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The impact of collaborative analysis of student work on student achievement among third graders in the area of writing: An action research study

Jami A. Lee
Walden University

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Jami Lee

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Review Committee

Dr. Casey Reason, Committee Chairperson, Education Faculty

Dr. Lisa Reason, Committee Member, Education Faculty

Chief Academic Officer

Denise DeZolt, Ph.D.

Walden University

2009

ABSTRACT

The Impact of Collaborative Analysis of Student Work on Student Achievement Among
Third Graders in the Area of Writing: An Action Research Study

by

Jami A. Lee

M.A., Central Michigan University, 2000

B.S., Georgia Southern University, 1992

Doctoral Study Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Education
The Teacher as Leader

Walden University
February 2009

ABSTRACT

Georgia Writing Assessment scores revealed that there were third grade students at an elementary school in rural Southeast Georgia struggling to meet the state standards. This pre-experimental, action research study examined the impact of collaborative analysis of student work on student achievement among third graders in the area of writing through a one-group pretest-posttest design. The pretest phase of this quantitative study was comprised of the collection of scored student writing samples followed by professional development training for teacher participants on collaborative analysis of student work. The posttest phase of the study included the collection of scored student writing samples. These student writing samples were scored by each teacher using a rubric developed by the state of Georgia as part of the Georgia Writing Assessment. Six third grade teachers and 50 third grade students participated in the study. A repeated measures *t* test was conducted to determine the impact of collaborative analysis of student work on student achievement. This comparative analysis between pretest and posttest scores indicated that the collaborative efforts of the teachers in this action research initiative positively impacted student achievement. Recommendations for further study include duplication of the study at another time during the school year, repetition of the study using a larger sample, and the collection of qualitative data from teachers and students through surveys, questionnaires, or focus group interviews. The social change implication of this study is that it informs the body of knowledge related to the impact of collaborative analysis of student work on student achievement in the area of writing at the elementary school level. This may be beneficial to administrators and teachers in the planning of professional development activities and the teaching and learning of writing.

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DEDICATION

This researcher would like to dedicate this study to her parents, Anniece and Jimmy Lee, who have always encouraged her to do her best and never give up. Their constant love and support throughout all of life's challenges have nurtured and inspired this level of achievement.

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SECTION 1:

INTRODUCTION TO THE STUDY

Introduction

The implementation of the No Child Left Behind Act of 2001 (NCLB) at the national level has compelled schools to explore strategies that ensure learning for all students. During the 2006-2007 school year, in schools throughout the state a transition to the newly developed English/Language Arts Georgia Performance Standards took place. Performance standards have brought about changes in teaching and assessing writing in third grade. The execution of standards-based instruction centers professional dialogue on “proven methods, practices, and lessons aligned with established standards” (Schmoker & Marzano, 1999, p. 17). However, at one elementary school in a rural school district in Southeast Georgia, there is a gap between the implementation of effective teaching strategies, and the analysis of student performance data in the area of writing among third grade teachers. These teachers do not currently participate in collaborative analysis of student work. Teachers at this elementary school have received limited professional development on the benefits of collaborative analysis of student work and do not currently incorporate this process into their learning team meetings. The Mid-continent Regional Educational Laboratory (McREL; 2005) reported that teachers “need to place a strong emphasis on using assessment results to determine students’ progress toward learning critical content and to make instructional decisions based upon student assessment results (Mid-continent Regional Educational Laboratory, 2005, p. 7). This study sought to determine the impact of collaborative analysis of student work on student

achievement among third graders in the area of writing in one rural South Georgia School.

Many schools are choosing to address student achievement by establishing a professional learning community (PLC) among teachers. According to the National Staff Development Council (2006), the definitive goal of teacher professional development is to ensure learning for all students through the organization of PLCs among educators. In this age of accountability, teachers are coming out of isolation and beginning to work together in a collaborative environment to set goals, solve problems, and reflect on their practices. Schmoker and Marzano (1999) proposed that teachers work in teams “to identify the most pronounced patterns of student weakness, then seek absolute clarity on the nature of these problems” (p. 20). These problems should be addressed through staff development, consistent collaboration, and progress monitoring (Schmoker & Marzano, 1999).

Collaboration supports the PLC concept which is “specifically designed to develop the collective capacity of a staff to work together to achieve the fundamental purpose of the school: high levels of learning for all students” (DuFour, Eaker, & DuFour., 2004, p. 18). An examination of the results of student achievement within this professional development model will provide information on any influence of the independent variable, the process of collaborative analysis of student work among third grade teachers, on the dependent variable, third grade student scores as evidenced through student writing samples as part of the *Georgia Writing Assessment Program*.

Background of the Study

All teachers and administrators at this elementary school in southeast Georgia complete the Standards Assessment Inventory (SAI) on-line at the close of each school year. The SAI “offers a valid and reliable measure of the quality of professional development in a school as defined by the National Staff Development Council’s Standards for Staff Development” (Hirsh, 2006, p. 63). Forty-four teachers and administrators at an elementary school in this school district responded to the SAI questions in May 2006. The National Staff Development Council provides each school principal with a report indicating the average standard values calculated from the question responses. The report also includes the five standards needing the most improvement according to the inventory responses. Administrators at each school site use the results of this inventory in planning for professional development and school improvement for the following school year.

According to the results of the SAI, the five areas that need the most improvement at this elementary school are learning communities, resources, evaluation, learning, and family involvement. Of the five areas, learning communities received the lowest average standard value of 2.8. This indicates that teachers see a need to develop collaborative skills to strengthen the learning community. Hord (2004) suggested shared leadership, shared values and vision, and supportive conditions as three dimensions that support collective learning among teachers and promote a strong learning community. The question related to examining student work received the lowest score by teachers in the area of learning communities. Thirty-seven percent of teachers answered *sometimes*,

seldom, or *never* when asked about examining student work. The SAI results indicated that the teachers at this school are comfortable with analyzing and looking at student achievement data. Analyzing classroom data received an average standard value of 3.3. However, the need for collaboration to examine student work is inherent.

“The benefits of collaborative review of student work range from powerful professional development experiences, deeper understanding of practice, and refinement of high quality instruction” (Flowers, Mertens, & Mulhall, 2005, p. 57). The results of the SAI indicated a need for teachers at this elementary school to be more involved in the selection of professional development to suit their needs. The average standard value was 2.4 for the question related to teachers choosing the types of professional development they receive. According to Hawley and Rollie (2002), “professional development should involve teachers in the identification of what they need to learn, and, when possible, in the development of the learning opportunity or the process to be used” (p. 88). Professional learning communities provide teachers with the opportunity to identify problems and make plans to address those problems. Sergiovanni (2005) stated “successful collaborative cultures are formally recognized communities of practice that work deeply and firmly to bring people together around themes of practice” (p. 125).

The teachers at this elementary school meet weekly in learning teams to plan lessons, analyze student performance data, and participate in discussions related to professional readings. Learning teams have been in place for three years at the school, and consist of grade-level teachers, paraprofessionals, and other support staff including special education teachers, counselors, and special areas teachers. In a recent third grade

learning team meeting, teachers participated in reflective analysis for the purpose of setting goals and planning for the upcoming school year. Dearman and Alber (2005) stated that teaching and learning improves through the incorporation of reflection into collaboration. The teachers noted collaborative lesson planning, effective implementation of teaching strategies, and the utilization of student performance data to drive instruction as areas of strength. The team members identified a gap between the implementation of teaching strategies and data analysis and determined that examining student work was the missing link. The team concluded that looking at student work would provide valuable insight into the ways students learn and how the team could better meet the learning needs of students. Therefore, the third grade teachers unanimously decided to choose examining student work in the area of writing as a primary goal for the 2006-2007 school year. Costa and Kallick (2004) contended teachers need to have some control over what they are learning in the professional development setting.

Problem Statement

Writing scores for the first nine weeks of the 2007-2008 school year revealed that there are third grade students at this elementary school failing to meet the state standards in the area of writing. Members of the third grade learning team identified an existing gap between the planning and implementation of effective teaching strategies and the analysis of student performance data in the area of writing. The members of the learning team met weekly to plan lessons, discuss effective teaching strategies, and utilize student performance data to drive instruction. However, no time was set aside for the members of this learning team to share student work samples and participate in the analysis of student

work in a collaborative setting. While the lack of collaborative analysis of student work had been identified as a weakness among the third grade teachers, a plan had not been put in place to initiate such collaboration.

There are many possible factors that contribute to the lack of collaborative analysis of student work including (a) lack of professional development opportunities relating to collaborative analysis of student work, (b) lack of a protocol for incorporating analysis of student work into the established learning team agenda, and (c) time constraints for meeting together to analyze student work samples. This study represents a contribution to the body of knowledge needed to address this problem by determining the impact of collaborative analysis of student work on student achievement among third graders in the area of writing at one elementary school in rural Southeast Georgia.

Purpose of the Study

The purpose of this preexperimental, action research study was to test the theory of self-directed learning that relates the positive impact of teacher participation in the collaborative analysis of student work to student achievement among third graders in the area of writing. This study sought to explore third grade teachers' perceptions of the impact of collaborative analysis of student work on student achievement in the area of writing. The independent variable is defined as the process of collaborative analysis of student work among third grade teachers. The dependent variable is defined as student writing samples among third grade students.

Research Question and Hypotheses

The primary research question is What is the impact of collaborative analysis of student work on student achievement among third graders in the area of writing at a rural South Georgia school?

The following null and alternative hypotheses will be considered:

Null 1: Collaborative analysis of student work does not have a positive impact on student achievement among third graders in the area of writing at a rural South Georgia school.

Alt 1: Collaborative analysis of student work has a positive impact on student achievement among third graders in the area of writing at a rural South Georgia school.

Theoretical Framework

The theoretical basis for this study is the theory of self-directed learning. This theory is grounded in the work of Knowles (1975) whose research has informed the study of adult learning and inquiry. Applying this theory to the present study, it is expected that the independent variable, the process of collaborative analysis of student work among third grade teachers in the area of writing, will impact the dependent variable, student writing samples among third grade students. The teacher participants took an active role in their own learning and participated in professional development to ensure optimum levels of student achievement in the area of writing.

Research provided several definitions for the term *self-directed learner*. Knowles (1975) broadly defined self-directed learning as

a process in which individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes. (p. 18)

Abdullah (2001) defined self-directed learners as those who are “responsible owners and managers of their own learning process” (p. 2). According to Costa and Kallick (2004), a self-directed person “can be described as being self-managing, self-monitoring, and self-modifying” (p. 6). Other terms defined similarly are self-determination, self-regulation, and independent learning. For the purpose of this study as it applies to teachers in a professional learning environment, self-directed learners are those who take responsibility and ownership of their own learning and engage in self-managing, self-monitoring, and self-modifying.

Researchers have specified three components of the strategy of self-directed learning: (a) self-managing; (b) self-monitoring; and (c) self-modifying (Costa & Kallick, 2004). Self-managing, self-monitoring, and self-modifying may take place in isolation or simultaneously during the learning process. Costa and Kallick (2004) presented research on these three components. Self-managing refers to the approach that a self-directed learner takes when faced with a problem. Another component of the strategy of self-directed learning is self-monitoring. This process involves a person’s ability to think about his thinking, adjust a plan of action, and look back at his work to make improvements. Self-modifying refers to the self-directed learner’s ability to communicate effectively with others.

Self-directed learners are able to make a plan and follow through with that plan to achieve the desired outcome. The self-directed learner approaches problem solving eagerly and finds solutions through questioning, relating prior knowledge, and gathering information. Effective listening skills have an impact on self-monitoring. The self-

directed learner has the ability to listen to the ideas of others and gather meaning from them. Self-directed learners are able to explain, discuss, draw conclusions, and defend an opinion by offering evidence that supports their beliefs (Costa & Kallick, 2004).

Ultimately, a self-directed learner seeks out opportunities to explore ideas, learn new concepts, and solve problems. Self-directed learners are able to learn from their mistakes and apply what they have learned to new situations.

PLCs provide teachers with an environment conducive to developing and strengthening their self-directed learning skills to improve teaching and student learning. Costa and Kallick (2004) contended that self-directed learning communities must foster a sense of trust in order to ensure open collaboration among its participants. According to Langer, Colton, and Goff (2003) the environment must be “safe and nurture thoughtful practice” (p. 44). The members of the PLC share a collective goal, which is “to inquire about how you know what you know, as well as how you can better inform what you know through active engagement with one another” (Costa & Kallick, p. 71). Hord (2004) stated that shared values and vision are critical to the development of PLCs. “Meaningful collaboration arises out of genuine interests or purposes held in common” (Hawley & Rollie, 2002, p. 48). In the self-directed learning community, professional development is an opportunity for teachers to grow and develop. “This focus on continual improvement and results requires educators to change traditional practices and revise prevalent assumptions” (DuFour, 2004, p. 11). These opportunities “set clear expectations that allow people to design their work in ways that enhance their capabilities” (Costa & Kallick, p. 72). Members of self-directed learning communities are continually learning

and striving to improve their teaching practices to ensure optimum learning for all students.

Nature of the Study

This quantitative, preexperimental, action research study was conducted to determine the impact of collaborative analysis of student work on student achievement among third graders in the area of writing at an elementary school in rural Southeast Georgia. This study was carried out to answer the following question: What is the impact of collaborative analysis of student work on student achievement among third graders in the area of writing at a rural South Georgia school? This researcher hypothesized that collaborative analysis of student work would have a positive impact on student achievement among third graders in the area of writing.

Data collection for this preexperimental, action research study included the administration of the Self-directed Learning Readiness Scale (SDLRS; Guglielmino, 1977) to teacher participants. The pretest phase of this study was comprised of the collection of writing samples from student participants. Professional development training for teacher participants on collaborative analysis of student work followed the pretest phase of this study. The treatment consisted of the implementation of collaborative analysis of student work in a study team setting and the execution of effective teaching strategies in the area of writing. The posttest phase of the study included the collection of student writing samples following the implementation of collaborative analysis of student work. This researcher will present a comparative

analysis and interpretation of the findings and report on the implications for social change.

Section 3 will address the nature of this quantitative pre-experimental, action research study in more detail.

Definitions

The following definitions are used to clarify meanings of terms used throughout this study:

Collaboration: is “a style for direct interaction between at least two co-equal parties voluntarily engaged in shared decision making as they work toward a common goal” (Friend and Cook, 2007, p. 7).

Collaborative analysis of student work: is the process of gaining a deeper understanding of the link between instructional strategies and student learning in a particular content area. (Langer et al., 2003)

Professional development: is “a means for organizing principles and validated practices” (Friend & Cook, 2007, p. 190) for meeting professional responsibilities.

PLC: is a concept “specifically designed to develop the collective capacity of a staff to work together to achieve the fundamental purpose of the school: high levels of learning for all students” (DuFour et al., 2005, p. 18).

Student achievement: quantitatively evidenced by a positive change between pretest and posttest scores on the analytically scored *Georgia Writing Assessment*.

Study team includes those who “interact directly to achieve their mutual goal of providing students with effective educational programs and services” (Friend & Cook, 2007, p. 60).

Student work refers to any evidence that is collected by the teacher that divulges information about student learning. (Langer et al., 2003, p. 4)

Limitations

This preexperimental, action research study is bounded by its focus on one grade level within the learning community at one elementary school in rural Southeast Georgia over a six-week period. The findings of this study cannot be generalized to other grade levels or other school sites due to the focus on one grade level at one rural elementary school. The findings of this preexperimental, action research study could be subject to other interpretations based upon student demographics and location.

Another limitation of this study is that the researcher is a member of the third grade learning team and serves as the grade level chairperson for third grade at this elementary school. However, the role of grade level chairperson does not include any supervisory or evaluative role for the teachers at this elementary school. This group of teachers has been working as a collaborative team for two years. Other groups of teachers in different grade levels or school systems may need additional time to build such relationships.

This quantitative study will be conducted using the pre-experimental, one-group pretest-posttest design. “This design includes a pretest measure followed by a treatment and a posttest for a single group”. (Creswell, 2003, p. 168) According to Creswell, this design involves the study of one group and “provides an intervention during the experiment” (p. 167). The pre-experimental design does not include a control group.

Delimitations

This study confined itself to training and surveying the members of the third grade learning team at one elementary school in rural southeast Georgia. This study was also limited to the analysis of student work among third grade students to the area of writing.

Assumptions

It is the assumption of this researcher that the members of the third grade learning team at this elementary school do not currently participate in collaborative analysis of student work due to lack of time and proper training. It is also the assumption of this researcher that there is no current protocol established for analyzing student work in a study team setting.

Significance of the Study

The purpose of this preexperimental, action research study was to determine the impact of collaborative analysis of student work on student achievement among third graders in the area of writing at an elementary school in rural Southeast Georgia. This study also intended to determine teachers' readiness to participate in a system of analyzing student work on teaching and learning among third grade teachers and students in the area of writing. The results of this study will add to the limited body of knowledge related to the impact of collaborative analysis of student work on student achievement among third grade students in the area of writing. The results of this study will also be important for administrators, curriculum coordinators, and teachers at this school site who are involved in the planning of professional development activities for teachers and

those who are interested in increasing student achievement among third graders in the area of writing.

Summary

The purpose of this preexperimental, action research study was to determine the impact of collaborative analysis of student work on student achievement in the area of writing. The rationale for this study lies in bringing teachers out of isolation and into a collaborative environment to ensure optimum learning for third grade students in the area of writing. Teachers must accept responsibility for their own learning and work together to employ strategies that promote learning for all students.

Section 1 of this study included an introduction and background. The statement of the problem and nature of the study were also included. The purpose of the study, conceptual framework, and significance of the study were discussed. Delimitations, limitations, and scope of the study concluded section 1.

The remainder of this study will include four sections. Section 2 will consist of a review of relevant literature as it pertains to professional development and the achievement of third grade students in the area of writing. Section 3 will outline the methodology used to conduct this quantitative study, as well as substantiate the selected methodology. In addition, the specifications for selecting participants and data collection and analysis will be discussed. Section 4 will serve to present the data and its analysis, and section 5 will complete the paper with an interpretation of the findings. Implications for social change within the professional education community and recommendations for further research will also be presented in the final section.

SECTION 2: REVIEW OF LITERATURE

Introduction

The purpose of this section is to present a survey of the literature related to PLCs, factors that influence the success of PLCs, and the role of collaborative analysis of student work in professional learning and student achievement.

Professional Learning Communities

Teachers in schools throughout the United States are participating in PLCs. According to DuFour et al. (2005), student learning, collaborative culture, and focus on results are three core principles that should serve as the foundation for PLCs (p. 32). “Review of a teacher’s practice and behavior by colleagues should be the norm” (Hord, 2004, p. 11). The establishment of a PLC is only an initial stepping-stone on the journey to progress and real change. Further development is necessary to ensure the success of a PLC. Establishing PLCs “requires a deep cultural change within the school” (Honowar, 2008, p. 25). Trusting relationships among teachers is critical to the effectiveness of a PLC. “Teacher learning communities, such as professional networks, critical friends groups, study groups, and teacher research collaboratives, provide settings for teachers to learn and build knowledge together” (Wood, 2007, p. 284). Members of the PLC must collaborate to set goals, monitor progress, and reflect on teaching and learning.

According to Costa and Kallick (2004), PLCs should promote a learning environment that consistently includes the examination of knowledge and reflection on practice to improve and ensure student learning. Collaborative work and discussions

among teachers, a focus on teaching and learning, and the collection of data to evaluate progress are three components of professional learning communities (Giles & Hargreaves, 2006). Powerful change can begin to take place when the mission of a PLC centers on success for all students (DuFour et al., 2005). Blankstein (2004) noted that a learning community is successful when “enhancing student learning is the primary focus of team meetings, and best practices for enhancing their achievement drives decisions” (p. 50). DuFour et al. suggested three central questions that teachers should focus on within their PLC when planning for instruction, assessing student learning, and reflecting on practice. These questions include “What do we want each student to learn? How will we know when each student has learned it? How will we respond when a student experiences difficulty learning?” (DuFour et al., 2005, p. 33). Costa and Kallick (2004) contended that meaningful professional learning is “guided by a sense of the power of continuously learning and improving” (p. 72). PLCs provide teachers with an environment conducive to developing and strengthening their skills to improve teaching and student learning. Costa and Kallick (2004) suggested that learning communities must foster a sense of trust in order to ensure open collaboration among its participants. According to Langer et al. (2003) the environment must be “safe and nurture thoughtful practice” (p. 44). The members of the PLC share a collective goal, which is “to inquire about how you know what you know, as well as how you can better inform what you know through active engagement with one another” (Costa & Kallick, p. 71). Hord (2004) stated that shared values and vision are critical to the development of PLCs. “Meaningful collaboration arises out of genuine interests or purposes held in common”

(Hawley & Rollie, 2002, p. 48). In the learning community, professional development is an opportunity for teachers to grow and develop. These opportunities “set clear expectations that allow people to design their work in ways that enhance their capabilities” (Costa & Kallick, p. 72). Members of learning communities are continually learning and striving to improve their teaching practices to ensure optimum learning for all students.

A collaborative culture is also important to the success of PLCs. The National Staff Development Council (2006) reported that “Schools with strong cultures produce more teaching expertise and better decision making by more teachers more of the time” (p. 52). Barth (2006) stated, “The relationships among educators in a school define all relationships within that school’s culture” (p. 8). Eaker and Keating (2008) contended “the challenge of changing culture is the challenge of changing behavior, of persuading people to act in new ways” (p. 16). However, forced collaboration could lead to what Hargreaves (2003) referred to as “contrived congeniality” (p. 165). It is the responsibility of the school leader to set high expectations for teachers and students, model lifelong learning, and support teachers by providing ongoing, meaningful professional development opportunities. “High leadership capacity schools are learning communities that amplify leadership for all, learning for all, success for all” (Lambert, 2005, p. 40). Leaders must be willing to take action. “Deep understanding and commitment follow action: they do not precede it” (DuFour, 2003, p. 77). In a collaborative culture, teachers are continually working together to improve teaching and learning (National Staff Development Council, 2006, p. 52).

As part of a study funded by the National Science Foundation, researchers at SRI International, Michigan State University, and Pennsylvania State University designed a study to identify patterns of collaboration and sharing of expertise among teachers that led to changes in practice (Penuel & Riel, 2007, p. 612). The study focused on 23 schools in California that were implementing school wide reform efforts. The findings of this study supported collaboration among teachers and noted that time is a critical factor that can hinder progress. A matrixed structure of collaboration was found to be the most successful. This structure provides teachers time to meet with teachers in their own grade level, as well as participate in meetings with colleagues across grade levels. Additional findings indicate the importance of ongoing learning for teachers and the importance of allowing time for in depth discussions related to teaching philosophies and strategies in the learning community setting. (Penuel & Riel, 2007)

“PLCs judge their effectiveness on the basis of results” (DuFour et al., 2005, p. 39). Teachers work together to evaluate teaching strategies and student outcomes to ensure that high levels of learning are taking place in classrooms throughout the school. DuFour (2007) stated “staff must focus must be on learning rather than teaching, work collaboratively on matters related to learning, and hold itself accountable for the kind of results that fuel continual improvement” (p. 7). Weinbaum et al. (2004) proposed three critical questions that should be answered by members of professional communities when monitoring progress and reflecting on practice. These questions include “Why do we do what we do? Why do we do what we do in the way that we do it? How might we do it better?” (Weinbaum et al., 2004, p. 148). Goal setting, progress monitoring, and

reflection is an ongoing cycle within a results-oriented PLC. Evaluating teaching strategies and analyzing student work are ways that members of PLCs can improve teaching and learning. “Data can be used first to determine what kinds of goals need to be established, then to determine whether a goal is achieved” (Blankstein, 2004, p. 152). DuFour et al. (2005) stated, “data will become a catalyst for improved teaching practice only if the teacher has a basis of comparison” (p. 40).

In a five-year study of 15 low-performing schools, Northwest Regional Educational Laboratories (2005) reported findings that suggested a link between data-driven decision making and student achievement. Teacher participants worked in PLCs to make decisions about teaching and learning based on data collected by the evaluators. Similar results were revealed among ninth graders at one high school. At the end of the 2004-2005 school year less than half of the students working at or below grade level in math were promoted. The following year 83 percent of those students were promoted. The increased promotion rate was attributed to teamwork among teachers whose goal was to increase student achievement in mathematics. (Horn, 2008)

Student learning, school culture, and focus on results are central themes that are woven throughout the literature related to PLCs. However, much of the research related to PLCs and their impact on student achievement has been conducted at the middle school level and above. There is a need to study the impact of PLCs on teacher and student learning at the elementary school level.

Collaboration

Friend and Cook (2007) defined collaboration as “a style for direct interaction between at least two co-equal parties voluntarily engaged in shared decision making as they work toward a common goal” (p. 7). Collaboration requires that teachers set mutual goals, hold themselves accountable for meeting those goals, and reflect on the outcomes of their decisions. Collaboration supports the PLC concept which is “specifically designed to develop the collective capacity of a staff to work together to achieve the fundamental purpose of the school: high levels of learning for all students” (DuFour et al., 2005, p. 18). Collaboration can be easily mistaken for congeniality. DuFour et al. (2005) stated, “Collaboration that characterizes PLCs is a systematic process in which teachers work together to analyze and improve their classroom practice” (p. 36). Collaboration cannot take place when teachers work in isolation.

DuFour et al. (2005) contended that teachers must work in teams to ensure successful collaboration. Team members must “make public what has traditionally been private; goals, strategies, materials, pacing, questions, concerns, and results” (DuFour et al., 2005, p. 38). Friend and Cook (2007) defined team as

a set of interdependent individuals with unique skills and perspectives who interact directly to achieve their mutual goal of providing students with effective educational programs and services. (p. 60)

Teachers who participate in collaboration in a study team setting have the opportunity to set collective goals, monitor progress, and reflect on results. Dearman and Alber (2005) suggested that teacher participation in study teams offers teachers the opportunity to improve teaching and learning. According to Aubusson, Steele, Dinham, and Brady

(2007), such practice among teachers “has the potential to provide an appropriate and sustainable way of building the capacity of schools to improve practice” (p. 135).

Teamwork in the form of collaboration provides teachers with the opportunity to explore a variety of teaching strategies to ensure student learning.

Several factors challenge the success of collaboration among teachers. One of the biggest challenges is teachers’ resistance to change. “Resistance is a defense mechanism that prevents individuals from undertaking change that is too risky for their sense of safety” (Friend & Cooke, 2007, p. 304). Administrators must be prepared to face resistance by building shared knowledge among teachers and involving teachers in the process of change (DuFour et al., 2005). Involving teachers in the process of change strengthens the collective capacity of the PLC. According to DuFour et al. (2005), when leaders build shared knowledge of best practice and give everyone on the staff access to the same information, they increase the likelihood that the staff will arrive at the same conclusions regarding the benefits of acting in new ways (p. 236).

Time constraints challenge the success of collaboration. Teachers face many time consuming tasks throughout the day. Langer et al. (2003) stated, “Powerful learning requires sustained time” (p. 164). Teachers need time to “co-construct a vision of high quality teaching and learning, to generate a common goal, or to collect and analyze data” (Nelson & Slavit, 2008, p. 99). Schools must be creative and flexible when scheduling time for teachers to collaborate. Scheduling common planning times or using staff meetings as a time for learning teams to meet are ways teachers can meet the challenge of time and incorporate collaboration into their work.

Internal competition is another critical factor that may affect the success of collaboration. DuFour et al. (2005) suggested that a “sharing culture” must exist for teachers to learn from one another in a collaborative environment (p. 236). Barth (2006) contended that such collegial relationships among teachers are the most difficult to develop (p. 10). In order to create such collegial culture, educators must be willing to talk openly with one another about practice, share personal knowledge, observe one another, and support one another (p. 10). Teachers must be willing to share their personal knowledge and learn from others to ensure effective collaboration. “Conflict is an element of the relational dynamics of a collaborative relationship that plays an instrumental role in collaborative learning and knowledge construction” (Creamer, 2004 p. 23). The work of a PLC should not focus solely on technical efforts. Servage (2008) stated that the “social and emotional dimensions of working in groups” must be addressed to ensure successful collaboration in a PLC setting (p. 71).

In an eight-year study of collaboration in professional development schools, results revealed negative attitudes among participants can hinder the collaboration (Rice, 2002). “Leaders must start by shifting their focus from evaluating and supervising individuals to developing the capacity of both teams and the entire school to work collaboratively” (DuFour et al., 2005, p. 239). Setting common goals and working together to achieve those goals diminishes the internal competition that may exist among members of a collaborative group. According to Gajda and Kaliba (2008), “in highperforming teams, collaboration will result in changes in pedagogical practice that

entail a level of intellectual sophistication” (p. 145). Collaboration has the potential of relieving the overwhelming pressure that teachers face to ensure success for all students.

Time is a critical factor that influences the effectiveness of collaboration among teachers in a study team setting. Costa and Kallick (2004) suggest the importance of using a protocol to “guide discussions in order to make certain that the discussion remains focused” (p. 72). “The real power of the protocol is that it provides a safe place for collaboration around practices” (Costa & Kallick, 2004, p. 73). Protocols provide teachers with the structure necessary for setting meaningful goals, monitoring progress, and reflecting on their practices. Different types of protocols serve different purposes. Therefore, it is important for study teams to identify the protocol that best suits their needs.

Protocols provide a structure for collaboration that ensures common goals, effective use of time, and reflection on practices (Langer et al., 2003). Teachers must choose a protocol that is relevant to their needs. The power of the protocol is that it promotes a trusting environment where teachers feel comfortable sharing and contributing to collaborative discussions (Costa & Kallick, 2004). The implementation of such a system provides teachers with the opportunity to set collective goals, monitor progress, and reflect on practices. There is evidence among the research that the implementation of protocols into the study team setting can be influential in promoting change and improving teaching and learning (Langer et al., 2003).

Collaboration among teachers in a study team setting provides teachers with the opportunity to engage in meaningful professional development. Teachers work

collectively to identify areas of strength and weakness in teaching and learning. Hawley and Rollie (2002) suggest that teachers are more likely to participate in collaboration when they share the same goals or problems. “Study teams, however, can provide teachers with opportunities to improve their practice by sharing and discussing their reflections, knowledge, and solutions” (Dearman & Alber, 2005, p. 637). Researchers agree that the primary goal of collaboration among teachers is to ensure optimum learning for students (Costa & Kallick, 2004; Dearman & Alber, 2005; Flowers et al., (2005).

Professional Development

In 2000, the National Center for Education Statistics (NCES) conducted a survey related to the issue of teacher preparation and qualifications in the area of professional development. Forty-five percent of teachers reported that they regularly engaged in collaboration. These same teachers reported that this activity improved their classroom teaching (NCES, 2001). All of the teachers who participated in the survey identified time as a critical factor that influences the effectiveness of collaboration. Embedding time for collaboration between teachers into the routine schedule and providing structure to ensure focused learning are critical to the effectiveness of the learning community (DuFour et al., 2005). The job-embedded nature of such professional development allows teachers time to learn new teaching strategies, collectively solve problems, and provide ongoing support for their peers (Roy & Hord, 2004). In a report by the U.S. Department of Education (2006), the Schools and Staffing Survey administered in 2000 revealed that 92% of schools provided time for professional development during the regular contract

hours. More than half of the teachers who participated in the professional development activities reported that the activities had been beneficial.

Meaningful professional development provides teachers with the opportunity to set goals, monitor progress, and reflect on practice and student learning (Hawley & Rollie, 2004, p. 94). Costa and Kallick (2004) noted that these elements of professional learning have a positive impact on the professional development of teachers and ensure optimum learning for students. “This exchange of ideas and experiences places a community of teachers in charge of their own learning” (Hawley & Rollie, 2002, p. 80). Costa and Kallick suggested, “Significant change in the behavior of people in a learning community will deeply affect the beliefs and attitudes of that community” (p. 95). Teacher participation in relevant professional development can have a positive influence on teaching and learning.

The changing face of professional development provides opportunities for teachers to participate in the processes of research and inquiry and to talk about teaching and learning with their peers (Darling-Hammond & McLaughlin, 1998). Colton and Spark-Langer (1993) referred to teachers as “reflective decision makers” who are able to “analyze a situation, set goals, plan and monitor actions, evaluate results, and reflect on their own professional thinking” (p. 45). Teachers play the roles of teacher and learner in professional development thus creating

new images of what, when, and how teachers learn, and these new images require a corresponding shift from policies that seek to control or direct the work of teachers to strategies intended to develop schools' and teachers' capacity to be responsible for student learning (p. 597).

DuFour (2004) suggested that successful professional development is more than just the acquisition of new knowledge and skills. Participation in professional development should bring about changes in practice among teachers.

According to Costa and Kallick (2004), teachers need to have some control over what they are learning in the professional development setting. “If teachers have sufficient say over decisions surrounding those activities for which they are responsible, they will be more able to do the job properly” (Ingersoll, 2007, p. 23). DuFour et al. (2005) suggested that teachers learn best from their colleagues instead of outside sources (p. 141). School-based professional development allows teachers to focus on identified areas of weakness, make a plan to address those areas, monitor progress, and reflect on teaching practices and student learning. In a study conducted by Kennedy (2006), findings suggested that, “teaching quality resides in the smallest details of practice” (p. 19). The results of this study support the notion that professional development should be relevant to the needs of teachers. “Teachers learn by doing, reading, and reflecting (just as students do); by collaborating with other teachers; by looking closely at students and their work; and by sharing what they see” (Darling-Hammond & McLaughlin, 1995, p. 560). Therefore, professional development activities should be relevant to the needs of teachers and students, embedded in the daily work of teachers, and provide teachers with time for progress monitoring and reflection on professional practice.

As part of a six-year study conducted by VanDeWeghe and Varney (2006), 15 teachers at a middle school in Denver, Colorado participated in a school-based study group focusing on classroom talk. This particular study group came about out of a need

for teachers to direct their own professional learning. As participants in mandated professional development led by outside experts, the members of this group had a desire to connect their professional development with classroom practice (VanDeWeghe & Varney, 2006). Over the period of six years, the purpose of the study teams has changed according to the needs of the participants. VanDeWeghe and Varney attributed the successful implementation of study teams at this particular middle school to four key principles of professional development. These principles include:

1. A learning community encourages individual development.
2. Inquiry motivates change.
3. Expertise lies within.
4. Reflective practice is key. (p. 285)

The face of professional development is changing as teachers begin to take control of their own learning. By participating in meaningful professional development, educators are able to set meaningful goals, check progress over time, and participate in reflection of their practice. Professional development is becoming a powerful source of progress and change in the realm of education to increase teacher learning and student achievement.

Collaborative Analysis of Student Learning

Collaborative Analysis of Student Learning (CASL) is a "teacher development system that helps educators develop a culture for collaborative inquiry and gain a deeper understanding of the link between their instruction and their students' learning around a standards-based target learning area" (Langer et al., 2003, p. 3). The process provides

teachers with the opportunity to identify areas of strength and weakness in student learning and instructional practices. Teachers use this information to make choices about professional development opportunities relative to the results of the analysis. This system takes place in a study team setting and follows specific norms and protocols designed to keep the team focused.

CASL provides teachers with a protocol for setting goals for teaching and learning, monitoring progress, and reflective analysis of teaching and learning. Langer and Colton (2005) suggested that reflective teachers follow a cognitive process in decision making by drawing on prior experiences, making a plan, taking action, and evaluating outcomes. CASL is a cyclic process in which teachers are continuously making adjustments to their teaching based on the analysis of student learning. This framework for analyzing student work aligns with what Hord (2004) refers to as “shared decision-making” (p. 47). CASL encourages teachers to make meaningful contributions in the making decisions related to instruction and professional development. The CASL system also promotes trust building among participants. Costa and Kallick (2004) suggested that successful learning communities promote open dialogue and build trust among its members (p. 72).

The characteristics of CASL include:

1. Student work samples are the basis for evaluation of progress.
2. Teachers collaborate to monitor student progress and adjust teaching strategies.
3. Framework implements a systematic cycle of analysis.

4. Written documentation provides evidence of student and teacher learning. (Langer, et al., 2003).

Collaborative analysis of student learning benefits students and teachers. Student learning is improved and expectations are clear. In a study conducted by Langer et al. (2003), 90% of the students studied showed evidence of improved learning. Collaborative analysis of student work provides teachers with the opportunity to “set clear goals for teaching and learning, monitor student progress over time, and develop plans to increase student achievement and establish a learning community” (Dearman & Alber, 2005, p. 636). Focused teaching and learning is more likely to take place when the desired outcomes are clear and a plan for achieving those outcomes is in place.

Georgia Writing Assessment

The implementation of the Georgia Performance Standards called for an evaluation of the writing assessments in grades 3, 5, 8, and 11 by committees of Georgia educators and redeveloped to align with the new performance standards. The test development process included: (a) defining knowledge and skills to be measured; (b) identifying student expectations; (c) specifying test format and questions; (d) writing, reviewing, and refining writing prompts for field testing; and (e) setting performance standards for students (Georgia’s Testing Program, 2007).

The writing assessment for grade three consists of teacher evaluation of student writing in the genres of narrative, informative, persuasive, and response to literature. The scoring system is analytic, meaning, “that more than one feature or domain of a paper is evaluated” (Georgia’s Testing Program, 2007). Teachers use rubrics to score student

writing in the domains of ideas, organization, style, and conventions. Student performance levels in the area of writing include *Does Not Meet*, *Meets*, and *Exceeds*. A Summary Report form indicating each student's performance level in each domain and genre is submitted to the Georgia State Department of Education. Individual Student Report forms go home to parents and a copy of this report is placed in the student's permanent record.

The implementation of the new Georgia Performance Standards in the area of writing, a change in testing procedures, and new criteria for evaluating student work is compelling educators to examine their current teaching strategies in the area of writing. These new standards in writing are also opening the doors for teachers to collaborate in planning lessons, monitoring student progress, and analyzing student work. Georgia Performance Standards are holding students to a higher level of learning and in turn, holding teachers to a higher standard of classroom instruction.

The Standards-Based Movement

The rationale for the standards-based initiative that began in the early 1990s was to "define what students should know and be able to do" (Lefkowitz & Miller, 2006, p. 403). While there is still much debate about the significance of such a movement on teaching and learning, this initiative has brought changes in the way student learning is measured. According to Resnick (2006), the success or failure of standards-based education is being largely measured by student performance on standardized tests. The results of these assessments are used to monitor progress and guide instruction. This has brought about changes in the instructional programs that schools employ and the

instructional practices that teachers implement to ensure instruction focuses on the standards.

The premise of standards-based education is that school districts have “one educational program for all learners” (Matlock, Fielder, & Walsh, 2001, p. 69). Therefore, all students are held to the same set of standards. Such high expectations pose a challenge for educators to ensure that all students learn. Schools are rising to meet this challenge by developing clear learning goals for students, organizing meaningful professional development for teachers, and implementing practices to monitor student progress. Teachers are making data-driven decisions based on state assessments to ensure quality teaching and learning are taking place.

Bessemer Elementary School in Pueblo, Colorado reported a 42% increase in writing scores from 1997 to 1998. Teachers at this school attributed student achievement to weekly team meetings. During these meetings, teachers analyzed assessment data to determine areas of weakness among students. These problems were addressed through meaningful professional development and collaboration among teachers. The teachers at this school also closely monitored student progress (Schmoker & Marzano, 1999).

Thomas (2000) suggested steps to ensure successful implementation of the standards. The first step involves knowing the standards and understanding what students are expected know and do. Secondly, instructional programs should be aligned with the standards. A lack of coherence in instructional programming can weaken improvement efforts (Schmoker & Marzano, 1999). It is also important to ensure that instructional programs and materials are aligned with the standards. Professional development for

teachers should be centered on the standards and involve teachers in improving standards-based instruction. Seed (2008) suggested five conditions for improving teaching including collaboration, empowerment, reflection, time, and training. Lastly, teachers should familiarize themselves with the state assessments. This is not to insinuate that teachers should teach to those tests, but rather to ensure that expected outcomes are clear.

While the debate related to standards-based education will surely continue, research suggests that the implementation of standards has had a positive impact on teaching and learning (Lefkowitz & Miller, 2006; Matlock et al., 2001; Schmoker & Marzano, 1999). “It can be an effective model when the accountability system is relatively new, when there is room to improve” (Gilmore, 2008, p. 31). Teachers are collaborating to set goals, monitor progress, and make plans toward improving instruction and increasing learning among student. The standards-based movement has forced educators to seek out the best practices for teaching and learning.

Best Practices for Teaching Writing

In this age of accountability, teachers in classrooms across the country are implementing best practices across the curriculum to ensure that students are meeting both the federal and state standards. Zemelman, Daniels, and Hyde (1998) used the phrase “best practice” to “describe solid, reputable, state-of-the-art work in a field” (p. viii). Writing is one area of the curriculum where teachers are working to pursue best practice in order to provide students with quality instruction and a strong foundation for the development of writing skills. In a report by the Florida Department of Education

(2005), an increase in student scores on state writing tests and student understanding of their own learning were the result of the incorporation of best practices in the area of writing.

According to a report by the Writing Study Group of the National Council of Teachers of English (NCTE) Executive Committee (2004), “the nature of writing” has changed due to advances in technology. The change can be attributed to student exposure to a wider variety of opportunities for writing, as well as a wider variety of readers. It is important to view writing as a process. Effective teaching is critical to the development of good writers.

The NCTE Executive Committee (2004) suggests several principles to guide best practice in the teaching of writing. These principles include:

1. Everyone has the capacity to write, writing can be taught, and teachers can help students become better writers.
2. People learn to write by writing.
3. Writing is a process.
4. Writing is a tool for thinking.
5. Writing grows out of many different purposes.
6. Conventions of finished and edited texts are important to readers and therefore to writers.
7. Writing and reading are related.
8. Writing has a complex relationship to talk.
9. Literate practices are embedded in complicated social relationships.

10. Composing occurs in different modalities and technologies.

11. Assessment of writing involves complex, informed, human judgment.

It is the responsibility of teachers to ensure that these principles are incorporated into setting goals for student writing, planning and instruction, and assessment of writing. Only when teachers adjust their strategies for teaching to adhere to these principles of best practice will evidence of improvement in student writing exist.

Kern, Andre, Schilke, Barton, and McGuire (2003) noted that the teaching of writing can be a difficult task and hold to the belief that “less is more” when it comes to best practices and the teaching of writing (p. 816). Kern et al. (2003) suggested five guiding principles for writing instruction to teach writing in a realistic classroom environment and prepare students for state writing assessments. These principles coincide with those set forth by the NCTE Executive Committee and include:

1. All students have something to communicate.
2. Students must be active participants in the writing classroom.
3. Students should receive direct instruction on a variety of writing styles.
4. Literature provides students with real purposes for writing.
5. Student writing is enhanced when teachers write along with their students.

“With such an approach, the standards do not become an additional burden; rather, they are embodied in good teaching, the best practice, and the wisdom of our profession,” (p. 825). The focus remains on effective teaching practices and student learning.

Summary and Implications for Social Change

The literature related to PLCs and the professional development of teachers reveals the importance of school culture, willingness to collaborate, and focus on student learning. These attributes are critical to the successful implementation of meaningful professional development opportunities. Educators play an important role in their own learning and have the opportunity to affect student learning through collaboration and analysis of student work. Collaborative systems of analyzing student work, such as CASL, have the power to change the way teachers teach and students learn.

SECTION 3:
METHODOLOGY

Introduction

The purpose of this pre-experimental, action research study was to determine the impact of collaborative analysis of student work on student achievement among third graders in the area of writing. (Walden University IRB approval #04-16-08-0307485) The purpose of this chapter is to delineate the methodology used to carry out this one-group pretest-posttest design.

This pre-experimental design was chosen to carry out the study as the researcher intended to determine the impact of collaborative analysis of student work on student achievement among third graders in the area of writing by including a pretest measure followed by a treatment and a posttest for a single group (Creswell, 2003). The SDLRS (Guglielmino, 1977) provided quantitative data on the readiness of teacher participants to take part in collaborative analysis of student work. The pretest phase of this pre-experimental, action research study consisted of the initial collection of writing samples of third grade students. These initial samples served as quantitative baseline data on students' achievement in the area of writing. The posttest phase of this study consisted of the collection of writing samples from the same third grade students. These samples were compared and conclusions drawn about the impact of collaborative analysis of student work on student achievement in the area of writing.

Research Design and Approach

Action research in the form of a pre-experimental design was used to study the impact of collaborative analysis of student work on student achievement among third graders in the area of writing. Mills (2003) defined action research as “any systematic inquiry conducted by teacher researchers...in the teaching/learning environment to gather information about how...they teach, and how well their students learn” (p. 5). Since the goal of the study was to determine the impact of professional development on teacher practice and subsequently the impact of that practice on student achievement in writing, action research was a logical choice.

The action research followed a one-group pretest-posttest design. This particular design was chosen because the quantitative study consists of the collection of student work samples before and after teacher participation in professional development related to collaborative analysis of student work. The one –group pretest-posttest design has the following notation:

Group A O₁ ----- X ----- O₂

A comparison was made to determine the impact of the professional development on student achievement among third graders in the area of writing.

Data collection occurred in six third grade classrooms at an elementary school in rural Southeast Georgia. The initial data collection included the collection of writing samples from each third grade student participant. These samples served as baseline data on student achievement in the area of writing. Writing samples are collected routinely throughout the school year. Therefore, student participants were accustomed to this

process. Third grade teachers participated in professional development related to collaborative analysis of student work. The teachers met together in a collaborative setting to analyze student work samples and implement effective teaching strategies in the area of writing for a six-week period. Another writing sample was collected from student participants following the implementation of collaborative analysis of student work. A comparative analysis and interpretation follows.

Setting and Sample

This pre-experimental, action research study was conducted at an elementary school in a coastal county in rural Southeast Georgia. There were 120 third grade students enrolled at this school and seven third grade classrooms. Writing scores for third grade students for the first nine weeks grading period indicated that 50 students did not meet the writing standards. Student participants for this study were chosen through convenience sampling. “A convenience sample is possible because the investigator must use naturally formed groups” (Creswell, 2003, p. 164). In this study, the sample was formed by the number of third grade students who did not meet standards in the area of writing during the first nine week’s grading period.

This study was designed to determine the impact of change in teacher practice on student achievement. After gaining permission from the gatekeepers, the building principal and the local school system superintendent, teachers were invited to participate in the study. Six third grade teachers participated in this action research study. These teachers were chosen because of their willingness to participate. The teaching experience of these teacher participants ranges from four to 20 years. Convenience sampling was

utilized for the study because the teacher participants were a naturally formed group at the school that the researcher wished to study (Creswell, 2003). The convenience sample may prove to be too small since the purpose of research on a sample is to generalize results back to the population (Gravetter & Wallnau, 2005). However, the goals of the researcher included “gaining insight, developing reflective practice, effecting positive changes in the school environment...and improving student outcomes and the lives of those involved” (Mills, 2003, p. 5). This study was designed specifically to determine the impact of collaborative analysis of student work on student achievement among third graders in the area of writing in a rural South Georgia school.

Role of the Researcher

The researcher’s role in this pre-experimental, action research study was that of teacher researcher. The researcher is a third grade teacher in an EIP classroom and serves as the grade level chairperson. The researcher administered the SDLRS to the teacher participants and analyzed the results. She also designed, scheduled, and implemented the teacher training related to collaborative analysis of student work. Finally, the researcher was responsible for collecting student work samples and conducting a comparative analysis to determine student progress in the area of writing.

The role of the researcher was explained to participants. It was made clear that all information collected is for the purpose of the research study, all participants will remain anonymous, and data collected will remain confidential. Each teacher participant involved was offered a copy of the completed study.

Instrumentation and Materials

Self-Directed Learning Readiness Scale. The initial phase of data collection for this pre-experimental, action research study consisted of the collection of data pertaining to the teacher participants' readiness for self-directed learning. The Self-directed Learning Readiness Scale (Guglielmino, 1977), a self-report questionnaire consisting of 58 Likert-type questions, was used to measure the degree of readiness for self-directed learning among teacher participants. The questionnaire contains person's attitudes, skills, and characteristics that encompass that individual's readiness to manage his or her own learning.

Scores from the SDLRS were used to establish individual teacher's readiness for self-directed learning. Readiness levels include low, below average, average, above average, and high. The average score for adults completing the questionnaire was 214, with a standard deviation of 25.59. Individuals with high self-directed learning skills have a tendency to perform better in jobs that call for high levels of problem solving ability, creativity, and change.

Georgia Writing Assessment. The Georgia Writing Assessment is designed to assess student writing in four domains: ideas, organization, style, and conventions. Therefore, the scoring system for this assessment is analytic. Teachers use representative samples of student writing to determine the performance levels of students in each domain. Scoring rubrics are provided by the state of Georgia to ensure accurate scoring of the student writing samples.

Teacher participants in this study were asked to collect a narrative writing sample from each student participant and score the individual samples based on the criteria outlined in the scoring rubric. Students were ranked in one of three performance levels including Does Not Meet the Standard, Meets the Standard, or Exceeds the Standard. These samples and rubrics were used as baseline data for this study.

Data Analysis

Data were evaluated in light of the research question: What is the impact of collaborative analysis of student work on student achievement among third graders in the area of writing at a rural South Georgia school? Hypothesis testing determined the acceptance or rejection of the null hypothesis:

Null 1: Collaborative analysis of student work does not have a positive impact on student achievement among third graders in the area of writing at a rural South Georgia school.

Alt 1: Collaborative analysis of student work has a positive impact on student achievement among third graders in the area of writing at a rural South Georgia school.

The quantitative data obtained from the initial administration of the SDLRS was used to determine the self-directed learning readiness of the teacher participants. Following the collection of this data, the teachers collected student writing samples to serve as baseline data and participated in professional development designed to help teachers conduct collaborative analysis of student work. The training was delivered by the researcher in the researcher's classroom. Following the training, teachers met together

weekly to share student writing samples and implement strategies in their classrooms for a period of 6 weeks.

After this period, the teachers collected another narrative writing sample from each student participant and scored the individual samples based on the criteria outlined in the state scoring rubric. Again, students were ranked in one of three performance levels. A comparative analysis was conducted by the researcher, using a repeated-measures *t* test to determine the impact of collaborative analysis of student work on student achievement among third graders in the area of writing.

A repeated-measures *t* test was used to conduct the analysis of the data. A single sample of individuals was measured more than once on the same dependent variable and the same participants were used in all treatment conditions. This design is effective when studying learning, development, or other changes that take place over time. (Gravetter & Wallnau, 2005) “The primary advantage of a repeated-measures design is that it reduces or eliminates problems caused by individual differences” (2005, p. 287). These differences may include age, IQ, gender, and personality.

Reliability

Mills (2003) defines reliability “as the consistency with which our data measures what we are attempting to measure over time” (p. 87). The reliability of this pre-experimental, action research study was maintained through the use of reliable data collection tools, such as the Self-directed Learning Readiness Scale. Guglielmino and Guglielmino (1991) report a reliability coefficient of .94. Frequent use of this instrument to determine self-directed learning readiness also supports the reliability of this

questionnaire. This instrument was not modified for this study. “When one modifies an instrument or combines instruments in a study, the original validity and reliability may not hold for the new instrument” (Creswell, 2003, p. 158). The analytic scoring system for the Georgia Writing Assessment is subject to teacher interpretation. Therefore, the researcher worked together with the teacher participants to assign numeric values to the student performance levels for the purpose of quantitative data analysis.

Validity

“Validity refers to the degree to which scientific observations actually measure or record what they purport to measure” (Pelto & Pelto, 1978, p. 33). The purpose of this study was to determine the impact of collaborative analysis of student work on student achievement among third graders in the area of writing. According to Mills (2003), “outcome validity requires that the action emerging from a particular study leads to the successful resolution of the problem that was being studied” (p. 84). Vockell and Asher (1996) stated, “action research refers to the practical application of the scientific method or other forms of disciplined inquiry to the process of dealing with everyday problems” (p. 10). “The power of action research is not in its generalizability. It is in the relevance of the findings to the researcher or the audience of the researcher” (Mills, p. 90). The findings of this study may not be generalizable to a wider population.

Protection of Participant Rights

The quantitative data obtained through this preexperimental, action research study will remain confidential. It does not include names of participants. A copy of the results

of the study was offered to all involved and will be a matter of public record upon its completion.

SECTION 4:

PRESENTATION AND ANALYSIS OF DATA

This study was designed to examine a problem at an elementary school in rural southeast Georgia. There were third grade students at this elementary school who were failing to meet the state standards in the area of writing during the first nine weeks of the 2007-2008 school year. Limited research is available on the impact of collaborative analysis of student work at the elementary level. The primary purpose of this pre-experimental, action research study was to determine the impact of collaborative analysis of student work on student achievement among third graders in the area of writing at a rural elementary school. A secondary intention of this study was to explore the level of teacher readiness to participate in self-directed activities related to collaboration and the analysis of student work. This chapter provides an analysis of the data.

Description of Sample

The population for this study included six third grade teachers who were willing to participate in the collaborative analysis of student work in the area of writing. The student population consisted of 120 third grade students enrolled at a rural elementary school in Southeast Georgia. The student sample included 50 third grade students who did not meet the standard in writing for the first nine weeks grading period of the 2007-2008 school year. It should be noted that at the time this study was conducted, the fourth nine weeks grading period of the 2007-2008 school year, only three students remained in the does-not-meet category in writing. While a large number of students had improved and moved into the meets category, the purpose of this study was to determine the impact

of collaborative analysis on student work in the area of writing. Therefore, the indication of progress or lack of progress among those students in the meets category was determined.

Data Collection Among Teacher Participants

The initial phase of data collection for this action research study included the administration of the SDLRS to teacher participants. The administration of this learning preference assessment took place in the researcher's classroom. This phase of data collection was included as part of the learning team's regularly scheduled weekly meeting. Following the signing of the statement of consent form (See Appendix A), teachers received a copy of the SDLRS to complete. The questionnaire contained 58 Likert-type statements related to a person's attitudes, skills, and characteristics that encompass that individual's readiness to manage his or her own learning. Responses to each statement ranged from 1 *Almost never true of me* to 5 *Almost always true of me*. The self-scoring version of this assessment was used so that each teacher would be able to immediately interpret their own level of readiness to participate in self-directed learning activities based on the ranges indicated in the score interpretation section of the SDLRS booklet. Readiness levels include low, below average, average, above average, and high.

Teacher Characteristics

Table 1 presents the number and percentage of students who worked with each of the six teacher participants. Descriptive data such as age range, gender, and degree is included in Table 1.

Table 1

Frequency and Percentage of Students per Teacher and Descriptive Information per Teacher

Teacher	Students per teacher n (%)	Teacher age range	Degree held	Gender
Teacher 1	12 (24%)	25 – 35	Master's	Female
Teacher 2	8 (16%)	25 – 35	Master's	Female
Teacher 3	11 (22%)	25 – 35	Bachelor's	Female
Teacher 4	5 (10%)	25 – 35	Master's	Female
Teacher 5	12 (24%)	46 – 55	Master's	Female
Teacher 6	2 (4%)	46 – 55	Master's	Female

Analysis of Self-directed Learning Readiness Scale

The SDLRS was administered to teacher participants to determine the level of readiness of each teacher to participate in self-directed learning activities. Cronbach's alpha was used to analyze the reliability of the 58 items of the SDLRS collected from each of the six teacher participants. The alpha reliability across the 58 items was very high ($\alpha = .91$), indicating that the items showed good internal consistency (Cronbach, 1951).

Descriptive statistics for the SDLRS scores are presented in Table 2. The mean score ($M = 213$, $SD = 20.93$) was compared to the population mean of 214 found by Guglielmino (1977), and was not significantly different from the population mean, $t(5) = -0.12$, $p > .05$. This population mean is shown in Figure 1. Skewness and kurtosis for the

SDLRS scores for the current sample were also well within the acceptable range of -2 to +2, indicating that the scores conformed to a normal distribution. According to Micceri (1989), “both skew and kurtosis have to be in this range – if either one is outside it then the variable fails the normality test” (p. 158).

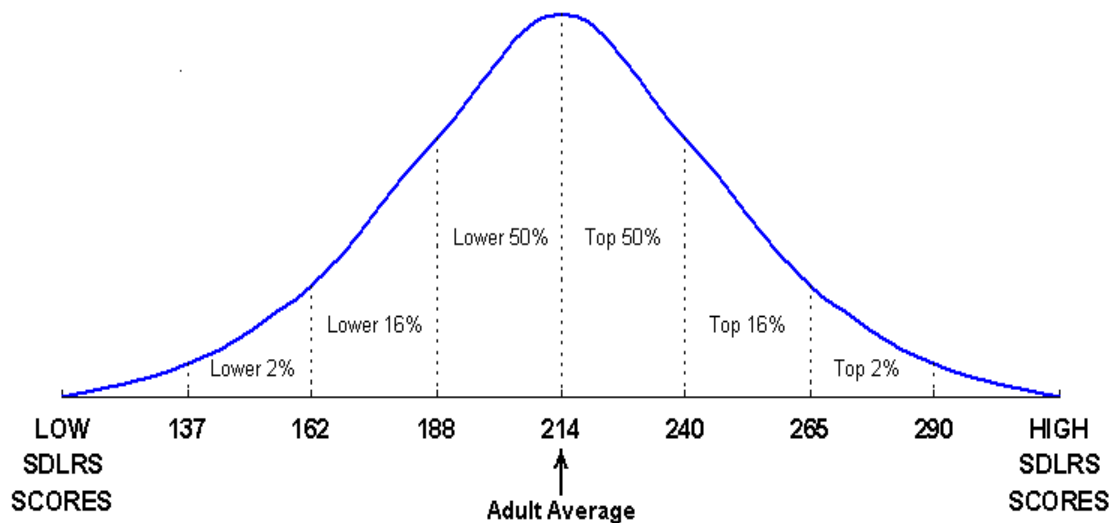
Table 2

Descriptive Statistics for Teacher SDLRS Scores and Student Writing Scores

	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Range</i>	<i>Skewness</i>	<i>Kurtosis</i>
Teachers						
SDLRS	6	213.00	20.92	182 – 238	-0.15	-0.56
Students						
Pretest	50	24.62	6.92	17 – 47	1.38	1.95
Posttest	50	26.64	5.64	17 – 38	-0.08	-0.82
Difference	50	2.02	6.54	-12 – 15	0.08	-0.65

Note. The difference scores were calculated by pretest scores from posttest scores such that positive numbers indicate an increase in scores.

Figure 1. Diagram of SDLRS score comparisons of other adults.



¹ Note. From Guglielmino, L. M. (1977). *Self-directed learning and readiness scale*. Reprinted with permission.

Teacher Training (CASL)

“Purpose refers to the reasons for the development of a collaborative effort”, (Mattessich, Murray-Close, & Monsey, 2004, p. 25). This researcher began the first of two training sessions by sharing the problem statement and the purpose of this pre-experimental, action research study with teacher participants. The initial 90-minute training took place in the researcher’s classroom on a Wednesday during a regularly scheduled learning team meeting. This training included an introduction to collaborative analysis of student work, benefits, culture building, and the five phases of CASL (See Appendix B). The researcher also gave instructions on the administration and collection of pretest writing samples to the teachers during this training. The training session concluded following a brief discussion pertaining to meeting schedule preferences among

the participants. A consensus was reached that the second training session would take place the following Wednesday during the regularly scheduled learning team meeting. The second training session was held in the researcher's classroom one week later. This 60-minute session included a review of the goals of collaborative analysis of student work and the development of group norms for further meetings. The target learning area of writing was reviewed, pretest administration and collection procedures outlined, and the rubric to be used for scoring student writing was discussed. An agenda for this training session is included in the appendix (See Appendix C). Following the training session, teachers administered the pretest writing assessment in their classrooms. This researcher was available to answer questions from the teachers before and after school, during daily planning time, and via email.

Collection of Student Work Samples

The collection of student work samples in the area of writing took place in each teacher's classroom. The pretest consisted of a narrative writing prompt that instructed students to write an imaginative story about a snowman. The students worked independently to write their stories without help from other students or the teacher. There was no time limit placed on the assignment. All of the third grade students in the six third grade classrooms participated in the writing assignment, however only work from those students who failed to meet the standard in writing during the first nine weeks grading period were used in this study.

Scoring Student Writing Samples

The pretest writing samples were scored by each teacher using the rubric developed by the state of Georgia as part of the Georgia Writing Assessment (See Appendix D). Teachers scored student pretest writing samples in four domains including ideas, organization, style, and conventions. Due to the subjective nature of the rubric, this researcher worked together with the teacher participants to assign numeric values to the student performance levels for the purpose of quantitative data analysis. Each component of the four domains were scored as does not meet standard received a score of 1, meets the standard received a 2, and exceeds standard received a 3. Table 2 includes the scale used to score and rank students in one of three performance levels does not meet the standard, meets the standard, or exceeds the standard.

Table 3

Georgia Writing Assessment Performance Levels and Scale

<u>Performance Level</u>	<u>Scale</u>
Does not meet the standard	0-18
Meets the standard	19-36
Exceeds the standard	37-54

Collaborative Analysis of Student Work

Teachers met in a collaborative setting for a minimum of 60 minutes a week over the next four weeks to analyze student writing samples. All meetings were held in the

researcher's classroom during grade level planning time or during regularly scheduled learning team meetings. This researcher served as the facilitator of these sessions to ensure that the meetings started on time, stayed focused, and allowed each teacher ample time to share. Numbers were assigned to student participants by the researcher to ensure anonymity. The researcher kept a master list of student names and numbers for the purposes of data analysis. This list was retained in a locked drawer of the filing cabinet in the researcher's home office. Teachers used the students' numbers instead of names when discussing student work.

During the collaborative analysis of student work sessions, each teacher was allowed 10 to 15 minutes to share individual writing samples with the other members of the group. The teachers pointed out individual strengths and weaknesses evident in students' writing, looked for recurring areas of weakness among the samples, and discussed possible teaching strategies to be implemented in the classroom to strengthen student writing. This researcher noted willingness among teachers to participate in discussions and to adjust teaching strategies in the area of writing during the collaborative sessions.

During the final week of data collection, teachers administered a posttest narrative writing prompt to all third grade students. The students were instructed to write an imaginative story about a butterfly. The teachers followed the same guidelines for administering and scoring these work samples as they did with the prettest. Again, only the scores of those students failing to meet the standard in writing during the first nine weeks grading period were used in this study. Teachers submitted a copy of the pre and

posttest writing samples and completed rubrics for each sample to this researcher for the purpose of data analysis. The teachers also met together one last time to reflect on the experience of collaborative analysis of student work and give a final report of student progress in the area of writing over the six-week period.

Analysis of Student Work Samples

Table 2 presents the number of students ($N = 50$), means (M), standard deviations (SD), and ranges for each of the test scores. “Difference” scores were calculated by subtracting pretest scores from posttest scores such that positive differences indicate improvement in test scores after the program and negative differences indicate a decline in test scores after the program. Table 3 indicates that the writing test scores increased 2.02 points on average ($SD = 6.54$) for the 50 students who were included in the study. The variation of student scores is evident by the rather large standard deviation (more than 6 points) and the wide range of scores. The largest decrease was 12 points and largest increase was 15 points.

Table 4 repeats these means and standard deviations for the 50 students who were measured on both the pretest and the posttest for the current study. Table 4 also presents the results of a paired t -test used to assess whether there was a significant increase from pretest to posttest for the writing scores.

Table 4

Paired t-test Comparing Pretest and Posttest Writing Scores

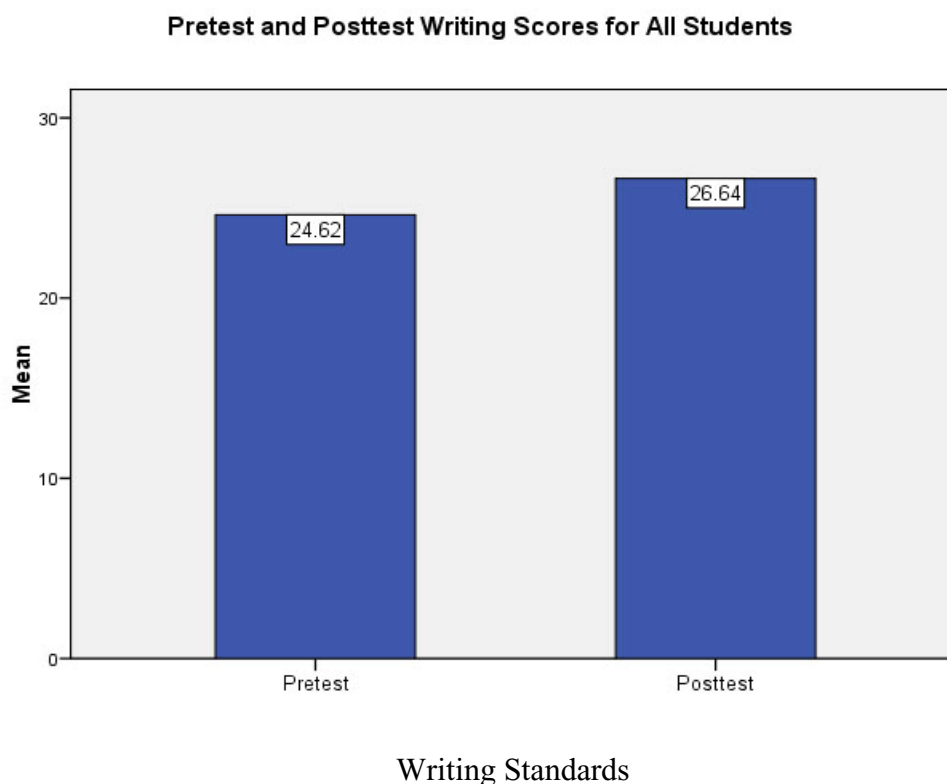
		Pretest	Posttest	
	<i>N</i>	<i>M (SD)</i>	<i>M (SD)</i>	<i>t(df)</i>
Writing test	50	24.62 (6.92)	26.64 (5.64)	2.19(49)*

* $p < .05$.

Test of Hypothesis

The results of the paired t -test from Table 4 was used to address the hypothesis that states collaborative analysis of student work will have a positive impact on student achievement among third graders in the area of writing at a rural South Georgia school. The results of the paired t -test indicate support for the alternative hypothesis. Writing scores showed a significant increase across students, $t(49) = 2.19, p < .05$. Figure 2 displays the pretest and posttest scores with a bar graph.

Figure 2. Mean pretest and posttest writing scores for all students.



Student pretest and posttest writing scores were grouped into three categories: (a) does not meet the standard, (b) meets the standard, and (c) exceeds the standard, according to the information presented in Table 3. Table 5 presents the number and percentage of students who fell into each of nine categories when considering their scores on both tests. For example, the majority of the students (32 students or 64% of the students) met the standards on both the pretest and posttest. Only 3 students (6%) failed to meet the standards on both the pretest and posttest. Inferential statistics such as the Chi-square test or McNemar test can be used to test for changes in categories from pretest

to posttest. Such tests were not used here because some of the cell sizes were too small to sustain the use of the test (Agresti, 1996).

Table 5

Frequencies and Percentages of Students Meeting Standards on Pretest and Posttest

	Does not meet (post)	Meets (post)	Exceeds (post)	Total (post)
Does not meet (pre)	3 (6%)	7 (14%)	0 (0%)	10 (20%)
Meets (pre)	5 (10%)	32 (64%)	0 (0%)	37 (74%)
Exceeds (pre)	0 (0%)	1 (2%)	2 (4%)	3 (6%)
Total (pre)	8 (16%)	40 (80%)	2 (4%)	50 (100%)

Limitations

One limitation of this preexperimental, action research study is the focus on one group of teachers and students in one grade level. The small sample size limits the generalizability of the findings to other populations in other grade levels and schools. This researcher utilized convenience sampling for this study. There were 52 students identified as failing to meet the standard in the area of writing during the first nine weeks grading period of the 2007-2008 school year. At the time this study was carried out, during the fourth nine weeks grading period of the 2007-2008 school year, two students had moved out of the school district. Therefore, the student sample for this study included 50 third grade students. One goal of action research is “improving student outcomes and the lives of those involved” (Mills, 2003, p. 5).

Another limitation of this study is that the researcher is a member of the third grade learning team and serves as the grade level chairperson for third grade at this elementary school that could have resulted in researcher bias. However, this researcher chose not to remove the bias, but to “identify them and monitor them as to how they may be shaping the collection and interpretation of data” (Merriam & Associates, 2002, p. 5). This researcher did facilitate the training and weekly meetings for the collaborative analysis of student work. However, the researcher’s role in the meetings was limited to assuring that meetings started and ended on time and followed the established protocol. Teacher participants were responsible for administering, scoring, and reporting the results of the pretest and posttest used in this study.

Summary of Results

This section presented the quantitative results of this pre-experimental, action research study. The results of the SDLRS indicated a mean score of 213, which specifies that the teacher participants in this study are likely to be successful in a more independent learning environment, but are not completely confident with identifying, planning, and implementing strategies to meet their own learning needs. The results of the paired *t*-test indicate support for the alternative hypothesis: Collaborative analysis of student work has a positive impact on student achievement among third graders in the area of writing at a rural South Georgia school. There was a significant increase in student writing scores. An interpretation of the findings, implications for social change, and recommendations for further action will be included in section 5.

SECTION 5:

SUMMARY, CONCLUSION, AND RECOMMENDATIONS

Overview

This preexperimental, action research study focused on the problem that writing scores for the first nine weeks of the 2007-2008 school year revealed that there were third grade students at an elementary school in rural South Georgia who were failing to meet the state standards in the area writing. The members of the third grade learning team identified a gap between the planning and implementation of effective teaching strategies and the analysis of student performance data in the area of writing. The six teacher participants completed the SDLRS to determine individual readiness to participate in self-directed learning activities. The teacher participants participated in training on the collaborative analysis of student work.

Pretest writing samples were collected from the 50 student participants and scored using the rubric provided as part of the Georgia Writing Assessment. Students were ranked in one of three performance levels including *Does Not Meet the Standard*, *Meets the Standard*, or *Exceeds the Standard*. Teacher participants met weekly in a collaborative setting to present student writing samples, discuss strengths and weaknesses in the samples, and share teaching strategies to improve student writing. At the end of the six-week period, teachers administered a posttest writing sample to the students. The rubric provided as part of the Georgia Writing Assessment was used to score these samples. A comparison was made using a repeated measures *t* test and the results were

interpreted based on these findings. This study was delimited to one grade level at one elementary school in rural southeast Georgia.

Interpretation of Findings

One research question was examined: What is the impact of collaborative analysis of student work on student achievement among third graders in the area of writing at a rural South Georgia school? As stated in section 4, the results of this study indicated a significant increase in student writing scores from pretest to posttest. A mean score of 213 on the SDLRS indicated that the teacher participants were at the average level of readiness for self-directed learning. While people with average SDLRS scores are not completely comfortable with managing their own learning needs, there is evidence of some degree of problem solving ability, creativity, and ability to accept change. A repeated measures t-test showed that the writing test scores increased 2.02 points on average ($SD = 6.54$) for the 50 students who were included in the study. The independent variable in this study, collaborative analysis of student work among third grade teachers in the area of writing had a positive impact on the dependent variable, student writing samples among third grade students. The results of this study support Knowles' theory of self-directed learning as it applies to adult learning and inquiry. The teachers in this action research study were active in their own learning through participation in professional development related to collaborative analysis of student work. Gable, Mostert, and Tonelson (2004) noted "evaluating collaborative processes and outcomes together addresses a pivotal question: Was the collaboration successful and how was this success (or lack thereof) assessed?" (p. 5). As previously stated, the results of the

repeated measures *t* test indicated a significant increase in student achievement among third graders in the area of writing. Based on this data, it is the conclusion of this researcher that the collaborative efforts of the teachers in this action research positively impacted student achievement among third graders in that area of writing at this elementary school in rural southeast Georgia.

Implications for Social Change

Implications for social change involve increasing student achievement in the area of writing through collaborative analysis of student work. The change in instructional practices as a result of collaborative analysis of student work has implications not only for individual classrooms, but other grade levels at the elementary school level. The results of this study increases the body of knowledge related to the impact of collaborative analysis of student work on student achievement in the area of writing. These changes reach to the design of PLCs and the planning of professional development opportunities for teachers. It is evident that the collaborative efforts of teachers result in improved teaching and learning.

Administrators should note the importance of implementing the PLC concept in their schools. Teachers are able to come together to set common goals, monitor progress, and reflect on practice in a supportive environment. It is also important that scheduling incorporates time for teachers to meet together to identify areas of strength and weakness in student work, make a plan to address those weaknesses, share effective teaching strategies, and reflect on instructional strategies and student learning in the area of writing. Administrators and curriculum coordinators must be open minded and willing to

listen to the needs of the teachers at their school. Professional development activities should be centered on the needs of teachers and the problems that they encounter in their classrooms. Teachers are more likely to participate in professional development that is meaningful to them.

In this age of accountability, teachers must rise up to meet the challenges of improving teaching and learning in the area of writing. Collaboration is a pivotal tool for strengthening teaching strategies and increasing student achievement. When teachers are able to identify a problem, make a plan to solve the problem, and reflect on practice through collaborative analysis of student work, powerful change can take place.

Recommendations for Action

As a result of the study of the impact of collaborative analysis of student work on student achievement among third graders in the area of writing in a rural South Georgia School, recommendations for action can be made. The third grade teachers who participated in this study will be interested in the findings of this study. Due to the increase in student achievement, these teachers may be interested in continuing the process of collaborative analysis of student work. The positive significance of the results suggests that additional professional development activities in the area of collaborative analysis of student work would be beneficial to the teachers in other grade levels at this elementary school. The school principal and other administrators at this school site will be interested in the findings of this study as it supports the PLC concept already in place. It is the recommendation of this researcher that professional development training on collaborative analysis of student work be offered to teachers in other grade levels at this

elementary school. The school principal should be mindful of the benefits of collaboration among teachers when scheduling grade level planning and PLC meetings. All stakeholders including administrators, teachers, parents, and students at this elementary school should note the findings of this study suggest an increase in student achievement in the area of writing resulting from the collaborative analysis of student work.

The results of this preexperimental, action research study will be disseminated to all stakeholders. The findings of this study will be shared with the third grade teacher participants during a regularly scheduled professional learning team meeting. This researcher will present the significant findings of this study during a School Council Meeting. The School Council is a representative group of administrators, teachers, parents, and students at this elementary school who meet regularly throughout the school year to make decisions related to academics, as well as other school related functions. The findings of this study will be presented to all teachers at this elementary school during a regularly scheduled staff meeting.

It is the intention of this researcher to share the findings related to teacher readiness to participate in self-directed learning activities and the impact of collaborative analysis of student achievement among third graders in the area of writing in a rural South Georgia school. This researcher will be available to meet with individual grade levels who are interested in or have questions about implementing collaborative analysis of student work.

Significance of the Study

While there has been research conducted in the areas of collaboration and analyzing student work (Costa & Kallick, 2004; Langer, et al., 2003; Van De Weghe & Varney, 2006), there is little information on the impact of collaborative analysis of student work on student achievement among third graders in the area of writing. Much of the research conducted in this area has been at the middle and high school levels. According to research, teacher participation in collaboration can have a positive impact on teaching and learning (Hawley & Rollie, 2002; Schmoker & Marzano, 1999). This study lends information on the impact of collaborative analysis of student work on student achievement at the elementary school level. The results of this study indicate a positive impact on student achievement in the area of writing through the collaborative analysis of student work. This study contributed to the body of knowledge supporting the implementation of collaboration among teachers at the elementary school level. The results of this study were indicative of possibilities for this process to improve teaching and learning in the area of writing among third grade teachers and students.

Recommendations for Further Study

More often than not, good research does not end with an answer to the initial research question, but generates additional questions and promotes further inquiry (Dana & Yendol-Silva, 2003). Based on the results of this preexperimental, action research study, there are several recommendations for further study. This study could be duplicated at another time during the school year so that teachers have a longer period to meet and analyze student work in a collaborative setting. It would also be beneficial to

repeat this study using a larger sample so that the limitations can be better addressed. Similar studies could be conducted across grade levels and at multiple school sites in the district, so generalizations may be made to the larger population. This study may be modified to include the collection of qualitative data from teachers and students.

Future studies might incorporate the collection of qualitative data through questionnaires, surveys, or focus group interviews to support the quantitative findings. The collection of qualitative data would provide insight into the attitudes of student participants towards writing at the onset of the study. A follow-up survey would provide quantitative data related to changes in student attitudes towards writing throughout the study. It would be beneficial to the study to include data related to the attitudes of teacher participants on the teaching of writing and participation in collaborative analysis of student work. Teacher focus groups could be incorporated into further studies. These focus groups would allow teacher participants to reflect on any changes in practice resulting from their participation in the collaborative analysis of student work. The inclusion of such qualitative data in future studies would further substantiate the findings of this quantitative study. As more is understood about the impact of collaborative analysis of student work in the area of writing at the elementary school level, application to the broader context of education beyond writing lends a forum for further research.

Conclusion

With the increasing need to explore strategies that hold all students to the same standards and ensure learning for all students, the opportunity for effective social change in the area of collaborative analysis of student work in the area of writing is presented as

one area for change. Teacher culture is emerging from a period of isolation toward collaborative work settings where they can analyze student work together, identify areas of strength and weakness, and adjust teaching strategies to address the authentic needs of students. The application of research findings related to collaborative analysis of student work to actual instructional practice is critical. PLCs are taking control of their own learning, coming together to solve problems, and making plans to ensure learning and progress for all students.

REFERENCES

- Abdullah, M. H. (2001). *Self-directed learning* (Report No. EDO-C5-01-10). [Bloomington, IN: ERIC Clearinghouse on Reading English and Communication. (ERIC Document Reproduction Service No. ED459458)]
- Agresti, A. (1996). *An introduction to categorical data analysis*. New York: Wiley & Sons.
- Aubusson, P., Steele, F., Dinham, S., & Brady, L. (July, 2007). Action learning in teacher learning community formation: informative or transformative? *Teacher Development*, 11(2), 133-148.
- Barth, R. S. (2006). Improving relationships within the schoolhouse. *Improving Professional Practice*, 63(6), 8-13.
- Blankstein, A. M. (2004). *Failure is not an option: Six principles that guide student achievement in high-performing schools*. Thousand Oaks, CA: Corwin Press.
- Colton, A. & Sparks-Langer, G. (September, 1993). A conceptual framework to guide the development of teacher reflection and decision making. *Journal of Teacher Education*, 44(1), 45-54.
- Costa, A. L., & Kallick, B. (2004). *Assessment strategies for self-directed learning*. Thousand Oaks, CA: Corwin Press.
- Creamer, E. G. (September/October, 2004). Collaborator's attitudes about differences of opinions. *Journal of Higher Education*, 75(5), 556-572.
- Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16, 297-334.
- Dana, N. & Yendol-Silva, D. (2003). *The reflective educator's guide to classroom research: Learning to teach and teaching to learn through practitioner inquiry*. Thousand Oaks, CA: Corwin Press.
- Darling-Hammond, L. (February, 1993). Teacher learning that supports student learning. *Educational Leadership*, 55(5), 6-11.
- Darling-Hammond & McLaughlin, M. W. (April, 1995). Policies that support professional development in an era of reform. *Phi Delta Kappan*, 76(8), 597-604.

- Dearman, C. & Alber, S. (2005). The changing face of education: Teachers cope with challenges through collaboration and reflective study. *The Reading Teacher*, 58(7), 634-640.
- DuFour, R. (Winter, 2003). Leading edge. *Journal of Staff Development*, (24)1, 77-78.
- DuFour, R. (2004). Leading edge: The best staff development is in the workplace, not in a workshop. *Journal of Staff Development*, 25(2), 63-64.
- DuFour, R. (May, 2004). What is a professional learning community? *Educational Leadership*, (62)8, 6-11.
- DuFour, R. (September, 2007). Professional learning communities: A bandwagon, an idea worth considering, or our best hope for high levels of learning? *Middle School Journal*, (39)1, 4-8.
- DuFour, R., Eaker, R., & DuFour, R. (Eds.). (2005). *On common ground: The power of professional learning communities*. Bloomington, IN: Solution Tree.
- Eaker, R. & Keating, J. (Summer, 2008). A shift in school culture: collective commitments focus on change that benefits student learning. *Journal of Staff Development*. (29)3, 14-17.
- Florida Department of Education. (2005). *Proven instructional practices for high quality writing*. Division of Public Schools.
- Flowers, N., Mertens, S., & Mulhall, P. (November, 2005). Teacher views on collaborative review of student work. *Middle School Journal*, 56-60.
- Friend, M., & Cook, L. (2007). *Interactions: Collaboration skills for school professionals* (5th ed.). Boston, MA: Pearson Education, Inc.
- Gable, R., Mostert, M., & Tonelson, S. (Spring, 2004). Assessing professional collaboration in schools: Knowing what works. *Preventing School Failure*, 4-8.
- Gajda, R. & Koliba, C. (June, 2008). Evaluating and improving the quality of teacher collaboration: a field-tested framework for secondary school leaders. *NASSP Bulletin*, 92(1), 133-153.
- Georgia Department of Education. (2007). *Georgia's testing program* [Brochure]. Atlanta, GA.

- Giles, C. & Hargreaves, A. (2006). The sustainability of innovative schools as learning organizations and professional learning communities during standardized reform. *Education Administration Quarterly*, (42), 124-157.
- Gilmore, S. L. (2008). Evidence-based practice for lifelong learning. *Leadership*, 29-31.
- Gravetter, F. J. & Wallnau, L. B. (2005). *Essentials of statistics for the behavioral sciences*. Belmont, CA: Wadsworth/Thomson Learning.
- Guglielmino, L. M. (1977). *Self-directed learning and readiness scale*.
- Guglielmino, L. M. (1991). Developing self-directed learner: Why and how. *Changing Schools*, 19(2), 6-7 & 11.
- Hamilton, R. N., Kruger, R., & Smiley, R. (2005). Eye on evaluation: Measuring teacher collaboration and student achievement. *Teachers Working Together*, 11(1), 1-3.
- Hargreaves, A. (2003). *Teaching in the knowledge society: Education in the age of insecurity*. New York, NY: Teachers College Press.
- Hawley, W., & Rollie, D. (Eds.). (2002). *The keys to effective schools*. Thousand Oaks, CA: Corwin Press, Inc.
- Hirsh, S. (Spring, 2006). Assessment inventory measures professional development quality. *Journal of Staff Development*, 27(2), 63-64.
- Honowar, V. (April, 2008). Working smarter by working together. *Education Week*, 27(31), 25-27.
- Hord, S. (Ed). (2004). *Learning together leading together: Changing schools through professional learning communities*. New York, NY: Teachers College Press.
- Horn, I. S. (June, 2008). The inherent interdependence of teachers. *Phi Delta Kappan*, (89)10, 751-754.
- Ingersoll, R. M. (September, 2007). Short on power, long on responsibility. *Educational Leadership*, 20-25.
- Kennedy, M. (March, 2006). From teacher quality to quality teaching. *Educational Leadership*, 14-19.
- Kern, D., Andre, W., Schilke, R., Barton, J., & McGuire, M. (May, 2003). Less is more: Preparing students for state writing assessments. *The Reading Teacher*, 56(8), 816-826.

- Knowles, M. (1975). *Self-directed learning. A guide for learners and teachers*. Chicago: Association Press.
- Lambert, L. (2005). What does leadership capacity really mean? *Journal of Staff Development, 26*(2), 38-40.
- Langer, G. & Colton, A. (January/February, 1993). A conceptual framework to guide the development of teacher reflection and decision making. *Journal of Teacher Education, 44*(1), 45-54.
- Langer, G., Colton, A., & Goff, L. (2003). *Collaborative analysis of student work: Improving teaching and learning*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Lefkowitz, L., & Miller, K. (January, 2006). Fulfilling the promise of the standards movement. *Phi Delta Kappan, 87*(5), 403-407.
- Matlock, L., Fielder, K., & Walsh, D. (May/June, 2001). Building the foundation for standards-based instruction for all students. *Teaching Exceptional Children, 33*(5), 68-72.
- Mattessich, P. W., Murray-Close, M., Monsey, B. (2004). *Collaboration: What makes it work* (2nd ed.). St. Paul, MN: Wilder Publishing Center.
- Merriam, S. B., & Associates (2002). *Qualitative research in practice: Examples for discussion and analysis*. San Francisco: Jossey-Bass.
- Micceri, T. (1989). The unicorn, the normal curve, and other improbably creatures. *Psychological Bulletin, 105*, 156-166.
- Mid-continent Regional Educational Laboratory. (2005). *Final report: High-needs schools: What does it take to beat the odds?* Denver, CO: Mid-continent Research for Education and Learning.
- Mills, G. E. (2003). *Action research: A guide for the teacher researcher*. (2nd ed.) Upper Saddle River, NJ: Merrill Prentice Hall.

- National Council of Teachers of English. (2004). *NCTE beliefs about the teaching of writing*. Retrieved April 7, 2007 from <http://www.ncte.org>
- National Staff Development Council. (2006). *NSDC standards for staff development*. Retrieved July 18, 2006, from <http://www.nsd.org/standards/index.cfm>
- Nelson, T., & Slavit, D. (2008). Supported teacher collaborative inquiry. *Teacher Education Quarterly*, (35)1, 99.
- No Child Left Behind Act of 2001*, Pub. L. No. 107-110, 115 Stat. 1425 (2001).
- Parsad, B., Lewis, L., & Farris, E. (2001). *Teacher preparation and professional development: 2000*. (NCES Publication No. 2001088). U.S. Department of Education. Washington, DC: National Center for Education Statistics.
- Pelto, P. J., & Pelto, G. H. (1978). *Anthropological research: The structure of inquiry*. Cambridge, MA: Cambridge University Press.
- Penuel, W. R., & Riel, M. (2007). The 'new' science of networks and the challenge of school change. *Phi Delta Kappan*, 88(8), 611-616.
- Resnick, L. B. (Spring, 2006). Making accountability really count. *Educational Measurement: Issues & Practice*, (25)1, 33-37.
- Rice, E. (January/February, 2002). The collaboration process in professional development schools: results of a meta-ethnography, 1990-1998. *Journal of Teacher Education*, 53(1), 55-67.
- Roy, P., & Hord, S. M. (2004). Innovation configurations: Chart a measured course toward change. *Journal of Staff Development*, (25)2, 54-58.
- Schmoker, M. & Marzano, R. (1999). Realizing the promise of standards-based education. *Educational Leadership*, 56(6), 17-21.

- Schmoker, M., & Marzano, R. (March, 1999). Using standards and assessments: Realizing the promise of standards-based education. *Educational Leadership*, 56(6), 17-21.
- Seed, A. H. (April, 2008). Redirecting the teaching profession in the wake of a nation at risk and NCLB. *Phi Delta Kappan*, (89)8, 586-589.
- Sergiovanni, T. J. (2005). *Strengthening the heartbeat: Leading and learning together in schools*. San Francisco, CA: Jossey-Bass.
- Servage, L. (Winter, 2008). Critical and transformative practices in professional learning communities. *Teacher Education Quarterly*, 63-77.
- Thomas, G. W. (May/June, 2000). 6 steps to surviving standards. *Thrust for Educational Leadership*, 29(5), 12-14.
- VanDeWeghe, R., & Varney, K. (2006). The evolution of a school-based study group. *Phi Delta Kappan*, 88(4), 282-286.
- Vockell, E. L., & Asher, J. W. (1996). *Educational research*. Upper Saddle River, NJ: Merrill/Prentice Hall.
- Weinbaum, A., Allen, D., Blyther, T., Simon, K., Seidel, S., & Rubin, C. (2004). *Teaching as inquiry: Asking hard questions to improve practice and student achievement*. New York, NY: Teachers College Press.
- Wood, D. (2007). Professional learning communities: Teachers, knowledge, and knowing. *Theory Into Practice*, 46(4), 281-290.
- Zemelman, S., Daniels, H., & Hyde, A. (1998). *Best practice: New standards for teaching and learning in America's schools* (2nd ed.). Portsmouth, NH: Heinemann.

APPENDIX A:

STATEMENT OF CONSENT FORM

CONSENT FORM

You are invited to take part in a research study related to the impact of collaborative analysis of student work on student achievement among third graders in the area of writing. You were chosen for the study because you are a third grade teacher at Taylors Creek Elementary School and you teach writing. Please read this form and ask any questions you have before agreeing to be part of the study.

This study is being conducted by a researcher named Jami Lee, who is a doctoral student at Walden University.

Background Information:

The purpose of this study is to determine the impact of collaborative analysis of student work on student achievement among third graders in the area of writing.

Procedures:

If you agree to be in this study, you will be asked to:

- Complete a Self-directed Learning Readiness Scale questionnaire (30 minutes)
- Participate in teacher training related to collaborative analysis of student work (2-3 hours)
- Participate in a collaborative setting to analyze student work writing samples and discuss teaching strategies to improve student writing (1-2 hours per week for a 6 week period)
- Collect writing samples from students (One per week)

Voluntary Nature of the Study:

Your participation in this study is voluntary. This means that everyone will respect your decision of whether or not you want to be in the study. No one at Taylors Creek Elementary will treat you differently if you decide not to be in the study. If you decide to join the study now, you can still change your mind later. If you feel stressed during the study you may stop at any time. You may skip any questions that you feel are too personal.

Risks and Benefits of Being in the Study:

There is no risk to you if you decide to participate in this study. Your participation in this study may help to increase student achievement among third graders in the area of writing.

Compensation:

You will receive a \$10.00 gift card to a local restaurant 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 project. Also, the researcher will not include your name or anything else that could identify you in any reports of the study.

Contacts and Questions:

The researcher's name is Jami Lee. The researcher's faculty advisor is Dr. Casey Reason. You may ask any questions you have now. Or if you have questions later, you may contact the researcher via email at jalee@liberty.k12.ga.us or the advisor at 1-419-841-1115 or creason@walden.edu. 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:

I have read the above information. I have received answers to any questions I have at this time. I am 18 years of age or older, and I consent to participate in the study.

Printed Name of

Participant

Researcher's Written or
Electronic* Signature

Jami A. Lee

Electronic signatures are regulated by the Uniform Electronic Transactions Act. Legally, an "electronic signature" can be the person's typed name, their email 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 B:

COLLABORATIVE ANALYSIS OF STUDENT WORK TRAINING AGENDA-
SESSION ONECollaborative Analysis of Student Work Training
Session 1
April 23, 2008
2:30 – 4:00

- Good Afternoon
- Introduction to Collaborative Analysis of Student Work (CASL)
- Components of CASL
- Benefits
- Framework for Reflective Inquiry
 - Ladder of Inference
 - Dialogue
- Culture Building
 - Group norms
 - Communication Skills
 - Listening
- Five Phases of CASL
- Questions or comments
- Narrative Writing Assignment
- Meeting schedule preferences

Great discoveries and improvements invariably involve the cooperation of many minds.

—Alexander Graham Bell

APPENDIX C:

COLLABORATIVE ANALYSIS OF STUDENT WORK TRAINING AGENDA-
SESSION TWO

Collaborative Analysis of Student Work Training
Session 2
April 28, 2008
2:15 – 3:15

- Good Afternoon
- Goals of CASL
- Develop group norms
- Review TLA
- Rubric
- Next steps

The purpose of learning is growth, and our minds, unlike our bodies, can continue growing as we continue to live. – Mortimer Adler

APPENDIX D:

THIRD GRADE GEORGIA WRITING ASSESSMENT SCORING RUBRIC

Georgia Grade 3 Writing Assessment: Scoring Rubric
NARRATIVE WRITING

Domain 1: Ideas - The degree to which the writer establishes a focus and develops the main points with examples, facts, anecdotes, and details.			
Component	Does Not Meet Standard	Meets Standard	Exceeds Standard
Focus	Little or no evidence of focus, purpose, or point of view	Generally consistent focus; some evidence of a purpose and point of view	Sustained focus on the narrative purpose; consistent point of view
Supporting Details	Details and descriptions are limited and may be irrelevant	Includes some relevant details and descriptions	Relevant details and descriptions are included throughout the paper
Character Development	Character(s) are named or listed rather than developed	Begins to develop main character(s) through action and dialogue	Develops main character(s) through action, dialogue, and/or description
Development/Completeness	Insufficient information to tell a story	Sufficient information to tell a story	Complete information; the events of the story are well developed

Domain 2: Organization - The degree to which the ideas are arranged in a clear order with a beginning, middle, and end.			
Component	Does Not Meet Standard	Meets Standard	Exceeds Standard
Organizational Pattern (Beginning, Middle, End)	Little or no evidence of an organizational pattern	Contains a beginning, middle, and end; one part of the paper may not be as strong as the others	Clear narrative organizational pattern with a strong beginning, middle, and end
Chronological Sequence of Ideas	Little or no evidence of sequencing	Ideas are generally presented in a chronological sequence	Chronological sequencing of ideas within and across parts of the paper
Transitions	Little or no evidence of transitions	Transitions are used but may not be varied	Transitions are used consistently and effectively throughout the paper

Domain 3: Style - The degree to which the writer controls language to capture the reader's interest.			
Component	Does Not Meet Standard	Meets Standard	Exceeds Standard
Word Choice	Language is simple, repetitive, or imprecise; little or no interesting language	A mixture of simple, ordinary language and interesting language (e.g., descriptive language, sensory details, strong verbs)	Sustained use of interesting language (e.g., descriptive language, sensory details, strong verbs)
Audience Awareness	Little or no awareness of audience	Some attention to the audience; some sense of the writer's voice	Attention to the audience in the beginning, middle, and end; writer's voice is clear and appropriate

Georgia Grade 3 Writing Assessment: Scoring Rubric
CONVENTIONS
All Genres

Domain 4: Conventions - The degree to which the writer demonstrates control of Sentence Formation, Usage, and Mechanics.				
Component	Element	Does Not Meet Standard	Meets Standard	Exceeds Standard
Sentence Formation	Clarity and Correctness	More incorrect and unclear sentences than correct, clear sentences	Majority of clear and correct sentences	Consistently clear and correct sentences
	Complexity	Little or no variation in sentence structure	Some variation in sentence structure	A variety of sentence structures with some complex or compound sentences
Usage	Subject/Verb agreement	Frequent and severe agreement mistakes	Agreement is generally correct with some mistakes	Few, if any, agreement mistakes
	Noun Forms (singular, plural, possessives)	Frequent mistakes in noun forms	Majority of correct noun forms with occasional mistakes	Consistently correct singular, plural, and possessive nouns
	Personal and Possessive Pronouns	Frequent mistakes using personal and possessive pronouns	Generally correct personal and possessive pronouns with only occasional mistakes	Consistently correct personal and possessive pronouns
Mechanics	Spelling	Frequent and severe spelling errors that may distract the reader, including misspellings of common words	Generally correct spelling; spelling errors do not distract the reader	Consistently correct spelling with few errors; spelling errors occur in words that are above grade level
	Punctuation (commas, apostrophes, quotation marks)	Frequent errors in punctuation; some basic punctuation (commas in a series) may be correct	Generally correct punctuation with occasional mistakes	Correct punctuation in a variety of contexts
	Capitalization	Frequent errors in capitalization; some basic capitalization (first word in a sentence) may be correct	Generally correct capitalization with occasional mistakes	Correct capitalization in a variety of contexts
	Contractions	Frequent mistakes forming contractions (missing or incorrectly placed apostrophes)	Generally correct use of contractions	Consistently correct use of contractions; may use a variety of contractions

CURRICULUM VITAE

EDUCATION

- Ed.D Teacher Leadership, Walden University, February 2009
- Ed.S Teacher Leadership, Walden University, January 2008
- MA Ed. Curriculum and Instruction, Central Michigan University, June 2001
- BS Education, Georgia Southern University, June 1992
- AA Elementary Education, Abraham Baldwin Agricultural College, March 1990

DISSERTATION

The Impact of Collaborative Analysis of Student Work on Student Achievement Among Third Graders in the Area of Writing: An Action Research Study: A preexperimental, action research study examining the impact of collaborative analysis of student work on student achievement among third graders in the area of writing. Doctoral Committee: Dr. Casey Reason, Dr. Lisa Reason

TEACHING EXPERIENCE

- Teacher,----Elementary 1994 to present
- Teacher,----Elementary 1992 to 1994

MENTOR

- Mentored new teachers or teachers in need of improvement at request of building principal
- Mentored practicum students from local colleges and universities as part of their program of study at request of building principal

HONORS

- Teacher of the Year, ----- Elementary School 1998

PROFESSIONAL AFFILIATIONS

- Professional Association of Georgia Educators