose to define the ideas in such a way that collegial interactions improve through them. A different participant (Participant 1) of School A stated that an

advantage "would be finding solutions to problems you are having by being able to discuss it with your colleagues." Problem-solving as earlier mentioned is an advantage of cross grade level collaboration (as well as grade level collaboration) that can be used to improve collegial interactions.

With regard to the preceding interpretations about how teachers use the different advantages and disadvantages to improve collegial interaction, there is one clear interpretation. Specific actions (limited only by the strengths or advantages and weaknesses or disadvantages of the collaborative process, individual teachers, and the teacher community) improve collegial interaction. Therefore, teachers can and do improve collegial interaction through specific actions such as (a) shared discourse across grade levels; (b) meaningful use of fiscal and human resources; (c) community-oriented problem-solving and decision-making; (d) peer debriefing to include mentoring and coaching; (e) promoting adult self-efficacy via incentives, accolades, and support; and (f) attending to student performance, professional development, teacher effectiveness, and job satisfaction. Also, to improve collegial interactions, it is clear that teachers need more opportunities to talk to each other, observe each other, and to assist and support each other for social change, reform to occur. Moreover, improving collegial interaction as suggested through the findings requires that teachers have an opportunity to work with role models for the acquisition of transforming collaborative behavior and to work in a climate where collaborative behavior can maturate. In addition, collegial interaction can also be improved when teachers trust, respect, encourage each other, and work together. Furthermore, when teachers trust, respect, encourage each other, and effectively work

together, they can create their own opportunities for professional growth and improvement and improving collegial interaction.

Category 2: Across grade level collaborative practices that improve collegial interactions.

The findings revealed what the participants are practicing and need to practice in the cross grade level collaborative to improve collegial interactions. I confirmed this statement via a participant's statement when asked "tell me about cross grade level practices at your school" in the interview. Participant 2 of School A answered, "... all of our collaborative practices are an opportunity to grow in instruction. Everything we work on focuses on betterment of the classroom." As indicated here by this participant, the main goal of teacher collaboration (grade level or cross grade level) is to improve teaching and learning through best practices. To the same question, a participant of School A responded:

. . . we meet about once a month to discuss problems in math that we see happening. We look at data and see if we see trends in the data and decide if there is something we can do to correct the trends. (Participant 1)

Therefore, teachers use problem-solving and data discussion practices. As earlier stated, problem-solving and data discussions may well improve collegial interactions by providing a meaningful focus for collaborative dialogues. Also, another participant when I asked the same question stated:

I know when I first took on the position, facilitating collaborative. The initial focus was 'Are the teachers applying what you have shared?' But, now it's to the point 'Is there application reflected in student achievement?' So, the ultimate goal

of collaborative planning should be increased student achievement. I think that . . . And, it changed my . . . It's a paradigm shift now that I've thought about it. But, that's the ultimate goal of collaborative planning is to increase your student achievement. The teachers are sharing and growing together and learning together. Your ultimate evidence of success with collaborative planning should be student achievement. Last year in our AYP grades, we had the highest C.R.C.T. scores in the county average. (Participant 2 of School D)

The participants' comments infer the practice of problem-solving, goal setting, peer-topeer learning, and data analysis to improve teaching and learning. As earlier stated, when
teachers problem-solved, set goals, learned from one another, discussed data, and peerreviewed research, they were also improving how they collegially interact with each
other during the collaborative planning meeting.

The participants' comments also imply what the participants of this study need to practice in cross grade level collaborative to improve collegial interactions. Participant 1 of School A contributed to this assertion by stating "I feel that maybe one improvement could be that all teachers get a chance to talk and discuss rather than maybe one teacher being the only one that talks." The participant's comment indicated that teachers need to practice active listening during the collaborative planning meetings as well as encourage each other to take part in clear and open communication to discourage the monopolizing of discussion and interaction. Teachers can address communication domination through their goals, norms, and covenants that they review at the start of each collaborative planning meeting. They can also set communication domination as an agenda discussion

item under problem-solving or roles and relationships. Active listening training may well help minimize any teacher monopolizing the collaborative planning discussion. In addition, the facilitator of the meeting can act to keep one teacher from monopolizing the talks while engaging all participants. The facilitator could reiterate that it benefits all when all participants of the collaborative take turns talking. The facilitator can also delineate the roles, responsibilities, and line of communication clearly and equitably to maintain an inclusive environment. The way in which the participants decide to resolve an issue is determined by the practices applied to improve collegial interaction.

Collegial interactions can also be improved through the practice of conducting collaboration as debriefing and as professional development. When teachers conduct collaboration as debriefing or professional development, teachers address a variety of topics, problems, concerns, and data and seek out solutions, research, and resources. This provides an atmosphere conducive to clear and open communication. Clear and open communication can decrease the chance for misunderstanding. Thus, when communication is clear and open, collegial interactions can be improved.

Category 3: The connection between improved student learning experiences and teacher collaboration.

The findings revealed that teachers addressed the support and barriers influencing student progress in collaborative planning to improve student learning through instruction (via the teacher) and the student. To substantiate this assertion, participants stated that in collaborative planning they decide what the students need to learn (by addressing standards and the curriculum and how their students perform in the classroom and on

assessments) and how students can acquire the learning they need. Also, the participants' replies to the question "what is the relationship between collaborative planning and student learning" when asked in individual and group interviews further corroborate the aforementioned assertion. Following are their reactions to the question "what is the relationship between collaborative planning and student learning." Participant of School B stated:

Well I think full circle your collaborative planning agendas come straight from your target areas from your continuous improvement plan. So you're targeting your weak areas, you're making the teacher stronger and as a result of that student achievement is going to go up. (Participant 3)

From this participant's perception, targeting and addressing the weak areas in teaching and learning is to improve instructional practices so that one can improve student learning. However, Goddard, Goddard, and Tschannen-Moran (2007) stated that from their perspective, "the relationship between teacher collaboration for instructional improvement and student achievement is likely indirect. That is, the most important outcome of teacher collaboration may be that teachers learn how to improve their instructional practice" (p. 892). From my perspective, improved instructional practices mean improved student learning. Therefore, more time should be given for teachers to collaborate to improve instructional practices, and teachers need to collaborate at greater levels. Goddard, Goddard, and Tschannen-Moran stated that their "results suggest that schools with greater levels of teacher collaboration did indeed have significantly higher levels of student achievement" (pp. 892-893). Contributing to the aforementioned,

Participant 2 of School B stated, "Well, we definitely want to make sure that they understand that there is a big connection between teacher collaboration and student learning, and that you know the purpose is to increase student learning. You know that's your purpose." The participant indicated here that the work (e.g., data analysis, research, shared resources, and troubleshooting,) in collaborative planning at grade level and across grade levels focuses on increasing student learning and achievement. Improving student learning will be the outcome. Participant 2 of School A stated, "Well, students benefit from more effective teaching so that's the direct relationship." The indication here is that when there are effective teachers teaching, there are students effectively learning. Participant 4 of School A responded, "As a result of teacher collaboration, looking at data, analyzing strengths and weaknesses, and creating smart goals, there has been a greater alignment between collaboration and student achievement." This participant established the connection between improved student learning experiences and collaboration to how data, strengths and weaknesses, and smart goals reform teaching and learning. Participant 1 of School C stated that "student needs has to drive your collaboration." Directly addressing student needs (e.g., educational, physical, emotional, psychological) to improve instruction and learning remains the ultimate goal of collaboration. With this much emphasis on teaching and learning, improving student learning is an expected end result.

Implications for Social Change

The purpose of this qualitative case study was to identify how the participating teachers use the advantages and disadvantages of cross grade level collaboration to

improve collegial interactions to achieve better student performance, professional development, teacher effectiveness, and job satisfaction. In regards to the implications for social change initially addressed in Section 1 of this study, the purpose of this study reveals where change is essential. Through the acknowledgment of needed changes, contributions to social change are feasible. Teachers and administrators may possibly find that this study is a disclosure of where changes are necessary and the recommendations for implementing those changes. In the paragraphs to follow, a discussion results about the implications for social change.

In the schools of this study, teachers and administrators used collegial interaction, reflection and collaboration, debriefing, professional development and learning to accomplish social change. For instance, participants indicated that given a chance to collaborate, interact, reflect, and learn (e.g., question, examine, observe) from each other, they experienced behavioral changes. As recorded in the collaborative planning meeting minutes of the schools of this study, teachers consistently participated in activities that allowed peer reflection, collaboration, interaction, observation, and instruction. Peer reflection, collaboration, interaction, observation, and instruction can produce social changes because teachers learn and use skills that cause changes in actions taken. Also, teachers assessed by the administrator via best practices were trained in best practices and continue to acquire best practices through collaborative planning used as professional development. Training and assessment can also yield social changes because training can imply preparation for change and assessment can infer the evaluation of a change. For instance, assessments conducted after changes and the introduction of something new can

provide evidence that something does what it is purported to do. In addition, teachers routinely performed using best practices that they acquired via collaborative planning used as professional development. Routinely, performing best practices can generate social changes.

Likewise, when teachers behave in a manner that allowed them to meet standards and professional and instructional expectations and receive an overall satisfactory on their evaluation, social change occurred. During this study, teachers used collaborative planning to help them learn how to behave in a manner that allowed them to meet standards and professional and instructional expectations and receive an overall satisfactory on their evaluation. Also, when mentoring and coaching strategies helped teachers retain, implement, and maintain best practices, social change occurred. Mentors and coaches can act as the support needed to achieve social change. Mentors and coaches are extensions of the support that collaborative planning provides. Also, collaboration requires that teachers follow up with next steps. *Next steps* are actions that must be taken to implement a plan and/or to follow-up on actions previously taken. Next steps determined in collaborative planning meetings can promote social change.

The schools of this study used peer-reviewed research and data (from the C.R.C.T., Benchmarks, the Writing Assessment, Dibels, the Math Computation assessment, and the Maze) to determine, promote, and implement the action for social change to improve the school and teacher community and teaching and learning. As expected, all teachers and the participants of this study used peer-reviewed research and data as guides and measures when making warranted changes in their professional

performance. These teachers and study participants used predetermined research and data. *Predetermined research* defined here as a professional school community decision concerning the research and data to be used. The *school community* defined here as teachers and administrators and the Director of Curriculum and Instruction. The professional school community relies on common core standards, best practices, the Georgia State Department of Education, and leading experts in the field when selecting from the available research. "The term 'Best Practice' has been used to describe 'what works' in a particular situation or environment. When data support the success of a practice, it is referred to as a *research-based practice* or *scientifically based practice*" (SERC, 2012, para. 4). Teachers and administrators need to keep in mind that "what works" for others may not work for them. Each school community has a different set of variables. Therefore, the results vary.

Assessment and evaluation (defined as observation) may foster social change in the schools of this study if and when the teachers of these schools use assessment and evaluation to foster social change. Teachers indicated that when they received an overall satisfactory on their evaluation, they did not feel compelled to change unless they received unsatisfactory. Teachers also stated that once they knew what a satisfactory evaluation entailed, they strived to achieve such an evaluation. In other words, teachers committed themselves to changing their performance (usually through formal and informal collaborative planning, professional learning, and debriefing) to attain a satisfactory evaluation. When teachers of the school community commit themselves to change, the school community can be changed which means social change is feasible.

The findings of this study are important to the collaborative process, teachers, academic coaches, administrators, and students (concerning instruction, learning, activities, assessments, and the environment). Teachers, academic coaches, and administrators may well find this study useful in assessing and improving the present state of the collaborative process at their school. The results of this study also solidify for teachers the need for cross grade level collaboration in order to raise the standards of teaching and learning across all grade levels. Also, this study is an assemblage of the practical approaches to cross grade level collaboration that teachers, academic coaches, and administrators can use to gain or increase the time needed for collaborating across grades.

Furthermore, teachers can use the information in this study about how to effectively improve collegial interaction (shared communication, collaborative interconnectedness, and community interfacing) to improve teaching and learning. Interview participants indicated that if they expended most of their time in the collaborative discussing (collegial interaction) teaching and learning, they actually improved teaching and learning. Collaborative planning minutes and agendas also substantiate the time teachers used to discuss teaching and learning. However, the minutes need to include (and agendas and minute forms need to include the task/topic item "detailed documentation of impact") more detailed documentation of the impact of their discussions (collegial interaction) on teaching and learning.

Recommendations for Action

The lack of time for cross grade level collaboration is a genuine issue for all of the schools in the school district of this study. Teachers and administrators expressed sincere concern about the lack of time to collaborate across grades. Cross grade level collaboration affords the teacher the opportunity to discuss the preparation of their current students for future grades. The recommendation for action includes assigning a task team to investigate existing solutions to problem-solving time issues to finding solutions tailored to the needs of each school. Also, locating and applying for obtainable grants that could provide the funds needed to hire qualified substitute teachers to release teachers so that they can attend cross grade level collaboration is another recommendation. In addition, there is the option of conducting cross grade level collaboration at the end of the school day.

Teachers and administrators could keep a daily log of how they used and managed their time to identify how they can become more efficient and to locate any hidden or down time that they can use for cross grade level collaboration. Any hidden or down time could lead to a power lunch. Therefore, a power lunch held to cross grade level collaborate is also an option. Teachers have regularly scheduled 30 minute lunch breaks. Teachers can use their lunch time to collaborate across grades since teachers use lunch time to discuss students and discipline issues to obtain collegial support and share ideas and strategies to help them effectively teach their students. A power lunch to cross grade level collaborate would mean rotating student lunch periods or using paraprofessionals to cover classes. Teachers could also use the time set for the homeroom

period to collaborate across grades. Paraprofessionals could reside over the homeroom period to give teachers this time to collaborate. If teachers report to work 15 minutes earlier, they could combine the 15 minutes and the homeroom period to collaborate for 30 minutes. Other options such as using a rotation schedule for collaboration to using email to establishing an online cross grade level forum or community that teachers could access at home as well are also plausible.

Another recommendation is that teachers and administrators acquire training in using debriefing as PD and as collaboration. The study participants that were interviewed indicated that they defined debriefing differently or not at all. The participants also admitted that they had conducted debriefing in various ways. Thus, there is no understanding of how debriefing should be executed. Therefore, training would help teachers and administrators understand their role in debriefing, and training would help teachers and administrators execute debriefing using the same standards and benchmarks. Furthermore, recipients of the training would become united in their understanding and execution of debriefing. Also, the implementation of quality debriefing would be important in keeping the benefits and results of debriefing constant and consistent.

Also, teachers need to participate in peer debriefing (reflective practices for professional growth). According to Hail, Hurst, and Camp (2011), "Peer debriefing offers a way to help overcome isolation, sustain collaborative environments, increase retention and make dynamic improvements in classroom" (p. 76). There are many sources for peer debriefing. Teachers can participate in peer debriefing though teacher study groups, graduate classes, professional organizations, learning communities, and formal and

informal sharing sessions with colleagues. Hail, Hurst, and Camp (2011) stated that peer debriefing often "happened by chance in the hallways or teachers' lounges" (p. 81). Thus, peer debriefing becomes boundless. Therefore, the recommendation is to use peer debriefing as yet another creative way to conduct collaborative planning across grades and to participate in professional learning.

The academic coach also needs to differentiate collaborative planning sessions to address the needs of each teacher as a professional learner. A teacher's effectiveness in the classroom (concerning learning and teaching) depend on meeting his or her professional needs or not. When a teacher's professional needs no longer exist, the teacher has had experiences that help him or her perform (teach) in a manner that is conducive to effective teaching that causes the student to learn. Differentiate collaborative planning sessions should allow the participant to explore the many aspects (based on needs) of the self as the teacher. Differentiated collaboration should impact every area of one's self as teacher.

One of the study participants expressed a need to attend collaborative planning session with administrative colleagues. Therefore, another recommended action is to schedule time for administrators' collaborative planning meetings. A collaborative planning meeting for administrators would bring the collaborative process to the forefront. More attention would be given to the process which in turn may mean heightening the significance of the process thereof. If the collaborative process can be seen as important, then feasibly the number of empirical research studies would increase. Also, when administrators participate in the collaborative process, they can begin to

understand the role that collaboration plays in effective teaching and learning. They can begin to see how teachers need more time and conceivably become the voice required in getting teachers more collaborative planning time.

The teachers, administrators, and the superintendent of the participating school district need to pay attention to the results of this study because the implications for this study vary. First, the study reveals exemplary examples of teacher collaboration connections to teaching and learning. The examples can serve as models. The questionnaire and interview responses of this study provide an insightful view of the perceptions, opinions, concerns, needs, interests, and desires that teachers and administrators have about collaboration, PD (and professional learning), and teaching and learning. The perceptions, opinions, concerns, needs, interests, and desires that teachers and administrators demonstrate can become agents of change.

Also, based on the findings of this study, I suggested the following two frameworks. The first framework layer depicts an articulation of the many layers of cross grade level collaboration from a student-centered perspective. The second framework layer focuses on the discourse, discussion, and communication, the enablers of the collegial interaction of cross grade level collaboration. The teachers and administrators can compare existing frameworks at their schools with the ones presented here to determine which elements they have omitted from their frameworks.

The Cross Grade level Collaboration Framework (figure 2) is a diagram of identified areas that need to be considered and the conditions that must exist to support the success of all students. Accordingly, students are at the center. Out from the center

are the enablers. The enablers make student academic success happen and teacher effectiveness a reality. In the diagram, I presented the results of cross grade level collaboration, professional learning, and debriefing as the third layer of circles. The outer layer of circles is the "what" that must happen to initiate, implement, and sustain effective teaching, learning and collaboration.

The purpose of the framework in figure 3 is to provide a visual of the enablers of quality collegial interaction that improves the practice of effective teaching for increased student achievement. Also, the framework functions as an implementation plan. The plan begins with collaboration (highly productive discussions about teaching and learning across the grades). This is the planning phase. Then, there is an execution phase. At this phase, execution of the plan depends on the utilization of professional learning and benchmarks based on teacher and student needs. Finally, feedback constitutes the last phase of the plan. The feedback phase transpires through debriefing.

An implementation plan would include creating the right conditions for quality collaboration that is meaningful, rewarding, and effective; aligning all collaborative efforts with school and district priorities; focusing on improving and increasing student learning and teacher effectiveness; using data, evidence, and research to inform practice; and sharing ideas, strategies, and knowledge.

CROSS GRADE LEVEL COLLABORATION FRAMEWORK



Figure 2. Cross grade level collaboration framework.

A FRAMEWORK FOR IMPROVING COLLEGIAL INTERACTION

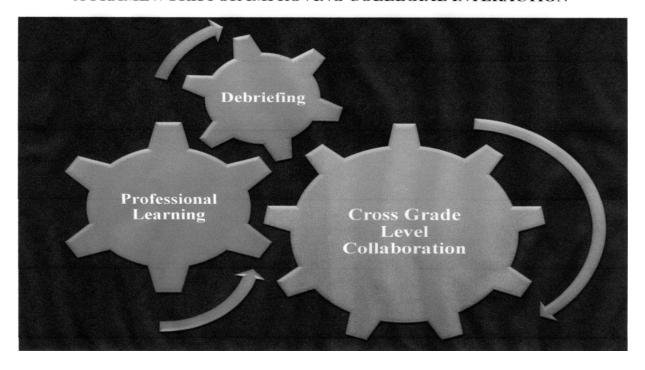


Figure 3. A framework for improving collegial interaction.

To disseminate the results and recommendations of this study, all study participants and the superintendent received an e-mailed PowerPoint presentation sent via me. I will make the published dissertation accessible to all stakeholders. The findings and recommendations can be disseminated through faculty meeting to interested colleagues, and oral feedback requested. In addition, scholarly literature lacks findings that focus on identifying and using the advantages and disadvantages of cross grade level collaboration to improve collegial interactions. Therefore, I will submit a variation of this dissertation to peer-reviewed journals.

Recommendations for Future Research/Further Study

Research on the topic of teacher collaboration and student achievement providing evidence of a cause-and-effect relationship does not exist. There are studies that exist as survey and case study research but not studies focused on teacher collaboration and student learning that provide evidence of a cause-and-effect relationship. According to Thomas-McClure (2008), "Most of the existing research on teacher collaboration and student achievement "is in the form of surveys and case studies, which do not provide evidence of cause-and-effect relationships" (p. 2). Therefore, current research demands studies conducted on the cause and effect relationships of collaborative practices that increase student learning and achievement. A longitudinal study centered on a resulting cause and effect relationship would add another dimension to existing literature. The literature also lacks empirical research based on teacher collaboration, debriefing, collegial interaction, and professional learning.

A mixed methods study could be conducted to determine the impact of time missed instructing students due to participation in collaboration or to identify the interferences that cause disconnects within the collaborative process. The quantitative data collected for each study would involve isolating the percentage of time missed conducting the first study or identifying the frequency of interferences that cause disconnects executing the second study. The qualitative data collected for the studies would entail collecting data via traditional methods to determine the quality of instruction in the absence of the teacher to be implemented as the first study or to determine the effectiveness of collaboration to be conducted as the second study.

A mixed methods two-phase, outcome and goal-based, sequential explanatory study could be conducted to investigate the effect of debriefing and collaboration as professional development on teacher effectiveness and student learning. The identified independent variable would be collaboration opportunities/no collaboration opportunities and the dependent variable would be teaching effectiveness. The independent variable collaboration/no collaboration opportunities would be united with the statistically controlled variables debriefing, systems thinking, and learning as a community, and the dependent variables would be teacher professional development, the learning organization, and student learning.

A quantitative study to determine if cross grade level collaboration is more effective or less effective than or equal to grade level collaboration in improving teacher effectiveness and increasing student achievement could be conducted. The results could be used as the evidence required (by stakeholders e.g., the local board of education and the stated department of education) to establish that across grade level collaboration demands more time. Students could benefit from the instructional practices of a teacher who has expended more time collaborating with teachers across grade levels than teachers who have not. Also, teachers involved in more cross grade level collaboration would have many more opportunities to meet with teachers above and below the grade level that they teach. There would be many more chances for teachers across grade levels to share ideas and strategies, to discuss issues, and to learn from each other.

A study that uses the qualitative paradigm of phenomenology and conducted for more than 3 weeks could be implemented to explore the experiences, perceptions,

perspectives, and understandings that teachers hold regarding the collaborative process and the impact of the teachers' roles and attitudes in relation to the collaborative process. Using a qualitative paradigm of phenomenology, an extensive spectrum of experiences, perceptions, perspectives, and understandings may possibly be found concerning the phenomenon of collaborative practices and efforts. The data collected, analyzed, and interpreted for this study could help identify applications, dialogue, actions, and systems thinking central to improving collegial interactions. By improving collegial interactions one could also improve the collaborative process, collaborative planning, cross grade level collaboration, or collaboration in general.

Damore and Murray proposed three future research studies. First, Damore and Murray (2009) identified the need for "future research that blends survey methodology and classroom observation" in the area of cross grade level collaboration (p. 241).

Damore and Murray (2009) also concluded the need for "future research that explores the relationship between professional development opportunities for educators, variations in structural supports provided to educators, and the actual implementation of collaborative teaching practices" (p. 243). Also, longitudinal studies conducted to define what extended learning opportunities and productive collaborative communities should resemble warrant investigation. Furthermore, Damore and Murray (2009) stated that current literature warrants "future research that examines teachers' perceptions over time (longitudinally) and investigations that examine how specific interventions influence collaborative practices" (p. 241). The literature lacks the aforementioned research studies.

Future research indicated in the area of differentiated collaboration to improve collegial interactions warrants exploration. In addition, conducting research on teacher collaboration tailored to the learning needs of the teacher needs further study. Integrative research conducted to connect structural, strategic, and interactional understandings about influencing student's level of processing information through cross grade level collaboration also requires an examination. Also, the literature lacks studies that integrate research to make connections. Research conducted on the patterns in routines central to collaboration, collegial interaction, and professional learning needs attention as well. The patterns found in routines can reveal important data about the interactions, behaviors, strategies, mannerisms, and emotional and intellectual acuities associated with the classroom and collaborative planning setting. Further study conducted to explore this study in a diverse demographic setting merits investigation. A diverse demographical setting may yield different findings. However, if both studies have similar results, the results would strengthen this study.

Reflections of the Researcher

Conducting this qualitative research study was challenging even after considerable planning and organizing. There were delays. Participants were difficult to recruit and retain. Interviews made difficult via cancellations and rescheduling made data collection arduous. Self-administered questionnaires were not promptly returned. Previous years of archival data were inaccessible at one of the schools. Only the archival data for the 2011-2012 school year were available. Many hours dedicated to gathering, transcribing, coding, categorizing, analyzing, and interpreting data created the little

opportunity for leisure time. Learning to expect the unexpected became the norm.

Keeping an open mind free from personal biases, values, and preconceived ideas demanded immediate attention. Nonetheless, the aforementioned challenges became the force behind my drive to complete the study.

Throughout this study, my personal objective was to conduct and publish an exceptional qualitative case study that contributes to today's scholarly literature. The intention of this study is to make a lasting contribution to research. Therefore, careful attention consumed every aspect of the study to ensure diligently the minimizing of threats and the strict adherence to the qualitative case study approach. However, one revelation became clear. The task would not be an easy one.

There were many challenges. One challenge (writing and conducting an exemplary qualitative case study) proved to be the greatest challenge. By using Yin's concepts of what makes an exemplary qualitative case study, I minimized my greatest challenge to make it manageable. Yin defined an exemplary qualitative case study using five general characteristics. According to Yin (2009), the case study must be significant, complete, consider alternative perspectives, display sufficient evidence, and engaging in manner (pp. 185-190). The problem that initiated this study fulfilled the first general characteristic. The problem for this study is of general public interest and is nationally important in practical terms.

I addressed the second characteristic in a number of ways. First, I gave the boundaries of the five cases of this study explicit attention. I exhausted every effort to collect a diverse and extensive amount of evidence. For instance, a questionnaire helped

further define and refine the problem and the direction of the study. I also conducted interviews and observations, collected archival data, and designed this study to be completed in 3 weeks. Third, I cited opposing propositions and analysis of evidence as well as the "basis upon which such alternatives might be rejected" (Yin, 2009, p. 188). Fourth, I presented sufficient evidence so that "a reader can reach an independent judgment regarding the merits of the analysis" and to establish my competence on the topic and issues, and to achieve validity of evidence (Yin, 2009, p. 188). Lastly, I wrote the study in a rich, thick, descriptive style to engage the reader.

As a result of this study, I realized that a deficiency (lack) of resources, time (e.g., changes in the bell schedule after the Spring Break holiday changes collaborative planning time to after school and competing with faculty meetings), changes in policy, beliefs, purpose, vision and the mission, illness, state mandates, and even the minutest problem can easily foil the collaborative effort. However, deficiencies and changes may well inspire creative collaborative efforts, as one of the interview participants demonstrated by stating that teachers (and administrators) use lemon notes (notes, ideas, and questions written on lemon shaped stationery) to extend the collegial interaction of collaborative planning meetings. Equally, deficits and changes can also be destructive that is they can be uninspiring. Therefore, collaborative efforts that can be inspired by deficits and changes can also be uninspired.

Also, during the course of writing up the results, I realized that "writing up results in qualitative research allows room for literary and creative expression" (Spillett, 2003, para. 10). For this study, I used literary and creative expression to yield rich, thick

descriptions. According to Creswell (2003), "Using rich, thick description to convey findings can transport readers to the setting and give the discussion an element of shared experiences" (p. 196). Figures and tables (forms of representation) became one of the creative ways to transport readers to the setting and to share meaningful experiences.

Several other perspectives have also been realized. First, teacher collaboration is boundless. When teachers exit the collaborative planning session, they do not leave behind their collaborative behaviors. They take collaborative behaviors that they displayed and learned during the session with them. This means that teachers behave in a collaborative manner all of the time. Therefore, teacher collaboration cannot be confined to planning sessions. Second, teacher collaboration affects everyone in some way. For example, teacher collaboration affects student learning and achievement via instructional strategies and methods and teacher effectiveness through professional learning and the academic coach, the facilitator of collaborative planning. Third, through teacher collaboration, the teacher learns how to be what the student lacks (e.g., the motivation, an attraction to learning) to provide the student what he or she needs (e.g., a passion for learning, an emotional drive to learn more) until the student can be what he or she lacks or needs for himself or herself.

As a researcher, many perspectives ascertained by simply taking a *double-sided* approach from extreme opposites to find a median perspective to define and/or refine the problem and/or answer became essential. A *double-sided approach* merely means to examine both sides of everything from extreme opposite perspectives and/or opposite directions at first with intent to merge those perspectives (or directions) in the middle to

achieve a balanced point of view. I found a *double-sided approach* most useful when following Yin's (2009) five characteristics of an exemplary case study, specifically when considering alternative perspectives, evidence, and composing this engaging qualitative case study.

At the end of this investigation, teacher efficacy, differentiated teacher collaboration, and the evolution of teacher collaboration became topics of interest.

However, to fully address these topics, researchers should conduct the aforementioned topics as different studies. If a researcher addressed the topics in a study or separate studies, each topic would warrant an investigation in its appropriate context. Each topic placed within the right context may well reveal a unique perspective on teacher collaboration.

Overall the experiences of this study were transforming. For instance, conducting this study required the application of a double-sided approach, the ability to think outside the box, creativity, innovation, perseverance, and a thorough understanding of Yin's (2009) five characteristics of exemplary case study. The aforementioned requirements were all essential to me while performing the role assumed in this study. Therefore, the first transformation occurred with the acceptance of the required role of researcher for this study. The second transformation began with an acquisition of a thorough understanding of Yin's (2009) five characteristics of exemplary case study. Another transformation transpired after achieving a comprehensive understanding of teacher collaboration. Other transformations will come in time. The most meaningful

transformation occurred as a result of the participants' declaration that this study has compelled them to think about the effectiveness of their collaborative efforts.

Also, I realized during the course of this study that research in the area of differentiated collaboration to improve collegial interactions warrants further consideration. Equally, integrative research to connect structural, strategic, and interactional understandings about influencing a student's level of processing information through cross grade level collaboration merits attention. In addition, research conducted on the cause and effect relationships of collaborative practices that increase student learning and achievement warrants further study.

Summary of Study

The purpose of this qualitative case study was to identify how participating teachers use the advantages and disadvantages of cross grade level collaboration to improve collegial interactions to achieve better student performance, professional development, teacher effectiveness, and job satisfaction. Accordingly, how teachers use those advantages and disadvantages to improve collegial interactions became one of the explorations of this study. This case study framed around the tenets of systems thinking, general system theory, and collegial coaching was also a focus on teacher community, rich thick description, and an illumination of how, when teachers do collaborate, they improve collegial interaction and student learning. Four phases (a questionnaire phase, interview phase, observation phase, and archival phase) conducted in 3 weeks with participants from 5 Title I elementary schools in southeast Georgia formed the study.

Administrators and teachers participated in interviews. Participating teachers took the researcher designed questionnaire 3 times. Participating teachers participated in classroom and collaborative planning meeting observations. I collected archival documents, addressed three questions, and explained ethical measures taken. Hatch's (2002) nine steps in typological analysis provided me a way to decipher the data. The population for this study included 50 selected (via maximum variation sampling) administrators and teachers of which 10 teachers and administrators participated in the study as individuals and four participated as a group. Most of the participants were European American and female. Three of the participants were European American males. There were no African American, Hispanic, Asian, or Native American participants.

The data collected for this study via the interviews, observations, and archival documents provided answers to the three research questions and to the problem, the lack of time to conduct regularly scheduled cross grade level collaboration. To the second research question, participants contributed a variety of answers as expected. For instance, participants stated that establishing norms and covenants, setting goals, brainstorming solutions, discussing current issues, addressing teacher and student needs, reviewing data, focusing on weak areas, sharing ideas, examining best practices, planning and debriefing, strategizing, and researching to enrich teaching and learning as the most common answers to improving collegial interaction. The participants also stated that it is what they talked about that improved their collegial interaction. According to researchers, collegial interaction can improve through identified weaknesses, activities, acts, cause

and effect relationships, and actions. Thus for the participants of this study, improved collegial interaction depended on what they talked about, what they needed, what they reacted to, what they adhered to, and what they did. Also, participants indicated that improved collegial interaction depended on addressing what they do not know and what they need to do to find out. Therefore, assessment, evaluation, and research can play an enormous role in improving collegial interaction.

The collected data also provided answers for the first and third research questions of this study. To the third research question, study participants responded that students demonstrate improved learning experiences through setting their own learning goals. With help from the teacher, students learned how to set learning goals that could improve how they learn and how they experience learning. Students set learning goals based on their strengths and weaknesses. Teachers learned how to help students set learning goals in collaborative planning meetings. In this study, teachers helped students set learning goals so that students were able to demonstrate improved learning experiences. The students of this study were able to improve their learning experiences via what they chose as a learning goal and the steps that they took to accomplish that goal. Thus, a student's demonstration of improved learning experiences depended on actions taken, strategies applied, steps preformed, activities completed, and behaviors and attitudes maintained during the learning experiences.

Pertaining to the first research question of this study, participants responded that they used identified advantages and disadvantages of cross grade level collaboration as guides and directives, for assessing, evaluating, and measuring the results of the

collaborative process and as the means to improving the collaborative process and the collegial interactions thereof. Participants also stated that they improved their collegial interactions via their own needs, the sharing of ideas and by choosing to discuss topics related to current research and issues and pedagogy. Also, I found that participants improved collegial interactions through the discussion of student learning experiences and practices in teacher effectiveness. Participants also pointed out that they improved collegial interactions through discussions of their difficulties and successes related to their teaching performance. Participants also indicated that setting professional goals contributed to improving collegial interaction. Through the aforementioned accounts of how participants improved collegial interactions, I found that reflection and constructive criticism were the keys to that improvement. Therefore, as varied as the aforementioned advantages and disadvantages of cross grade level collaboration are, they represent a few of the ways that collegial interaction may be improved. I mentioned other advantages and disadvantages in this section and in Section 4.

Throughout the course of this study, data revealed several themes. The data revealed the themes: shared accountability, student-centered collaboration, and trust (as the means to improving the collaborative process and collegial interaction). In addition, the themes internalizing what we learn changes the way we behave and interacting with others changes the way we behave also emerged from the data. In Section 4, I addressed other themes as well as patterns, issues, topics, ideas, relationships, cases, cross-cases, and concepts.

The findings (expected, unexpected, and interpreted) of this study provide rich descriptive details. Many of the findings answered the research questions while other findings became evident during the course of this study. The most important find was the existence of a teacher community functioning within the tenets of systems thinking, the general system theory, and collegial coaching. The findings of this study are significant to the local teachers, administrators, and students.

The resulting positive social change (as defined in this study) is the potential impact of using the collegial interactions of cross grade level collaboration to revolutionize professional development to improve teacher effectiveness and student learning. In addition, the methods presented in this study could be used to synchronize the collaborative process between elementary schools so that a true systems thinking organization exists. Also, the knowledge gained from this study may be used to improve the collaborative process or change it.

The recommendations (for future study, action, and further study) that emerged as a result of this study are practical and effective. The recommendations for action ranged from providing training in debriefing to purposely framing the collaborative process around the tenets of systems thinking, the general system theory, and collegial coaching to differentiating collaboration and conducting collaborative planning for administrators. Also, I presented recommendations for future research and further study to include empirical research based on teacher collaboration, debriefing, collegial interaction, and professional learning. In addition, I recommended integrative research on cross grade

level collaboration that connects structural, strategic, and interactional understandings and influences a student's level of processing information.

At the conclusion of this study, concerns about the lack of regularly scheduled cross grade level collaboration remain. However, all of the participants agreed that they would continue to make requests for regularly scheduled cross grade level collaboration. Accordingly, I offered several practical approaches in Sections 4 and 5 of this study to fulfill their requests.

Conclusion

The results of this study may substantiate previous research that emphasizes the lack of time as the main reason cross grade level collaboration is not regularly scheduled. For instance, a recently established bell schedule used to minimize operational costs at the schools of a rural southeast Georgia county increased the lack of time in the school day for regularly scheduled cross grade level collaboration. Many other instances of the lack of time in the school day also frame the reasons cross grade level collaboration is not regularly scheduled. Other reasons for the lack of regularly scheduled cross grade level collaboration were resources, scheduling, demographics, and less instructional time with students. To find the time to collaborate across grade levels, teachers and administrators must be creative, innovative, and resourceful.

The findings of this qualitative case study may help teachers, academic coaches, administrators, and the education communities understand that cross grade level collaboration creates a universal environment in which all teachers learn from each other through the use of a universal language that unites them and their areas of expertise into

one general thinking system. The use of a universal language to unite all disciplines and areas of expertise into one general system could bridge instructional and curriculum gaps; eliminate social and political barriers; establish better discipline to discipline communication; and differentiate collaboration. In addition, the results may finalize a decision on behalf of all stakeholders to allocate more time to cross grade level collaboration. As substantiated earlier, to prepare students for future grades, teachers need to spend more time collaborating across grade levels.

In addition, through the findings of this study, I confirmed that teachers who know the collaborative process need to spend time conducting action research focused on collaboration as PD, debriefing as PD, and improving collegial interaction. Also, I established that researchers need to conduct more empirical research in the area of teacher collaboration. As I previously stated, most researchers collect data on teacher collaboration through surveys. I collected the data for this study via interviews, observations, and archival documents.

Also, consistent with the findings of this study, I concluded that teachers practice collaboration continuously (with the exception of cross grade level collaboration) at all of the participating elementary schools. I also concluded that collaboration does not conclude at the end of the collaborative process. Collaboration is ongoing. This means that teachers are constantly learning, planning, practicing, observing, sharing, reflecting, conferring, and debriefing to improve teaching and student learning. Teachers who behave in this manner can reform teaching and learning. When teachers can (behaving in this manner) reform teaching and learning, they become the agents of change.

References

- AdvancEd (2011). Standards for quality schools, standard 3: Teaching and assessing for learning. Retrieved April 30, 2013, from http://www.advanced.org/webfm_send/288
- American Psychological Association. (2010). *Publication manual of the American Psychological Association* (6th ed.). Washington, DC: Author.
- Arlow, J. A. (1989). Psychoanalysis. In R.. J. Corsini & D. Wedding (Eds.), *Current psychotherapies* (pp. 19-62). Illinois: F. E. Peacock Publishers, Inc.
- Ayers, W. (2001). Teacher talk: Teachers building a professional community by talking to other teachers about teaching. *New Horizons Online Journal*, *6*(3), 1-5. Retrieved April 30, 2013, from http://www.marthalakecov.org/~ building/trans/ayers.htm
- Bertalanffy, L.V. (1968). *General system theory* (Rev. ed.). New York, NY: George Braziller.
- Biehler, R. F., & Snowman, J. (1982). *Psychology applied to teaching* (4th ed.). Boston, MA: Houghton Mifflin Company.
- Carter, N., Prater, M. A., Jackson, A., & Marchant, M. (2009). Educators' perceptions of collaborative planning process for students with disabilities. *Preventing School Failure*, *54*(1), 60-70. doi: 10.3200/PSFL.54.1.60-70
- City-Data.com (2012). Coffee county, Georgia. Retrieved April 30, 2013, from http://www.city-data.com/county/Coffee County-GA.html

- Coffee County Schools and Title I (2012). *School-wide requirements*. Retrieved April 30, 2013, from http://coffee.k12.ga.us/Ambrose/images/

 COFFEE TITLE I BROCHURE FY11[1].pdf
- Cole, A. L., & Knowles, J. G. (2000). Researching teaching: Exploring teacher development through reflexive inquiry. Boston, MA: Allyn & Bacon.
- Corno, L., & Randi, J. (1999). A design theory for classroom instruction in self-regulated learning? In C. M. Reigeluth (Ed.), *Instructional-design theories and models: A new paradigm of instructional theory* (pp. 293-318). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Creative Research Systems. (2009). *Sample size calculator*. Retrieved April 30, 2013, from http://www.surveysystem.com/sscalc.htm#one
- Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches* (2nd ed.). Thousand Oaks, CA: Sage.
- Creswell, J. W. (2006). *Chapter 6: Collecting data in mixed methods research*. Retrieved April 30, 2013, from http://www.sagepub.com/upm-data/10983_Chapter_6.pdf
- Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods* approaches (2nd ed.). Thousand Oaks, CA: Sage.
- Damore, S. J., & Murray, C. (2009). Urban elementary school teacher's perspectives regarding collaborative teaching practices. *Remedial and Special Education*, 30(4), 234-244.
- Dantonio, M. (1998). Perfecting the art of teaching. *Learning*, *26*(4), 34-37. Retrieved April 30, 2013, from ProQuest Central database.

- Darling-Hammond, L., Bullmaster, M., & Cobb, V. L. (1995, September). Rethinking teacher leadership through professional development schools. *Elementary School Journal*, *96*(1), 87-106. doi: 10.1086/461816
- Darling-Hammond, L., Wei, R. C., Andree, A., Richardson, N., & Orphanos, S. (2009, February). *Professional learning in the learning profession: A status report on teacher development in the United States and abroad* (National Staff development Council Research Report). Retrieved April 30, 2013, from National Staff development Council website: http://www.nsdc.org/news/NSDCstudy2009.pdf
- Dooner, A.-M., Mandzuk, D., & Clifton, R. A. (2008). Stages of collaboration and the realities of professional learning communities. *Teaching and Teacher Education*, 24, 564-574. Retrieved April 30, 2013, from http://www.unizar.es/cce/atencion_diversidad/Colaboraci%F3n_2_Psico.pdf
- Doubek, M., & Cooper, E. (2007, July). Closing the gap through professional development: Implications for reading research. *Reading Research Quarterly*, 42(3), 411-415. doi: 10.1598/RRQ.42.3.5
- Falk, B. (2001). Professional learning through assessment. In A. Lieberman and L. Miller (Eds.), *Teachers caught in the action: Professional development that matters* (pp. 118-140). NY: Teachers College Press.
- Finley, S. J. (2000). *Instructional conference: The changing role of the teacher*(Southwest Educational Development Laboratory). Retrieved April 30, 2013, from http://www.sedl.org/pubs/teaching99/changingrole.pdf

- Futernick, K. (2007). *A possible dream: Retaining California teachers so all students learn*. Retrieved April 30, 2013, from Sacramento: California State University website: http://www.calstate.edu/teacherquality/documents/possible dream.pdf.
- Gajda, R., & Koliba, C. (2008). Evaluating and improving the quality of teacher collaboration: A field-tested framework for secondary school leaders. *National Association of Secondary School Principals Bulletin*, 92(2), 133-153. doi: 10.1177/0192636508320990
- Georgia Department of Education. (2010). *Georgia schools*. Retrieved April 30, 2013, from http://public.doe.k12.ga.us/ReportingFW.aspx?PageReq=111& CountyId=634&PID=62&PTID=213&T=0&FY=2009
- Georgia Department of Education (2008). *GAPSS analysis*. Retrieved April 30, 2013, from http://archives.gadoe.org/DMGetDocument.aspx/GAPSS%20

 FINAL%20Rev%20PRINT%20READY%208-6-08.pdf?p=6CC6799F8C

 1371F629970641DAA1DDE3ED496B145857D4450887CCABED6ACE36&Typ
 e=D
- Georgia School Ranking. (2010). *School performance information*. Retrieved April 30, 2013, from http://www.psk12.com/rating/index.php
- Goddard, Y. L., Goddard, R. D., & Tschannen-Moran, M. (2007). A theoretical and empirical investigation of teacher collaboration for school improvement and student achievement in public elementary schools. *Teachers College Record*, 109(4), 877-896. Retrieved April 30, 2013, from https://www.tcrecord.org/

- Content.asp?ContentID=12871
- Gravetter, F.J., & Wallnau, L.B. (2008). Essential of statistics for the behavioral sciences (6th ed.). Belmont, CA: Thomson Wadsworth.
- GreatSchools. (2010). *Information on public school performance*. Retrieved April 30, 2013, from http://www.greatschools.org/
- Guarino, C. M., Santibanez, L., & Daley, G. A. (2006). Teacher recruitment and retention: A review of the recent empirical literature. *Review of Educational Research*, 76(2), 173-208. doi: 10.3102/00346543076002173
- Hadar, L., & Brody, D. (2010). From isolation to symphonic harmony: Building a professional development community among teacher educators. *Teaching and Teacher Education*, *26*(8), 1641-1651. doi:10.1016/j.tate.2010.06.015
- Hail, C., Hurst, B., & Camp, D. (2011). Peer debriefing: Teacher's reflective practices for professional growth. *Critical Questions in Education*, 2(2), 74-83. Retrieved April 30, 2013, from http://education.missouristate.edu/assets/ele/Peer_
 Debriefingfinal.pdf
- Hamzah, M. S. G., Mohamad, H., & Ghorbani, M. R. (2008). Excellent teachers' thinking model: Implications for effective teaching. *Australian Journal of Teacher Education*, 33(4), 11-27.
- Harwood, T., & Clarke, J. (2006). Grounding continuous professional development (CPD) in teaching practice. *Innovations in Education and Teaching International*, 43(1), 29–39. doi: 10.1080/14703290500467400

- Hatch, J. A. (2002). *Doing qualitative research in educational settings*. Albany, NY: State University of New York Press.
- Introduction to Georgia Teacher Evaluation Program. (Retrieved 2010). GTOI: reliability *information*. Retrieved April 30, 2013, from http://www.ciprg.com/ul/mresa/part3.pdf
- Introduction to Georgia Teacher Evaluation Program. (Retrieved 2010). GTOI: validity information. Retrieved April 30, 2013, from http://www.ciprg.com/ul/mresa/part3.pdf
- James, C. (2007). Collaborative practice: The basis of good educational work. *Management in Education, 21*(4), 32-37. doi: 10.1177/0892020607082674
- Jonassen, D. (1999). Designing constructivist learning environment. In C. M. Reigeluth (Ed.), *Instructional-design theories and models: A new paradigm of instructional theory* (pp. 215-239). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Katzenmeyer, M., & Moller, G. (2001). Awakening the sleeping giant: Helping teachers develop as leaders (2nd ed.). Thousand Oaks, CA: Corwin Press, Inc.
- Kazempour, M. (2009). Impact of inquiry-based professional development on core conceptions and teaching practices: A case study. *Science Educator*, 18(2), 56-68.
- Kovalik, S. J. (1999). Integrated thematic instruction: From brain research to application.

 In C. M. Reigeluth (Ed.), *Instructional-design theories and models: A new paradigm of instructional theory* (pp. 371-396). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.

- Laszlo, E. (1996). *The systems view of the world* (Fourth printing 2002). New Jersey: Hampton Press, Inc.
- Laureate Education, Inc. (Executive Producer). (2005). Interview techniques. *Qualitative* research. Baltimore: Author.
- Leedy, P. D., & Ormrod, J. E. (2005). *Practical research: Planning and design* (8th ed.).

 Upper Saddle River, NJ: Pearson Education, Inc.
- Leonard, L. J. (2002). Schools as professional communities: Addressing the collaborative change. *International Electronic Journal of Leadership in Learning, 6*(17).

 Retrieved April 30, 2013, from http://www.ucalgary.ca/iejll/leonard
- Leonard, L. & Leonard, P. (2003, September 17). The continuing trouble with collaboration: Teachers talk. *Current Issues in Education [On-line]*, *6*(15), 1-14. Retrieved April 30, 2013, from http://cie.ed.asu.edu/volume6/number15/
- Lewis, C., Watson, M., & Schaps, E. (1999). Recapturing education's full mission:

 Educating for social, ethical, and intellectual development. In C. M. Reigeluth

 (Ed.), *Instructional-design theories and models: A new paradigm of instructional theory* (pp. 511-536). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Little, J. W. (2002). Locating learning in teachers' communities of practice: Opening up problems of analysis in records of everyday work. *Teaching and Teacher Education*, 18(8), 917–946.
- MacGregor, K., Handley, M., Wong, S., Sharifi, C., Gjeltema, K., Schillinger, D., & Bodenheimer, T. (2006). Behavior-change action plans in primary care: A

- feasibility study of clinicians. *Journal of the American Board of Family Medicine*, 19(3), 215-223. doi: 10.3122/jabfm.19.3.215
- Martin-Kniep, C. O. (2000). *Becoming a better teacher: Eight innovations that work*.

 Alexandria, VA: Association for Supervision and Curriculum Development.

 Retrieved April 30, 2013, from Questia database: http://www.questia.com/

 PM.qst?a=o&d=111495552
- Maryland Coalition for Inclusive Education Maryland State Department of Education (2006). *Guide for collaborative team practices*. Retrieved April 30, 2013, from www.mcie.org/docs/publications/Collaborative_Teams.pdf
- Marzano, R. J. (2003). What works in schools: Translating research into action.

 Alexandria, VA: Association for Supervision and Curriculum Development.
- Merriam, S. B., & Associates (2002). *Qualitative research in practice: Examples for discussion and analysis*. San Francisco: Jossey-Bass.
- Merriam, S. B. (1998). *Qualitative research and case study applications in education*. San Francisco: Jossey-Bass.
- Montiel-Overall, P. (2008). Teacher and librarian collaboration: A qualitative study. *Library & Information Science Research*, 30(2), 145-155. doi: 10.1016/j.lisr. 2007.06.008
- Montiel-Overall, P. (2005). Toward a theory of collaboration for teachers and librarians. *School LibraryMedia Research*, 8. Retrieved April 30, 2013, from http://www.ala.org/ala/aasl/ aaslpubsandjournals/slmrb/slmrcontents/volume8 2005/vol8.htm

- Musanti, S. I., & Pence, L. (2010). Collaboration and teacher development: Unpacking resistance, constructing knowledge, and navigating identities. *Teacher Education Quarterly*, *37*(1), 73-89.
- National Network for Collaboration. (1998). *Collaboration: The power of WE the people*.

 Retrieved April 30, 2013, from http://crs.uvm.edu/nnco/
- National Staff Development Council. (2009). *Collaborative skills*. Retrieved April 30, 2013, from http://www.nsdc.org/standards/collaborationskills.cfm
- Nelson, L. M. (1999). Collaborative Problem Solving. In C. M. Reigeluth (Ed.), Instructional-design theories and models volume II: A new paradigm of instructional theory (pp. 241-267). Mahwah, NJ: Erlbaum.
- Public School Review. (2003-2012). *Profiles of USA public schools*. Retrieved April 30, 2013, from http://www.publicschoolreview.com/
- Randi, J. (2004). Teacher as self-regulated learners. *Teachers College Record*, 106(9), 1825-1853. doi: 10.1111/j.1467-9620.2004.00407.x
- Reigeluth, C. M. (1999). What is instructional-design theory and how is it changing? In C. M. Reigeluth (Ed.), *Instructional-design theories and models volume II: A new paradigm of instructional theory* (pp. 5-29). Mahwah, NJ: Erlbaum.
- Riel, M. (2007). *Understanding action research*. Retrieved April 30, 2013, from Pepperdine University, Center for Collaborative Action Research website: http://cadres.pepperdine.edu/ccar/define.html
- Rubin, H. J., & Rubin, I. S. (2005). *Qualitative interviewing: The art of hearing data* (2nd ed.). Thousand Oaks, CA: Sage.

- Samuels, P., Rodenberg, K., Frey, N., & Fisher, D. (2001, Winter 2001). Growing a community of high quality teachers: An urban professional development middle school. *Education*, *122*(2), 310. Retrieved April 30, 2013, from Academic Search Premier database.
- School A CIP (2012). *Continuous Improvement Plan*. Retrieved April 30, 2013, from http://dp2.coffee.k12.ga.us/westgreen/West_Green_CIP_2011-20121.pdf
- SchoolDigger. (2010). School rankings, reviews, and more-public and private elementary, middle, high schools. Retrieved April 30, 2013, from http://www.schooldigger.com/
- Senge, P. (2006). The fifth discipline: The art & practice of the learning organization (Rev. ed.). New York: DoubleDay.
- SERC (2012). *Best practices in education*. Retrieved April 30, 2013, from http://ctserc.org/s/index.php?option=com_content&view=section&id=8&Itemid= 28
- Simons, J., Dewitte, S., & Lens, W. (2004). The role of different types of instrumentality in motivation, study strategies, and performance: Know why you learn, so you'll know what you learn! *British Journal of Educational Psychology*, 74(3), 343–360. doi: 10.1348/0007099041552314
- SmartDraw the World's First Visual ProcessorTM (2012). *Matrix*. Retrieved April 30, 2013, from http://www.smartdraw.com/product/features/#/product/ features/70-Kinds-of-Visuals

- Spillett, M. A. (2003). *Peer debriefing: Who, what, when, why, how.* Retrieved April 30, 2013, from http://www.thefreelibrary.com/Peer+debriefing%3a+who%2c+what%2c+when%2c+why%2c+how.-a0111848817
- Stronge, J. H. (2002). *Qualities of effective teachers*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Tasker, T., Johnson, K. E., & Davis, T. S. (2010). A sociocultural analysis of teacher talk in inquiry-based professional development. *Language Teaching Research*, *14*(2), 129-140. doi:10.1177/1362168809353871
- The Southeast Center for Teaching Quality. (2003, January). *How do teachers learn to teach effectively? Quality indicators from quality schools* (Brief Report No. 7). Retrieved April 30, 2013, from http://200.17.137.109:8081/novobsi/propostanovo-bsi/metodologiadeensino/How%20Do%20Teachers%20Learn%20to%20 Teach%20Effectively.pdf
- Thomas McClure, C. (2008, September). The benefits of teacher collaboration: Essentials on education data and research analysis. *District Administration: The Magazine of School District Management*. Retrieved April 30, 2013, from http://www.districtadministration.com/viewarticle.aspx?articleid=1682&p=1#0
- Trachtman, R. (2007, March). Inquiry and accountability in professional development schools. *Journal of Educational Research*, *100*(4), 197-203. doi: 10.3200/JOER. 100.4.197-203
- Umpleby, S. A. (2001, May). *Two kinds of general theories in systems science*. Online Proceedings of the American Society for Cybernetics 2001 Conference,

- Vancouver. Retrieved April 30, 2013, from http://www.asc-cybernetics.org/2001/Umpleby.htm
- Van Eekelen, I. M., Vermunt, J. D., Boshuizen, H. P. A. (2006). Exploring teachers' will to learn. *Teaching and Teacher Education*, 22, 408-423. doi: 10.1016/j.tate. 2005.12.001
- Washburn-Moses, L. (2006). Obstacles to program effectiveness in secondary special education. *Preventing School Failure*, *50*(3), 21-30.
- Weinbaum, A., Allen, D., Blythe, T., Simon, K., Seidel, S., & Rubin, C. (2004). *Teaching as inquiry: Asking hard questions to improve practice and student achievement.*New York: Teachers College Press; Oxford, OH: National Staff Development Council.
- Wilson, S. M., & Berne, J. (1999). Chapter 6: Teacher learning and the acquisition of professional knowledge: An examination of research on contemporary professional development. *Review of Research in Education*, 24, 173–209. doi: 10.3102/0091732X024001173
- Yin, R. K. (2009). *Case study research: Design and methods* (4th ed.). Thousand Oaks, California: SAGE, Inc.
- Yin, R. K. (2004). *Case study methods*. Revised chapter draft, COSMOS Corporation.

 Retrieved April 30, 2013, from http://www.2dix.com/pdf-2010/yin-robert-k.-case-study-research-design-and-methods-pdf.php
- Zahorik, J. A. (1987, March). Teacher's collegial interaction: An exploratory study. *The Elementary School Journal*, 87(4), 385-396.

Appendix A: Questionnaire

Questionnaire

Cross Grade Level Collaboration, Collegial Interactions,
Professional Development and Learning Questionnaire

Use this questionnaire to redefine and regulate collaboration, collegial interactions, professional development, and learning opportunities. Select the response that most appropriately maps an effective course for assessing, implementing, and monitoring collaboration, collegial interactions, professional development, and learning. Your answers will be used to prioritize goals to be accomplished for/in cross grade level collaboration and debriefing as professional development.

Directions: Please place an X on the line next to your response choice. If your response choice is not listed, please write your response on the comment lines below and explain your response.

1. As (c	ircle one: a teacher/an administrator), I am satisfied with the present state of	
collaboration. Why? (Use the comment lines below and the space on the back of this		
questionnaire.)		
	_Strongly agree= 5	
	_Agree= 4	
	Disagree=3	

Strongly disagree= 2

Undecided=1

2. Collegial interaction promotes adult learning, improved teacher competency, and
impact student achievement. (Please explain how on the lines below and use the space on
the back of this questionnaire if needed.)
Strongly agree= 5
Agree= 4
Disagree=3
Strongly disagree= 2
Undecided=1
3. Teachers and administrators utilize cross grade level collaboration on a regular basis.
Strongly agree= 5
Agree= 4
Disagree=3
Strongly disagree= 2
Undecided=1
4. As (circle one: a teacher/an administrator), I am familiar with the use of debriefing as
professional development.
Strongly agree= 5
Agree= 4
Disagree=3
Strongly disagree= 2
Undecided=1
5. Collaborative planning meetings are used as opportunities for professional

development.
Strongly agree= 5
Agree= 4
Disagree=3
Strongly disagree= 2
Undecided=1
6. As (circle one: a teacher/an administrator), I frequently use cross grade level
collaborative practices.
Strongly agree= 5
Agree= 4
Disagree=3
Strongly disagree= 2
Undecided=1
7. The present collaborative practices are effective. Why? (Use the comment lines below
and the space on the back of this questionnaire.)
Strongly agree= 5
Agree= 4
Disagree=3
Strongly disagree= 2
Undecided=1
8. As (circle one: a teacher/an administrator), I use cross grade level collaboration

opportunities to redefine and regulate professional development/learning standards at the

local level.
Strongly agree= 5
Agree= 4
Disagree=3
Strongly disagree= 2
Undecided=1
9. Regular cross grade level collaborative planning meetings are needed. (Please explain
why on the lines below and use the space on the back of this questionnaire if needed.)
Strongly agree= 5
Agree= 4
Disagree=3
Strongly disagree= 2
Undecided=1
10. Student learning is improved through effective collegial interaction. (Please explain
how on the lines below and use the space on the back of this questionnaire if needed.)
Strongly agree= 5
Agree= 4
Disagree=3
Strongly disagree= 2
Undecided=1
Comments:

^{*}Your cooperation is greatly appreciated.

^{*} Any questions or concerns should be directed to Fidelia Johnson, Ed.S.

Appendix B: GTEP Map

GEORGIA TEACHER EVALUATION PROCESS

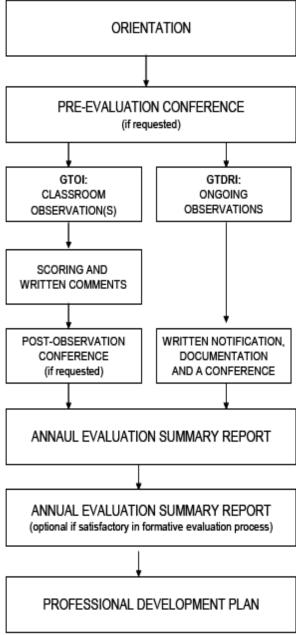


Figure 1. GTEP Map. Retrieved April 30, 2013, from http://www.ciprg.com/ul/mresa/part3.pdf

Appendix C: Consent Form

Consent Form

You are invited to take part in a research study of Identifying Advantages and Disadvantages of Cross Grade Level Collaboration to Improve Collegial Interactions: A Case Study for 3 weeks. You were chosen for the study because you are a teacher or an administrator at a rural elementary school who has experience in collaboration, collegial interaction, collaborative planning and/or implementation in a rural elementary school setting. Please read this form and ask any questions you have before agreeing to be part of the study.

This research study is being conducted by a researcher named Fidelia Gale Johnson, who is a doctoral student at Walden University. Fidelia Gale Johnson is also School Counselor at West Green Elementary School.

Background Information:

Thus, the purpose of this case study will be to identify the advantages and disadvantages of cross grade level collaboration. The focus of the study will be to understand the collaborative needs and desires of teachers to improve collegial interactions. The resulting positive social change may be the potential impact of using the collegial interactions of cross grade level collaboration to revolutionize professional development to improve teacher effectiveness thereby improving student learning.

Procedures:

If you agree, you will be asked to participate in audio-recorded interviews lasting a half-hour to an hour. Any additional interviews (e.g., follow-up interviews) will be conducted at the end of the interview phase as warranted for a half-hour to an hour. You will have the opportunity to participate in a structured observation lasting a half-hour to an hour. Observations will occur during instructional time in the classroom (and during collaborative planning meetings to observe collegial interaction) for a day. Observations will serve as the means to examine the interactions, behaviors, strategies, mannerisms, and emotional and intellectual acuity that exist and do not exist in an effective and ineffective teaching and learning environment. The purpose of the observations will be to identify the connection between teaching practices and collaborative practices, to identify ways to improve collegial interaction, and to identify practical approaches to cross grade level collaboration. Member-checking and peer debriefing will be used immediately after interviews and observations to enhance the accuracy of notes taken. The archival data collection process will begin at the start of the study until the end. There will be follow-up interviews if additional information is required. Your consent to use any and all data collected in the dissertation will be requested.

Voluntary Participation:

Your participation in this research study is voluntary. This means that everyone will respect your decision of whether or not you want to be a participant in this study. No one will treat you differently if you decide not to be a participant in this study, there is no penalty. If you decide to join the research study now, you can still change your mind later. If you feel stressed at any time before, during, or towards the end of this study, you may stop at any time without penalty. You may decline to answer any questions that you feel are too personal.

Risks and Benefits:

There are no known conflicts of interest related to participation in this study, and the risks are minimal. The possible benefits associated with participation in this study are numerous and range from improved teacher effectiveness to improved student achievement and/or learning to improved collegial interaction. The study will add to the scholarly research and literature on teacher collaboration and collegial interaction.

Compensation:

There is no compensation for participating in this study.

Confidentiality:

Any information you provide will be kept confidential. The researcher will not use your information for any purposes outside of this research study. Also, the researcher will not include your name or anything else that could identify you as a participant in the study.

Contacts and Questions:

The researcher's name is Fidelia Gale Johnson, Ed.S. The researcher's Doctoral Advisor is Dr. Nathan Long. You may ask any questions you have now. Or, if you have questions later, you may contact the researcher via 1-(912) 393-7023 EST and fidelia.johnson@waldenu.edu or the Doctoral Advisor at 382athan.long@waldenu.edu or 1-513-549-7735 EST. If you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott. She is the Director of the Research Center at Walden University. Her phone number is 1-800-925-3368, extension 1210.

The researcher will give you a copy of this form to keep.

Statement of Consent:

	mation. I have received answers to all my questions I have at this time. I am I agree to terms described above and consent to participate in the research
Printed Name of Participant	
Participant's Written and Electronic* Signature	
Researcher's Written and Electronic* Signature	Fidelia Gale Johnson fidelia.johnson@waldenu.edu

Electronic signatures are regulated by the Uniform Electronic Transactions Act. Legally, an "electronic signature" can be the person's typed name, their e-mail address, or any other identifying marker. An electronic signature is just as valid as a written signature as long as both parties have agreed to conduct the transaction electronically.

Appendix D: Superintendent's Letter of Permission

Letter of Permission: Superintendent

County Board of Education Superintendent



August 26, 2011

Fidelia G. Johnson



RE: Letter of Cooperation

Dear Miss Johnson:

After reading the abstract for your doctoral research study, I am pleased to grant you permission to conduct your study entitled "Identifying Advantages and Disadvantages of Cross Grade Level Collaboration to Improve Collegial Interactions: A Case Study" within the elementary schools in the County school system. You are thereby authorized to recruit participants for your research study within County Schools. Please keep in mind that the participants who decide to participate in your study reserve the right to withdraw from the study at any time no matter the circumstances and without penalty. I understand that their participation will be voluntary and at their own discretion. I also understand that data will be collected primarily in interview and observation sessions and that documents and statistical data relevant to the study will be collected as well.

You have agreed to the following terms and will be expected to uphold the terms agreed upon. Data collected for the research study must remain confidential indefinitely. Access to the data collected will not be provided to anyone outside of the research team without permission from Walden University IRB. All participants should have access to their data via the researcher. Participants should fully understand their involvement in the study and that their rights are protected.

Sincerely,



Appendix E: Interview Questions

(Individual/Group)

- 1. How many years have you been teaching? Tell me about your teaching experiences. Tell me about your teaching career. Tell me about your professional experiences as a teacher. What is the highest degree that you hold? How are all of your aforesaid experiences related to the success and failure of your collaborative practices?
- 2. How many times this year have you been involved in collaborative planning?
- 3. Tell me about a typical collaborative planning session.
- 4. Tell me about cross grade level collaborative practices at your school.
- 5. Explain what collegial interactions are like before, during, and after collaborative planning sessions. How can teachers and administrators improve collegial interactions?
- 6. Tell me about collaborative practices at this school.
- 7. What kind of relationship is shared between teacher collaboration and student learning?
- 8. Explain the impact of collaborative practices on student learning and teacher effectiveness at this school.
- 9. What are the disadvantages of cross grade level collaboration? How are the disadvantages utilized to improve collegial interaction during collaboration?
- 10. What are the advantages of cross grade level collaboration? How are the advantages utilized to improve collegial interaction during collaboration?
- 11. What do you think are the effects of a positive relationship between teacher collaboration and student learning?
- 12. How is collaborative planning used as professional development? How is collaborative planning used as professional development an advantage and disadvantage? How is collaborative planning used as debriefing an advantage and disadvantage?
- 13. What is the relationship between collaborative planning and teacher effectiveness?
- 14. What does professional development look like at this school?
- 15. What does debriefing as professional development look like at this school?
- 16. What is the relationship between collaborative planning and student learning?
- 17. How is improved teacher effectiveness and improved student learning a direct result of collaborative planning?

18. Is there anything else that you would like to share with me on the topic of collaborative practices that I have not asked you about or that you would like to have an opportunity to say? (Crawford, 2005, Interviewing Part 2)

Probe Questions

- 1. What does collaboration mean to you?
- 2. What are some of the inhibitors of collaboration?
- 3. What are some of the enablers of collaboration?
- 4. How do you find time to collaborate?
- 5. Who initiates collaboration between teachers and librarians?
- 6. What do you do when collaborators don't share the same worldview?
- 7. What are some of the activities involved in collaboration?
- 8. What role does the principal play?
- 9. How do new teachers learn to collaborate?
- 10. What is the process of initiating collaboration?
- 11. What effects do you see on students?
- 12. What are the attributes of collaborators?
- 13. What level of trust is needed to collaborate?
- 14. What practical approaches of collaboration do you practice?
- 15. What do you hope to change at the local level through collaboration at the school level?
- 16. After receiving the researcher's results and findings, what can you do as a teacher (administrator) to affect change in the district through collaboration across grade levels? (Question will be posed during interview phase to further the impact of the study.)

Note. Probe Questions from Montiel-Overall, P. (2008). Teacher and librarian collaboration: A qualitative study. *Library & Information Science Research*, 30(2), 154.

Appendix F: Questionnaire Consent Form

Questionnaire Consent

Introduction:

This research study is being conducted by Fidelia Gale Johnson a Walden University doctoral student to identify how the participating teachers use the advantages and disadvantages of cross grade level collaboration to improve collegial interactions to achieve better student performance, professional development, teacher effectiveness, and job satisfaction. The questionnaire will be administered at the start (the first week) of the study to further define and refine the problem and the direction of the study. The questionnaire will be administered during (the second week) the study to confirm responses collected during the individual and group interview sessions. The questionnaire will also be administered at the end (the third week) of the study to determine the professional development and collegial interaction needs, desires, and interests of the teacher participants.

Procedures:

You will be asked to complete a paper and pencil questionnaire. The questionnaire was designed by the researcher of the study and consists of 10 open and closed items to which you the respondent rates truth of statements using a five-point scale and will take approximately 20 minutes for individual administrations (approximately 15 minutes for self-administrations). All questionnaire participants must sign a questionnaire consent form before participating. All participants will be e-mailed the date and time of the first, second, and third questionnaire administration and administration options. All participants will be given the option to choose to complete the questionnaire individually with the researcher or without the researcher via self-administration using a directions/cover letter (return instructions included) provided by the researcher. For individual administrations, the researcher will conduct, introduce (providing the purpose of the questionnaire, the sponsor, the role of the respondent, and informed consent), and collect the questionnaire. Administrators will not be asked to participate in the questionnaire phase. The completed questionnaires (hardcopies) will be stored in a secure location (in a locked file cabinet of the researcher's home office). Tangible data (handwritten notes, hardcopies, computer [DVD+RW, and CD-RW], electronic, and audio recorded files) will be securely stored for five years and then shredded or erased. The data from each administration of the questionnaire will be collated and coded. Questionnaire results will be available to participants.

Risks:

There are minimal risks for participation in the questionnaire phase of the study.

Benefits:

The possible benefits associated with participation in this study are numerous and range from determining the professional development and collegial interaction needs, desires, and interests of the teacher participants to redefining and regulating collaboration, collegial interaction, professional development, and learning opportunities to prioritizing the goals to be accomplished for/in cross grade level collaboration and debriefing as professional development.

Confidentiality:

Any information you provide will be kept confidential. The researcher will not use your information for any purposes outside of this research study. Also, the researcher will not include your name or anything else that could identify you as a participant in the study.

All questionnaire data will be kept in a secure location (a locked file cabinet of the researcher's home office) and only those directly involved with the research will have access to the questionnaire data. After the research is completed, the questionnaires will be kept in a secure location (a locked file cabinet of the researcher's home office) for five years and then shredded.

Compensation:

There is no compensation for participating in this study

Voluntary Participation:

Participation in this research study is voluntary. You have the right to withdraw at any time or refuse to participate.

Contacts and Questions about the Research:

The researcher's name is Fidelia Gale Johnson, Ed.S. The researcher's course Doctoral Advisor is Dr. Nathan Long. You may ask any questions you have now. Or, if you have questions later, you may contact the researcher via 1-(912) 393-7023 EST and fidelia.johnson@waldenu.edu or the Doctoral Advisor at nathan.long@waldenu.edu or 1-513-549-7735 EST. If you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott. She is the Director of the Research Center at Walden University. Her phone number is 1-800-925-3368, extension 1210.

The researcher will give you a copy of this form to keep.

Statement of Consent:

	rmation. I have received answers to all my questions I have at this time. I am agree to terms described above and consent to participate in the research
Printed Name of Participant	
Participant's Written and Electronic* Signature	
Researcher's Written and Electronic* Signature	Fidelia Gale Johnson fidelia.johnson@waldenu.edu

Electronic signatures are regulated by the Uniform Electronic Transactions Act. Legally, an "electronic signature" can be the person's typed name, their e-mail address, or any other identifying marker. An electronic signature is just as valid as a written signature as long as both parties have agreed to conduct the transaction electronically.

Appendix G: Field Notes Worksheet

Observation: (Circle One) A B C D E F G H I J

An Outline of the Behaviors Being Looked For	Observation Notes	Abbreviated\ Observation Notes	Interpretations	Codes	Definitions

Appendix H: Archival Data Worksheet

Archival Data Worksheet

Directions: Circle (Written Policy/Collaborative Planning Minutes/Collaborative Meeting/Other Documents)

Document(s):_____

Date:			
	Data	Code	Patterns, Themes, Issues, Topics, Ideas, Relationships, Cases, Events, and Concepts Connection (document name, page number, paragraph, line number where located)
			,

Appendix I: Data Triangulation Chart

DATA TRIANGULATION CHART

Teacher_____ Date(s)_____

Source 1	Source 2	Source 3
Interpretation:		
i		

Note. Retrieved April 30, 2013, from http://cecp.air.org/fba/problembehavior2/appendixf.htm

Note. COPYRIGHT: This information is copyright free. Readers are encouraged to copy and share it, but please credit the Center for Effective Collaboration and Practice" from: http://cecp.air.org/fba/problembehavior2/main2.htm



Fidelia Johnson, Ed.S.

fidelia.johnson@waldenu.edu

Appendix J: Member-Checking Letter

MEMBER-CHECKING

Directions: Please comment on the researcher's interpretation of the findings collected from the interviews and observations conducted with you. Please confirm the findings or suggest some fine-tuning to better capture your perspectives. Use the **Interview Questions Guide and Notes** form provided.

Date:
Dear,
I greatly appreciate your participation in this study. Thank you for your active participation in the interview and member-checking process. I have attached a copy of the transcript created from your interview. Please review the transcript of your interview for accuracy of information. If the information is accurate, place a check in the member-checking column and your initials. If the information needs correction, please use the notes column to make corrections. Next, please review the transcript of your interview to comment on the researcher's interpretation of the findings. Please make all comments within the margins of the transcript provided and initial your comments. Finally, please suggest some fine-tuning to better capture your perspectives. If you are reviewing observation notes, please write your comments, suggestions, and questions in the column (designated as member-checking) provided and initial your comments.
Please feel free to contact me via phone or e-mail should you have any questions. Thank you for your active participation in this phase of the study. Return the transcript, observation notes, and member-checking form back to the researcher in the envelope provided by
Sincerely,

Appendix K: Interview Questions Guide and Notes

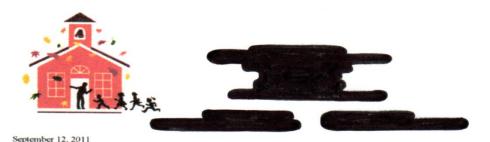
INTERVIEW QUESTIONS GUIDE AND NOTES

Participant:

Questions	Notes	Observations	Member-
			Checking
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			

(Numbered interview questions and answers [a transcript] are attached for member-checking.)

Appendix L: Recruitment Letter



RE: Letter of Recruitment

Dear Potential Participant,

I am an Ed.D. candidate in the College of Education under the direction of Dr. Nathan Long of the College of Education at Walden University. The principal at your school has given me permission to send you this invitation letter to invite you to participate in a research study. A research study that I am conducting in the Fall of 2011.

As an attempt to identify how the participating teachers use the advantages and disadvantages of cross grade level collaboration to improve collegial interactions to achieve better student performance, professional development, teacher effectiveness, and job satisfaction, I am studying teacher collaboration in relation to collegial interactions, teacher effectiveness, student learning, professional development, and job satisfaction and my aim is to gain an understanding of how when teachers do collaborate across grade levels they improve collegial interactions. In addition, this research may well support the findings in literature that effective collaboration requires regularly the scheduling and appropriation of time and more opportunities to take place. This study will also provide a framework for improving the state of collaboration and for supporting the collaboration efforts of teachers across grade levels to accomplish the task of preparing students for future grades. Projected title of my study is "Identifying Advantages and Disadvantages of Cross Grade Level Collaboration to Improve Collegial Interactions: A Case Study."

I will be recruiting ten regular and special education teachers and administrators for participation in the four phases of this study. The four phases are the questionnaire phase, the interview phase, the observation phase, and the archival phase. Administrators will not participate in the questionnaire phase. The subjects will participate voluntarily and no incentive will be offered. The interview participants must be employed educators in the County School System, be able to speak the English language, and be currently or previously a participant in collaborative planning meetings. Also, each participant must have completed at least one professional development credit to participate in this study. For this study, all participants must be able to speak and express themselves in English. Participants who speak a second language are also sought.

Your participation in this study is totally voluntary; however, your participation in the questionnaire phase, the interviews, the observations, and the archival phase will contribute to the success of this research and will be greatly appreciated. Your participation will contribute invaluable information to scholarly research and literature on teacher collaboration and collegial interaction. All your responses and any identifying information, including your email addresses and other electronic information in electronic correspondence, will be kept confidential. You may send your interest in participation in this study to me by replying back to this letter. Before your participation in this study, you must return via county mail or send the attached copy of your informed consent form after you sign and date it to me by scanning and sending it to my email address at fidelia.johnson@waldenu.edu All questionnaire participatis must sign a questionnaire consent form before participating.

Your decision not to be a participant in this study will be respected. You have the right not to participate and decide to withdraw from participation at any time without prejudice, penalty or loss of benefits. Finally, the results of the research study may be published, but your name will not be used.

Should you have any questions concerning this research study, please call me at (912) 393-7023 EST or email me at fidelia.johnson@waldenu.edu You may also contact my Chair at nathan.long@waldenu.edu or at 1-513-549-7735 EST. In case you have any questions about your rights as a subject/participant in this research, or should you feel you have been placed at risk, you can contact Dr. Leilani Endicott. She is the Director of the Research Center at Walden University. Her phone number is 1-800-925-3368, extension 1210.

Thank you for your time and help in advance

Sincerely Yours,

Fidelia G. Johnson, Ed.S.

Appendix M: Coding Worksheet

(Codes)

(This worksheet was used in the coding process during data analysis and interpretation.)

CODES	CODE DESCRIPTIONS	

Appendix N: Researcher's Logs

Date: May 17, 2012

Research Log

Search topic (write in the form of a question and circle major concepts):

What is the connection between improved student learning experiences and teacher collaboration?

Keywords to search (synonyms for the concepts circled above; think of both broader & narrower terms):

Connection (link, relationship); Student Learning (student achievement, student success); Teacher Collaboration (collaboration)

Information Source used (e.g. Library Catalogue, Journal Index or Database, Internet):

Internet: Teachers College Record Online Journal

Access point(s) (how did you find the source? e.g. keyword=, subject heading=, author= etc.):

Membership/Subscription

Library Location: Online Journal Call # ContentID=12871 Status Peer-reviewed

Complete Citation for item found:

Goddard, Y. L., Goddard, R. D., & Tschannen-Moran, M. (2007). A theoretical and empirical investigation of teacher collaboration for school improvement and student achievement in public elementary schools. *Teachers College Record,* 109(4), 877-896. Retrieved November 30, 2012, from https://www.tcrecord.org/Content.asp?ContentID=12871

Evaluation of material (how/what will it contribute to your paper or support your argument? How does it relate to the other information that you've found?):

396

Used to substantiate and refute assertions about the connection between student achievement and collaboration.

Paraphrased ideas or "direct quotes" to use in paper (record the page numbers where the quote is found): p. 892; pp. 892-893

Researcher's Log

Interview: October 31, 2011

Time: 9:40-10:17

Location: School A (Counselor's Office)

Interviewee: Participant 2

Data Collected: Audio Taped Interview; Archival Documents

Task: Created a transcript from the audio taped interview.

Notes:

• Participant 2 read from a script. When asked follow-up questions (noted in transcript of Appendix O), participant responded without reading from the script.

• The participant authored the script. According to the participant, the script was a way to maintain her focus and nerves.

All participants were given the interview and probe questions before they were interviewed.

Reflection:

The participant responded to each interview question asked. The participant's answers when compared with the replies of other participants were substantiated. Scripted responses that are the truth are acceptable. At least, this researcher thinks so. Scripted

responses that are truthful can be responses that are concise. However, unscripted responses are natural and are preferred by this researcher.

Appendix O: Transcripts

Transcript/Participant 1 School D

10/6/11

School D Elementary

2:15-3:20

(Greetings, Re-acquainting, Introduction, and Informed Consent)

Researcher: Tell me about a typical collaborative planning session.

P1 of School D: Well, before we get to the session, Mrs. J, the assistant principal and of course me the principal, and our academic coach meet early in the year before school starts, and we look at various with our leadership team. You know we've got Title II expectations. We have our own school needs. From our focus walks, we determine what our strengths and weaknesses are, and where we need to go, and then we have to bring in the system. What they need for us to do. Then, we sit down and we plot out a schedule. We don't do collaborative; we do collaborative say for this week we do it on Tuesday. The next week they have homework, and then we come back and share that homework and how did it go. What work? What didn't work?

Researcher: Okay.

P1 of School D: A typical session in collaborative, Mrs. H is our facilitator normally. Sometimes I have things I need to do with them, and of course Mrs. J does as well but mostly, Mrs. H, the academic coach that is her position here at School D. She leads those, and the teachers come in. It's by grade level. We just have not been able to work it in the day especially with the economical crisis we're experiencing too (Researcher: Oh yeah.). Hire subs for multiple grade levels. So, it's just say a grade level. Now, our special ed. and support team, they choose the grade level that... Now they may work with two grade levels but they select one (Researcher: Okay.) to go to so you know you may have more than just a grade level in there. There could be an ESOL teacher, Special Ed teacher, Speech teacher, you know (Researcher: Well, that's great with the inclusion.). Right! We want them to hear all the things too, (Researcher: Okay.) the best practices. (Researcher: Right!) So, she you know, she even does just what we expect in the classroom. She has activators. She uses the active board with her presentations. There's partner work during the collaborative and share out responses and tickets out the door with what we've done. And then, like I say we have an assignment. Where what they've learned in collaborative, they take it back, and it's not that they're implementing something new (Researcher: Okay.) every time. We're working on differentiation, and it may be tiered assignments for several weeks. We may work on that. That may be two months. And then, it could be

examining student work and that may be two months (Researcher: Oh! Okay, collaborative.). You know we provide them articles and that may be an assignment that they read. You know, what was the ah ha (Researcher: Laughs.) in the article. You know what do you think will work in your classroom. And, they'll bring in I guess you call it artifacts or evidence of where they... You know at the beginning of school it was foreman's flex groups. (Researcher: Okay.) Show how you use the data. We talked about the data and the different types of data. You know, you've got your leading and lagging data. You know, the C.R.C.T. would be the lagging data. That was last year what they did in second grade. (Researcher: There's a lot of interaction.) You know, there really is, and so they'll look at that they'll plan their flex groups. They go back and they try them. You know, what did you find? Well yeah, the lagging data didn't tell us enough. (Researcher: Okay.) And, we gave the pre-assessment at the beginning of the unit but that's when I was able to say we got to...they really are flexible groups. We are going to move these kids to this group and this one to that and that kind of thing. So, it's neat to sit in there. A typical session it's very, they're not...it's not the sit, get, spit, and forget. (Researcher: No, no. Laughs.) Laughs!

Researcher: They're involved. (P1 of School D: Yes.) Oh, I like that. Okay. Sounds good! (P1 of School D: It is.) I need to come. Laughs. (P1 of School D: You are. We've invited you.) Okay. Thank you! Right? (P1 of School D: Right.) Okay, well the next thing would be to... I guess... Some of what you just said probably takes care of this particular question to but tell me about cross grade level collaborative practices at your school. I guess you would call it vertical planning?

P1 of School D: Right. I don't know if you remember me kind of hitting on that (Researcher: Right.). With the economic crisis, the only time you can do that is after school and I'll hold this up and show you that the system and not just the system but the state is rolling out CCGPS, and as you can see we will not have any afternoons available. Laughs. (Researcher: Laughs.) This starts...You know, we actually have already started this in September. So, that's going to be a weakness for us this year not having the time. In the past, when we have had for example second, you know meeting with third... (Researcher: Right.) What gaps were there? (Researcher: Right.) What were you know, what were second graders strengths? You don't want to just talk about weaknesses because that can make a teacher feel bad. So, you know they talk about their strengths, weaknesses, acceleration pieces that they can do. It's a big transition between...kindergarten mixed with first... (Researcher: ... how to bridge.) Bridging, exactly! (Researcher: Alright!) Now, as far as I know, we have not as a system connected 5th grade teachers with 6th grade. That's a weakness (Researcher: Okay.) that we probably do need to address. Once again, the time you know and paying for subs with the shortest of funds right now, it's very difficult to do that but those are some... Now, we haven't had any vertical this year. I'm being honest and it's strictly been...but in the past when we did, those were the types of things that we did.

Researcher: I don't why I keep coming up with... I keep hearing in the back of my mind pen pal teacher. May be through e-mail (P1 of School D: Right.) that could be connecting that way. You know sharing ideas and what have you... that goes on in a regular collaborative planning session. I don't know. It's just something about that that might make a connection ... I'm not sure.

P1 of School D: Well, I will tell you with the collaborative sessions that we have ... they are all doing and hearing the same activity. (Researcher: Okay.) It's just a different grade... So, whatever's going on in collaborative, they're all get. (Researcher: So, that's a connection right there.) Right! (Researcher: ...because they're all getting it.) Uh huh!

Researcher: And, that sort of bridges the grade levels right there. (P1 of School D: Uh huh.) That's a practical approach to it.

P1 of School D: And, may be that, you know I know with our test scores were so good this year. They were the highest in the system. (Researcher: Oh!) Reading, Math, (Researcher: You got us.) Science and Social Studies (Researcher: Laughs.) ... (Researcher: That's wonderful!) And, we are doing something... I would say that cross grade level is something that we could improve. (Researcher: Okay, okay and that's probably system wide and that might be most systems in the state even in the nation, finding the time to make that bridge.)

P1 of School D: Finding the time for collaborative that was a two or three year process to get that to the level we are now. I think we were one of the few schools in the system that only had it once a week for fifty minutes (Researcher: Okay.) This is our first year with two fifty minute sessions a week. Now, when I say collaborative... remember I told you we have collaborative (Researcher: Right.) and then we don't have collaborative then we have collaborative that's what we've done in the past. This year we have collaborative on Tuesday, common planning on Wednesday (Researcher: Okay.), and then the next week we give them two commons (Researcher: Oh!) and then go back to the collaborative, common (Researcher: Oh!) so they have time to do those assignments (Researcher: Yes.). This is probably the best year we've ever had as far as time. When we got all our new students, I found out one particular grade level had 120 kids in it, and we had one P.E. teachers and that was going to shoot my collaborative schedule. (Researcher: Laughs. Because that when you are shooting for the noninstructional time they have.) Right and so, P.E. had a slated time and I thought okay if we split first grade then there goes my collaborative planning. So, I pleaded my case (Researcher: Laughs.) to Lisa Hodge and she you know worked with the state on it and because of the numbers, I got a new P.E. teacher.

Researcher: So, it's a blessing.

P1 of School D: I prayed about that a lot and it worked out.

Researcher: So, they do realize that it's important. (P1 of School D: Uh huh.) That's a big step though. (P1 of School D: Oh yeah.) So, may be in realizing that may be they'll realize ... (Laughs)... collaboration is equally important. (P1 of School D: Yeah. May be some of the funding ...) I guess...

P1 of School D: I mean we get funding that can be used but we're having you know to stretch it, instructional materials (Researcher: Yes, yes.) because the state's not sending us much money. We're really... My little cupboards are bare. Somebody came and asked me for rolls of tape the other day. I said we're out and I do need to order some things but I mean we're just ... We running ... (Researcher: ... on bare bottom.) plus materials are harder to come by. (Researcher: That's amazing what we are finding... Creative ways to take care of things.) I know. (Researcher: It's bad but I mean that's why we're in this business because we are creative people. Laughs.) I know.

Researcher: Okay. So, explain what collegial interactions are like before, during, and after collaborative planning sessions. You know, how can teachers and administrators improve collegial interactions? That's two questions I believe... (P1 of School D: ...the collaborative. Which one are you...?) Let's see number five, where we're looking at collegial interactions. (P1 of School D: Oh!) How do you think they are before, during, and after collaborative planning sessions or ...?

P1 of School D: And, you know, I'll give you an example. I think I still have them in my bag. Teachers sometimes are always real frustrated. You know, they have so much paperwork and they can get in little ... the morale. And, sometimes during collaborative (This one's from weeks ago. Researcher: Oh!), she might let them write me a little note about something that they need help with, or they're feeling good about, or they're not feeling good about (Researcher: Right. It's great you have that kind of relationship with them because in the past it was like. Oh no! You don't tell a person you don't know something.) Right! (Bell issue/Not knowing when to release student/Solved by calling...)

Researcher: And theses are little lemons?

P1 of School D: Just little lemons. Sour. What are you feeling sour about today? (Researcher: Laughs.) Not having a parapro. Not having a key (Researcher: Oh!) to the front. You see it's not just the teachers but ... (Researcher: Okay, okay!) Well, anyway... (Researcher: And it's good when you can help them meet some of those things.) Right! Yes. (Researcher: So, wow...) And, it can be ... If I read all of these, you would probably see something about something that we were doing in collaborative (Researcher: Okay.), you know.

Researcher: This is a good way to have interaction, (Silence) note writing. The kids pass notes all the time. So, why come we can't. (P1 of School D: It's just a way for them to vent, the good, bad, and the ugly.) That's right. (P1 of School D: You know.) That is so true.

P1 of School D: And, I mean that develops... They know I'm going to respond. (Researcher: I like that.) I might not get to them the day they write them but that's one way we ... (Researcher: But, they know it's coming.) They know I support them, (Researcher: Right!) and they know they can come to me, and they know I may not be in every single collaborative meeting because you know a principal ... (Researcher: But, you're still made a part of it through those notes.) Exactly! (Researcher: How cute! I like that. P1 of School D: Laughs.)

Researcher: Oh that's a practical approach. (Laughs) We've got some wonderful ideas about...

P1 of School D: Mrs. A's good too. (Researcher: ... Wow!) We'll talk about... She'll come in and she'll say this is what I've got planned to do. (Researcher: Okay.) And then, Mrs. J will say we want to tweak it by doing this or that. (Researcher: Right.) It's a team effort. (Researcher: Oh it has to be.) It does. So, you know before you were talking about collegiate interactions before, during, and after, I'll go if a teacher or it might be a grade level, if they are having that same topic of differentiation and one grade level, either weren't happy or didn't understand it, (Researcher: Right.) we may pull them together again. (Researcher: Okay.) Or, I'll go sit in a common planning (Researcher: Okay.) you know and follow up. Or, go into a classroom (Researcher: Okay.) and observe. From some of the classroom observations, I do especially when new people that are new to School D. You know then I'll go to A. I say well we've got to do a little follow up there without her knowing it, you know. (Researcher: Right, right.) Tell her this is standard practice and you go down there and you watch and you help her. You try to stay positive. (Researcher: Yes.) In this day where we're furloughed, (Researcher: Laughs.) furlough for ten days, making less money, and we're working more hours, and children are changing (Researcher: I know.) and challenging. But, I would say you know it's a constant because ... (Researcher: It is, isn't it? It's a continuous is what I'm hearing.) We are ... One collaborative leads to another. It's not like you stop this topic or whatever and it moves to another. They all are related. (Researcher: Okay, interrelated.) If they are not ready to move on because I see they're not or hear they're not. Then, we wait (Researcher: It's almost like going back to the classroom where you've got kids who ... Because nowadays that little system where the kid may have smiley faces on their desk top and one smiley face may say "I've got it" and one may say 'I'm not sure" and another may say "I'm way off target" or whatever and the child can tell you without having to identify themselves as the student who doesn't know.) Right. (Researcher: Okay. I like that. This is the adult version.) Yeah, it is, I hadn't thought about that, adult efficacy. P1 of School D/Researcher: Laughing) (Researcher: Yes, yes, yes, Okay, That's very good.)

Researcher: Here's another one. And, I think most of these we may have hit on some (Referring to interview questions) but if you want to you can elaborate. Tell me about collaborative practices at this school. And. I think you've said (P1 of School D: Yeah.) quite a bit on that earlier in the first question. (P1 of School D: Alright.) So, we can go on

to: what kind of relationship is shared between teacher collaboration and student learning?

P1 of School D: Well, now that would tie in big time to our focus walks (Researcher: Oh yes, yes!) and that's not Mrs. J and I, just us doing those. That is the leadership team of the school. (Researcher: Okay, good.) In fact ... (Researcher: So their peers are a part of this...This is good.) And, we share that with them. In fact, we've got a leadership team meeting next week on the 13th and this is our results of our first focus walk.

(Note: Could not share it with me. Just done to provide proof.)

P1 of School D: We'll meet next week and we'll look at our strengths and weaknesses. (Researcher: Okay.) And, we decided this year to do the same exact things we were looking at last year because we have 19 new faculty members now. (Researcher: Oh!) Thirteen of those are certified. So, we need to see if we're still where we were and we're not. So, you know ... We're revisiting ... See these were things we were very confident in. (Researcher: Right.) So, we still want to do the differentiation piece that we pulled in. (Researcher: Okay.) But, you know, we have to look at this and then use it, use that data.

Researcher: Okay. So, the relationship that is shared between teacher collaboration and student learning has a lot to do with the data collected and has a lot to do with maintaining where you were by bringing the new members up to speed.

P1 of School D: And then, when you're trying new best practices, how are they working? (Researcher: Right.) And then, how are the students performing? See this is how the teachers are performing but now how are the students performing? We look at a lot of data with that. Uh, the CBMs that we administer 3 times a year, and actual grades in the classroom, and with the RTI process are they showing gains. (Researcher: Okay.) I mean it took us 3 years to close the gap. I would say our African American group and our students with disabilities, 100%. (Researcher: Oh my goodness! Doesn't that make you feel good?) Yes. So, there is a correlation and it's working. These teachers are applying ... And, I think holding them accountable for the assignments and see evidence and that kind of thing. They're doing it. I think because they're doing it they see it works. (Researcher: Okay, Oh that's good. That is a huge pat on the back if you think about it, closing that gap.) Just phenomenal what we did but those were the same kids without the new ones yet. It was just like unbelievable that three year ... at the top and a 100% with students with disabilities and our African Americans in math 94%. (Researcher: Oh my goodness! Laughs. So, what you're doing is working.) Yeah! (Researcher: There's the proof right there.) So collaborative is ... in all that. (Researcher: ...you worry about your whole student population. You want to see every one perform well and at the level they should be at.) Right! Now, we've got new students and we've got about 120 of ... and now it's about a 140.

(Talk of confidence that School D can be back at the top.)

Researcher: Well, here's another great question. Explain the impact of collaborative practices on student learning and teacher effectiveness at this school. And, you may have...I feel like you've hit on that quite a bit. Do you want to kind of draw it in to may be make it more specific? Or, pull in some information from what you've already shared.

P1 of School D: Well, the big piece on the teacher piece again is that they know they are held accountable because their own peers are coming in there to see. (Note: Leadership Team/comments on observations and lesson plans from different grade levels/ the role that the team plays) The collaborative does impact big on everything from even teacher effectiveness with routines, etc. (Note: Through collaborative teachers can see what teachers of other grade levels are doing.) What the other piece...?

Researcher: ...it was on student learning number 8. Explain the impact of collaborative practices on student learning and teacher effectiveness at this school.

P1 of School D: Well that goes back... you know like flex groups that we are working on. (Researcher: Right.) Making sure you're differentiating by content, product, and process first of all. ... you got to make sure everybody is on the same page with that (differentiation that is) ... and so that child that's sitting at that flex group table (in one class has the same as the child in the other classes of that same grade level) ...that the equity is there (for all flex groups of the same grade level) Not that the teachers are cookie cutter teachers. Of course, they're going to bring their personalities... but they all have the same concept of what that means ... Well, if you said go forth and differentiate by content, well what does that mean? (Researcher: And, they're going to make it mean something.) Right! ... so we are on the same page with our meaning... So, the students benefit from that . . . (Researcher: That's true.) If you had twins, one in teacher A and one in teacher B, you're getting an equitable education because this teacher understands and this teacher understands the best practice strategies for differentiating with the children. So, that's how they benefit, the children benefit from collaborative. Researcher: Alright now, let me know if we are...because I've got a lot of good information from you...

P1 of School D: Now, you just let me know... Researcher: ...let's go down...

P1 of School D: Collaborative planning is used as professional development. It is professional development. There's no doubt that it's professional development. Do we have things other than collaborative? Yes. We will have after school meetings. We will have our in-service days where we bring in other things. Uh the leadership team will help make that decision.

Researcher: You've painted a very good picture of how collaborative planning is used as professional development. ...a lot of good examples...

P1 of School D: ...And they do get PLUs for that too ... We do track that for them. Researcher: Okay. We talked about sixteen and student learning ... Let's go back here ...

P1 of School D: ... We definitely have the time we never skip collaborative. ... We may not jump the first week into collaborative. We may use that time as for housekeeping ...

Researcher: Are you planning your agenda at that time ...

P1 of School D: Uh huh.

Researcher: And, you talked about new teachers ...

P1 of School D: ...because there are so many verbal opportunities...

Researcher: What practical approaches to collaboration do you practice? I noticed the lemons ...

P1 of School D: They're really run like a lesson in a classroom as far as you know the activator, teaching and modeling. First you give the explanation of why, the research behind it. Why are we doing this? Why is it important that we're learning to do this? (Researcher: That's probably the buy in too. Teachers I think need to even anybody they need to know that there is some reason we're doing this. We are not just doing this to be doing it.)

Researcher: What do you think as an administrator, what can you do as an administrator to affect change in the district through collaboration or collaboration across grade levels?

P1 of School D: That's easy to answer because here's an example...you go into the (Researcher: So, you are acting liaison too for the teachers) classroom (Note: and see needs or possible changes that must occur and as the principal you take it to the principal's meeting as an agenda item and talk about it) ...and it makes a change occur. (Note: So there can be an impact at the district level through the agenda of a principal's meeting and also an impact at the school level when what is decided on as a solution at the principal's meeting is taken back to be implemented at the school level. And, it all started with a concern at the school level.)

Researcher: (questions 9 and 10)

P1 of School D: (Commented) The acceleration pieces... At the end of the year ...what can they accelerated.

Researcher: At School A ... We are trying to include Earth Science terminology. (discussed the process of how it is delivered.)
*Tape ended.

Transcript/Participant 2 School A

10/31/11

9.40-10.17

(Introduction and Informed Consent)

Researcher: Okay, we have interview number six, and I would like to say it is a pleasure that you are here with me today to talk about collaboration. And, we're going to go through a few questions if you have anything you want to elaborate on please go ahead and do so. (Participant 2 School A: Okay.) Question number one; there are several questions there. Let's start with the first one. How many years have you been teaching?

Participant 2 School A: I've been teaching thirteen years.

Researcher: Oh great! Wonderful!

Researcher: Well, tell me about your teaching experiences.

Participant 2 School A: Uh, well, in my thirteen years of teaching, uh, I've earned some awards that I'm kind of proud of. My first year, I earned the New Teacher of the Year for the county award in 98-99. And then, in 2010, I was Teacher of the Year for WGSA Elementary School where I teach, and I love teaching. It's my passion.

Researcher: Okay, well that sounds like we've pretty much covered all the rest of the questions there. Do you see any one that we've missed? (Other questions: Tell me about your teaching career. Tell me about your professional experiences as a teacher. What is the highest degree that you hold? How are all of your aforesaid experiences related to the success and failure of your collaborative practices?)

Participant 2 School A: Uh, I have a master's degree, (Researcher: Oh wonderful!) and uh, I believe that through collaboration sharing ideas is always beneficial in education. (Researcher: Okay, alright)

Researcher: Okay, I think that covers number one. Let's go on to number two. How many times this year have you been involved in collaborative planning?

Participant 2 School A: We usually meet on a weekly basis. (Researcher: Okay) We've met plenty of times this year, and vertically, we've met twice (Researcher: Oh!) with different grade levels. (Researcher: So, do get to meet vertically too.) Uh huh.

Researcher: Number three: Tell me about a typical collaborative planning session. (Tell me about cross grade level collaborative practices at your school.)

Participant 2 School A: We meet with our academic coach to work on standards based classroom strategies, or we'll meet with our API when we meet with her, we work with RTI and interventions

Researcher: Okay, number five: Explain what collegial interactions are like before, during, and after collaborative planning sessions, and how can teachers and administrators improve collegial interactions?

Participant 2 School A: We follow agendas, and we set rules and we norms to go by for each meeting, and each meeting always follows the same protocol. So, that helps.

Researcher: Okay, number six: Tell me about collaborative practices at this school.

Participant 2 School A: Uh, all of our collaborative practices are an opportunity to grow in instruction. Everything we work on focuses on betterment of the classroom.

Researcher: Okay, number seven: What kind of relationship is shared between teacher collaboration and student learning?

Participant 2 School A: It's our main focus that what drives our meetings.

Researcher: Oh great! Okay. Number eight: Explain the impact of collaborative practices on student learning and teacher effectiveness at this school.

Participant 2 School A: Well, we know our expectations. We understand standards based classrooms, and it allows us, it prepares us for more effective teaching.

Researcher: Okay, number nine: What are the disadvantages of cross grade level collaboration? How are the disadvantages utilized to improve collegial interaction during collaboration?

Participant 2 School A: Time. Time is the biggest disadvantage because it's so hard for everybody to meet (Researcher: Uh huh) on a regular basis, and we help by, we set agendas. Uh huh, we meet weekly. We meet monthly, and then often times we'll just meet with other teachers you know at the end of the day. (Researcher: Okay) Just a quick short meeting. (Researcher: So, you have formal and informal meetings.) Yes. (Researcher: Okay)

Researcher: And, time seems to be something that everyone says is the biggest disadvantage.

Participant 2 School A: It is.

Researcher: Number ten: What are the advantages of cross grade level collaboration? How are the advantages utilized to improve collegial interaction during collaboration? Participant 2 School A: The advantages are learning new ideas. Anytime, you get together with other teachers; you're learning ideas. And, you can carry those back and use them in your classroom. You can also share difficulties that you have and that helps because that's the window that opens up new ways of looking at things.

Researcher: Okay, number eleven: What do you think are the effects of a positive relationship between teacher collaboration and student learning?

Participant 2 School A: Definitely, the new ideas that you gain from the meetings. New strategies to help support academic success. Those are all helpful.

Researcher: Number twelve: And, there's quite a bit here to ask. And, you can choose to answer one or two questions. One question would be fine. But, let's start with the first one. How is collaborative planning used as professional development?

Participant 2 School A: Okay, we work on uh; we look at our weak or needed areas that need to be addressed. (Researcher: Okay) Maybe looking at standardized test scores, teacher surveys. We find areas of weaknesses and that's where we focus on.

Researcher: Okay. How's collaborative planning used as professional development an advantage and disadvantage?

Participant 2 School A: Well it's an advantage because we're targeting those weak areas that need to be addressed. Uh, not really any disadvantages other than just the time.

Researcher: Okay. How is collaborative planning used as debriefing an advantage and disadvantage?

Participant 2 School A: I guess the biggest thing is whatever we work on we go and apply it and implement it in our classroom. And then, we can always come back and share (Researcher: Okay) how successful it was and where we need to go from there.

Researcher: Okay, number thirteen: What is the relationship between collaborative planning and teacher effectiveness?

Participant 2 School A: Collaborative planning focuses on ways to teach more effectively (Researcher: Okay, okay. Great!)

Researcher: Number fourteen: What does professional development look like at this school?

Participant 2 School A: Just like I said earlier. We look at surveys to determine areas of need and weakness, test scores to determine those areas, and then the school wide survey that we do helps determine where the teachers want to focus. (Researcher: Okay, so in effect you look at teacher needs through collaborative planning and then (Participant 2 School A: and student needs). And, you look at different topics like differentiate (Participant 2 School A: Yeah) learning would be one of those topics. And then of course, it's addressed through, I think you also have like book studies that you do (Participant 2 School A: Yes) and those kinds of things. Okay.

Researcher: Number fifteen: What does debriefing as professional development look like at this school?

Participant 2 School A: Uh, whatever is in the book study and collaborative planning; we take it and we implement it in our classrooms (Researcher: Okay). And then, we always come back and share the results.

Researcher: Okay, alright. Number sixteen: What is the relationship between collaborative planning and student learning?

Participant 2 School A: Well, students benefit from more effective teaching so that's the direct relationship. (Researcher: Okay. And, collaborative planning is all about effective teaching [Yes mam] is what I'm understanding.) Uh huh.

Researcher: Okay seventeen: How is improved teacher effectiveness and improved student learning a direct result of collaborative planning?

Participant 2 School A: Well, it's not 100% a direct result (Researcher: Okay), many other variables do affect it but it helps improve student learning in many ways. (Researcher: Okay) It's all positive. (Researcher: Okay, alright).

Researcher: And looking at the one above there is there anything else you would like to share with me on the topic of collaborative practices that maybe I have not asked you yet or . . . [Is there anything else that you would like to share with me on the topic of collaborative practices that I have not asked you about or that you would like to have an opportunity to say? (Crawford, 2005, Interviewing Part 2)]

Participant 2 School A: Uh, Just the fact that sometimes too much collaboration can burn teachers out. It can be (Researcher: Yes) overwhelming (Researcher: It is.) too much at one time. It's better to take it in small pieces (Researcher: Right) and then be able to go back and implement it and then come back (Researcher: So we need not only to address student needs but teacher needs too. And, sometimes, student needs come before teacher needs. [Participant 2 School A: Right] But, if you think about it, both are just as important [Participant 2 School A: Exactly] because one is related to the other. Okay)

Researcher: A few other questions here: What does collaboration mean to you?

Participant 2 School A: Working with others as a team to reach success; a time to share.

Researcher: Okay. What are some of the inhibitors of collaboration? Participant 2 School A: Time. (Researcher: Exactly, I heard that a lot.)

Researcher: What are some of the enablers of collaboration?

Participant 2 School A: Gaining new strength, new ideas, and strategies; uh, things that can be carried over into your classroom.

Researcher: Okay. How do you find time to collaborate?

Participant 2 School A: Well, it's scheduled for us twice a week and once a month (Researcher: Okay). And then other times, we just meet as needed.

Researcher: Okay and that's pretty much on your own, (Participant 2 School A: Those are informally.) informally. Okay!

Researcher: Who initiates collaboration between teachers and librarians?

Participant 2 School A: Both. (Researcher: Oh! Okay) The librarian and I work very closely together especially since I teach reading.

Researcher: That's true; that's true. So, the English, Language Arts teacher usually have to work very closely with the librarian?

Participant 2 School A: Yeah.

Researcher: What do you think when, what do you do when collaborators don't share the same worldview?

Participant 2 School A: You have to stay positive, stay on task, and follow the agenda. That's where the norms and protocols help. (Researcher: ...okay, and standards and those kinds of things [Participant 2 School A: Uh huh, uh huh] Okay)

Researcher: What are some of the activities involved in collaboration? Participant 2 School A: We have mini lessons, workshops, presentations, meetings, and times to share. Those are all just the many examples of ... (Researcher: Oh yeah, you mentioned book studies earlier.) and, book studies.

Researcher: Okay. What role does the principal play? That's on number eight. What role does the principal play you think in collaboration?

Participant 2 School A: She helps set up the meetings. She helps decide what we cover at the meetings. She attends meetings sometimes. (Researcher: Oh great! She acts as the facilitator sometimes?) As the leadership team member, also they come through and they check sometimes to see if we're implementing those things. (Researcher: Is that what the focus walk is about? Oh, okay! So, that's all connected to collaboration and meetings and practices. [Participant 2 School A: Uh huh] Oh, okay)

Researcher: Number nine: How do new teachers learn to collaborate?

Participant 2 School A: Through meetings, and observations, and experiences.

Researcher: Okay, okay. So they... (Both laugh) And, probably if there's a mentor they can also help guide them on how they should come in to a collaborative planning session.

Researcher: Okay, number ten: What is the process of initiating collaboration?

Participant 2 School A: Well, the API, and the principal, and the academic coach set up the time, most of the time but the teachers also have a say especially through the surveys (Researcher: Okay) in addressing weak areas (Researcher: Okay).

Researcher: What effects do you see on students?

Participant 2 School A: Well through collaboration, the teachers gain insight to be used with the students. The students are benefitting from whatever is being implemented in the classroom.

Researcher: True, that's true. What are the attributes of collaborators?

Participant 2 School A: Sharing ideas and strategies and gaining all kinds of good stuff. When you put a bunch of teachers together, you learn good stuff. (Researcher: Okay)

Researcher: So, all in all, collaboration is still professional development (Participant 2 School A: Yes). It's just done differently (Participant 2 School A: Uh huh). What level of trust is needed to collaborate?

Participant 2 School A: Well WGSA, fortunately, we are at a great school. Our school is small and the trust is never an issue here. But, if it is an issue that's where those norms and standards and rules and all that come in that we've set. As a group when you meet to collaborate, you set the guidelines for that meeting and so everyone has to stick and follow the guidelines. So, what you say in the meeting stays in the meeting. You don't have to worry about that. We don't have that problem here at WGSA.

Researcher: So, there's no turf guarding or anything like that. And, it seems to me too that everyone take seriously the responsibility of everyone in educating all students. (Participant 2 School A: That's right!) Okay

Researcher: Number fourteen: What practical approaches of collaboration do you practice?

Participant 2 School A: Basically, the most important is sharing what's beneficial in your room to others because that's the meat of everything. You're able to take back and actually use it.

Researcher: Okay. Number fifteen: What do you hope to change at the local level through collaboration at the school level?

Participant 2 School A: It encourages team work, and it takes a team to teach a child. Not just one person. (Researcher: That is so true.)

Researcher: Number sixteen: After receiving the (my results) researcher's results and findings, what can you do as a teacher to affect change in the district through collaboration across grade levels?

Participant 2 School A: We can share those results with others and show the benefits. (Researcher: That's true.)

Researcher: And so that's like an overall collaboration, district collaboration. Okay, alright.

Participant 2 School A: I think most schools do but I don't know that they go to the extent that we do.

Researcher: We use to have Teacher Talks at one point in time. I don't know if they still ... if it's an ongoing thing.

Participant 2 School A: We haven't had any this year (Researcher: Okay) but we did last year.

Researcher: May be they will and that kind of got teachers across the district at the same grade level may be even the same subjects ...

Participant 2 School A: And, we did the same things ... It was nice. It was helpful. (Researcher: Okay)

Researcher: So, Teacher Talks needs to be a part of what's going on with collaboration. Okay, well it has been a pleasure interviewing you today. (Participant 2 School A: Well I'm glad.) If you have anything else you want to elaborate on, please do so. If not in this interview, may be later on, and I can just take notes of it. (Participant 2 School A: Okay ...) Okay. Thank you so much! (Participant 2 School A: You are welcome.) Alright! (Laughs)

Appendix P: Field Notes

Field Notes

School E

10/25/11

8:15-9:44

Observation/Kindergarten and First Grade/Collaborative Planning (Professional

Development)

Facilitator: Participant 2 of School D

First Grade: (Tiered Instruction Part 2)

- At School E, the walls of the data room are lined with C.R.C.T. data charts (each subject area is on display and the data is disaggregated) and other pertinent information useful in collaborative planning meetings. The work area (tables arranged in U-shape in front of an active board currently turned on) of the room is center stage and is where collaborating teachers sit. Materials relevant to the task at hand are gathered in a separate but accessible area of the room. The data room is equipped for collaborative planning, professional learning, and debriefing. The meeting today is a collaborative planning meeting that is being conducted as professional learning. The facilitator (Participant 2) of the meeting is working with kindergarten teachers on tiered instruction. The lesson began with an essential question.
- The teachers entered the room smiling and conversing with each other. They greeted me with a smile and a hello. The environment was quite friendly

and inviting. You could see the look of interest on their faces. They wanted to know why I was there and who I am. The facilitator introduced me and reminded them that they were told that I was coming.

Curriculum Vitae

Fidelia Gale Johnson

PROFILE

Fidelia G. Johnson, Ed.D., earned her Doctoral Degree from Walden University in 2013 under the tutelage of Dr. Nathan Long, with a major in Teacher Leadership. Her primary research interests are in all aspects of teaching, learning, and leadership with particular emphasis on collaboration, debriefing, and professional development. She is also specifically interested in the role and utilization of mental imagery, after-imaging, and image streaming in reading comprehension. Her main career objective is to work as an exemplary professor and researcher.

EDUCATION

Georgia College and State University (Georgia College) B.S., 1983 – Art Education

Georgia College and State University (Georgia College) M.Ed., 1986 – Early Childhood Education

The University of Georgia Ed.S., 2000 – Reading Education

Harvard University Extension School ALM (Pursuing), 2003 – History

Teachers College Columbia University
M.A., 2005 – Instructional Technology and Media

Walden University
Ed.D. (Achieving), 2007 – Teacher Leadership

DISTINGUISHED RECOGNITIONS

Outstanding Young Woman of America, 1986

Member Leadership McDuffie, 1990

Who's Who in American Education, 1989-1990, 1992-1993

The World Who's Who Among Women, 1992

ABI Woman of the Year, 1996

Georgia Association of Educators Outstanding Leadership as Local Association President, 1995-1996

WWMS Teacher of the Year Nominee, 1996-1997

ABI World Lifetime Achievement Award, 1997

CSRA RESA Summa Cum Laude, 1998

University of Georgia Beta Kappa (Kappa Delta Pi, KDP) initiated Member, 2000

Outstanding Leadership Award – UGA Kappa Delta Epsilon (Alpha Delta Chapter), 2000-2001

UGA KDE Perfect Scholar Award (4.0), 2001

Golden Apple Service Award – UGA Kappa Delta Epsilon, 2001

Selected NBPTS Portfolio Pilot Participant in the Early and Middle Childhood/Literacy: Reading-Language Arts, 2003

Who's Who Among American Teachers, 1998, 2005, and 2006

National Honor Roll Outstanding American Teacher, 2006–2007

Honorary Member of National Nominating Committee of National Youth Leadership Forum on Medicine, 2008

West Green Elementary Teacher of the Month, 2011

CERTIFICATIONS

Georgia Teaching Certificate: (Professional Active) Teacher Support Specialist, Gifted In-Field, Director: Pupil Personnel Services, Educational Leadership, Instructional Supervision, School Counseling, Art, Early Childhood Education, Reading Specialist

Arizona Teaching Certificate: (Professional Active) Guidance Counselor

EXPERIENCE

- First Grade Teacher, 1986–1987, J.D. Dickerson Early Childhood Center, Vidalia, Georgia, Fall Spring
- First Grade Teacher, 1987–1991, Washington-Wilkes Primary School, Washington, Georgia, Fall Spring
- School Counselor, 1991–2002, Washington-Wilkes Middle School, Washington, Georgia, Fall Spring
- Summer School Principal, 1995, Washington-Wilkes Middle School, Washington, Georgia, Summer
- Summer School Principal, 1997, Washington-Wilkes Middle School, Washington, Georgia, Summer
- Principal and/or Assistant Principal (On Call), 1997–2002, Washington-Wilkes Middle School, Washington, Georgia
- Employed Liaison for The University of Georgia's Great Schools and Families, 2000-2002
- School Counselor, 2002–2003, Conyers Middle School, Conyers, Georgia, Fall
- School Counselor, 2003–2006, Coffee High School, Douglas, Georgia, Fall Spring
- School Counselor, 2006–2013, West Green Elementary School, West Green, Georgia, Fall Spring

PRESENTATIONS

- Presented Alternative Support Programs to Clayton College and State University, Conyers Middle School, Conyers, Georgia, 2002
- Special Guidance Services Presentation to Clayton College and State University, Conyers Middle School, Conyers, Georgia, 2003
- Differentiating Math Instruction Book Study Presentation, West Green Elementary, West Green, Georgia, 2009
- The Motivated Student: Unlocking the Enthusiasm for Learning Book Study Presentation, West Green Elementary, West Green, Georgia, 2009

Never Work Harder Than Your Students Book Study Presentation, West Green Elementary, West Green, Georgia, 2010

Bullying Prevention/Intervention Presentation, West Green Elementary, West Green, Georgia, 2011

PROFESSIONAL AFFILIATIONS

Phi Kappa Phi, 2001-Active-for-Life Member

Walden University Alpha Epsilon Xi (KDP) Charter Member, 2010 (2010-2012) PAGE, 2002-2012

The University of Georgia Alumni Association, 2012

American School Counselor Association, 2012

Georgia School Counselor Association, 2012