A Reflective Exploration of a Multiyear Elementary School Learning Community Experience

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A Reflective Exploration of a Multiyear Elementary School Learning Community Experience

by

Susan Ganley

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy Department of Secondary Education College of Education University of South Florida

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ABSTRACT

This study reports a reflection upon the experience of a multiyear elementary school learning community designed for improved teaching and learning. The exploration uses interview data to describe the perceptions and reflections of the principal and teachers directly engaged in this project of educational reform. The goal of this process is to gain a deeper understanding of the experience and to determine to what factors the participants attribute the outcomes of this project.

Through an auto-ethnographic reflective critical practice inquiry and extended interviews, this study describes the context and environment of this learning community and how the participants reflect on their experiences in that community. It also provided an opportunity for participants to review and explain their perceptions and attributions regarding both the measured and the unintended outcomes associated with this learning community project.

Results from teacher and administrator reflections indicate that the strength of a multiyear learning community is the positive relationships that they foster and the institutional consistency for both parents and students. Evidence from the interviews indicates that teachers’ expectations for outcomes of multiyear learning communities may differ from those of administrators, and be less concerned with improved achievement measures than other, relationship-focused outcomes.
A key implication of this study is that, although the principal players involved in the creation and implementation of this learning community use terms that describe or refer to the overall experience as very successful, test scores did not respond significantly to this innovation. This suggests that comprehensive plans need to be developed in advance to assure appropriate and accurate methods of measuring success in innovations such as this.
CHAPTER 1: INTRODUCTION

As I come to the end of a thirty-four year teaching career, I find myself looking back and reflecting on my past teaching experiences. I have put heart and soul into these years of classroom teaching and would like to think that I made a positive difference in the lives of my students. I have had the opportunity to teach all elementary grade levels and content areas within a variety of teaching environments. Within this teaching time frame, I have witnessed many changes in the U.S. education system and been enmeshed in numerous promising reforms aimed at enhancing teachers’ and students’ performance in schools. One particular innovation, implemented through six school years from 1994 through 2000 in a west central Florida elementary school, remains in the forefront of my memory and discussions of educational settings. Of the varied experiences I have shared with students and teachers over my career, thoughts of this unique multiyear learning community continue to produce nostalgic feelings and compelling questions many years later. This dissertation provides a look back at what was for me an oasis in the chaos of curriculum reform—a rewarding innovation that had a profound influence on my future teaching philosophy.

In the summer of 1994, I was in a unique position—the position of having a voice in the design of PRIME (Positive Realistic Instruction will Motivate to Educate)—an innovative, small-scale reform of the classroom environment at the school level. This
learning community consisted of two other teachers and myself together with our shared classes of third, fourth, and fifth grade students. An integrated, thematic curriculum was taught using constructivist learning strategies within our community of shared values and commitments (Appendix A offers a narrative of PRIME).

PRIME was developed with the concept that the essential sound educational tenets might be brought together and strengthened most effectively through a consistent and long-term culture of commitment to shared interrelationships between teachers, students, and parents. The intent behind this small multiyear learning community was to positively influence the achievement, habits, skills, and knowledge of students. A strong family and service learning component was also in place throughout this educational period. Each of the branches of the PRIME framework (Figure 1) was grounded in research-based efforts and strategies for improved teaching and learning.

Figure 1. Framework for the PRIME design.

It was a renewed sense of connection following this PRIME innovation that led me back to the University of South Florida and this doctoral program in social science education, as I desired to understand more than just effective curriculum and instructional
methods, but also the dynamics of these democratic community classroom interactions. With the separation of time and the benefit of experience, the shared voices of those who created and implemented this learning community can now reflect on this process in view of the evolving U.S. classroom to provide constructive ideas for effectively establishing learning environments in today’s elementary schools and a real-world account of the strengths and challenges of instituting such an environment. By revisiting the participants directly involved in the implementation of this multiyear learning community, this narrative may help to bridge the gap between the experience of practitioners and the educational theories expounded by researchers (Schön, 1983, 1987).

This multiyear learning community setting itself, constructivist in student learning, offered an on-going optimal opportunity within its creation and evolution for constructivist teacher reflection (Schön, 1983, 1987). This dissertation is a continuation of this reflective practice as I look back and explore this unique time in my teaching career. It is an attempt to explain how and why the PRIME experience continues to remain in my memories and in the memories of the key persons involved. “Researchers are discovering ways to learn from the ‘wisdom of practice’, that comes from successful teachers who can share their expertise” (National Research Council [NRC], 2000, p. 31), and in this examination of the PRIME community, I attempt to add my voice and those of my colleagues to the collected wisdom of experienced teachers. Furthermore, I hope to discover to what we might attribute the nostalgia and good feelings that come when remembering or talking about this time.
The Purpose

Experience shapes people’s ways of thinking and interpreting information, so, just as students learn within the classroom, teachers, too, are in a dynamic, integrated, and continuous process of learning, reflecting, and reorganizing (Argyris & Schön, 1974; Brookfield, 1990, 1995; Schön, 1983, 1987). As both a researcher and a teacher, I am in a constant state of transformation and continue to learn across my career span. In this dissertation, I use a combination of reflective engagement and attribution theory to examine the experiences of the PRIME teachers and principal. In this way, I hope to discover the specific characteristics of this particular time within this unique learning community that may contribute toward both skillful teaching and engaged students.

Through this auto-ethnographic reflective critical practice inquiry, I explore the PRIME learning community experience of a specific group of teachers to determine the manner in which small learning communities function and how and why they might offer an alternative approach to the conventional progression of students through grade levels in the elementary school setting. Robinson (1995, p. 199) finds that autobiographical memory—or the reflections of key actors after the passing of time—is an exercise in perspectives that links the past, the present, and the future. As such, the reflective interviews with the teachers and principal provide unique insights into the years before, during, and beyond this initiative. These responses, with the benefit of the passage of time, provide perspective that would not have been possible while immersed within the operational dynamics of the PRIME years. Additionally, it provides an opportunity to explore how the PRIME experience may have affected future professional decisions and instruction even years after its conclusion.
While the main focus of this study was on the reflections of the teachers and principal involved in PRIME, this study also attempted to describe the context and environment these participants experienced that formed the impetus behind these reflections. One of the aspects of the environment was the achievement level of students during the course of PRIME. Consequently, I analyzed existing longitudinal quantitative data routinely collected from standardized achievement test scores over a 10-year period that allowed comparisons of students who participated in the learning community with those who did not. This will be summarized in Chapter 4, while details of the data are available in Appendix B.

This study explores the design, implementation, teacher perceptions, and student achievement outcomes of the 1994-2000 PRIME learning community. This work is my attempt—from the perspective of both researcher and teacher—to describe, analyze, and interpret this educational experience. This study is predicated on interpretation and, as with all histories, reflects my own translation of these memories. This systematic investigation is guided by my role as a researcher, while at the same time, informed by my experience as a teacher. Also, within this investigation, the triangulation of the views of the other key participants will provide a collective reflection rather than just the reminiscence of a single person.

The Problem

The face of the U.S. classroom continues to change as our schools become more complex in every dimension: ethnicity, race, immigrant status, class, gender, and ability (Armstrong, Henson, & Savage, 2009; Campbell, 2010). In this era of ever-increasing teacher and school accountability, teachers and principals are under tremendous pressure
to help ensure the academic performance of their students (Sleeter, 2005). Research indicates that in order to meet the needs of today’s diverse and global society, schools must reframe their missions and adapt their visions to develop into communities of learning (NRC, 1999b). The common characteristics of shared values, meaningful experiences, and collective learning can best be nurtured and strengthened within communities of learning (Flinders & Noddings, 2001; Lave & Wenger, 1991; Meier, 2002; Sergiovanni, 1994; Wehlage, Rutter, Smith, Lesko, & Fernadez, 1989; Wenger, 1998; Wenger, McDermott, & Snyder, 2002). Data suggest that with community comes a greater sense of belonging, connectedness, and meaningful relationships that may ensure better academic preparation through a quality curriculum, improved teacher attitudes, increased parental involvement, higher attendance rates, and stronger community support (Flinders & Noddings, 2001; Lave & Wenger, 1991; Meier, 2002; Sergiovanni, 1994; Wehlage et al., 1989; Wenger, 1998; Wenger et al., 2002).

Although many studies in the area of learning communities have been conducted at the middle and high school level (Avila & Rivera, 2008; Bernstein, Millsap, Schimmenti, & Page, 2005; Lee & Friedrich, 2007; Oxley, 2008; Oxley & Kassissieh, 2008; Oxley, Barton, & Klump, 2006; U.S. Department of Education, Office of Elementary and Secondary Education [DOE], 2001; U.S. DOE, 2010), relatively few have examined the design and implementation of multiyear learning communities and how they foster long term continuous personal connections in students, teachers, and parents in the early grades. In addition, relatively few studies have used reflections gained through the perspectives of experience and time. Using attribution theory, this study explores outcomes and related possible causes from the viewpoint of educators.
involved. This organizational change in classroom environment, which would provide for more extended contact between teachers and students over time, might ideally help schools better address students’ learning and better redress inequalities of access to this learning.

**Learning Community Background**

In 1991, the Legislature enacted Florida’s system for school improvement and accountability (s. 229.591, F.S.). The philosophy behind this legislation was that communities and schools collaborate to prepare children and families for success in schools. A primary purpose of Blueprint2000 (Appendix C) was to return the responsibility for education to those closest to the students—the schools, teachers, and parents. The intent was that the state would no longer dictate to local schools and districts the processes or programs to be followed; instead, the schools would follow their own improvement plans to demonstrate progress. Administrators were to view their role as supporting teachers and allowing them to move at their own pace toward more measurable school improvement objectives (Florida Legislature Office of Program Policy Analysis and Government Accountability, 1996).

**PRIME Model**

The PRIME model (Figure 2) was designed in response to this Blueprint2000 initiative and included five major aspects: (a) a strong professional community of collaboration and collegiality among the team of teachers; (b) instructional approaches that presented high levels of collaboration and cooperation between students; (c) significant support and interactions with families and the community; and (d) an authentic, relevant, student-centered, active, and interdisciplinary curriculum with the key
factor being (e) the continuity, consistency, coherence, and investment of these essential attributes within a shared culture for three consecutive years (Table 1).

![Figure 2. Elements, attributes and outcomes of the PRIME learning community.](image)

The teachers taught the content area matched to their expertise and choice. The core disciplines were math, language arts, and social studies/science. The other two teachers and I each specialized in one of these areas for professional development, training, research, and strategic ideas. This instructional approach allowed for peer teaching; cooperative learning and coaching; multilevel and multiage groupings; and
authentic and primary-source-based situational learning with interdisciplinary thematic unit teaching for relevance and connection. We employed best practices, immersing students in hands-on experiential learning opportunities through drama, art, movement, music, projects, and service learning presentations. Culminating presentations were created as authentic assessments and to motivate exciting and positive parent and family involvement. This model design proposed that these interrelated factors, in turn, would facilitate and enhance learning and thus produce greater student achievement (Cotton, 1996, 2000; Florida Department of Education [FLDOE], 2002; Meier, 1996, 1998, 2002).

The initial group of students involved in this design remained together from the 1994 school year for Grade 3, until the end of Grade 5. Although reflections of PRIME include the years from 1994 through 2000, the initial group, or Cohort 1, was the only group for which standardized test scores were collected and measured for the purposes of this study.

Table 1

PRIME Sequence of Cohorts

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**Study Data**

In this study, interviews with the key teachers and the principal involved with the PRIME learning community provide qualitative data about the design, implementation, and outcomes of this initiative. The interview data also places the PRIME initiative in
historical context by allowing the participants to discuss changes in U.S. and state education policy and to explore the influence that these policy changes might have on the potential implementation of a similar elementary learning community. Whenever a new elementary program is introduced, a concern is always that the program has no unintended influences. I therefore utilized existing archival, longitudinal quantitative data collected from standardized achievement test scores over a 9-year period (second through tenth grades) as a broad indicator of whether the PRIME initiative produced an unintended impact on student scores. These archival data, compiled from national and state achievement scores within the local school district for the initial cohort of students, begin with the students’ 1993 second grade scores and continue through the cohorts’ middle and high school experience. This allowed for comparisons of the test scores of students who participated in the learning community with those who did not to ensure that this innovation showed no unintended results on academic outcomes.

**Theoretical Grounding**

This study was first envisioned as a quantitative study. My experience with the PRIME learning community was formative enough that it became a major impetus for returning to graduate school. I was eager to share the experience with the education community as my dissertation. I believed that with the convenience and comparative samples in place and archival data available at the county level, an examination of this innovative program would certainly reveal significantly favorable outcomes. After all, we who participated in the program experienced it as a success. PRIME was “the village” of the old adage: a learning community designed with the elements needed to accomplish our goals. We had collaborating teachers, engaged and supportive parents, and motivated
students working interactively in cooperative groupings. Classes were characterized by authentic and thematic instruction while a supportive community provided students needed continuity over a 3 year period. Even long after the initiative ended, those involved could not forget it (Goldenberg, 1971; Sarason, Zitnay, & Grossman, 1971) looking back on those years with a nostalgia that seemed more than just “good old days” yearnings.

As I went about my review of literature, from the interrelated best practice elements to the systems-thinking of community dynamics, these feelings of success were further grounded, and I felt I had a solution to some of the problems of education. The bulk of the literature reviews of learning communities supported an improvement in the area of the affective domain established within this setting of continuity, confirming my own findings and experience. However, I was surprised to discover that this literature was unable to defend a greater academic outcome based on test scores. In spite of the many millions of dollars that have been and continue to be spent on learning communities through government grants, statistical data do not support the assumption that there is an academic advantage to these learning communities. And imagine my surprise and disappointment when, as the literature suggests, the archival standardized test scores from our program did not produce a more significant, favorable statistical gain. The results produced no meaningful conclusions. PRIME, so grounded in best practices and seemingly so beneficial to students and involved staff, was no better or worse than the conventional classroom setting of yearly changes of students, teachers, and instructional methods.
How could this have happened? Why might this have happened? Given the realities of this performance data, I began research on the advantages and disadvantages of using tests to compare success. I researched various large and small-scale programs and read stories of success and failure. Since educational reform is more than just showing gains in student achievement, I would have liked to discount the importance of test scores. But—taking a pragmatic stance and given Florida’s most recent involvement in the “Race to the Top” (http://www.fldoe.org/arra/pdf/rfa.pdf)—I knew that any future reform movements must by necessity work effectively within the realities of today’s schools.

My goal became to discover the causes of these results that seemed to be at cross purposes. What caused the strong feeling of community and positive perceptions about the PRIME program? And given this positive perception, why was there an absence of solid data charting student improvement? Was there a missing ingredient or critical element in the development or execution of this learning environment? To discover my answers, I turned to reflective practice and attribution theory.

As an educator, I am in the habit of employing reflective practice, introduced and described by Donald Schön (1983, 1987). A primary benefit of reflective practice for teachers is a deeper understanding of their own teaching style and ultimately, greater effectiveness as a teacher within their own teaching action or experience and those with whom they share this action or experience. By thoughtfully looking at an experience, understanding, and learning from it or even improving on it, a reflective practitioner engages in a continuous cycle of development. This cycle can continue on through the discussion and sharing of this experience with others, and then, to even further analyzing
and generalizing from that experience (Schön, 1983, 1987). Similarly, attribution theory involves a process of examination. It seeks to explain the relationship between behavior and outcomes, contributing to a more effective management of both the individual and the environment. Weiner (2006) and other attribution theorists use the metaphor that persons are scientists, seeking to understand themselves and the world in which they live.

Looking back to look ahead sums up the exploration of this innovation and describes both reflective practice and attribution theory. Because both processes search for and address causes rather than reasons or excuses, they both begin with an already completed event. In this case the event is the learning community that seems to have failed, if test scores are the method by which we measure success. On the other hand, the event is also a community that resulted in feelings of success and accomplishment for all who were involved. Through a combination of reflection and attribution, the perceived causes of success and failure might be explored and future adaptations made. The goal is to discover a way to retain the positive outcomes, while improving the test data that is so important in charting student accomplishment. As Weiner (1985) suggests, you need to know why you are winning or losing before you can alter the cause to produce a different effect.

**Research Questions**

This study will address the following research questions:

Research Question 1: What are the recollections and perceptions of the principal and PRIME teachers regarding the creation and implementation of the PRIME innovation?
Research Question 2: Do the recollections and perceptions of the key participants support the framework of strategic research-based efforts for improved teaching and learning on which PRIME was grounded (Figure 1)?

Research Question 3: Do the recollections and perceptions of the key participants identify or reflect the implementation of the critical attributes (Figure 2) to teaching and learning?

Research Question 4: Do the recollections and perceptions of the key participants reflect the six intended outcomes of the PRIME learning community?

Research Question 5: To what do the key participants attribute the success or failure of attaining these outcomes?

Research Question 6: To what do these recollections and perceptions attribute the influence of this multiyear learning community on students, teachers, and parents?

Research Question 7: To what do these teachers and principal attribute the nostalgia for this PRIME innovation among key participants?

Research Question 8: In what ways has the key participants’ experience with the design of and involvement in this PRIME multiyear learning community influenced their subsequent professional philosophies and decisions related to effective curriculum and instruction?

**Significance of the Study**

Scholars have argued that learning communities have a significant impact on students, with research focusing on the analysis of both cognitive and affective outcomes (Flinders & Noddings, 2001; George, 1987; George & Lounsbury, 2000; Grant, 1995, 1996; Meier, 1996, 1998, 2002; Noddings, 2003). Research indicates that smaller
learning communities create the conditions for curricular change and innovative instruction together with active and collaborative student and teacher participation (Cotton, 1996, 2000, 2001; Oxley, 2008). Government grants continue to be available for high school studies of Small Learning Communities (SLC). However, researchers have conducted few auto-ethnographic reflective critical practice inquiry studies that combine teacher interviews that revisit the program design and implementation for student and teacher outcome data within elementary multiyear learning communities.

This study strives to contribute to the evidence guiding classroom environment effectiveness by providing this reflective account of the PRIME learning community through interviews with the principal and teachers who participated in the initiative’s development and implementation. In addition to reflective interviews, I analyzed existing, archival, quantitative, longitudinal data to investigate the relationship of two differing elementary learning environments to student achievement. To get this analysis, I collected data from the test scores of the sample students using benchmarks at 2nd, 4th, 5th, 8th, and 10th grades as determined by the standardized testing procedures and then compared academic achievement of the learning community cohort with the conventional group using standardized scores of the National Achievement Test in 2nd and 5th grades; the Stanford 9 Achievement Test in 8th and 10th grades; and Florida Writes in 4th, 8th, and 10th grades.

The perspective of time allows me to examine PRIME in light of changes to U.S. education policy. Since the establishment of the PRIME learning community, the federal and state governments have instituted a system of teacher and student accountability. The No Child Left Behind Act (NCLB, 2001, 2002) requires that every state develop and
assess student performance on a rigorous set of standards accompanied by high stakes penalties and funding repercussions. The other principal teachers in the initiative and I experienced these changes, putting us in an advantageous position to provide insights into the barriers, opportunities, and the feasibility of learning communities in the present educational environment. Consequently, examining the basic principles that supported PRIME’s design, exploring a multiyear educational learning community and its outcomes, and analyzing the data and reflecting on the PRIME initiative provides a foundation from which I can make suggestions for the design of more effective curriculum and instruction models that might reinforce and bridge coexisting student, teacher, parent, and accountability needs.

**Limitations**

The following list acknowledges and clarifies the limitations of this study that may impact the generalizability of my findings:

1. The quantitative assessments are limited to available archival data.
2. The nationally norm-referenced tests used in this study are not consistent across the years. The county school system had been using the National Achievement Test (NAT) as their norm-referenced assessment. The NAT’s final year of availability was 1998. The county schools then selected the Stanford 9 as their new norm-referenced assessment. This test was administered for the first time during the 1998-1999 school year. Although equating study data for the NAT and the Stanford 9 could not be found, the county stated the following in its School Match Study of 1999: “typically, districts experience a drop in overall achievement scores when introducing a new norm-referenced measure, because the tests are not
‘apples-to-apples’ comparisons. However, the County Schools appear to the benchmarking consultants to have made this transition virtually unscathed.”

Despite this seeming continuity, no direct longitudinal comparisons are possible for performance over time.

3. Due to the small and unique sample available for the study, results may not be generalizable beyond the specific population from which the sample was drawn. Because this is an exploratory study, the results cannot be generalized to other study groups. In the study, the independent variable is the instructional setting (the 3-year cohort learning community called PRIME and the conventional group). The objective is to use the standardized test scores (dependent variable) in grades beyond the treatment period to determine program outcomes.

4. Due to the length of the study, a significant number of students available at the beginning of the study were not available at each benchmark. This study began with a cohort number of 27 grade three students and a conventional group number (the remaining third graders) of 81 students and culminated with 20 and 26 respectively.

5. I had no control over which students were in the 3-year continuous learning community or the conventional yearly progress setting. Since the participants were not randomly assigned to PRIME or to the conventional classrooms, this study involves pre-existing groups. Students were assigned to classrooms at the previous years end articulation meeting which involved the sorting of student cards into piles to reflect an effort to balance student traits (See Appendix B).
Assumptions

This study acknowledges that memories become condensed through time and that repetition and change occur in the reconstructions of how and in what ways specific events transpired. Though the details of many of the recollections of the key actors in the PRIME learning community who were interviewed for this study cannot be verified, the fundamental integrity of these memories is assumed to be valid based on prior research into the validity of memory (Barclay, 1995).

I begin this study with the premise that achievement is measurable. Embedded in this premise is the idea that there must be a systematic way to measure the effectiveness of educational techniques and policy interventions in order to improve educational programs and progress. Two significant, parallel challenges accompany this premise. One challenge is the complexity of research in educational institutions over multiple years. Attaining and analyzing longitudinal, quantitative educational data is not simple. Berliner (2002) emphasizes the complexity and unique nature of educational science and attributes these challenges to both the power of contexts and the ubiquity of interactions. The second challenge is the ongoing debate regarding accountability measures (Green, Winters, & Forster, 2003; NRC, 1999a).

This study recognizes that the problems embedded within this exploratory setting—the PRIME learning community with its complex and changing network of social interactions—produce an impossibility of replication and limit the generalizability of results. The ubiquity of interactions resulting from student characteristics, teacher characteristics, and various other uncontrollable characteristics as well as peer, family,
and the larger community effects within this multiyear learning community are among
the limits of this research (Green, Winters, & Forster, 2003; NRC, 1999a; NCLB, 2001).

This study also recognizes some of the criticisms of testing. With today’s climate
of accountability and the high stakes (the use of these tests to reward or sanction schools
for their performance) of this accountability, it is especially important that educational
leaders and policymakers understand what they can and cannot infer from test scores
(Green, Winters, & Forster, 2003; NRC, 1999a).

The group of students in this study was routinely given a commercially prepared
national achievement test each spring. The archival records within the county were
searched to use the domains of reading, math, and writing at each of the benchmarks
chosen, as a longitudinal measure of the comparison of test scores between those students
who were in this community with those who were not. The students were given the
National Achievement Test for grades 2–5, the Stanford 9 for grades 8–10, and the
Florida Writes for grades 4, 8, and 10. Although no direct translation between the results
of the standardized scores of the different tests exists, evidence accumulated over many
years is likely to be more reliable than evidence from a single year (Green, Winters, &
Forster, 2003).

Definitions

Academic achievement: Within the context of this study, academic achievement
is the standard score on the math and reading portions of the National Achievement Test,
the Stanford 9 Achievement Test, and the Florida Writes.
Academic outcomes: Within the context of this study, academic outcomes are reflected in both teacher and student behavior and student archival test scores within this learning community.

Cohort: Within the context of this study, a cohort describes a specific group of students who remain together for their grades 3 through 5 academic experience.

Constructivism: Constructivism is the “point of view that holds that what individuals learn and understand is constructed through their mental processes and social interactions” (Bruning, Schraw, Norby, & Ronning, 2004, p. 363).

FCAT (Florida Comprehensive Assessment Test): Florida’s assessment program specifically designed to measure the Sunshine State Standards in reading, writing, and math of students in Grades 3 through 8, and Grade 10. Scores from students in Grades 3 and 10 are used as a measure for retention. Scores from students are also used to assign a performance letter grade to the schools (FLDOE, 2001).

Florida School Accountability Program: This is a comprehensive school improvement program designed by the state to improve student performance, including eight goals, rules for schools’ advisory councils and needs assessments, student performance standards and assessment procedures, a system of school regulation, and procedures for reporting progress (FLDOE, 2001).

Florida Writes: Florida Writes (Florida Writes) was developed in response to the 1990 Florida Legislative mandate that an assessment of student writing be conducted in Grades 4, 8, and 10. In 1992, the Florida Writing Assessment Program was introduced in the format of a single, extended writing task based on a prompt. Originally administered only in Grade 4, the assessment was also administered in Grade 8 in 1993 and Grade 10
in 1994. The Florida Writes assessments are performance based in that student performance is judged against standards or rubrics as the evaluation of student responses goes beyond correct or incorrect (FLDOE, 2001).

High stakes testing: This is a testing program that has significant contingencies associated by either the students or the administrators of the test.

Learning community: A learning community is a cohort of students sharing the same set of teachers; classrooms; curriculum; strategies; peer relationships; and a continuous, interrelated learning environment for their elementary school third, fourth, and fifth grade educational career.

Learning environment: The learning environment is the classroom and all variables related to learning.

Long-term student-teacher relationship: This is any type of strategy used to keep students and teachers together for more than the conventional year in anticipation of a stronger relationship and interaction that might enhance student achievement.

Multiage groupings: This strategy consists of a deliberate mixing of age and grade levels in the classroom in which there is always movement in and out of the class since, as older students graduate they are replaced as a group of new, younger children enter. This structure is used in this study to support a long-term student-teacher relationship (Flinders & Noddings, 2001).

Multiyear groupings: This strategy is to keep students and teachers together for more than the conventional one year rather than sending them to another teacher at the end of the year or, in other words, to create a long-term student-teacher relationship (Flinders & Noddings, 2001).
National Achievement Test: This is a traditional norm-referenced test. The NAT was given to this group of students from 1993 to 1997.

Norm-referenced scores: Norm-referenced scores describe the performance of an individual in relation to that of other individuals and must always be interpreted with reference to the grade and time of year of test administration (Harcourt Brace, 1997).

PRIME: Positive Realistic Instruction will Motivate to Educate; This is an acronym used to label the specific learning community of a cohort of students sharing the same set of teachers; classrooms; curriculum; strategies; peer relationships; and a continuous, interrelated learning environment for their elementary school third, fourth, and fifth grade educational career.

Scaled score: A score on a test that is expressed on some defined scale of measurement. “The scaled score system for the Stanford series also links together the levels at which content domains are tested, yielding a scale across levels on each subtest and total that is common to those levels” (Harcourt Brace, 1997, p. 17). “Scaled scores are especially suitable for studying change in performance over time” (Harcourt Brace, 1997, p. 17).

Stanford 9: “The Stanford Achievement Test Series, with a rich history dating from the early twentieth century, measures students’ school achievement in reading, language, mathematics, science, and social science. This Ninth Edition of the Stanford battery (Stanford 9) provides updated content that reflects the current ‘national consensus curriculum’ and modern educational trends” (Harcourt Brace, 1997, p. 7). The Stanford 9 was administered annually to students in Grades 2 through 11 as part of this county’s
standardized testing procedure. This particular group of students was tested with the Stanford 9 from 1999 through 2001.

**Organization of the Manuscript**

This manuscript comprises five chapters. Chapter 1 provides an introduction and describes the learning community in terms of its framework and design. Historical and contextual information for the particular learning environment in this study is explained. The purpose, problem, theoretical grounding in terms of a reflective practice and attribution theory, research questions, and significance are provided. Limitations, assumptions, and definitions are listed.

Chapter 2 presents an extensive review of relevant literature to this study. The theoretical perspective on which this dissertation is grounded is first described in terms of reflective practice and attribution theory. What follows is the development of an historical and theoretical stance of education strategies and restructuring, with learning communities as a possible, logical outcome. Strands include: literature related to reflective practice; literature related to attribution theory; literature related to reform and restructuring; literature and research on learning communities; research investigating the specific elements of long-term student-teacher relationships; and relevant theories with key precepts that underlie the design of the specific learning community under research.

Chapter 3 includes the methods and procedures used in this research design. Quantitative protocol as used in the beginning phases of this research is discussed as well as the reflective qualitative interviews.

Chapter 4 answers the research questions and presents the results of an analysis of the interviews.
Chapter 5 summarizes the results, discusses the resulting implications of the findings, and concludes with recommendations for classroom practice and future research.
CHAPTER 2: REVIEW OF THE LITERATURE

This chapter provides a review of research literature and theory related to “A Longitudinal Exploration of a Multiyear Elementary School Learning Community” and is organized into five interrelated sections. The introductory paragraphs introduce the theoretical perspectives of reflective practice and attribution theory on which this dissertation is grounded. The next section of this chapter discusses literature related to reform and restructuring. The following section introduces literature and research related to learning communities. The subsequent section offers research investigating the specific elements of long-term student-teacher relationships. The final section defines relevant theories with key precepts that underlie the design of the specific learning community under research.

Theoretical Perspectives

Reflective Practice

Donald Schön (1983, 1987) is best known for introducing the subject of reflective practice. Reflective practice involves recognition through reflecting on personal experience and the experience of other successful professionals. Schön used the term reflection-in-action to define the reflection that takes place at the time of action or while “inside” (Brookfield, 1990, p. 50) and reflection-on-action to define the kind of reflection that takes place after the action, and he considered both to be critical in the process of the
refinement of these actions (1983). Schön speaks of reflective practitioners who are not just skillful or competent but “thoughtful, wise and contemplative” and whose work involves “intuition, insight and artistry” (1983, p.13).

A primary benefit of reflective practice for teachers is a deeper understanding of their own teaching style and, ultimately, greater effectiveness as a teacher within their own teaching action or experience and those with whom they share this action or experience. By thoughtfully looking at an experience, understanding, and learning from it or even improving on it, a reflective practitioner engages in a continuous cycle of development. This cycle can continue on through discussion and sharing this experience with others, and then, to even further analyzing and generalizing from that experience. Schön also speaks of tacit knowledge or “knowing more than we can say” (1987, p. 22) and how this knowledge can be “discovered” (p. 86) through reflection.

Experience shapes peoples’ ways of thinking and interpreting information, so just as students learn within the classroom, teachers too are in a dynamic, integrated, and continuous process of learning, reflecting, and reorganizing (Argyris & Schön, 1974; Brookfield, 1990, 1995; Schön, 1983, 1987). Because the teaching strategies and curricula that educators adopt implicitly reflect the learning theories they advocate, the voice, recollections, interpretations, and reflections of other colleagues can be powerful (Argyris & Schön, 1974; Brookfield, 1990, 1995; Schön, 1983, 1987). As teaching is a reciprocal relationship whereby teachers learn from each other, insightful recollections and conversations with colleagues about learning, describing, theorizing, and understanding can help both teachers and learners.
“Researchers are discovering ways to learn from the ‘wisdom of practice’, that comes from successful teachers who can share their expertise” (NRC, 2000, p. 31). Experience, like learning, is a process of trial, error, and practice; and through the experiences of teachers, researchers, scholars, and lifelong learners, we know how people learn. What teachers do and who they are is viable and vital but, so often the people who shape our educational system neglect to consider teachers’ understandings and beliefs about learning. Teachers’ voices are essential to make sense of the complex context of education as educational theory and educational practice are intertwined. This pragmatic stance gives opportunity for a reflective practice.

**Attribution Theory**

In attribution theory, the result of an action is dependent on two conditions: factors within the person and factors within the environment (Heider, 1958). Bernard Weiner (1985) further analyzed the structure of causality, or result of an action. This analysis of the structure of causality became a three dimensional causal taxonomy. The first dimension is known as the locus dimension as each cause can be ascribed to internal or external characteristics. A second dimension was determined to be a further necessity because within this first dimension each cause (internal or external) consisted of variability from time to time. This dimension is known as the stability dimension because the cause of this outcome can be ascribed to either stable or unstable conditions. Because this dimension was found to be ambiguous, a third dimension for controllability was then established. Thus, according to attribution theory, the perceived causes of success or failure share three common properties: locus, stability, and controllability.
Attribution theorists use the metaphor that persons are scientists, seeking to understand themselves and the world in which they live (Weiner, 2006). Attribution theory relates the structure of thinking to the dynamics of feeling and actions. These are actions that have already occurred; thus, this theory begins with an already completed deed or state (Weiner, 1985, 2006). It seeks to explain the related behavior and outcomes; it focuses on why and because pairings. As Weiner claimed (1985), once a cause is understood, a possible guide for “future action can be suggested” (p. 548).

Attribution theory neglects excuses or justifications to focus on explanations of why a particular event or outcome has happened. This knowing or understanding may contribute to a more effective management of both the individual and the environment. Weiner states that, “If the prior outcome was a success, then there is likely to be an attempt to reinstate the prior causal network; if the prior event or outcome was undesired, then there is a strong possibility that there will be an attempt to alter the cause to produce a different...more positive effect” (Weiner, 2006, p. 918). Thus, attribution theory provides grounding to my search for perceived causes following unanticipated or unexpected results.

**Restructuring**

School districts and states across the nation have developed standards for student learning to guide curriculum, teaching, and assessment and to provide information to students, families, and communities about the progression of the students. Ideally this information might help schools better address students’ learning needs and inequalities in access to knowledge. The resulting discussions, however, offer little insight as to how schools can ensure that students meet these standards. In these standards based
environments there is an ever increasing degree to which curriculum has been prescribed, and there is presently a mandated, daily minute requirement for math, reading, and physical education. Teachers are currently under tremendous pressure to improve test scores, and many experienced teachers are becoming increasingly frustrated as they see their work shift from engaging students in interesting academic pursuits to primarily teaching content that will appear on tests. Teachers frequently complain of frustrations with being compelled to teach standards rather than to teach kids.

Many experienced teachers also feel frustrated with directives that ignore their expertise or insights. The call for educational reform or improvement as it currently exists has many meanings. Some focus on scores such as those on standardized tests, others revolve around restructuring efforts, and still others see reform as cognitive changes in student thinking (Brooks & Brooks, 1999). Newmann and Wehlage (1995) call for educational reforms or improvements to be made from the ground up.

Teaching strategies that address differences in how students learn while also aiming toward these common high standards often require organizational changes that provide more interaction working with curriculum in a substantive and meaningful way between teachers and students and extended over time (Newmann & Wehlage, 1995). Conventional wisdom holds that close interpersonal relationships are more likely to encourage one person to spend time and energy contributing to the welfare of another.

Research and experience in social psychology, corporate spheres, and more recently in education, point to the centrality of the quality and length of human relationships in any schema for improved satisfaction and productivity (Sergiovanni, 1994). The study of long-term close relationships in education is an area deserving
increased attention. The interrelated components that are nurtured through the processes involved in the creation of a coherent and meaningful program within small, long-term communities of learning might provide a formula for success.

Recent research connects the affective domain and bonding process (Meier 2002; Tomlinson, 2003) as well as authentic pedagogy to learning. Newmann and Wehlage (1995) defined authentic pedagogy as assessment together with instruction. Newmann and Wehlage (1993, 1995) justified their view that there is no point in restructuring schools unless it helps kids learn. Their research on restructuring and reform gave some important insights into assessing the quality of instruction and evaluating the quality of student work and consequently established a direct connection between restructuring and improved student learning.

Newmann and Wehlage (1995) defined authentic student achievement as achievement that is significant and meaningful and defended this primary focus on authentic pedagogy by saying that authenticity contributes to equal opportunity and translates to higher achievement for all students. They (Newmann & Wehlage, 1995) advanced this authenticity by maintaining that authenticity has value beyond the classroom as it makes connections to the world beyond school. Additional major themes of their 5-year study on the process and effects of school restructuring were equity, empowerment, professional community, and accountability. Newmann and Wehlage (1993, 1995) asserted that any educational reform should begin by addressing these two questions: “How can learning have intellectual quality?” and “How do we build a community of learners?”
A Learning Community

What Is a Learning Community?

A community of learners, or learning community, is what emerges from the long-term relationship of students and teachers progressing together. Learning communities are a creation, an outcome, a result of, long-term commitment and interaction (Collay, Dunlap, Enloe, & Gagnon, 1998). Building community takes time and must be deliberate. By being together in a class or a school, teachers might assume there is community, but authentic community must be purposefully built or constructed and then continually renewed and sustained. Sergiovanni (1994), states that authentic community “requires us to think community, believe in community, and practice community” (p. xiii).

“The very word community implies unity, relationship, and a kindred sense of spirit” (Norris, Barnett, Basom, & Yerkes, 2002, p. 9). The absence of community frequently resonates even more strongly and quickly than its presence. In a community, students have a place to be nurtured, teachers hold a shared commitment, and together through interaction all are bonded by what they do. Members of community, both formally and informally, bond together by what they do, by what they have learned through their mutual engagement, and through the work they have produced (Wenger, 1998).

Transforming Powers of a Learning Community

Fullan (2001) seeks this transformative change in his call for the restructuring of schools. Sergiovanni (1994) states that, “Community building must become the heart of any school improvement effort” (p. xi). “Community celebrates the dignity and worth of self and others, fostering the empowerment of both, and encourages and supports the
maximum development of human potential for the benefit of the common good” (Norris et al., 2002). Senge (1990) in his blueprint for learning organizations affirms that learning is enhanced in learning communities when students are provided opportunities to share ideas, to elaborate on their own thoughts, and to consider the ideas of others. Wenger (1998) offers that as members engage in a collective process of learning, they develop and share their capacity to create and use knowledge. A community shares a mission, a vision, and values. A learning community focuses these criteria on improved practice to affect student outcome. In a learning community, the purpose is learning; therefore, individual and collective growth is the outcome or the product of that relationship (Norris et al., 2002). Community building in schools is vital (Fullan, 2001; Meier, 1995, 2002; Sergiovanni, 1994). Sergiovanni (1994, p. xiii) contends,

Community is the tie that binds students and teachers together in special ways, to something more significant than themselves: shared values and ideals. It lifts teachers and students to higher levels of understanding, commitment, and performance—beyond the reaches of the shortcomings and difficulties they face in their everyday lives. Community can help teachers and students be transformed from a collection of ‘I’s’ to a collective ‘we,’ thus providing them with a unique and enduring sense of identity, belonging, and place.

A Situated Learning Theory

Lave and Wenger (1991) come at learning from an analytical perspective. Theories of situated learning in “communities of practice” (Lave & Wenger, 1991) are frequently cited across the literature on learning communities. They had as their foundation the situated learning theory, which declares that learning occurs as a function
of activity, context, and culture (Lave & Wenger, 1991; Wenger, 1998; Wenger et al., 2002). They further avowed that this social context must provide the social interaction necessary to develop a community of practice that allows an individual to move from novice to master (Lave & Wenger, 1991; Wenger, 1998; Wenger et al., 2002). Wenger (1998) saw learning from a perspective that places learning in the context of our lived experience of participation in the world and furthermore saw learning and knowing as an “inevitable and life-sustaining part of our nature.” Wenger (1998, p. 5) broke learning into four components: practice (learning as doing), meaning (learning as experience), community (learning as belonging), and identity (learning as becoming). He saw these elements as “deeply interconnected” and “mutually defining” (p. 5).

Wenger (1998) believed that participation in communities of practice shapes everything about us: what we do, who we are, and how we interpret what we do. He wrote that “education, in its deepest sense and at whatever age it takes place, concerns the opening of identities—exploring new ways of being that lie beyond our current state” (Wenger, 1998, p. 263). This process is not only transforming but continues to take learning forward. To Wenger (1998), “teachers and instructional materials become resources for learning in much more complex ways than through their pedagogical intentions” (p. 267). He advised that “teachers need to represent their communities of practice in educational settings,” as “this type of live authenticity brings into the subject matter the concerns, sense of purpose, identification, and emotion of participation” (Wenger, 1998, p. 267).
Organizational Theories of a Learning Community

A search through the evolution of the learning community begins with the theory of collective learning within a learning organization. The concept of learning community is rooted in the work of organizational theorists such as Peter Senge (1990). Dialogue, collaboration, challenges, commitments, shared visions, teamwork, lifelong learning, reflection, and success are desirable behaviors and goals, no matter what the organization, level, or age of the members of that organization. A learning organization is described as a setting “where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together” (Senge, 1990, p. 3). Senge wrote that successful organizations are those that discover how to tap into people’s commitment and capacity to learn. The whole of the experience can exceed the sum of its parts. A learning organization is a place where people are continually discovering how they create their reality (Bolman & Deal, 1995; Jaworski, 1996; Senge, 1990; Wheatley & Kellner-Rogers, 1996) and the meaningfulness of the experience or process is related to the product or unique outcome. The collective learning, systems thinking or fifth discipline (Senge, 1990), causes this behavior. The idea of a fifth discipline posits that a system, group, or organization is compelled to act in a certain way. Firsthand experiences, feedback, connections, and the interrelationships of all of the parts of the system will affect the outcome, “After all, it is systems that encourage collaboration and systems which make change not only effective but possible” (Bennis, 2000, p. 145).

Learning, no matter what the organization, is an active process. Communities of learning have various names, characteristics, and roles depending on the participants, the
purpose, and the setting, yet they all have a number of similarities. All learning is related to action, and it never occurs through passive study alone. Therefore, a variety of learning communities, not only throughout the business world but within the educational system, have been initiated in various situations as an effort to promote learning and assess its effect on the process and the products or outcomes of success.

This type of learning is what Senge (1990) meant by organizational learning. Senge (1990) wrote that to create constructive learning communities, “schools must change organizational paradigms; roles and instructional practices must be modified and a sense of collaboration and cooperation must be fostered” (p. 4). This new move to “systems thinking,” where the vision is people pursuing common goals collaboratively while continuously defining their values and beliefs about learning, might be accomplished within learning communities in the schools (Senge, 1990). Sergiovanni (1994) wrote about learning communities centered on school life, where the focal point is student learning and this sense of community is the foundation for all curricular and instructional decisions. Furthermore, study of the relationship among learning, community and size of educational environments has contributed to the view of school as community (Sergiovanni, 1990). The classroom began to be seen as a community influenced by the same social dynamics that are in play within the larger society, and thus the classroom was shown to be a sufficiently rich environment for community to develop. Even, John Dewey, in his Pedagogic Creed of 1897, discussed schools as “communities of learners.” For Dewey, community was dominated by tradition. Sergiovanni (1994) believed that communities can be constructed inside schools and that values that transcend beyond the shared activities and interest create this community. Sergiovanni
(1994) saw community as an emotional connection and offered that “when speaking of community it is helpful to speak of community by kinship, of mind, of place, and of memory” (p. xvi). Wehlage (Wehlage et al., 1989) focused on the inner workings of a school, wondered about the process of social bonding, and spoke of commitments and values.

There exists an abundance of educational literature from two well known originators of learning communities, particularly with students who have had little success in the conventional school setting. Anne Ratzki of the Koln-Holweide School in Germany (Ratzki, 1988), and Deborah Meier known for both her Central Park East Schools in Harlem and more recently her Mission Hill School in Boston describe in detail the many facets of the experiences within these learning communities (Meier, 1995).

**Education and Learning Community**

Affect has been shown to be a critical component in achievement (Meier, 2002; Noddings, 2003; Ratzki, 1988; Tomlinson, 2003). These educators all have written about caring. In the collection, Letters to the Next President: What Can We Do About the Real Crisis in Public Education, Deborah Meier (2004) wrote, “At the heart of good schooling are relationships; relationships between trusted teachers and children, and between trusted teachers and families” (p.18). In Deborah Meier’s work (1995, 1996, 1998, 2002), and in both her Central Park East Schools and her Mission Hill School, she has maintained that the most powerful factor in the success of her research and the case for small educational settings is the relationships students build with the adults. In her school settings, students stayed with the same teachers for several years, each student had one
faculty member responsible for him or her, and class sizes were small. In her words to the future president, Meier (2004) stated, “Get the size right: Small is better!” (p. 20).

Nel Noddings (2003), in her book Happiness and Education, questioned the absence of happiness in current school standards and reforms as well as explored the connection of education with present and future happiness. Noddings (2003) demanded that the original aims of education be given more thorough discussion, clarity, and preparation and that we revisit these aims continually to see whether we are, in fact, successful at what we think we are doing in education. She wanted the talks to center around “what things really matter” and wondered whether, if that were our initial question and the aim were happiness, we would establish very different guidelines for teaching (2003, p. 208). Noddings (2003) thought that the quality of our present experience and the likely contribution of that experience to future happiness might be reached through an educational setting of continuity that would establish equitable benefits to the students both academically and socially. On the basis of learning community and multiyear teaching by Flinders and Noddings (2001), Meier (1996, 1998, 2002), and Noddings (2003), there are numerous relational benefits to be gained from the continuity of a multiyear educational setting. Flinders and Noddings (2001, p. 2) feel that “Next to parents, teachers play the most important role in the lives of many children. The benefits of continuity far outweigh those of variety.”

In Multiyear Teaching: The Case for Continuity, Nel Noddings (2001) provides a view based on her personal work and experience within a multiyear teaching setting. Noddings (Flinders & Noddings, 2001) talks about the significant effects this experience had on the development of her educational philosophy and recalls the warm memories
she continues to share with her prior students regarding this experience. Flinders and Noddings (2001) also provide an overview of research on multiyear teaching that supports the benefits of this teaching. Their summary (Flinders & Noddings, 2001, p. 2-3) of the likely indirect academic benefits of this continuity include: a sense of belonging, the acceptance of guidance, the more likely expertise of subject matter thus the potential of higher achievement, incentives for genuine teaching, more time on task, satisfaction and rewards for the teachers, positive student attitudes, and a more complete curriculum.

As part of this overview of research, Flinders and Noddings (2001) cite a comprehensive national review of six studies by George and Lounsbury regarding multiyear teaching and academic benefits (George & Lounsbury, 2000, in Flinders & Noddings, 2001). Taking the whole body of their research into account, they warn that although some suggest a positive relationship, caution is urged in this interpretation because of the lack of studies on the cognitive effects, the lack of detailed description concerning the methodology, and the inability to specify a particular effect on student achievement within other program characteristics (Flinders & Noddings, 2001).

A second area of study by Flinders and Noddings (2001) encompasses the social benefits of the organization of multiyear teaching. This category includes attendance rates, discipline, and perceptions of the teachers, students, and parents. They suggest that this area is more measurable in terms of effects. Improved attendance and discipline have been reported with the use of multiyear organization as well as positive perceptions of the students, teachers, and parents involved (Flinders & Noddings, 2001).

Noddings explains that the obvious argument against multiyear teaching holds that students need the experiences of dealing with multiple personalities and counters
with, “The benefits of continuity far outweigh those of variety” (Flinders & Noddings, 2001, p. 2). These studies support renewed interest in the benefits of multiyear relationships and offer confidence in the fact that these relationships will not hinder academic achievement (Flinders & Noddings, 2001). Flinders and Noddings (2001) suggest that more extensive research is needed to answer the questions related to multiyear teaching and academic improvement.

**Long-Term Student-Teacher Relationships**

Flinders and Noddings (2001) connect contemporary issues of student diversity, citizenship, and moral education to multiyear student-teacher relationships. Along with Meier (1995), and Wood (1990), they support these potential societal contributions of multiyear relationships. Furthermore, Dewey’s (1916) belief was that a democracy is a dynamic achievement, a mode of living continually under construction, so education must be dynamic and flexible, with a curriculum that is continually constructed through shared experience.

How can we best provide an appropriate education for all students without an expectation of the same performance from each child? What kind of a setting will reinforce the idea that childhood should consist of more than preparation for adulthood? How do we help students develop their best selves, with happiness in mind? A learning environment that provides continuity might offer some of the solutions.

Long-term student-teacher relationships come in myriad forms. At the core of a long-term relationship come the desired and seemingly logical outcomes of the promotion of strong, extended, meaningful, positive interpersonal relationships between
students and students, students and teachers, and teachers and parents that could foster increased student motivation and, in turn, stimulate improved learning for students.

Regardless of the specific name attached to the process used for this structure—looping, multiage, continuous learning, continuous progress, persisting groups, multiyear grouping, family-style learning, two cycle teaching, or student-teacher progression—the purpose is to keep students and teachers together for more than the conventional one year, or in other words, to create a long-term student-teacher relationship.

One such strategy that promotes long-term student-teacher relationships is a strategy called looping (George & Lounsbury, 2000; Grant, 1996) or a teacher advancing with his or her students to the next grade level rather than sending them to another teacher at the end of the year. Typically with looping, at the end of the second (or third) academic year in the pattern, the children move on to a new teacher while the looping teacher returns to the lower grade level to receive a new group of students. This practice has also been known as continuous learning, continuous progress, persisting groups, multiyear grouping, or teacher/student progression.

A second strategy that has been used to promote long-term student-teacher relationships is a multiage structure (George & Lounsbury, 2000; Grant, 1996; Milburn, 1981). There are two reasons why multiage classes might exist: one reflects a philosophy; the second relates to financial or administrative considerations. The multiage philosophy is the concern for the purpose of this literature review. One main difference between the former looping strategy and this multiage strategy is that a multiage group consists of a deliberate mixing of age and grade levels in the classroom. Chronological and mental age do not always correspond and likewise, a child may excel in one curricular area but
experience difficulty in another. Although these individual differences are the norm, conventional grouping frequently makes this difficult to attend. A number of terms describe this long-term student-teacher relationship practice: family-style grouping, split level, and mixed grade; in each, a child remains in the same class with the same teacher for a number of years, most commonly three. Multiage grouping can start at any age and there is always movement in and out of the class since, as older students graduate, they are replaced as a group of new younger children enter.

**History of Long-Term Student-Teacher Relationships**

Long-term student-teacher relationships in both the forms of multiyear and multiage teaching have had a long history and vast support. They share much of the same structure and benefits of what is remembered as the one room school house of early American educational history. Because of the limited access of schools, students, and teachers in rural communities, teachers in the 17th and 18th centuries frequently taught students of many grades in only one classroom. From necessity, children of all ages went to school together learning from each other as well as the teacher. In this concept, younger students would cycle in to frequently be mentored by other older, more senior students, who would in turn be cycling out at the end of their educational career.

One of the earliest and most obvious references to long-term student-teacher relationships came under the name of teacher rotation in 1913 from the Department of Education (George & Lounsbury, 2000; Grant, 1996). In this historic memo, the issue of long-term student-teacher relationships was questioned thus, “Shall teachers in graded city schools be advanced from grade to grade with their pupils through a series of two, three, four, or more years, so that they may come to know the children they teach and be
able to build the work of the latter years on that of the earlier years…?” The memo went on to say, “…what a child needs is not an ever-changing personality, but a guide along the pathway of knowledge to the high road of life.” This same memo continued on to discuss the advantages of this sort of class structure, outlining some of the same advantages of long-term student-teacher relationships that more recent literature cites. Among these shared benefits and support for this structure are time saved at the end of the year and the beginning of the following year and more support from parents who know and understand the teacher and the methods (George & Lounsbury, 2000; Grant, 1996).

Up to this point in history, educating the masses was not a priority, as it was felt that all children did not need to learn how to read or write. For example, those who would grow up to become farmers and factory workers may not have seen education as particularly necessary. Horace Mann, then secretary of the Massachusetts Board of Education, strongly disagreed and insisted that America must educate all children since our ideal of democracy was dependent on educated citizens (Grant, 1995). In 1843, Horace Mann was looking for a system to solve the schools’ problem when he visited Prussia and saw their graded system at work. He felt this graded system was efficient and would also ensure that all Americans have an education (Grant, 1995). A graded system could be regulated to make supervision easier, and as American factories would turn out products, American schools would turn out educated citizens. Thus, one room school houses gradually went out and in came the single-grade system of the conventional school structure. Horace Mann’s goal of educating all children continues on as our shared
goal, but research has recently taught us more about how children learn and develop (Grant, 1995).

When age grading was adopted from the Prussian educational system nearly a century ago, it seemed an efficient way to structure teachers’ work, apply sequential curriculum guides, and move students through a more tightly specified system. However, as it was implemented, a graded system reduced the time teachers spent with their students and their ability to know them well became limited, as were the opportunities for peer teaching and socializing as powerful teaching resources (Darling-Hammond, 1998).

Literature can be found with examples of long-term student-teacher relationships in other countries (Burke, 1996; Gaustad, 1998; Hanson, 1995). One of the more noted is the Waldorf Schools founded in the early 1900s by Austrian educator and philosopher, Rudolf Steiner. Steiner founded the Waldorf Schools in Germany for the education of the children of the Waldorf-Astoria cigarette factory workers. He believed that a long term relationship with the teacher was beneficial to children and that the teacher should follow their students throughout the elementary grades much like a “third parent” (Hanson, 1995). Waldorf Schools continue to use this practice.

In addition, this practice has been used for years and continues to be successfully and widely implemented in Germany by Anne Ratzki of the Koln-Holweide School. Literature and interviews from Ratzki strongly support long-term student-teacher relationships and all of the academic and long term benefits that they offer. Ann Ratzki (1988), states that the importance of the time saved at the beginning of each year is incalculable.
Literature from numerous other nations, including Japan, Israel, Denmark, Sweden, and Switzerland, describe the structures and benefits of their various educational long-term student-teacher school settings (Darling-Hammond, 1998; Gaustad, 1998). Research in these settings include findings that students experience much greater success in schools structured to create close, sustained relationships among students and teachers.

More recent literature and research comes from Deborah Meier, author of The Power of Their Ideas (1995) and award-winning educator/creator of the innovative Central Park East Schools in New York City and Mission Hills Schools of Boston. Meier began using multiyear assignments in her Central Park East Elementary School in 1974 and considered the practice of long-term student-teacher relationships essential to knowing students and their families over several years (Hanson, 1995; Meier, 1995).

Elements of Strength of Long-Term Student-Teacher Relationships

The rationale for multiyear and multiage strategies is shared and assumes positive effects and benefits in both cognitive and affective domains. Literature and studies are replete with interviews of teachers, students, administrators, and parents who have participated in and reported on these types of long-term student-teacher relationships (George & Lounsbury, 2000; Grant, 1996; Hanson, 1995; Jacoby, 1994). These case studies find that more ambitious learning goals are supported with greater success when students’ and teachers’ efforts are more cohesive and the time is available to support these more profound efforts. The strength of these grouping strategies is in the relationships. At the core of these groupings are the relationship factors which include the teacher to student relationship, the student to student relationship, the teacher to parent
relationship, and the teacher to teacher relationship. These findings can be categorized into the following elements.

**The benefit of time.** The factor supported most frequently is the benefit of additional learning time. A long-term student-teacher relationship gives the teachers extra teaching time and the students extra learning time. Some have reported at least a month of additional time, others have reported at least two months, and still others have suggested even more with summers being an academic portion of a long-term student-teacher relationship (Burke, 1996). Because it is not necessary to spend transition time getting to know students, setting up classroom routines, and reviewing to assess a child’s academic level, that time can be spent by immediately building on learning experiences gained the prior year (Grant, 1995; Hanson, 1995; Jacoby, 1994; Ratzki, 1988). Hanson (1995) and Mazzuchi and Brooks (1992) call this “the gift of time” in memories of their experiences. Others note the time gained at the end of every year since teachers feel a strong responsibility for this group and continue teaching past the point of spring testing with no let up until the final day. Still others contend that learning continues to occur as students and parents enthusiastically are empowered through the interest and motivation of the school year learning experiences beyond the actual school setting through the summer by taking vacations and transferring learning applications to these summertime experiences (Hanson, 1995). Researchers of time on task consistently obtain a positive correlation between measures of instructional time and student achievement.
The continuity of learning. A second factor, strongly supported, is that the advantage of additional time in a long-term student-teacher relationship provides the time to build relationships on which much of children’s learning depends (Jacoby, 1994). A teacher has the time to accumulate more knowledge of students’ personalities, learning styles, strengths and weaknesses, and to build on these known foundations and utilize these strengths and talents to a greater extent. Teacher knowledge about a child’s intellectual strengths and weaknesses increases in a way that is impossible to achieve in a single year (Jacoby, 1994). Daniel Elliot and Robert Capp (2003) call this a “continuum of learning” in their report of a study of multiyear classes. Instruction becomes constructivist, or child-centered, rather than curriculum centered (Hanson, 1995). Curriculum is strongly defined by the previous experiences between the students and students and students and teachers. The planning for instructional standards, goals, and objectives can be addressed proactively over a longer process, with attention to the support and retention of learning, the extension of skills, and finally enrichment covering both the depth and breadth of this knowledge. With a longer time to reflect, more time to cover content in enhanced ways, and less time spent on unnecessary repetition, fragmentation might be prevented and cohesive connections made readily available. Long-term student-teacher relationships improve student performance (Checkley, 1995; George, 1987).

Differentiated instruction. Long-term student-teacher relationships provide more opportunities for all students. More time leads to the development of a deeper understanding of students’ learning styles and needs. Students change from one grade to another with more confidence (Checkley, 1995; Mazzuchi & Brooks, 1992) and a
minimum of anxiety (Checkley, 1995; Hanson, 1995) about the new school year since they know both the teacher and the accompanying expectations (Hanson, 1995). There is reduced apprehension about the new school year and the new teacher after the first year (Checkley, 1995; Hanson, 1995). This emotionally supportive environment is more developmentally appropriate, allows for flexible adjustments to individual needs, and provides more continuity to benefit children of all abilities and backgrounds. Inclusion on many levels is more apt to be successful as more opportunities are available to tailor the curriculum to individual strengths and needs. A teacher can implement a more coherent instructional plan appropriate to the child’s development, abilities, and attainments (Grant, 1996; Hanson, 1995; Milburn, 1981; Miller, 1995). Cooperation among groups is fostered, and the sense of community that is built in a long-term student-teacher relationship is strong. Jim Grant, the executive director of the Alliance of Multiage Educators, reports that teachers and principals have found that keeping students and teachers together longer than the traditional one school year builds “trust, belonging and bonding” (1995, p. 7). George Wood, in an article discussing students as citizens, describes multiyear relationships as one means to “make sure that every child has the time to connect with the classroom, feel a part of all that goes on, and have the time it takes to succeed in school” (1990, p. 34).

Student collaboration is an additional student-student relationship benefit of long-term student-teacher relationship structures. Student benefits from time spent on developing social skills and cooperative group strategies become evident in subsequent years (Grant, 1996; Hanson, 1995). Teachers can use the various grouping techniques as their students’ needs necessitate and among these suggested are teamwork (Hanson,
1995), cross age groupings, and peer tutoring (Berliner & Casanova, 1988, as cited in Miller, 1995; Cotton, 1996; Villa & Thousand, 1988, as cited in Miller, 1995). In a long-term multiage relationship, there is more of an opportunity for children to interact with each other while children teach their peers, act as role models, or mentor the younger students of the larger group. Younger children learn routines and receive help from older children, which in turn reinforces learning. Although studies have found that grouping by age or single grade level yields no benefits over multiage groupings, multiage grouping, however, yields benefits in the affective domain. Literature strongly suggests a connection between the affective domain and academics.

**The support and involvement of parents.** A long-term student-teacher relationship helps teachers build better relationships with parents. Darling-Hammond (1998, p. 52) believes that, “Teachers get to know individual children and families better because of the longer time they spend together.” Family is a very important factor in a long-term student-teacher relationship. This kind of relationship creates a “family” atmosphere that inspires parent involvement and gives children a more positive attitude about school. A long-term relationship can turn parents into supporters and promote bonding between parents and teachers (Jacoby, 1994; Mazzuchi & Brooks, 1992). Parental support is an essential ingredient of any school reform. Parents play a vital role and are important stakeholders in their children’s education; therefore, the closer the parent is to the education of the child, the greater the impact on the educational achievement (Fullan, 2001). “The children of involved parents do better academically, get along better with their parents, do more with their parents, and have a more positive attitude about school” (Grant, 1996, p. 71). Project F.A.S.T. (Families Are Students and
Teachers) parents reported feeling more respected by teachers and having more confidence in their child’s teachers (Burke, 1996). Primary looping teacher Jan Jubert speaks of a “close-knit family” (Grant, 1996). Teachers spoke of a better understanding of students’ family dynamics and the parents’ needs and expectations regarding their children’s education. A long-term student-teacher relationship encourages a stronger sense of community and family among parents, students, and teachers (Checkley, 1995). When a teacher has a child for more than one year, there is more time to build relationships with families.

The empowerment and commitment of teachers. In a long-term student-teacher relationship, students commit themselves to learning because their teachers commit themselves to ensuring that learning takes place (Burke, 1996; George & Lounsbury, 2000). F.A.S.T. teachers reported an increased sense of ownership for student outcomes and a heightened sense of efficacy as a result of their increased decision-making autonomy for students (Burke, 1996).

“Teacher expertise has been found to be the most significant determinant of student success, accounting for 40% of the difference in overall student performance” and “students who have highly effective teachers three years in a row score as much as 50 percentile points higher on achievement tests than those who have ineffective teachers three years in a row” (Darling-Hammond, 1998, p. 49-50).

Teachers need deep understanding of subject matter and students’ diverse approaches to learning as well as multiple teaching strategies if they are to enable students to succeed. Teachers are more effective when they know students well, when
they understand how their students learn, and when they have enough time with students to accomplish their goals (Darling-Hammond, 1998, p. 50).

As there is not only one successful student progression model in long-term student-teacher relationship programs, there are also various teacher progression models within long-term student-teacher relationship programs. In successful programs teachers might meet to collaborate during planning time, or they may co-teach or even team-teach the long-term group of students. Both Grant (1995, 1996) and George (1987) found that the ability of a multiage teacher to meet the needs of his or her students is enhanced when the teachers work as a team. In team teaching an essential element is the available time scheduled to learn effective strategies, develop lessons, and to examine and discuss student work. The teachers treat all of the students as their own and lessons are presented to whole groups, small groups, and individuals. Team teaching gives the students various perspectives, the same message from all teachers although heard in different ways, a balance in terms of teachers’ strengths in subjects or content areas, and teacher investment.

Teacher support of long-term student-teacher relationships is extremely strong and positive (Grant, 1996). Many of these teachers have a significant basis for comparison as they have taught for many years (Grant, 1996). Although these teachers enthusiastically support these types of student progression programs, they voice the concern repeatedly that these programs are not easy for the teachers; the work is harder, cooperation needs to be ongoing and collaboration requires more time. George, in his 1987 study, reported that long-term relationships often seemed to cause teachers to be more dedicated and spend more time on their teaching. More trust and involvement is
required from the teachers, but in return more support is available to them (George, 1987; Grant, 1996). Research on school effectiveness has consistently suggested that long-term student-teacher relationships improve job satisfaction for teachers (Burke, 1996; George, 1987). Teachers are passionate and believe that this approach accelerates learning. Responses by teachers overwhelmingly speak of this rewarding experience. Comments from teachers and principals around the United States reflect the positive experiences most educators and students have had when long-term student-teacher progressions have been implemented in their schools. A group of teachers said that the experience had been the “most satisfying interval of their professional lives because it allowed them to see students grow and change over time” (Burke, 1996 p. 360). A middle school teacher in a multiyear arrangement said, “It’s the most exciting thing I’ve done, and I’m 55 years old” and, “Seeing the eagerness with which youngsters participate and are engaged in their learning is thrilling” (Burke, 1996, p. 360). Another participant was so enthusiastic about her role in long-term student-teacher relationships that she intended to expand their use in her building and make such relationships the focus of her doctoral dissertation (Burke, 1996). Hanson stated, “It was one of the most rewarding and exciting years of my career” (1995, p. 43). “I have had some of my most rewarding teaching and learning experiences with these children,” states Jacoby (1994, p. 59). “The pay is the same, the work is double, but the professional satisfaction rewards to the teacher are unimaginable” (Elliot & Capp, 2003, p. 36).

**Summary of research for long-term student-teacher relationships.** This review of literature is premised on the concept of building community through long-term student-teacher progressions to support students’ cognitive and affective learning. This
review of research to explore results of long-term student-teacher relationships on the success of students concludes that the effects on student learning are frequently indirect. The learning community, facilitated by long-term student-teacher relationships, allows for many mediating effects of desirable practices or characteristics that promote increased student learning. Outcomes such as: increased collaboration between students, teachers, and parents; increased support and involvement of parents; increased differentiation of individual students, curriculum, and instructional strategies; and increased teacher satisfaction were reported.

The literature covered research within a broad range of academic levels in addition to national surveys and studies, state studies, studies within school districts, single-school case studies, and individual teacher practitioners. While most studies produced no statistically significant differences on standardized measures of achievement, taken collectively, the evidence indicates that there may be considerable benefits attached to this strategy. The vast majority of respondents involved in long-term student-teacher progressions reported that student learning had been affected in positive ways.

The results of the literature review indicate that other programs of organization are not necessarily less effective and that there is no evidence to deter practitioners from implementing this model. However, there is vast support to encourage exploration and conduct studies that may confirm these promising results. This multiyear learning community structure may contribute to the eagerness of teachers, students, and parents to create a more positive environment for learning together. This may, in turn, contribute to improved academic learning.
Educational Trends and Research

Teachers need to put into practice the methods that research has found assist students in learning. This research has asked questions such as the following: How do people learn? What are the best practices for instruction? How can we use the constant and grounded cognitive educational theories of Dewey (1916, 1938), Piaget (1972), and Vygotsky (1962, 1978), accompanied by the school culture aspects of the theories of Bruner (1986, 1996) and Cawelti (1995, 1999, 2000)? How can the recent brain research of Gardner (1983, 1993) and Caine and Caine (1991, 1997), combined with the innovative restructuring approaches of Wehlage (Wehlage et al., 1989), Newmann (e.g., Newmann, Secada, & Wehlage, 1995; Newmann & Wehlage, 1993, 1995), and Meier (1996, 1998, 2002), best be used to support an educational philosophy of constructivism and develop a learning environment in which all can succeed? In the case of this study, the answer was a learning community, a group that was on the same page right from the start. Years of theory, practical knowledge, professional development, and education courses had given the lead teachers the educational philosophy to proceed, while the school principal provided the opportunity.

Constructivist Learning Embedded in a Learning Community

The goal was to create a learning environment that would maximize the learning outcomes of the school’s students. From years of teacher preparation, professional development, and firsthand experience, it was clear that ensuring what is taught is learned requires a multifaceted process. What works is not always obvious and clear-cut. There is not one unifying theory of learning but many, and the research of John Dewey (1916,
The theories of these educational pioneers would serve as the foundation of the learning environment. Their grounded theories of knowledge would be the epistemology that would support the construction of a learning community based on the premise of a constructivist learning theory. The teachers were eager to create a particular learning community that would help students come to participate and fully engage. The design of that community would encompass the critical attributes of a constructivist model for learning.

**What Is Constructivism?**

The constructivist epistemology, or theory of knowledge, is concerned with both how people learn and the nature of knowledge. This body of knowledge has grown considerably and has put a critical spotlight on the conventional understandings of what needs to happen in the classroom for effective learning to happen. Constructivism had gained wide acceptance in teaching and learning at the time of this call to action through Blueprint2000 legislation. Constructivism is a theory of knowledge based on the premise that people construct their own knowledge from their experiences—that cognition or learning is the result of mental construction. Constructivism is an approach to both teaching and learning that promotes the principle that for effective learning to occur, it must take place within a meaningful, authentic situation in which experience and knowledge are shared and adapted collectively (Brooks & Brooks, 1993; von Glasersfeld, 1995).
A Constructivist Philosophy in Context With Past Learning Theories

A constructivist theory is a meta-theory or even a learning philosophy, as it encompasses a number of cognitive learning theories. Dewey (1916), Piaget (1972), Vygotsky (1962, 1978), and Bruner (1996) each proposed that learners actively construct new knowledge on the basis of their prior knowledge. It was their research that first promoted constructivist practices in schools. John Dewey, an American philosopher and educator, felt that a situation represents the experiences of the environment affecting the learner and that interaction takes place between the learner and the environment.

Dewey (1916) believed that to develop students’ interest in learning, educators must provide opportunities for inquiry and discovery, as well as social interaction with peers. In this pragmatic paradigm, learning emphasizes the process rather than the product, inquiring over acquiring. Dewey (1916), in Democracy and Education, wrote about “the whole child,” the “transformative experience,” and “learning by doing.” His influence made school and learning more fun and led to profound changes in American schools during a time of progressive education. Although Dewey recognized the importance of both school and curriculum, he maintained that the focus of instruction should be placed on the learning process. The importance that he gave student interest and active learning reminds us to teach the child, not the subject, and that the quality of the process of learning is more important than the result. This relevance to the authentic educational possibilities within the learning community gave teachers new meaning and value.

The work of Jean Piaget (1972), a Swiss philosopher, natural scientist, and developmental psychologist, was largely devoted to the fundamental question of the
development of knowledge. Piaget is considered to have set the standard for the investigation and concept of individual intellectual development. His concern was with the cognitive structures and mental actions within various distinct stages of the intellectual or cognitive development of children. His findings suggest that children cannot merely be told what they need to know; they must build knowledge through interacting purposefully with their environment (Piaget, 1972).

According to Piaget (1972), in The Psychology of the Child, a child interacts with his or her environment and learns thorough a process of assimilation and accommodation. For timely educational purposes, as teachers, we might take from Piaget’s work the importance of leaving the child the space within which to construct knowledge and of allowing this development within the learning environment. Piaget believed that children learn best when they are provided with activities that engage them at an appropriate level and require them to develop new knowledge. In the constructivist learning community in this study, creating these types of inquiry-based activities and opportunities would be the most exciting task.

Lev Vygotsky (1962, 1978), a Russian cognitive psychologist, emphasized that social interaction plays a fundamental role in cognitive development. Vygotsky took this development to a higher psychological process, as his research placed more emphasis on the social context of learning. Whereas Piaget (1972) stressed biological and universal stages of development and individual active learning, Vygotsky’s emphasis was on the “interlacement” between the biological and cultural and the concept of the child as a social being. In addition, Vygotsky’s theory emphasized the importance of the sociocultural context in which learning takes place and how the specific context has an
impact on what is learned. This means that to understand a child's knowledge, we must also analyze the socially supported interactions. Vygotsky (1962), in Thought and Language, posited that a child's knowledge is socially constructed in interaction with significant adults, whose remarks validate the knowledge for the child. He wrote that “it is through others that we develop into ourselves” (Vygotsky, 1962, 1978). According to Vygotsky, learning takes place in the zone of proximal development. He asserted that the only “good learning” is that which takes place in this zone and therefore is “slightly in advance of development” and “awakens and rouses to life those functions which are in a stage of maturing” (Vygotsky, 1962, 1978).

From Vygotsky’s (1962, 1978) research, teachers may conclude that although the individual child plays a large part in the learning process, he or she is not able to learn alone and needs the help of adults and other children for deep knowledge to occur. Teachers know these strategies as scaffolding. The social nature of knowledge is crucial to the arguments for learning in a constructivist framework within the learning community (Vygotsky, 1962, 1978).

Jerome S. Bruner (1986, 1996) a psychologist and education theorist, built a cultural psychology of education with both a historical and a social context for participants. The cognitive development theories of Piaget (1972) are distanced by Bruner’s research. These social and cultural aspects of learning take the cognitive revolution to a higher level. In his book The Culture of Education, Bruner (1996) explained, “How one conceives of education, we have finally come to recognize, is a function of how one conceives of culture and its aims, professed and otherwise” (pp. ix–x). Bruner believed that human nature is not independent of culture, that there is a special
interaction through which mind both constitutes and is constituted by culture (Bruner, 1996). In addition to his attention to social culture, his beliefs also took on a political context. He wrote,

> What has become increasingly clear is that education is not just about conventional school matters like curriculum or standards or testing. What we resolve to do in school only makes sense when considered in the broader context of what the society intends to accomplish through its educational investment in the young. (Bruner, 1996, pp. ix–x)

The moment we enter the classroom as practicing teachers, we recognize, like Bruner, that the school experience is about more than the process—that it is a culture. We share his critical view that school is about more than curriculum, standards, and testing.

**Constructivist Principles**

Active learning is a key principle of constructivism, which emphasizes the cognitive theory that knowledge is predicated on active experience. Cognitive constructivism is centered around the idea that children move through distinct stages of cognitive ability and that they learn by constructing their own knowledge fitting new information together with what they already know (Brooks & Brooks, 1993; Piaget, 1972; von Glasersfeld, 1995).

Constructivism requires active learning situations. This construction of knowledge happens as the learners actively work toward an understanding of their own through engagement and ownership in tasks that are meaningful to each unique learner. Learners construct knowledge for themselves both individually and socially. Constructivism is a cognitive approach to learning that stresses the role of students as
active participants in drawing knowledge and meaning from their experience. Learning is a process of forming meaningful representations, of making sense of one’s experiential world.

No knowledge can be independent of the meaning attributed to the experience constructed by the learner or community of learners. Constructivists assert that both the learning and meaning of this learning are grounded within the shared experiences (Brooks & Brooks, 1993; Dewey, 1916; Piaget, 1972; von Glasersfeld, 1995). Our learning is closely associated with our connection with others and on the connections that the learner is making between ideas. Rather than presented, learning should be guided through interaction and discussion within group processes. Within a constructivist framework, it is possible for the learner to find multiple ways to link new information to previous experience (Brooks & Brooks, 1993; Dewey, 1916; Piaget, 1972; von Glasersfeld, 1995; Vygotsky, 1962).

Constructivism focuses on learners’ control of the learning process, and it narrows the gap between the school world and real-life society. The context in which ideas are taught as well as students' own beliefs and attitudes toward these ideas, are interconnected within a constructivist learning environment. This learning is also influenced by the social dimensions of culture and politics (Brooks & Brooks, 1993; Bruner, 1996; Dewey, 1916; Piaget, 1972; von Glasersfeld, 1995; Vygotsky, 1962, 1978). Teaching based on constructivist principles emphasizes active learning, the linking of new knowledge to knowledge learners already possess, and the application of understanding to authentic situations, which offers the possibility of equal opportunity for all students.
Strategies for the Promotion of Constructivist Learning

**Teachers’ changing role.** From the constructivist perspective, effective teachers need to structure learning experiences that are learner centered and facilitate active learning. These instructional strategies should be activity and inquiry-based and give the students opportunities to construct their own knowledge. Through experiences such as cooperative learning activities and authentic learning situations, an integration of thoughts, feelings, and actions fosters the learner in the process of developing meaning, understanding, and, thus, knowledge. Recognizing that a learner’s prior knowledge is a key factor to future learning, teachers support, encourage, and help students develop this knowledge in addition to cognitive skills. Because learners differ in their learning styles, motivation, interest, aptitudes, experiences, and knowledge, it seems that constructivism could provide the best medium to match these diverse needs (Brooks & Brooks, 1993; von Glasersfeld, 1995).

**Students’ changing role.** At the core of constructivism lies the idea that the students are the constructors of their knowledge, sense of meaning, and understanding through their learning experiences and therefore share the responsibility for their learning. Within constructivist learning environments, students become engaged by applying existing knowledge and experience to collaborative ventures. In these settings, multiple truths, perspectives, and realities may exist. As differentiated instruction is a goal of education, a constructivist setting might aspire to reach this goal (Brooks & Brooks, 1993; von Glasersfeld, 1995).
The constructivist classroom. In the constructivist classroom, the teacher is seen as an instructional designer, moving the focus from designing strategies or instructional sequences to designing environments. The learning environment should reflect the importance of the social context of learning. A key principle at the core of the constructivist theory is that cognitive development is facilitated by activities that engage students at an appropriate level and require adaptation. Cooperative and collaborative learning is at the foundation of the classroom instructional design. Many other strategies contribute to this method of instruction for learning. Among these instructional innovations are thematic curriculum, hands-on investigations and experimentation, project building, problem solving, critical or higher order thinking, concrete and authentic situations, and reflection. Students should learn how to learn and keep sharpening the tools needed for lifelong learning.

With a well-planned constructivist learning environment, the classroom will mirror the larger community, where people naturally learn and work collaboratively. The classroom prepares students for the larger goal of life in a democracy. Because the collaborative learning experiences that are innate in a learning environment give students authentic experiences and reasons to communicate, active learning processes that engage everyone, tools for continued learning, opportunities to reflect, and support for the development and comprehension of their academic learning, the case for a constructivist learning community is strong (Brooks & Brooks, 1993; Johnson & Johnson, 1989; von Glasersfeld, 1995).
A Constructivist Philosophy in Context With Recent Learning Theories

New understandings of the brain and intelligence have strong implications for teaching and learning that support constructivism (NRC, 2000). Howard Gardner (1983), in Frames of Mind: The Theory of Multiple Intelligences, introduced a multifaceted way of understanding intelligence. According to Gardner, everyone has multiple intelligences that develop at unique rates for each person. Gardner’s brain research has shown that the most effective learning takes place when students are engaged in hands-on experiences that access a variety of intelligences; therefore, multiple approaches to learning stimulate the whole brain. In support, Gardner (1983) stated, “Stimulation of the entire brain is imperative for effective learning to occur” (p. 112). New momentum for constructivist learning has been gained from observations of how children learn and from most recent research into the workings of the human brain and how learning occurs (Caine & Caine, 1991).

Reaching each child. Tomlinson (2003), in Fulfilling the Promise of the Differentiated Classroom, reinforced the ideology of constructivism when she stated that “the philosophy of differentiation proposes that what we bring to school as learners matters in how we learn” (p. 14). Differentiated instruction requires a change in teaching practices and an evolution of classroom culture (Tomlinson, 2000, 2003). Teachers in a differentiated classroom must take into simultaneous account both who and what they are teaching and must “plan actively and consistently to help each learner move as far and as fast as possible along a learning continuum” (Tomlinson, 2003, p. 2). Like Vygotsky (1962, 1978), Tomlinson believes that students are dependent on the adults who shape the experience. Tomlinson, however, took this responsibility to a higher imperative by
identifying caring and dignity as the duty of a teaching professional and by attaching to
the already daunting task of teachers, the need to value and be committed to each child’s
uniqueness. Differentiation is a philosophy, a way of thinking about teaching and
learning, and is based on a set of beliefs about students’ differences and the way that they
learn because of these differences. Teaching in a differentiated fashion involves building
on core teaching and learning practices that are solid and then refining them for
maximum individual growth.

**How people learn: A composite.** A scientific understanding of learning includes
understanding about learning processes, learning environments, the teaching of
sociocultural processes, and the many other factors that contribute to learning (NRC,
2000). Three organizing factors of the committee for the NRC that are reflected in its
compilation (NRC, 2000) provided the framework for the NRC’s study and the present
research. The NRC focused its research on human learning, the design of instructional
environments, and the potential of these environments to help all individuals achieve to
their highest potential. The organization found that

learning is influenced in fundamental ways by the context in which it takes place.

A community-centered approach requires the development of norms for the
classroom and school, as well as connections to the outside world, that support
core learning values. (NRC, 2000, p. 25)

**Summary**

The theoretical perspective of this study is explained through this review of
literature. Reflective practice and attribution theory is described. Educational reform and
restructuring is discussed. Literature and research related to learning communities have
been introduced and explained. Research investigating the specific elements of long-term student-teacher relationships has been presented. Relevant educational theories with key precepts that underlie the design of the specific learning community under research have been supported. The reality is that schools must find ways to motivate teachers and students while encouraging the implementation of strategies that help to ensure equity in student learning and achievement. The continuity of a smaller learning community may offer possible solutions.
CHAPTER 3: METHOD

As both a researcher and a teacher, my research interest stemmed from a desire to revisit and share my own experiences as a teacher involved with the PRIME multiyear learning community in the mid to late 1990s. The purpose of this study is to explore the experience of a unique multiyear elementary school learning experience designed with interrelated research-based efforts for improved teaching and learning, to use an autoethnographical critical practice inquiry to describe the perceptions and reflections of the principal and teachers directly engaged in this project of educational reform for a deeper understanding of the experience, and to attribute perceived causes to the outcomes of this interaction for possible future action. This initiative had a profound effect on my teaching approach and beliefs and that of the other key participants involved in the learning community’s implementation. In view of the evolving U.S. classroom and increased interest in learning communities among researchers and education policymakers (Armstrong, Henson, & Savage, 2009; Campbell, 2010; Ornstein, Levine, & Gutek, 2011), I revisit the key actors involved in PRIME in two rounds of interviews with the goal of providing best practices ideas for effectively establishing learning environments in today’s elementary schools through a real-world account of the strengths and challenges of instituting such an initiative.
The method used is an auto-ethnographic reflective critical practice inquiry designed to explore the experience of this multiyear learning community. Included within this exploration are teacher interviews that revisit the program design and implementation to record student and teacher outcome data. Using the attribution theory as an analytical tool, attributional dimensions to the successes and failures within this outcome data were ascribed. While the qualitative data collected for this dissertation describe anecdotal influences of PRIME on students, teachers, and parents, as part of the process I also monitored achievement levels to determine unintended and positive outcomes. Consequently, I also integrated into this dissertation longitudinal quantitative data collected from standardized achievement test scores over a 10-year period that allowed comparisons of students who participated in the learning community with those who did not. Preceding this reflective study, I followed the sample students through a 10-year academic trek using benchmarks at 2nd, 5th, 8th, and 10th grades as determined by the standardized testing program. This analysis helped determine that there was no significant difference between the achievement levels of students assigned to the 3-year learning community, compared to students of a conventional grade 3–5 classroom placement.

This chapter presents and explains the methods employed in this study. I reiterate and explain the research questions first introduced in Chapter 1. The research context, design, participants, and approach are clarified throughout this chapter.

Research Questions

This study addresses the following research questions:
Research Question 1: What are the recollections and perceptions of the principal and PRIME teachers regarding the creation and implementation of the PRIME innovation?

Research Question 2: Do the recollections and perceptions of the key participants support the framework of strategic research-based efforts for improved teaching and learning on which PRIME was grounded?

Research Question 3: Do the recollections and perceptions of the key participants identify or reflect the implementation of the critical attributes to teaching and learning?

Research Question 4: Do the recollections and perceptions of the key participants reflect the six intended outcomes of the PRIME learning community?

Research Question 5: To what do the key participants attribute the success or failure of attaining these outcomes?

Research Question 6: To what do these recollections and perceptions attribute the influence of this multiyear learning community on students, teachers, and parents?

Research Question 7: To what do these teachers and principal attribute the nostalgia for this PRIME innovation among key participants?

Research Question 8: In what ways has the key participants’ experience with the design of and involvement in this PRIME multiyear learning community influenced their subsequent professional philosophies and decisions related to effective curriculum and instruction?
Context of the Study

County

When the PRIME learning community was first implemented in 1994, the county had a population of approximately 296,002 and was the 14th largest county in Florida. Approximately 90% of its residents were white, 9% were African American, 2% were Hispanic, and 1% of other racial backgrounds. Half of the households in this county had an annual income of $29,926 or less compared to $27,483 for the state as a whole. Residents of this county were among the most educated in the state of Florida; approximately 21% of persons 25 or older were college graduates. This county was perceived by many as a highly cultural, affluent community. The county embodied a variety of economic, racial, and cultural groups. Reflecting this diversity, students attending this county’s schools represented numerous nationalities and abilities. The school district served a large number of both gifted students and students with special learning needs.

District

In 1994, this school district was the 18th largest in the state with 30,431 students attending pre-kindergarten through 12th grade in 36 schools. Based on information available from the Department of Education, approximately 84% of students were white, 11% were African American, and 4% were Hispanic compared to state averages of 59%, 25%, and 15%, respectively. One indicator used to measure the poverty rate of a school district is the percentage of students eligible to receive free or reduced-price lunches.

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1 The primary content of the student demographics were taken from Florida Legislature Office of Program Policy Analysis and Government Accountability, 1996. The county name has been omitted to ensure anonymity of the study participants.

2 ibid
(FRL). In 1994, the average percentage of students eligible to receive FRL in the county’s schools was 21% compared to the median state percentage of 43%. In 1994, the mobility rates in the county were 26% for elementary schools, 23% for middle schools, and 23% for high schools. In comparison, that year state mobility rates were 36%, 31%, and 33%, respectively.

**Elementary School**

Based on 1995 information, the school studied had 708 students in attendance: 86% white, 11% African American, 3% Hispanic, and 1% other. Approximately 41% of these students were eligible for free or reduced-price lunch, compared to the county average of 21% and the state average of 43%. Approximately two-thirds of the students lived in neighborhoods surrounding the school. Families in these neighborhoods generally earned middle-class incomes. Many of the children’s parents and grandparents had attended the school. Of the third of the students who were bused to school, most were from lower income African American families and communities. The school also had a number of students from migrant families and from families employed by the circus, which was headquartered nearby. These factors may have contributed to the school’s mobility rate of 34% compared to the county’s rate of 26% and the state median of 36%. There were 40 teachers at this school at the time this study began.

**Research Design**

This study uses an auto-ethnographic reflective critical practice inquiry designed to explore the experience of this multiyear learning community and to analyze the perceived causes of the successes and failures of this community using the attribution theory. This account was preceded by a quasi-experimental exploration of the PRIME
multiyear learning community to determine whether the initiative had an influence on student test scores. This quantitative research component is described in detail in Appendix B. As part of the process I was monitoring achievement levels to determine unintended and positive outcomes. Utilizing existing archival quantitative, longitudinal data, I followed the sample students through a 10-year academic trek using benchmarks at 2nd, 4th, 5th, 8th, and 10th grades as determined by the standardized testing procedures. Academic achievement of the learning community cohort and the conventional group was measured and compared using standardized scores of the National Achievement Test in 2nd and 5th grades; the Stanford 9 Achievement Test in 8th and 10th grades; and Florida Writes in 4th, 8th, and 10th grades.

Participants

The three key people involved through this initiative participated in the qualitative component of this dissertation: two teachers as well as the principal directly involved in implementing and maintaining the PRIME multiyear learning community between 1994 and 2001. Prior to the interviews, all participants received and signed informed consent forms that included a statement of the purpose of the research, the name of the person who was to conduct the interview, how it was to be conducted, potential risks, participant rights and benefits, confidentiality of data, my plans for dissemination of the results of the research, and contact information. Participants were informed that they could withdraw from the study at any time. Pseudonyms are used in reporting data to protect the identity of the participants. The nature of my relationship with the interview participants has no intentional elements that might result in forced participation.
Katie Phelps

When interviewed in May 2010, Katie was in her early 60s. She was a teacher for 37 years in the school district. Prior to becoming involved in PRIME, Katie had taught elementary school students (grades 3, 4, and 5) for 21 years. At the time of the interview she had recently retired. Katie provided the math instruction for the three year cohort of students.

Rebecca Sutherland

When interviewed in May 2010, Rebecca was in her 50s and at that time had taught for 27 years in the school district. For the students in this multiyear elementary learning community, Rebecca was the language arts instructor. Prior to becoming involved in PRIME, Rebecca had taught elementary school students (grades 1–5) for 11 years. Rebecca continues to teach in this same elementary school in the district.

Janice Peters

Janice was the principal at the elementary school when PRIME was first conceived and implemented. She had recently come to the district and had had significant experience as an administrator out of state. She was in her late 50s when interviewed in May 2010. At the time of the interview and presently, she is the principal at the largest high school in the county.

Qualitative Instrumentation and Data Collection

Initial Semi-Structured Face-to-Face Interviews

On May 17, 2010, a fellow doctoral student conducted the first set of semi-structured interviews for this dissertation. Both interviews were administered in a local

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3 Names have been changed to ensure anonymity.
high school and lasted approximately one hour each. The interviewer used a semi-structured script (Appendix D) designed for each interview and was asked to probe when necessary in an unbiased manner. Because the purpose of the interviews was to understand the experience of the participants (McCracken, 1988; Seidman, 2006), the protocol was designed to elicit data about PRIME’s creation, its outcome expectations, its barriers and opportunities, as well as details about implementation and lessons learned from and about learning communities.

Because of my involvement in the learning community innovation, it was important that these interviews minimized the potential for any bias that my presence might have created. However, as McCracken (1988) notes, attending the interview session can provide the researcher with a sense of the energy, passion, and emotion that may not emerge from the transcripts. I, therefore, attended the initial set of interviews and sat behind the interview participants, out of their line of sight. I was not involved, as my colleague conducted the interview, and did not react to any of the statements made. Interviews were recorded, with permission and with the digital recorder in plain sight of the participants. Both the interviewer and I took notes throughout the initial interviews, paying careful attention not to disrupt the flow of the interview. This note-taking aided concentration and limited interruptions, while enabling the interviewer to return to a particular question or response in order to clarify or probe deeper into a participant’s response (Seidman, 2006). These notes also served as a precaution, in case the recordings were destroyed or damaged.

The first initial interview involved a single participant: Janice Peters, the principal who had been the impetus of the design and implementation of the PRIME learning
community. Because of her administrative role at the school, she approached PRIME from a different angle than the teachers and brought a larger perspective of how PRIME fit into the county and the school. For this reason, this interview was conducted separately from the initial interview with the two teachers.

The next initial interview was with the two teachers who had been involved with the creation and implementation of PRIME: Katie Phelps and Rebecca Sutherland. Although too small to be considered a focus group, I chose to conduct this interview with the two responding simultaneously because I wanted to allow ideas to emerge from the group organically. Following the same reasoning as for a focus group, this sample can be small, because, as McCracken (1988) reminds us, the group is not chosen to represent some part of a larger world but rather to get a glimpse of the experience. Additionally, focus groups are designed to encourage dialogue among participants on a particular topic (Tashakkori & Teddlie, 2003). The use of this two person interview grouping and semi-structured questions helped to ensure that the participants had opportunities to express their socially constructed realities without the restrictions imposed by questions with limited choices for answers (Tashakkori & Teddlie, 2003).

Second Semi-Structured Face-to-Face Interviews

I developed the second interview guide after reviewing and conducting initial analysis of the data from the face-to-face interviews. This initial analysis, together with committee recommendation, caused me to rethink the focus of my initial, more general study questions and define them more precisely. A more thorough literature review was completed taking into account both reflective practice and attribution theory. This second interview guide specifically targeted a contrast of changing perspectives, a search for
causes of expected and unexpected program outcomes, and the extent to which this innovative practice continues to be manifested in the professional work of the teachers and principal years after its conclusion. This second interview set also served as a check to clarify and extend the collected data of the first interview set (Lincoln & Guba, 1985; Seidman, 2006). Prior to this second set of interviews, participants were sent the transcripts of the first interview to verify accuracy. In addition, each participant was sent the follow-up interview protocol one week prior to these scheduled second interviews.

This second semi-structured interview script was developed taking into account additional literature review research, themes on which to build from the participants’ responses in the first interview, and the revised, clarified research questions. These final questions were created through a group process with committee members, reviewing and revising them to attempt a fair balance. Janesick (2004) recommends a list of specific questions with the understanding that as the interview evolves additional questions may emerge. With that in mind, this script was discussed with the interviewer prior to the interview date. This second set of interviews was conducted on November 3, 2010 at the same location and by the same graduate student. This time, however, the three participants were each individually interviewed to expand on the previous results and to encourage deeper responses. I did not attend this second set of interviews to ensure that my presence did not influence the participants’ responses to the questions. As in the first set of interviews, with the participants’ permission, the responses were digitally taped. Each interview lasted approximately one hour.
Analysis of Qualitative Data

To answer research questions 1 through 8, the qualitative data from the two interviews described above were analyzed in two separate stages. Both sets of interviews were transcribed into written records by a professional transcription service. I verified the validity of these transcriptions by simultaneously listening to the recorded interviews and reading the printed transcripts. The software program Atlas-ti was used in the data analysis of the initial set of interviews. This software enables the researcher to code the text that results from transcription of the recorded interview sessions as a first step in looking for patterns, themes, and meaning for future analysis. Atlas-ti provides an electronic medium for coding data, attaching notes and memos, assigning codes to similar text, and retrieving coded memos to extract information that answers the research questions from the study (Tashakkori & Teddlie, 2003). During the first stage, a professional research assistant with detailed knowledge of the Atlas-ti software was hired to provide feedback and support with the first set of interviews. Because the script for the second set of interviews was specific to the research questions, during the second stage, a colleague from the education department of a local university and I worked together to discuss, categorize, and analyze these responses using the questions as an outline.

Data Coding and Analysis

The professional research assistant and I began the data analysis for the first set of interviews by assigning elements, attributes, and intended outcomes based on the literature review research of best teaching practices and learning community involvement (Figures 1 and 2) to initial codes. As we identified relevant sections of the text of participants’ perceptions related to or describing a particular code, that code was
administered. When it became apparent that a code was too general, sub codes were used. The coding process was designed to move from a descriptive approach to an analytical one in order to understand the meanings behind the interview text (McCracken, 1988). The analytic approach implies a search for meaning, themes, or patterns in the text, which are then matched to the initial coding categories (those identified as elements, attributes and outcomes of the learning community). In the event that a new meaning, theme, or pattern was discovered that did not fall within one of these initial code categories, a new code was created. This method led to numerous codes that were then grouped into themes. Through these themes I began to get a better understanding of the perceptions of the other participants of the PRIME learning community. To ensure the validity and reliability of my analysis, this assistant and I independently examined the thematic groupings. We then discussed any discrepancies in themes, coming to a mutually agreed upon scheme.

Finally, after multiple readings of both sets of interviews, I developed a list of significant quotes that focused on the reflections of the participants’ experience of the phenomenon relative to the clarified research questions. I again checked my interpretations of the quotes with the interpretations of my assistant and my colleague. Revisions were subsequently made. These final significant statements were used to answer each research question and to write descriptions of the experience. These descriptions include participant interview examples from the transcript that relate reflections and ascriptions of their perceived learning community experience.
After I wrote the results discussed in Chapter 4, each of us independently re-read the interviews to ensure that the contextual relationship within the data had been maintained.

Similarly, ascribing attributional dimensions to the successes and failures repeated this method using the attribution theory as the analytical tool. All interview responses to the outcomes of success and failure were coded for interpretation and analysis. The first dimension of internal or external locus of control was labeled in each response, both individually and then collaboratively. The same interview response was then labeled with the second dimension or the stability factor. Again, this was done both individually and collaboratively. Finally, this sequence was repeated for the final dimension of controllability. When all three dimensions had been ascribed to each interview response, my assistant and I collaboratively discussed each ascription and response relative to the literature to be certain that we had interpreted each similarly. These quotes were then quantitatively grouped into paragraphs with the ascribed dimensions and related interview responses.

**Reliability and Validity of Analysis**

To ensure the reliability and internal validity of my qualitative analysis, I used multiple perspectives to assist in the initial coding of the interviews and to provide inter-rater reliability checks throughout the data analysis process (LeCompte & Goetz, 1982). As a strategy to ensure both reliability and validity, my assistant, my colleague, and I worked both independently and in collaboration to code and analyze the data as we went through the interviews line-by-line, discussing each code, and revising the coding scheme as needed. Member checks, in which interview participants are updated on the
interpretation of data and requested to provide feedback, were used to refine and support the data. This data triangulation of multiple strategies (such as between participants, transcripts, recordings, transcriptions, and reflections) and from multiple sources (such as interviews, member checks, code checks, and researcher reflection) serve to provide corroborating evidence (Janesick, 2004). In addition, the research questions are clearly connected, defined, and match the design of this study.

To further ensure trustworthiness and credibility, it is important that I make explicit my own perspective and connection within the study subject: the PRIME multiyear learning community. Contrary to a positivist view of researcher bias, I do not consider my insider and outsider perspectives to be a liability (Eisner, 1998; Hatch, 1995; McCracken, 1988). Instead, my situated position in the research, as one of the three teachers who designed and implemented PRIME, may uncover nuances not apparent to others (McCracken, 1988). To suspend my prior knowledge and involvement would compromise the integrity of the research and would invalidate the relevance of the connections I have developed. The process of both independent and collaborative coding, data analysis, and interpretation, aims to provide the necessary accountability and to mediate issues for researcher perspective connected to my analysis.

**Quantitative Instrumentation, Data Collection, and Analysis**

Secondary archival data for the quantitative section of this study were used, consisting of the National Achievement Test, Stanford Achievement Test, and FLWrites. These data were not collected specifically for this study but were collected as part of the ongoing routines, processes, and annual assessments of students conducted by the district as required by board policy and state law. Specific archival longitudinal data were
collected from 1993 (second grade scores) through 2001 (tenth grade scores). The
collection points were at 2nd, 4th, 5th, 8th, and 10th grades for the standardized scores.
The data were then compared and analyzed. See Appendix B for more detailed
information.

Summary

This chapter presents the procedures, participants, and methods used to conduct
this study. Chapter 4 presents the results of an analysis of the interview data. Chapter 5
summarizes the results, discusses implications of the findings, and concludes with
recommendations for classroom practice and future research.
CHAPTER 4: RESULTS

The purpose of this study is to explore the experience of a unique multiyear elementary school learning experience designed with interrelated research-based efforts for improved teaching and learning, to use reflective practice to describe the perceptions and reflections of the principal and teachers directly engaged in this project of educational reform for a deeper understanding of the experience, and to attribute perceived causes to the outcomes of this interaction for possible future action. This chapter examines the research findings through an analysis of the qualitative data to answer the eight research questions guiding the study:

1. What are the recollections and perceptions of the principal and PRIME teachers regarding the creation and implementation of the PRIME innovation?

2. Do the recollections and perceptions of the key participants support the framework of strategic research-based efforts for improved teaching and learning on which PRIME was grounded?

3. Do the recollections and perceptions of the key participants identify or reflect the implementation of the critical attributes to teaching and learning?
4. Do the recollections and perceptions of the key participants reflect the six intended outcomes of the PRIME learning community?

5. To what do the key participants attribute the success or failure of attaining these outcomes?

6. To what do these recollections and perceptions attribute the influence of this multiyear learning community on students, teachers, and parents?

7. To what do these teachers and principal attribute the nostalgia for this PRIME innovation among key participants?

8. In what ways has the key participants’ experience with the design of and involvement in this PRIME multiyear learning community influenced their subsequent professional philosophies and decisions related to effective curriculum and instruction?

**Literature Review Connections**

Research identifies key components for effective teaching and learning. These include the logical assumptions that

1. effective teaching and learning builds on students’ prior learning experiences;

2. effective teaching and learning is active and involved;

3. effective teaching and learning involves building an environment that supports learning;

4. effective teaching and learning is supported with a strong core of academic knowledge with teachers who are experts in their fields;

5. effective teachers and learners are empowered through their involvement;
6. teaching and learning is supported and enhanced through parental support and engagement;
7. effective teaching involves using all modalities to reach all students;
8. service learning opportunities connect students with the community to support and enhance teaching and learning.

While it is certainly possible and desirable that these interrelated components can and will be found within multiple kinds of effective teaching and learning environments, the design of the PRIME learning community as a coherent and meaningful program was developed with these key components and their associated academic and social assumptions in mind.

Envisioning these effective teaching and learning components, the PRIME program was structured for multiyear continuity, with teachers as experts, through content area departmentalization and multiple opportunities for collaboration, increased parent support approaches, and multidisciplinary applications for increased motivation and optimal learning possibilities.

Furthermore, much of the research involving long-term student-teacher relationships describes these elements of strength:

1. the benefit of additional learning time
2. the continuity of learning over an extended time
3. increased opportunities for more differentiated instruction
4. the support and involvement of parents
5. the empowerment and commitment of teachers.
The logical assumption of the creators of PRIME was that this multiyear learning community structure may contribute to the eagerness of teachers, students, and parents to create a more positive environment for learning together and that this may, in turn, contribute to increased academic achievement.

**Qualitative Data Analysis**

This qualitative analysis involved the use of descriptive data collected through the two rounds of interviews with the teachers and principal involved in the creation and implementation of PRIME. These reflective interviews were focused toward their perceptions of the innovation and how it may have influenced future professional decisions.

**Analysis of Research Question 1**

Question 1: What are the recollections and perceptions of the principal and PRIME teachers regarding the creation and implementation of the PRIME innovation?

Seven main themes emerged from the first round of interviews. This first interview script had broad questions, allowing for a variety of directions. The themes that emerged from this first interview were:

1. PRIME’s influence on teacher engagement and motivation
2. PRIME’s influence on student engagement and motivation
3. PRIME’s influence on family interest and involvement
4. PRIME’s influence on curriculum pedagogy and learning activities
5. PRIME’s weaknesses and challenges
6. PRIME’s strengths, outcomes, and lessons learned from this experience
7. lasting memories of PRIME.
Each of these themes with their more detailed subthemes will be described in further detail in subsequent questions.

**Analysis of Research Question 2**

Question 2: Do the recollections and perceptions of the key participants support the framework of strategic research-based efforts for improved teaching and learning on which PRIME was grounded?

Figure 3 describes the framework by which PRIME was created. The four major branches of this framework are supported through the learning community environment while the goal of these interrelationships was improved achievement.

![Figure 3. Framework for the PRIME design.](image)

The first four of these themes, with their related subthemes, speak to this second research question.

**Theme 1: PRIME’s influence on teacher engagement and motivation.** The work of teaching involves a high level of passion. Passion is relationship centered and the continuity of this long-term student-teacher relationship seemed to foster a more intense influence on the teachers involved. The continuity of the relationship helped promote more depth in communication and collaboration. The climate of teacher empowerment seemed to increase their satisfaction of teaching.
In both interviews participants discussed, through vivid recollections, their perceptions of the differences in teacher motivation between the PRIME learning community and the more conventional educational environments in which they had taught and worked both prior to and after PRIME. Participants repeatedly referred to teacher motivation throughout the interviews, with this theme surfacing far more frequently than any other theme. Janice Peters, the principal at the time of the implementation of this initiative, said of the PRIME team,

It was not administratively driven, it was teacher driven. What I believe should occur is the teacher should have autonomy within a prescriptive curriculum, but as professionals, they should have the ability to be creative as long as they are meeting the outcomes and students are being successful. I think that [teacher autonomy] was a really important piece.

When the interviewer asked what made this situation so motivating to the teachers as compared to a more conventional setting, Katie Phelps replied,

It was so much a part of us. That’s one of the real positives of the program. We all felt it was our program and we wanted to talk about it. And we wanted to plan, so we planned formally, and did a lot of informal planning, too. We’d brainstorm and come up with a lot of ideas.

Katie continued to explain that an increased feeling of motivation on the part of the students led to increased enthusiasm on the part of the teachers:
We had…something really exciting for the kids every quarter, and the children liked coming to school. Never before or after did I have students who were enthused about school. I taught for 36 years and, when we did this program, we had more enthusiasm than any other time when I taught…

Rebecca Sutherland said that PRIME was

...very motivating. Everyone was working together for the students. Everything was integrated [we all shared] the same values, ideas, and viewpoints. There were very few behavior problems or students not accepting each other.

Both teachers found their experience teaching in the PRIME program to be more “rewarding” than in their experiences teaching in a more conventional setting. Both said that they felt like they had “really made a difference” in the PRIME program and those feelings were not felt as obviously in the more traditional settings they had experienced over their teaching careers.

Teacher collaboration, continuity, and accountability were subthemes that emerged during data analysis. These subthemes are discussed in the analysis of research question 3.

**Theme 2: PRIME’s influence on student engagement and motivation.** The consistency of this multiyear learning community seemed to promote enthusiasm through the long-term nurturing that it facilitated. When asked to compare the students’ motivation in the multiyear learning community with more traditional classrooms [before and since PRIME] Rebecca Sutherland admitted,
I believe that I saw children more motivated to learn, more on task. They knew that they were going to be with us another year. They were more willing to please, not only us, but their parents. As I teach my traditional fifth grade, motivation is difficult. I really feel like they were just so much more enthusiastic [in PRIME].

Mrs. Sutherland supported this perception again:

Many of the children that we had [in PRIME], by the time they were in fifth grade, they could far surpass the children that I have in [a more conventional] fifth grade in what they could do, especially in reading and writing, and I would also say [in] their knowledge of science and social studies. They had such a good time learning science and social studies [in PRIME] because they learned it hands-on, they learned it through songs, through movement, through physically doing things… and I have thought about this and thought, how could those kids have done that, they really could do a lot more. I also think, of course, just the effect of the genuine desire to come to school, the fun, and the enthusiasm that is lacking [in this conventional setting].

Katie Phelps provides examples of this active engagement with the learning goals:

We energized and motivated each other. Teachers organized activities around the curriculum which excited students and enriched their learning. Songs, dances, raps, poems, and plays made subject content more meaningful to students. Responses
from their audiences, whether it be residents of the nursing home
or parents, was very rewarding for both students and teachers.

Janice Peters called PRIME “more project-based, more participatory, and much
less traditional than other classes in the school. Katie and Rebecca both repeatedly talk
about the fun, excitement, and interest that “the non-traditional activities” and “the
performances that correlated with what they were learning” inspired.

**Theme 3: PRIME’s influence on parent interest and involvement.** The
multiyear continuity of the student-teacher relationships within PRIME afforded deeper
relationships between teachers, parents, and students. PRIME seemed to foster
cooperation and trust between the home and the classroom with its strong family
component. Teachers in PRIME saw the multiyear learning community as a family
structure with the aspect of a mutually beneficial relationship for the student. This longer
period of time gave opportunity for more and deeper communication. This in turn seemed
to nurture a more trusting relationship with a result of more family involvement. The
following comments express the bond shared in PRIME.

We had the same children for three years, so it was a family-like
atmosphere. We got to know the children and know their parents
and their families, so there was much more personal knowledge of
the child and where the child came from, and the families knew
more about us. (Katie Phelps)

And, of course, when you have the same children for three
years, you learn a lot about them, so you do become a little closer.
There’s more of a bond. We also felt that by having the same
children, we would have great parental support, because…they become like your family, these people you know very well. We had remarkable volunteerism. (Rebecca Sutherland)

Rebecca Sutherland said that PRIME had an abundance of support, giving the following example:

When we would take our field trips…we had so many parents volunteer to go that sometimes we couldn’t give a parent even two kids to walk around with. There were so many parents the teachers never even had a child.

Katie Phelps gave another example of parent support, showing a community effort:

We had a great deal of parent support. The core of our program, each grading period, was to culminate our curriculum with a program we organized around either a science or social studies theme and the children would be involved in the program. We also put this program on monthly for the seniors at the local nursing home. We had a great deal of parent support there helping children [learn parts], transporting us, helping us with both of these programs.

Rebecca Sutherland continued, “We had a lot of people come in and help paint scenery. So that we wouldn’t take class time, they would pull a couple of children out at a time since we had so many volunteers.”
Rebecca Sutherland compared PRIME parents with parents of a more typical setting:

[I]n my classroom of 18 children I have one volunteer. I would say in each of the three PRIME classes we would have no less than 12 or 13 parents and they came in often. The students knew that we’d see their parents.

Katie Phelps and Rebecca Sutherland recalled a more recent fieldtrip in their more traditional classrooms:

Now the last year I taught, we had a field trip to the beach, and it was fun. We had no one so I had to call in favors. I had to call my husband, who is a retired school teacher and he had to come. I called grandparents and begged them. (Katie Phelps)

Right. We did the same field trip this year and not one parent showed up. We actually had two sign up and they did not come (laugh). (Rebecca Sutherland)

**Theme 4: PRIME’s influence on curriculum.** The principal, Janice Peters, spoke of the curriculum and the autonomous role that the teachers played in curriculum design when she said that “the team of teachers actually designed what that was going to look like” and that

The teachers used the district curriculum and standards, and integrated it based on interdisciplinary units. They used the core curriculum, but how it was delivered and the sequence, was altered
based on the teachers looking at students and what their outcomes were for that year.

Rebecca Sutherland described the process of designing the curriculum for the year as follows:

We teamed and we planned together and we based what we read about and what we learned about on the social studies/science theme. We all worked together, largely based on what was being taught in science and social studies, even though it still was the county curriculum. …we needed to look at where things were connected [to our own content area]. All of that had to be much more complex because we weren’t simply going from a linear perspective, it was much more holistic.

Janice Peters said that this multiyear program design with teachers teaching in their areas of curriculum expertise “allowed the teachers to really roll up their sleeves and dig into the curriculum. It allowed teachers to go deeper into the curriculum.”

Reflecting PRIME’s use of the varying modalities to teach, Katie Phelps explained that “teaching objectives were reinforced every quarter with performances given by the children,” while Rebecca Sutherland shared that “the method of combining the arts with curriculum content strengthened the learning.”

**Analysis of Research Question 3**

Do the recollections and perceptions of the key participants identify or reflect the implementation of the critical attributes to this teaching and learning?
Table 2

Elements, Attributes, and Outcomes of the PRIME Learning Community

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The four major branches of the PRIME framework consist of the major components of teachers, students, family, and curriculum all interrelated within a multiyear progression for consistency within and between each branch. These relationships within and between become the elements of the PRIME design and critical attributes that may define these relationships are communicated. The possible evidence for the implementation of these critical attributes is further identified. The subthemes give details of this implementation.

**Subtheme: Student cooperative groupings.** Both Katie Phelps and Rebecca Sutherland recalled teaching and learning methods and specific activities used in—and often because of—the multiyear learning community that took advantage of cooperative
groupings. Both felt that the multiple age groups and continuity of the children over the 3 years allowed for important and innovative learning opportunities that are not possible in a conventional classroom setting. Rebecca Sutherland explained,

We used a lot of cooperative learning. We also did pairing of younger children and older children. Since we had all age groups, we used the fifth graders to come in and tutor the third graders. Say, for example, in math, they would help with the multiplication tables or, perhaps, help with a reading page or something like that. So we certainly were able to have some peer tutoring. We all know that having older models is a good thing and there was certainly an expectation that older students would set expectations and norms and model for the younger students.

**Subtheme: Student accountability.** Rebecca Sutherland reflected on this attribute of the students:

I think by being in this program, it made the students different. I don’t think we necessarily had different students. But I think just because of the family atmosphere that we had, the children were more hesitant to act out. We didn’t have as many discipline problems [because we knew] the children for a longer period of time. I do think that our students behaved better than they did on some of the other teams.

Katie Phelps credited parent involvement as a reason for this improved accountability and its benefits:
I think one of the major components that made the achievement greater, [with students] more on task and less arguments with the teacher, was the support from the parents. We had parents who felt that our program was outstanding. They wanted their children to be in there. The children felt as though it was a privilege to be in this program and they wanted to please us.

Rebecca Sutherland credited better communication due to both the consistency of the multiyear program and the increased parent involvement in PRIME for this additional benefit when comparing it with her more traditional classrooms:

I had not anywhere near the problem to get [PRIME] children to do homework. I would lay it out at the beginning of the year. We always met with our parents and we’d tell them that math was due on Tuesday and Thursday and spelling on Monday and...they knew exactly what night and we had no problem with homework.

Teachers outside of PRIME also saw improved accountability for behavior, as Katie Phelps explained,

I just had dinner last night with our old music teacher. She’s retired now, but I was telling her we were going to meet and we were going to be interviewed on what we did in PRIME and she said, “Your children always were the most cooperative, the happiest, and the best behaved children.”

**Subtheme: Teacher collaboration.** One of PRIME’s expectations was that the teachers would work together as a team. Janice Peters, the principal, explained,
The expectation was that you worked as a collaborative team. It wasn’t three teachers with rooms next to each other who, “oh, by the way,” there really was an expectation that they plan together, they collaborated, they articulated. There was an expectation that this was a cohesive unit of teachers and not isolated classroom teachers.

Rebecca Sutherland emphasized this motivational factor when she said, “We teemed and we planned together and we based what we read about and what we learned about on the social studies/science theme.”

Katie Phelps reiterated this motivational factor of teacher collaboration when she discussed the bond that developed between the teachers.

One of the strengths [of the PRIME learning community] was that the three of us worked very well together. We had the same philosophies. We became friends as well as coworkers, and we just supported each other.

When comparing PRIME to a more traditional educational setting, Mrs. Phelps discussed issues of competition among teachers and a lack of support that she had experienced in other learning environments:

I see teachers competing with each other, where there was none of that when we were working together [in PRIME]. We were totally supporting each other….There was no, “I want to do a greater project than yours.” Whatever project was on board we were there
supporting it. I think that’s the only way education can work, with teachers supporting each other and helping each other to be better.

Interview participants felt that this collaboration was necessary for the implementation of the PRIME. For example, Katie Phelps explained,

You had to plan a lot together because of all the things we were doing. When you are planning so many different activities, especially going to a nursing home every month, where every month we put on a little performance for them and we usually did some kind of craft or other outreach activity with them...so we had to plan a lot together because we did these big culminating learning activities together.

When asked to discuss planning expectations in teaching environments outside of PRIME, the two teachers described a teaching setting with little to no collaboration. For example, Rebecca Sutherland said, “There was no requirement [within the school] that teachers met, and everyone I believe, just planned on his or her own.”

The teachers also discussed the mandated planning expectations of the current environment. Together, the teachers described a situation in which collaborative planning is now required by the county but, in their view, little collaboration occurs because teachers teach their classes in isolation from one another. Mrs. Sutherland said, “[T]oday we are mandated to plan together, even if it doesn’t make sense....” Mrs. Phelps concurred, calling planning together “a total waste of time.”
Subtheme: Teacher continuity. Having the students for 3 years was perceived to influence teacher motivation through student performance, both academically and behaviorally. Rebecca Sutherland supported this by saying,

[PRIME] was motivating for teachers because academically I knew what consistent product I was going to have the following year.

Also behaviorally there was continuity of expectations.

Katie Phelps compared the PRIME experience to a more conventional setting and talked about this type of continuity stimulating increased rewarding interaction with students even outside of the classroom:

In a traditional classroom, if you would have told me I had to spend my Friday night line dancing, I’d have said, “Forget that” (laugh). So, we put a lot more into it. We worked hard, but it didn’t seem like we were working harder because we enjoyed doing it.

We enjoyed doing what we were doing.

When comparing the PRIME learning community with the more traditional teaching situation from which she had recently retired, Mrs. Phelps spoke candidly when she made this comparison between the two educational environments:

[S]o, very, very different. It really did require a lot more time. We spent really a lot more time than we do today on all of it. On the planning, on the time out of… school. [In this setting] I don’t spend the time out of school. I grade papers, but other than that, I don’t do anything else. With PRIME, we had to come back a lot at
nighttime. So, you know, when we stopped doing it, we said, “Well, at least we have a lot more free time.”

When asked if the other teachers within the school were doing any of these types of “outside of school” activities, Mrs. Phelps responded, “No, no, it was just us, and many teachers thought we were crazy.”

**Subtheme: Teacher accountability.** The teachers in this PRIME multiyear setting felt that they were specializing in or accountable to this larger group of children rather than a group that would be filled and refilled yearly. This extended teaching and learning time in the PRIME setting promoted a sense of shared responsibility for each and every child. According to Katie Phelps,

There was more accountability, we felt, with this program, as teachers, because at the end of third grade, it wasn’t like I was going to send them on to fourth grade to another teacher. If I finished my third grade curriculum, I’d start those kids on fourth grade curriculum the minute they were ready. So there was more accountability for us and more accountability for them.

**Subtheme: Curriculum continuity.** Janice Peters reported of the multiyear benefit:

[The benefits of continuity] really came down to the collaboration of the teachers working more closely together and, I think, the long-term relationship with students and families and the teachers over time, as opposed to “I’m with one teacher one year and then I’m moving to another teacher who has no connection
whatsoever.” So, there was certainly much more alignment of the curriculum. There wasn’t duplication. Each teacher knew what happened the previous year, so there was less review and more continuity.

Subtheme: Activity examples of curriculum depth and creativity. Katie Phelps and Rebecca Sutherland, respectively, each gave examples of the results of the extra depth of teaching opportunities this multiyear setting offered.

After the students presented their monthly, thematic, curricular presentation to the seniors at the local nursing home, the third, fourth, and fifth graders would learn from the seniors. They would do interviews, for instance, for an English assignment. The students would interview the seniors to learn about how school was for the seniors 60 years ago. They would, in turn, compare for the seniors, and tell how school is now, and then they would follow this up by writing about this difference. (Katie Phelps)

As Rebecca Sutherland explained,

Here is another example. I had a lot of supplemental readers, or trade books, that usually come with the reading text. The children would read a trade book, and then we would stop at the end of a chapter and I would give them some type of creative assignment maybe comparing them to the character and inventing a fantasy world like the character in the book. I would get beautiful, page long paragraphs, written in paragraphs, written in script, and
written grammatically correct. In my more traditional setting, if I ask for four sentences, I get two, no capitals, and you’re talking fifth grade. I really feel that there is a tremendous difference in what they can do, in what they accomplished.

Curriculum depth and creativity are also shown in the examples of nontraditional activities that the teachers discussed such as quarterly shows, dinner theaters, astronomy nights, annual trips to Busch Gardens, and Oscar Scherer State Park nature walks. Line dancing, an activity discussed previously, exemplifies PRIME’s family-like atmosphere.

As Rebecca Sutherland explained,

A grandmother from our group taught line dancing in the community, so the three of us went line dancing on Friday night, and we invited the children. So the parents would drop their children off on Friday nights and we might have ten little girls on a Friday night line dancing with us. Now, that would never happen in a traditional classroom.

**Subtheme: Curriculum comparison.** Rebecca Sutherland compared the continuity of the PRIME curriculum to a more traditional curriculum,

I taught the same children reading, and for 3 years, the same children were taught math by the same teacher and the same with science and social studies. The other teams at our school had the team of children remain the same, but they did not rotate through the teachers for 3 years. They just had an individual third grade teacher, fourth grade teacher, fifth grade teacher. PRIME was
different in the fact that we kept the children for three years and
unlike looping, where you keep the same children, they actually
went through three different teachers for three years.

Katie Phelps compared the two by saying, “It’s a much easier job to teach
t raditionally. Much easier job.” When discussing the end of the PRIME program, Mrs.
 Phelps expressed her disappointment:

I think that the people that lost the most were the students because
I don’t think they achieved as much. We spend those first four
weeks on expectations again and then once testing is over, you sort
of let up, where when you know you are going to have the same
kids next year and they know they are going to be with you the
next year, there’s no down period at all. Three years, no down
period. So, students lost the most.

**Subtheme: Student continuity.** Teacher interview responses indicate that an
increase in “time on task” was reflected in the PRIME environment. For example, Katie
Phelps discussed a much quicker start to the beginning of the school year than is typical
in a more conventional setting:

[Because students stayed with the same teachers for three years]
there were no games to play. They knew that we knew them. We
knew what to expect. They couldn’t play the typical beginning of
school games that oftentimes students try to play with teachers.
There was no honeymoon period. We got right down to work. We
were more on task.
Rebecca Sutherland concurred with the following:

We expected that a child would come [and] jump into fourth grade or fifth grade, already knowing what to expect. They knew the rules, they knew what the day was going to be like, there were no surprises; they were ready to jump in and work.

Janice Peters considered the benefits of a multiage, multiyear learning community such as PRIME, and stated,

I’m a real advocate for multiage, multiyear learning. You don’t lose time for transitions, you don’t lose time for review, the new students who are joining the group, the orientation time is much more abbreviated because it is such a small group [of new students entering] and [the remaining students] are already well oiled machines. So, that would be different [than in a traditional setting.]

When asked about the major components of PRIME, both Rebecca Sutherland and Katie Phelps found consistency to be of foremost importance.

The major component of Prime was that it was a 3-year program that consisted of a third grade, a fourth grade, and a fifth grade. Within that component, one teacher taught reading, another teacher taught math, and another teacher taught science and social studies, and the children rotated through the three teachers for that year and then again for the next 2 years. So if you were in it as a third grader, you stayed in it until you were a fifth grader—through the
fifth grade—with the same three teachers teaching the same
subjects. (Rebecca Sutherland)

Multiyear grouping provided consistency in many ways.
There was a positive environment, intense collaboration among
teachers, the parent involvement was much higher than when I
taught in a traditional setting and there was a sense of family, of
bonding with students and parents. We really cared about each
other. (Katie Phelps)

**Analysis of Research Question 4**

Question 4: Do the recollections and perceptions of the key participants reflect the six
intended outcomes of the PRIME learning community?

The academic goals and outcomes desired throughout the PRIME program
include

1. increased cooperation and academic improvement by students
2. increased communication and collaboration by teachers
3. increased connection, identification, and trust between students and
teachers
4. improved student/teacher/parent relationships for academic support
5. improved academic achievement resulting from a curriculum replete with
   supportive interrelationships
6. an environment conducive to effective strategies for increased motivation
   leading to improved academic progress
**Outcome: Increased communication and collaboration by teachers.** Increased communication and collaboration by teachers was evidenced when the principal, Janice Peters, was questioned by the interviewer regarding the major components of PRIME as she remembered them. Janice responded by saying “collaboration, site-based management, and best instructional practices.” She also saw, as a part of her role in this learning community, the “modeling” of that collaboration.

Additionally, Katie Phelps listed “intense collaboration among teachers” as one of her responses to the same question. She stated that

> Collaboration among us was not weekly or bi-weekly, but daily.
> We spent lunches and [planning periods] discussing our hits and misses… we discussed students’ curriculum, strategies, and interventions.

In the same interview, Rebecca Sutherland was asked about her expectations of the program and she also spoke of this outcome when she responded that “we had teachers who worked and collaborated, who got along well, had the same methods, and the same beliefs to do our best to educate our students.”

**Outcome: Increased cooperation and academic improvement by students.** Increased cooperation by students was evidenced through quotes by all of the participants. Katie Phelps talked about the “cooperative groups” the “study buddies” and the “small group situations” and thought that through these kinds of settings the students “supported each other” academically and socially. Rebecca Sutherland described the methods of instruction as “not just open your book and read” but “doing hands-on activities” and “learning in a real way.” Rebecca also described the different grade levels
as “working together” by “teaming a third, fourth, and fifth grader together to work on projects and assignments.” She told about using “the older students to work with the younger students to read to them or help them in math.” In the first interview the principal, Janice Peters discussed the “active” and “project based learning” that was “much less traditional than other classrooms.”

Increased academic improvement was an outcome called into question as the scores on standardized tests did not show improvement as had been predicted by all of the key participants. Although this was a frustration and an unexpected result due to the first hand experiences of engagement, motivation, cooperation, collaboration, and parent involvement, a review of many studies involving learning communities reflect consistent affective gains such as those perceived by the participants and inconsistent or even non-existent academic gains.

**Outcome: Increased connection, identification, and trust between students**

**and teachers.** When asked about the things that were done well, Janice Peters talked about the initial building of the learning environment around “credibility”, “trust,” and “confidence” to ensure that the parents of the students were able to take that “initial risk.” Rebecca spoke of this as a “feeling of community” that was developed because of the long-term continuity of “three years and many extra curricular activities so you would really get to know their families.” Katie Phelps described this increased connection, identification, and trust when she stated that, the “children knew what to expect of the teachers and the teachers knew what to expect of the children.”

**Outcome: Improved student/teacher/parent relationships for academic support.** The interviews gave many instances of improved relationships between the
students, teachers, and parents and examples of the academic support resulting from these improved relationships. Rebecca Sutherland talked of the numerous curricular enhancing activities “like dinner theaters, astronomy nights, gardening, or art projects” where “the parents would come in and pull a child or two out to help them with whatever they were doing.” Katie Phelps, when asked about the number of students attending these evening performances reported,

Oh, all of them. Every student. There may have been a couple of parents who didn’t get there, but generally, even the children who were bused in would make some kind of arrangement to ride with someone else. Even parents who didn’t drive.

Katie discussed this support as continually evolving. “It was something we were always tweaking…as we discovered which things motivated the students and brought more support from parents” and “refined our way of reporting to parents…making it more frequent and specific.”

Janice Peters explained this increased support with,

As a parent, when you’re involved…in the whole school the direct impact on your child is diminished, but it was real clear that, as parents, if we were working with PRIME, that was going to make a direct impact on my child and their learning.

**Outcome: Improved academic achievement resulting from a curriculum replete with supportive interrelationships.** This was an outcome of the study that produced both surprises and disappointment. As the intent of this multiyear learning community was to facilitate changes and create more positive learning conditions through
its interconnected aspects and relationships, the participants’ disappointment in the lack of evidence for success in the form of standardized test scores was evident.

When asked if the lack of improved standardized test scores was a surprise, the principal, Janice Peters, noted,

Unfortunately, I think it wasn’t what we had hoped for or what we had envisioned. I think our hypothesis was that we would have seen at least some kind of greater achievement than with other non-Prime classes.

Janice then countered with the explanation that at the time of the PRIME learning community experience, “we weren’t just focused on data and student achievement at the level we are now.”

She later added,

Back then we weren’t as laser focused on student achievement data, but, certainly, we always looked at student-standardized scores. We looked at the success of all students, gifted students, ESE students and everything in between. The expectations were academic achievement. The goal was to see an increase in that and discipline. Reduced discipline issues and greater customer satisfaction among parents were the expectations.

Rebecca Sutherland shared, “I thought, perhaps, that they would have been slightly higher, but I do know that that’s not the case.”

Rebecca defended the results with,
I believe that there is evidence that that did happen...[A]lthough maybe the gains weren’t as much, or weren’t more, we certainly had learning gains that were probably as good as any group and I believe the affective gains were greater. I really feel that the program itself worked well. The teachers worked well and the students worked well. It’s hard to say. We did a lot of things that were very beneficial to the students and the families and the community.

Katie Phelps responded to the results of the quantitative data with,

I would have thought and at the time I was teaching…we did better on tests…and our administrators made us feel that we were doing better so it does surprise me to some extent that we didn’t.

**Outcome: An environment conducive to effective strategies for increased motivation leading to academic progress.** There were many instances within the reflections of the key participants of PRIME relating to the PRIME learning community environment. Mrs. Peters discussed the importance of the physical setting when implementing a multiyear learning environment and described the PRIME facility as “not exactly ideal.” She went on to say that “It was sort of ‘make do,’ but a more ideal physical setting [would be] where the rooms were actually designed to make it a much more collaborative environment.”

Katie Phelps saw the learning community environment as providing “consistency in many ways. The long-term component encouraged a positive environment, intense
collaboration among teachers, parent involvement, and a sense of family, of bonding with students and parents.”

Rebecca Sutherland saw the consistency of the three years as having a positive influence on the curriculum and the learning capabilities of the students. She gave numerous instances of service learning opportunities, extra-curricular activities, student engagement, student nostalgia, and parent involvement and support. She stated these were more evident during PRIME than in the more traditional settings of her career and credited this to the continuity of the “learning community environment.”

In summing up the learning community environment Katie Phelps concluded,

This multiyear learning community gave us the opportunity to try many different approaches so we were able to find what worked best for us while considering our strengths and the needs of each particular group of students. A major strength was the help and support we gave each other. It is obvious that there is competition in education...among teachers, schools, states, and even countries. We all want to be #1. In contrast to this, in PRIME, we seemed to be able to use our strengths to make each other better rather than guard our own status. I feel this attitude was transferred to the students and the parents.

Within this environment, we were able to incorporate intergenerational experiences, community service, hands-on economics, and an appreciation and respect for the environment into our instruction. Teaching through performances, planning
field trip fund raisers, planting a butterfly garden, and naming and creating our project logo as we did with project KARE (kids and retirees to educate), were only some of the ways students put their skills to work. This learning community environment encouraged and encompassed what we felt through experience were the best ways to motivate and educate students.

**Analysis of Research Question 5**

Question 5: To what do the key participants attribute the success or failure of attaining these outcomes?

Each of the participants interviewed perceived successes and failures within this multiyear learning community named PRIME. Each of the outcomes had degrees of successes and failures depending upon the perceptions of the participants. Although many of the intended goals and outcomes of PRIME were achieved, there were unintended outcomes and goals that were not achieved. With these outcomes in mind, these interview responses speak to weaknesses and challenges, strengths, outcomes, and lessons learned.

The attribution theory is used as the analytical framework for this research question. Attribution theory assumes that the way one perceives or interprets the causes of their prior successes and failures relates to their thinking and behavior which, in turn, contributes to their future motivation and persistence. The theoretical framework of attribution theory developed by Weiner (1972) relates achievement to the factors of ability, effort, difficulty of task, and chance. The role of effort in achievement is the focus of Weiner’s theory. Outcomes are perceived and judged as successes or failures and the
causes and interactions can be characterized in terms of the three dimensions of locus of control, stability, and controllability.

Within the first dimension, or locus of control, we look for the location of the cause. This location, or locus, can be either internal or external to the person. This can be thought of in terms of dispositional (behaving in a certain way because of something about the person, such as attitude, character, or personality) or situational (blaming others, such as a poor exam or bad luck).

The next dimension is the stability dimension as this characterizes the factor as enduring or as changing over time. A factor such as motivation or effort would not be considered enduring. A factor such as aptitude or intelligence would be considered more predictable. This dimension of the theory explains the ability to change factors once understood.

The final dimension of controllability looks to whether the responsibility relates to the person having a sense of control or efficacy as contrasted with the feeling that the causes are beyond their control.

The interview responses were categorized and then mapped onto attribution dimensions. The multitude of explanations given to explain outcomes therefore can be condensed into the following eight category combinations.

1. External-Stable-Controllable
2. External-Stable-Uncontrollable
3. External-Unstable-Controllable
4. External-Unstable-Uncontrollable
5. Internal-Stable-Controllable
6. Internal-Stable-Uncontrollable

7. Internal-Unstable-Controllable

8. Internal-Unstable-Uncontrollable

**Internal-unstable-controllable.** This combination of responses reflects a perception that the causes of the success or failure of outcomes were within the dispositions of the participants, such as ability and effort. These internal factors would be seen to be inconsistent, changing, and not necessarily enduring. This combination also reflects a perception of the participants that the outcomes can be changed once understood.

When asked if, in this more data-driven environment, PRIME might have had a different outcome, Janice responded,

> I think if we paid closer attention to it, yes. I think this was certainly a time when we weren’t focused on data and student achievement at the level we are now. If we were doing Prime now, we would have walked into it with clear academic goals, ways of measuring [these goals] and ...ways to measure them more frequently.

When asked about other areas of student performance that may have been affected by this experience, all participants had alternative ideas. Janice mentioned the following: “affective kinds of gains, relationships, sense of belonging, sense of community, a culture, discipline, attendance, those kinds of things.”

Katie talked about social interaction as an area that may have shown improvement as she explained,
A child can do very well on tests but if they don’t know how to use this knowledge, what to do with it, they’re not going to be very successful…a person can be very knowledgeable, but if they don’t know how to get along with people...

So we felt that the social interaction of children, learning to work together in groups, learning how to behave when you went ... somewhere like a theater performance or when you put on your own performance. We worked on those areas. Just learning respect for other people was really important [as well as] being able to get along with other people.

Evidence of these affective gains was given by Rebecca Sutherland as the following:

I think they had a feeling of confidence, I think they gained some social skills. Some of the things that we did that would have allowed them to do that...were the quarterly presentations to the school, the parents, and the nursing home. We also have weekend community service learning projects such as environmental events and beach clean-ups. So I think that all of that probably not only helped them at that time, but would be helping to create individuals who would continue to feel that way in the future and want to make the world a better place.

Rebecca elaborated on some of the activities that she saw as evidence of success.
I have not seen a group have more innovative projects or do more community activities than PRIME in the 30 years I have been teaching. They had to dress as the President and they would have to know all about that President and they would have to give a presentation about that President, or they would have to be an inventor and they would have to invent. We would have environmental contests where they would have to take junk and make an invention out of it and they would present this to a group.

So, I would think probably confidence. I think they probably built up self-esteem from having worked with people who knew them well and who...gave positive reinforcement. So, although standardized test scores maybe didn’t show a difference, I feel that the affect probably did.

When asked of the possibility of the collection of a different kind of data, Rebecca responded,

It’s hard to collect data on the affect, but yes, we could have done more surveys. Not everything is measured quantitatively, so sure, we could have put out surveys to students, and parents, and other teachers. [These surveys] could have asked about opinions towards school, how they felt about school, how they felt about their learning experience, if they thought they were making progress or were making learning gains. [Surveys to students and parents]
could have asked questions about what it was they liked or didn’t
like.

Katie responded,

Perhaps if you would have taken interviews the way you are with
me, interviews with all our parents and our students, that would
have been one kind of data we could [have collected]. We don’t
have that but I would suspect that it would have been positive. I
feel children really liked to come to school since we offered an
environment that really made them want to come to school.

Another possible set of data that might have been interesting would
have been to compare attendance.

All participants attributed the success of PRIME to components of the multiyear
learning community that were not present or possible in a more conventional setting. The
multigrade setting of PRIME offered opportunities for peer tutoring. Rebecca Sutherland
remembered the following:

For example, we would team a third, fourth, and fifth grader and
they would work together. Children who needed extra help would
work with the older ones and read to them or help them in math.

So that was something that we were able to do that you couldn’t do
in the one-year.

The teachers both agreed that their job was “harder” in this multiyear learning
community and that it was “much easier to teach traditionally.” They went on to explain
that although they worked harder “it didn’t seem like we were working harder because we enjoyed what we were doing.”

When thinking about the overall picture for strengths, outcomes, and lessons learned—and how these might be replicated for future teachers, students, or in a future multiyear learning community setting—I repeat the responses given by the principal:

I think the commitment of the teachers, the caliber of teachers, high quality teachers who knew their curriculum, cared about their students and really wanted to do something more innovative. So, I think that was a real strength.

If you allow professionals to use their judgment, their experience, and their expertise, you get a more enhanced product. I think that when people have the ability to use what they are passionate about and work with people that are like-minded, I think that the quality is enhanced, and I believe that with this and with almost every situation where teachers have been given that kind of flexibility and latitude within parameters, the product is always far superior.

A subsequent question in the second interview with the principal, Janice Peters, uncovered a perception of a weakness that had not previously been shared with the teachers:

I actually expected more innovative instructional strategies—more innovative instructional program in terms of teachers using a less traditional methodology in the classroom. [There was] more
innovative instruction [than in a traditional classroom] but certainly not way outside the box. There was some of that but not of the magnitude that I had expected.

**External-unstable-controllable.** This combination of attributional categories describes the success or failure of these outcomes as externally beyond the participants’ abilities and efforts. It also describes these factors as changeable and within the participants’ control.

Janice attributed the lack of success in standardized test score achievement to an educational climate that was not as standard driven as the present:

I think what happened is, this was a while ago. I don’t think we were paying attention to formative data and formative assessment. Had we been doing that, we probably would have been looking periodically at the data, at least in the first year to say okay, wait a second, we don’t seem to be seeing the gains that we were hoping to see, and then [we could have] made some adjustments.

Mrs. Peters also discussed the ubiquitous challenge of implementing something new, stating,

...change and not knowing how it was going to work. Anytime you embark on something new and innovative, you sort of anticipate what is going to happen, but then you have to modify it as you move through it.

When asked if, as an administrator, Janice had seen other areas of student performance that were affected as compared to the conventional classes, she responded,
[T]here was a different climate, a different expectation for students...certainly the relationship between the teacher and the student was much more enhanced. Especially over time when there were common kids and common teachers.

The continuity of the three year PRIME program offered opportunities for relationships as Rebecca Sutherland explained,

[F]irst of all spending this much time with people is going to give you more of a relationship with them and also because the types of things we did we were able to build character more than you would in a traditional program.

Rebecca answered this way when asked about her expectations of the PRIME experience:

I pretty much expected to happen what did happen. I expected there to be a community where people worked cohesively. We had teachers who worked and collaborated, that got along well, that had the same methods, that had the same beliefs, what worked to do the best we could to educate our students. That’s pretty much what I expected.

**External-unstable-uncontrollable.** The following responses seem to attribute some of the causes of the success or failure to factors externally forced upon the experience. These factors were once again seen to be changing and inconsistent. These responses portrayed these factors as beyond the respondents’ control and dependent upon the actions of others.
When asked about the weaknesses and challenges of the PRIME initiative, Janice Peters, the principal, discussed the physical setting, the lack of funding, the short-term implementation of the initiative, and the challenge of starting something new. In regard to the short-term aspect of the program, Mrs. Peters expressed her frustration with the fact that many promising initiatives are often implemented short-term and that long-term impacts are often difficult to ascertain:

I think with this program, as with others, I’m not sure we’ve ever given them the longevity to see the long-range impact. We seem unable to sustain initiative for what I consider significant amount of time to determine that this is, indeed, a best practice and it should be replicated.

When asked by the interviewer if the lack of a significant difference in standardized test scores between PRIME and the conventional group was a surprise, Rebecca countered with,

Am I surprised? Maybe a little bit. I know that... test scores are...one of the things that...we can measure. You can’t measure everything. So, I think there are things that maybe students got from this experience that, perhaps, are not measurable. For example, I think a lot of them built up confidence. Some of the things that they had to do... in drama, song, dance... that went with the curriculum.

Katie supported this by saying,
I don’t think the tests are the only way to judge how well we did with the children. But I think it’s an important way of judging, and I always felt [along with] our administrators...that we were doing better, so it does surprise me to some extent that we didn’t.

**External-stable-uncontrollable.** These categories would reflect an interpretation that the causes of the success or failure of the outcomes were external or forced due to the situation, such as luck or aptitude, rather than to the efforts or abilities of the participants. This combination also reflects that these factors are fixed and unalterable. In this combination, the causes are viewed as outside their limit of control. The following response supports these perceptions.

When asked if there were steps that could have been taken to assure an increase in test scores, Rebecca answered,

I don’t know. I don’t know if I have an answer for that as far as what I think we could have done differently to assure that test scores go up. No, I’m not really sure what we could have done differently.

**Internal-unstable-uncontrollable.** This set of categories relates the successes or failures as dispositional, with factors that fluctuate, and are out of the participant’s control. Katie Phelps summed up the feelings of the participants concerning PRIME’s effect on morale and attitudes as follows:

I don’t feel that [the conventional classes] had as many opportunities to accomplish the same affective gains. I found that in all the years I taught that the way that worked best for me was
the Prime way getting the support of everybody around you. We tried to make every child feel that they could succeed.

**Internal-stable-uncontrollable.** The interpretation of participant responses did not reflect this set of conditions due to the stability category. These conditions describe a situation that is dependent on the participants’ enduring dispositions and also describes the situation as being outside of their power to effect change.

**Internal-stable-controllable.** Once again, this set of conditions was not perceived by the participants. These conditions would describe the outcomes as dependent on the participants’ dispositions, with factors that are unchanging, yet within their control.

**External-stable-controllable.** This combination of categories did not describe causes for the outcomes of the multiyear learning community. This combination describes the factors as due to an external situation rather than to the efforts or abilities of the participants. This combination also describes these factors as unchanging. These situational and enduring factors would be seen as within their power of control.

**Summary of attributational outcome examination.** An examination of the responses of the participants to this interview question reflects the participants as viewing the successes and failures as due to a combination of both internal and external factors. In either of these cases—whether dispositional or situational—these factors of motivation, effort, attitude, or situational circumstances were viewed by the participants as changeable. The vast majority of these responses connected and related to efficacy.
Analysis of Research Question 6

Question 6: To what do these recollections and perceptions attribute the influence of this multiyear learning community on students, teachers, and parents?

All respondents agreed that this experience had an influence on the students, teachers, and parents involved in PRIME. When asked to what she attributed this learning environment’s influence on students’ learning and students’ behavior Janice reflected the following:

I think it was the ownership and sense of belonging. You know [it] wasn’t that big of a school, but [PRIME] was a smaller school within a school kind of environment and I think that kind of increased ownership, sense of belonging, mutual interaction and respect among the students. It was more like a small family.

When asked to what she attributed the influence of PRIME on the parents of these students to contribute to student learning Janice reinforced the following:

I think, again, it was a smaller setting with much more direct contact. As a parent, when you’re involved or you volunteer in the whole school, the direct impact on your child is diminished, but it was real clear that, as parents, if we were volunteering for Prime or working with Prime, then that was going to be a direct impact on my student and their learning.

Rebecca gave more personal examples of the influence of this community on students:
This is just one example because this happens a lot. I had a message a couple weeks ago to call ... a student that we had in Prime, and that he ... wanted to do a classroom visit... I’ve had children go to college or something and need to come in. So, I called him back and, in fact, what he really wanted to do was just come and see me. So he came the next day actually and visited and he just wanted to come back because of his memories of Prime and wanted us to know what a positive influence it was. He was 21-years-old and we sat and we chatted about what he had done.

Here’s another example. Last year I received a letter in my box. A very nice letter from a girl was a little bit older than the one I just mentioned to you and her letter was how much she appreciated our program and that because of this influence she had just graduated and was now a teacher. And so that was a nice letter I received from her saying that she had really appreciated all I had done and I had inspired her to become a teacher and she just graduated from college and was pursuing a career in teaching and, like I said, it kind of happens frequently. When I’m out I see all these grown people I know and they remember [PRIME].

When asked to what these memories could be attributed, Rebecca said, Well, part of it is just the fact that, because you’re with someone for three years, you obviously become closer to them. I think that because we did so many extracurricular activities with the kids, as
well as academics, they remembered school as a fun place, or maybe they saw you as more of a person rather than just their teacher.

Rebecca also talked of the influence of PRIME on parents and consequently to student learning and to what she attributed this influence:

I see parents out in the community and they still recognize me and I stop and chat and I always ask how their child is. People remember me and remember us and remember [PRIME]. I think that the parents saw it as a very positive experience because they found us to be very positive people, but I think that they were very impressed with the hands-on activities that we did.

We did a lot of team teaching and we did a lot of hands-on activities...so that was something that parents saw as a positive learning experience. We did dinner theaters, we did astronomy night, we did all kinds of creative art projects that went along with our curriculum that the parents would come and volunteer and they’d pull out [students] and help them with whatever they were doing.

Katie agreed about the influence of this learning community on students, parents, and student learning and behavior:

They [students and parents] knew exactly what to expect from us and what they could and couldn’t get away with. I think we had a very positive approach to students. I’m very sure it influenced
parents. I never had parents, in all those years of teaching, support me like I did when I taught with PRIME. Students, parents and teachers all knew each other better than in a traditional setting because we had so much interaction with parents. They seemed to trust us more and so if I said, “Johnny’s not doing his homework,” or “Johnny needs to do this or that,” they believed me. And we just kept so much closer contact that…communication was so much better. Much better communication. Parents were there any time we needed something.

Katie attributed this influence on students and parents to the following:

The family atmosphere. The bonding. They became our friends.

Perhaps being with the same people for three years made parents more comfortable and willing to chaperone and volunteer at school. I felt a great bond and a great friendship with the students and the parents.

When asked how this learning experience influenced her as a teacher, Katie responded,

It made me want to do more than I had to do. It made teaching fun. Just as we tried to make learning fun, it also made our jobs….I won’t say easier, because it wasn’t any easier. We spent a lot more time, a lot more preparation but it was always things that I wanted to do. It made my job more rewarding. I was more inspired. I really
wanted to go above and beyond what I felt I had to do to do my job.

When asked to what she might attribute this, Katie stated,

We all felt the same way about children…and we all cared a great deal about children. As a teacher I felt more support from teachers on my team and parents of my students than I sensed in a single year setting.

Janice Peters, looking at the experience from an administrator’s point of view, saw this experience as affecting teachers outside of the PRIME program also when she talked of influence:

You know, when you have a team of teachers who want to get outside the box and do something different, it raises the bar for those people who are more traditional and going like, “What are they doing and why are they doing this?” and “How will it impact us?” Again, I think there is a certain comfort level with the status quo and whenever someone moves out of that status quo, I think it causes teachers to either consciously or unconsciously reflect on their own classroom and their own practice and they go, “Whoa, should I be doing something different?” As opposed to everyone being a traditional teacher who goes in the classroom, closes the door and teaches in isolation.

When asked to what she attributed this influence, Janice responded, “I think the risk taking, having the role model that it’s okay to be different and do things differently.”
Rebecca and Katie both saw an influence on teachers outside of the PRIME program, as well.

I felt there were some negative feelings...perhaps this was due to the popularity of the program. Some [teachers] felt that we were given the best students...I felt that we encouraged them to develop into the best students. (Katie Phelps)

I think there were people who gained some ideas from some of the things we did. Subsequently, the whole school was required to go on vertical strands similar to ours and a lot of teachers did not want to teach this way. (Rebecca Sutherland)

Some of the negative influence PRIME may have had on other teachers was attributed by Janice, Rebecca, and Katie in some measure to a lack of “buy-in.”

Participants were asked if they found one of the learning environments—PRIME or a conventional setting—more rewarding than the other. Their answers illustrate, support, and emphasize the connection between the multiyear learning community and long-term friendships.

I definitely think that the multiyear learning community was more rewarding...you meet those kids and you are just so interested in what they are doing. They were just more a part of you because you knew them so well. It was just like a friend, you know, they become a friend rather than an acquaintance. I would compare it that way. Kids you have for a few months are an acquaintance.
Kids you have for three years, they’re a friend. (Rebecca Sutherland)

Katie Phelps explained, “I started letting a couple of them on Facebook, and now I can’t deny any of them, because I let some. Half of PRIME is on my Facebook page.”

Rebecca Sutherland candidly summed up a comparison of the two educational experiences as she echoed many of the earlier stated opinions:

As an overall comparison between traditional classroom experience and this multiyear learning community, there definitely was a difference for parents, children, and teachers. I think it was an effective way to teach. I would say it was more effective. In my opinion, from what I saw, I felt like they made more growth. I felt like it certainly allowed parents to buy into something because they were enthusiastic about what you were doing and that kids wanted to come to school because they were having fun… which is different from [my experiences] in a more traditional setting. They come to school because they have to and parents aren’t very interested and we’re all just going through the motions.

**Analysis of Research Question 7**

Question 7: To what do these teachers and principal attribute the nostalgia for this PRIME innovation among key participants?

Janice Peters agrees that there is a continuing sense of nostalgia and credits this sense of nostalgia to
the affective outcomes. I think the looking fondly at a time when it was a small community when we belonged together. We cared about each other and, again, all the affective parts of it. I think that’s why it was memorable. It was about relationships. It was about a sense of community and a sense of belonging...And I think the feelings and emotions are what people look back [on] fondly. It’s sort of like, oh, landmarks or hallmarks in a child’s life. You know, they’ll remember something that happened or a place they went and often that’s more about nostalgia and how they felt, as opposed to what they did when they were there.

Rebecca also agrees that there are feelings of nostalgia and attributes these feelings to the sense of community gained from PRIME.

...the feeling of community...the fact...that you spent three years with the same students, so obviously you knew them better. Also, you did so many extra curricular activities that you got to know their families...their siblings and their parents.

Rebecca is certain that many of the students shared these feelings of nostalgia based on the following as evidence of that nostalgia:

...the students that I see and come back. I think if there weren’t that feeling they probably wouldn’t remember you, or want to write you, or want to come back and visit you. I see a difference is their enthusiasm when they see you out in public. They seem, you know, although other students are happy to see you and they talk,
but they may, you know, come up to you and talk and have a conversation, but these kids actually go back and say, “Do you remember when we did…”. Or they’ll say, “Are you still going to the nursing home? Are you still making your kids dress up as George Washington?”...they are remembering things that we did.

It seemed to have an impact.

She adds “nostalgic feelings happen, usually, on things that we like. So, if you liked something, you’re going to have nostalgic feelings.” When asked by the interviewer if those feelings were the proof of a good program, Rebecca responded adamantly,

No, not at all. It doesn’t make it a good program, but it doesn’t make it a bad program either. No, shoot, you could just sit around and sing campfire songs all day, you know. No, it doesn’t make it a good program. What makes it a good program is that while you were having this good experience, this positive experience that produces these feelings of nostalgia, while you were having a good time, you were still learning. And although... the data didn’t show an increase, or higher learning gains I know that it was equal to...so while you were learning, you were having fun. I don’t think that there is anything wrong with that.

Katie agrees there are feelings of nostalgia shared by teachers, parents, and students regarding PRIME, and when asked what she thought produced these feelings she replied,
The nostalgia probably comes from the feeling of family...the closeness developed among students, teachers, and parents impacted us all to the extent it produced these fond memories...I don’t think they would have these memories if they had only had us for a year. And also all the fun things we did...the jogs to the nursing home were fun for them, the Busch Garden trip was very exciting as many of the children had never gone before.

Analysis of Research Question 8

Question 8: In what ways has the key participants’ experience with the design of and involvement in this PRIME multiyear learning community influenced their subsequent professional philosophies and decisions related to effective curriculum and instruction?

When asked how this learning community influenced her in her leadership role, Janice Peters said the following:

Well, I think as I reflect back, involved with innovative programs prior to this and after this, I think there’s things that you would repeat and things that you would do differently and I think this is typical of that. There are some things, in hind sight, that we should have done differently. There are some things that I think we did well. And, both of those, whether we should have done it differently or it went well, have factored into other similar kind of initiatives since then.

An unanticipated finding that may have affected future decisions was reflected in this response by Janice:
I learned that you can have an innovative vision that doesn’t always impact the teacher’s instructional practices. That you can structure a program differently, but if the instructional practices tend to be very traditional, I expected this program to push the envelope a little bit more on teacher methodology, which didn’t happen.

Reflecting on possible missing elements of this learning community and projecting to future learning community involvement, Janice makes this connection with these statements:

I’d have a clear learner profile, a clear teacher profile, spell out, specifically, the outcomes of the program, how we’re going to measure those, what happens if things aren’t working the way we want and have some real clear instructional goals....we’re looking at a new ninth grade transition program, and those are exactly the criteria that we’re going to be looking at. This is what we’re going to put into place...looking at really clearly what the program is, being able to define that, being able to market that, being able to identify the correct target audience and then, again, focus it all on curriculum instruction and data.

When asked how this PRIME involvement affected future decisions, Rebecca looked at this question with a narrower focus than that of the principal taking the students actions into consideration:
I realized that it was a good way to teach. That it seemed to be a good way to get information across to students while they were still having some element of fun, making it enjoyable.

Rebecca and Katie both reflected on the future impact it had on their teaching methods:

I established the value of using all the senses and [making certain] you’ve reached all the modalities, which we certainly worked hard to do, making sure we included movement and we included the vision and...hearing. I believe that the student’s attitudes towards school were more positive because they were more actively involved in learning. I think sensory building is important, that you try to use all of your senses and that you try to make lessons that are engaging. I think that’s the most important thing. That engagement...you want to have something that will appeal to the student and yet they’ll learn from it. (Rebecca Sutherland)

While teaching in the PRIME multiyear learning community I learned how much students can learn by teaching others. I learned that students mastered material more easily when they see, hear, do, and then teach it to others. Students need to be continually focused and involved in the learning activity. We know that students learn differently and they need to be presented their materials through all the different modalities. I’m not sure when we had Prime that [this was well-known research]. I think we just
sort of discovered it ourselves. So, I think the way we instructed kept all children involved. (Katie Phelps)

The teacher collaboration component of PRIME was also one of the important elements affecting future teaching situations for Rebecca and Katie. As Rebecca Sutherland noted,

I learned to work on a team. We had teachers who worked and collaborated, who got along well, who had the same methods, the same beliefs, and just worked to do the best we could to educate our students.

Katie Phelps shared, “We energized and motivated each other. Collaboration among us was not [just] weekly or biweekly [as it is presently] but daily. We really lived our teaching experience.”

Janice Peters saw her part in this collaboration as demonstrating a “leadership role, in terms of providing a climate where teachers could be free with their ideas” and as “modeling collaboration.” Katie Phelps described her role as, “...I taught math, but I felt as though I was working as part of a team, rather than a teacher.” While Rebecca’s response to the question of her role in the community confirmed, “... I was an equal partner. [The three of us] were all equal.”

In addition, student teamwork was an important element for the future of Katie’s teaching methods:

[I]t made me understand the value of teamwork from a teacher’s perspective, as well as a student’s perspective...children working
together, teaching each other, peer tutoring, keeping every child involved in the learning process.”

A final factor that all of the participants mentioned taking away from this experience was the realization that an innovation is best practiced when all participants share their desire for success. All participants interviewed recognized this importance:

...getting staff buy in. I think building around strengths, creating a program with some respected teachers that parents already had confidence in. I think that’s really important. The credibility has to be there. When you do something new, it’s a risk for parents and if they have confidence in the teachers who are affiliated with it, they’ll be willing to take a risk on something unknown initially, because they trust those teachers. (Janice Peters)

Rebecca Sutherland noted that you buy into it. It has to be something that you believe in. It has to go along with your beliefs and philosophies, your attitudes, you recognize its importance, and it’s something you want to do.

Katie Phelps explained,

[O]ur program was very popular...due to the buy-in of all involved, the teachers, the parents, and the students...We were all so invested in our program...we all believed we were doing it right.

Initial Quantitative Data Analysis

As an initial indicator of PRIME’s effect on standardized test scores, a quantitative comparison over time of the students who participated in the PRIME
learning community with those who did not is provided in Tables 3, 4, and 5. Effect-size measurements tell us the relative magnitude of the treatments. A pooled formula was used to calculate for effect sizes while Cohen’s d effect sizes allow for a standard comparison using the following general conventions for this labeling of effect sizes: .2 is small, .5 is medium, and .8 is large.

Table 3

Initial Calculations for Reading

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Table 5

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Further results for each quantitative research question are presented separately in Appendix B.
Summary

This chapter focused on the findings of the interviews and presented a summary of the initial quantitative data. The interview data were presented through descriptive narratives while responding to the research questions. Themes and subthemes surfaced from the reflections and perceptions of the key participants of the PRIME learning community. Chapter 5 presents a discussion of the findings, their connections to the literature, and recommendations for future research.
CHAPTER 5: SUMMARY

Discussion

The purpose of this study is to explore the experience of a unique multiyear elementary school learning experience designed with interrelated research-based efforts for improved teaching and learning, to use an auto-ethnographical critical practice inquiry to describe the perceptions and reflections of the principal and teachers directly engaged in this project of educational reform for a deeper understanding of the experience, and to attribute perceived causes to the outcomes of this interaction for possible future action.

This chapter contains six sections. The first section presents a summary of the findings of the study. The second section describes the conclusions of these findings. The third section discusses possible implications derived from these research findings. The next section discusses the recommendations for practice based on the study conclusions and implications. The following section offers recommendations for future research. The final section consists of concluding remarks.

Summary

Qualitative Summary

Using the attribution theory as an analytical lens with which to look at responses relative to the successes and failures of PRIME produced a key perception. Whether the participants viewed the locus of control as internal or external, these teachers most often viewed the factors as adaptable and maintained a sense of control. These interview
responses seem to reflect the teachers’ conviction that they have a critical role in student learning. This sense of agency and influence on students seems to be true even in a data-driven environment. Attribution theory analysis supports the fact that the PRIME students did not lose anything in terms of achievement but they gained some very rich and memorable learning experiences.

This multiyear learning community environment provided a support system for interrelated components and corresponding attributes associated with academic success. These support systems might intersect within any learning environment; however the multiyear aspect of this learning community provided an optimum opportunity for long-term continuity and thus, more effective implementation of these systems.

The students were provided with a variety and abundance of group involvement. This was thought by key participants to improve social skills, self-confidence, and self-esteem, and this perception was supported by a variety of research. Peer teaching reinforces skills, responsibility, and allows for an increase of time on task. The cooperative component of PRIME provided peer collaboration and allowed students engaged in this teamwork to build skills, support, and trust.

The teachers were invested in this learning community. The interview responses reflected a more intense level of teacher commitment and an increased willingness to invest more time and effort. The multiyear aspect provided the time needed for the teachers to grow in caring more about each individual student as a person. This investment was evidenced by the teachers’ acceptance of responsibility for the total group of students and was claimed to be instrumental in making teachers feel more responsible for the success and failure of each student. The continuity of the multiyear configuration
helped teachers form long-range goals for student achievement and design instruction with these goals in mind.

The parents of the students of this multiyear learning community were perceived to be more aware of student learning and more supportive of the teachers. There were accounts of more frequent parent contacts with a higher level of effective teacher-parent communication, including with those parents of less successful students. This environment was viewed by the participants as having significant and positive effects on teacher relationships with parents and these relationships went beyond a responsibility to their own child. The sustained duration of the multiyear configuration and the service learning community component provided significant, meaningful, and authentic ways to include parents in the life of the school community as they came to feel welcome, needed, and more acquainted with all the children.

The collaborative planning opportunities for the teachers provided an opportunity to create sustained blocks of learning for the students, an interdisciplinary approach, a thematic focus, and community based learning experiences. These curriculum approaches offered optimum opportunities for inclusion, authentic learning, continuous progress, academic awareness, learning style varieties, avoidance of duplication, and the ability to identify, prescribe, and implement responses in a way that is frequently not possible in a typical setting.

**Quantitative Summary**

Quantitative data analysis indicated no statistically significant differences between the academic achievement based on the selected tests and benchmarks for the PRIME learning community and the comparison group. A slight difference in test scores
for both math (0.38) and reading (0.17) was found at the end of the PRIME program (5th grade). In tenth grade, the conventional group realized a slight increase over PRIME students in math (0.24) and reading (0.26). Writing scores in tenth grade showed a medium (0.65) effect for the PRIME students.

**Conclusions**

A review of the literature suggests that learning communities come in various designs. The descriptions of the interrelated elements and critical attributes are frequently vague. The specific elements of the learning community would need to be specified toward the goal of a clear definition. In much of the literature review, without this clarity the idea of community gets reduced to its affective dimensions. Few school initiatives are likely to be formed on this basis. However, the results of this study do not indicate that other programs for the organization of elementary schools are less effective.

Throughout the literature, compelling examples of the benefits of long-term student-teacher relationships were encountered. Using the method of reflective practice throughout this exploration of the PRIME learning community these same major benefits of increased teacher collaboration, motivation, and engagement; improved student cooperation, motivation and engagement; increased family interest, support, and involvement; and a deeper, authentic, and more engaging curriculum were offered repeatedly as evidenced by the interview participants in their perceptions of a successful intervention. The interview responses of the key participants reflect that they strongly believed in the success of PRIME.

When looking at academic achievement, however, the results do not seem to indicate success. Clearly, as evaluated through the quantitative portion of this research
study, the data showed no significant differences between the standardized scores of the PRIME students and the students in the conventional classrooms. After researching studies of other restructuring programs, I have come up with two possible rationales. First, a flawed design of the program may account for the results, or secondly, a flawed design of this research may account for the results as shown.

**Program Design**

PRIME did not have a formal instrument in place to evaluate the program and to monitor progress. Also, as the program was ongoing, we failed to collect measures of the program implementation. Early research findings related to academic achievement was through the research of Coleman (1966) and Jenks (1972). This research tells us that academic achievement strongly relates to students’ socioeconomic background. However, research of the 1980’s on effective schools indicates that in spite of the Coleman and Jenks research findings, schools can produce considerable gains in performance (Bennett, 1986; Marzano, 2003) and more recent restructuring efforts have been very successful in increasing the academic achievement in many schools (Dynarski, Gleason, Rangarajan & Wood, 1998; Good, Burross, & McCasin, 2005; Rowan, Correnti, Miller, & Camburn, 2009; Simmons, 2006). The knowledge and experience required for organizational transformation to take place is available and currently there are research based strategies that, when implemented properly, can transform the school (Simmons, 2006).

A significant study, A Study of Instructional Improvement (SII), by a team of researchers from the Consortium for Policy Research in Education (CPRE) involving 115 elementary schools across the nation (Rowan et al., 2009) that examined “the design, implementation, and instructional effectiveness of three of America’s most widely
disseminated comprehensive school reform programs (the Accelerated Schools Project, America’s Choice, and Success for All) over a four year period” (p. 5) put this research and its findings into perspective. This SSI study was conducted to evaluate the effectiveness of these specific externally-designed school improvement programs in addition to the larger purpose which was to gain insight into design-based school improvement and to determine why a program may fail to increase student learning. Results found that the adoption of these programs was generally easy, implementation was more difficult, and there was a “pattern of weak effects on the reform’s intended goal—to improve the academic achievement of students” (Rowan et al., 2009, p. 19).

In the SSI study one of the schools (the Accelerated Schools Project) frequently mirrored characteristics of PRIME. The Accelerated Schools Project model, developed at Stanford University in 1986, is based on vision, constructivism, authenticity, activities, and school culture. At the same time, it is not prescriptive in nature, does not target particular subjects for improvement, and does not offer specific strategies for instruction. The teachers in this process oriented model were most likely to feel a sense of autonomy and trust; the teaching practices did not appear significantly different from the comparison schools, nor did the students learning increase compared to their control group (Rowan et al., 2009).

A second model, America’s Choice (designed in 1998), offers guidance in curriculum and instruction and requires coaches and facilitators at the school level. This model was built around definite ideas for both curriculum and instruction. Improvement plans were clearly a part of this literacy based pattern of instruction. An early focus on writing shifted to a later reading and math focus. Levels of instructional leadership were
highest in this model. This professional controlled model outperformed other models at grades 3, 4, and 5 in literacy achievement (Rowan et al., 2009).

A third model, Success for All, developed in the 90s at John Hopkins University, is highly prescriptive using clearly specified plans and routines. Cooperative learning opportunities during class instruction and a weekly scripted lesson plan sequence were its two core principles. Distinctive patterns of organization and instruction were apparent. These schools were more centrally managed compared to the other two models. The focus was on the particular instructional target of Reading. The students in this skill based model excelled in the early grades of kindergarten through grade 2 (Rowan et al., 2009).

This PRIME multiyear elementary school learning community intervention was designed as a small-scale innovation involving only three teachers, within three classes, within one school. Research shows that generally more ambitious programs or whole school initiatives are more successful due to the fact that a larger scale, systemic approach offers more opportunities for leadership involvement, faculty coherence, professional training, and other aspects of reinforcement (Ornstein, Levine, & Gutek, 2011) rather than one involving an isolated fragment as was PRIME.

“Building an effective design is difficult and requires attention to both instructional design and implementation support” (Rowan et al., 2009, p. 21). Taking the vast resource of restructuring research into consideration, identifying student performance standards and specific educational goals, and then aligning curriculum, instructional methods and materials, testing, and professional development to the
objectives of increasing student achievement would direct energies in a way that would have a high likelihood of success.

**Research Design**

The initial design of the study was flawed in a variety of ways. Because PRIME did not have a formal instrument in place to evaluate the program and monitor progress and we failed to collect measures of the program implementation, how do we look for growth in this exploration years later? This question leads to the reflective practice nature of this design as key participants continue to be available for this reflective capacity.

This PRIME program model design and research design were, upon reflection, put into place without the goals and outcomes clearly defined. Because of this lack of foresight, insufficient rigorous research existed to clearly address the multiple variables of this multiyear elementary school learning community program or its impact on student achievement. PRIME’s strengths or weaknesses might be understood more clearly using attribution theory, so this approach was also brought into the research design.

Part of the reason for the lack of clarity and accuracy may also stem from the difficulties inherent in this type of research as Berliner (2002) discusses “the power of contexts,” “the ubiquity of interactions,” and “the short half-life of our findings.” Berliner (2002, p. 18) calls this educational research “the hardest science of all”. A learning community is wrought with variables and interactions, but it is those interactions that I found to be of consequence in this exploration and in the reflections of the participants.

Part of the reason for this confusion may be attributed to “the problem of conflicting worldviews between teachers and researchers” that David Labaree describes in The Peculiar Problems of Preparing Educational Researchers (2003). Labaree (2003)
examines inherent differences between educational practitioners and educational researchers and suggests that these differences create a “cultural clash” (p. 13) in worldviews that is not easily remedied. Labaree sees this as a clash between teacher culture and academic culture. The educational knowledge teaching encompasses is described as “very soft and very applied” and as “producing findings that are neither very clear nor very convincing” (p. 14). While “quantitative work has a harder feel to it” (p. 14) with results that are more precise and definitive; these results can often appear abstracted from the “messy reality of schools” (p. 14). Labaree contends that “carrying out credible research in education is particularly difficult” (p. 14). This transition from teacher to researcher, though on the one hand, natural and easy due to the traits Labaree enumerates (p. 15) including maturity, professional experience, and dedication, was without a doubt the struggle that I faced throughout this dissertation process. Issues that I had been exploring as a practitioner were those I desired to continue to examine through research in order to understand the nature of those issues. Additionally, Labaree discusses the apparent “straddling two conflicting work cultures” (p. 17) with the analogy of a practitioner’s view of research analysis to “intellectual fiddling while the classroom burns” (p. 18). Although challenging to do research simultaneously to teaching in an elementary classroom, the experience of balancing these differing cultures and learning through a new perspective of researcher was also rewarding.

In addition, within the limitations of the design are the limitations in measurements. The learning community characteristics did not translate into higher test scores. Norm-referenced standardized test scores did not improve as a result of this multiyear elementary learning community. Although a score on a standardized test seems
like a relatively straightforward indicator of achievement, the practice of determining educational quality by testing students has frequently been called into question (Green, Winters, & Forster, 2003; Kohn, 2000; Rose, 2009). Norm-referenced tests are not intended to measure the quality of learning or teaching, but are designed to rank, not rate (Kohn, 2000). Standardized testing is not the most valid method of outcome measurement as the focus of this kind of testing is more on lower-order skills and superficial thinking than on deeper outcomes such as problem solving and conceptual understanding.

Although students may have learned skills over and above those in the comparative curriculum, standardized tests might be insensitive to these differences. Curriculum-sensitive measures are more dependent on the characteristics of what is happening within the educational setting (Marzano, 2003). Multiple data sources or forms of assessment may have reflected more personalized learning. None of the curricula related to this learning community were assessed through any formal tool, and that assessment cannot be reproduced now. Standardized test scores do not tell the whole story. The nature of the evidence chosen was problematic and different measures may have produced different results.

Marzano (2003) in his book Translating Research into Action clarifies much of my research and helps to bridge my on-going struggle between the clashing world views of researcher and practitioner. On the one side of the bridge, is my shared understanding of the teachers’ various nomenclature when discussing outcomes of the learning community. On the other side of the bridge is my understanding of the messiness of this inability to precisely name a definitive outcome and to measure the success of this outcome. On the one side is my innate shared distrust of testing as the legitimate sole
measure of success. On the other side is my understanding of the precision that is warranted for scientific study.

This study done in retrospect would clarify the nomenclature used to define successful outcomes. The teachers, at various times in the interviews, use various vocabulary terms to relate successful outcomes. At times these seemed like best practices that could take place in any good teaching setting and the reader might wonder why these best practices would not be evident in all classrooms. The activities themselves are best practices but because of experience in both conventional and this learning community setting, we as participants, see increased and extended opportunities for these to become integrated between teachers, students, and parents. Marzano discusses this as the act of establishing clear and common goals (2003).

This study done in retrospect would clarify formative and summative evaluation. Although results often rely on state tests or external standardized tests as feedback, Marzano insists that feedback must be both timely and specific to the content. These once a year tests do not create opportunities for timely and specific feedback which has been shown to be crucial to enhancing achievement. Formative evaluations might have improved the design of the learning community, the pedagogy of the teachers, and the achievement of the students (Marzano, 2003).

**Implications**

A broad implication of this study is the disconnect between the way teachers talk about results and increasing achievement and the reality of our present interest in academic standards testing. When discussing outcomes the teachers would repeatedly defend the initiative and define successful results by means other than standardized test
results. These outcomes would consistently be described in terms of activities and affective gains. This study reflects how these teachers think about the challenges they faced and what they felt constituted success. For the teachers these challenges and successes are defined in terms of their daily interaction through the curriculum with the students, each other, and the parents. For the administration, county, and state, it is indicated by an increase in standardized test scores. This finding was evident throughout this research study.

As smaller learning communities are gaining popularity as a reform measure in U.S. high schools, the organizational implications of multiyear elementary school learning communities as an alternative structure provides advice to policy makers as well as educators. Knowing the common or particular patterns of a smaller learning community and how these may affect achievement and affective characteristics may perhaps provide a more equitable education. Multiyear teacher-student relationships in learning communities such as PRIME may create the conditions for curricular change, innovative instruction, collaboration, support, and other elements that promote learning. The smaller learning community research base yields meaningful results that support the contention that learning communities will likely be effective in raising achievement (DOE, 2010).

Many school-size studies support the premise that smaller school size is better, and the effect of small schools on academic achievement is well documented (Cotton, 1996, 2000, 2001; National Association of Secondary School Principals, 1996). These findings have elevated small school policy in status, but smaller learning community effects on achievement are less consistent (Avila & Rivera, 2008; Bernstein et al., 2005;
Lee & Friedrich, 2007; Oxley & Kassissieh, 2008). Literature results of qualitative studies of affective improvements through smaller learning communities are well documented and consistent as are results of neutral effects on student achievement scores. This growing recognition of the benefits of small schools and the possible link to smaller learning communities has led government and private funding sources to make millions of dollars available for implementing small learning communities, particularly at the high school level (DOE, 2010).

**Recommendations for Practice**

How can we tell about the quality of life within schools? This was a question that was discussed throughout the chapters and within the interview responses. Literature reviews and participant responses discussed the possibility of getting data from students and parents. There seemed to be a weakness in using recollections as the primary source of data as we often remember only those selective emotional or episodic moments. The reflective data produced from the interviews did not reveal many of the frustrations or conflicts that I, as the researcher, remember as being present within this innovation. Systematic methods of getting data could include parent and student focus groups and interview responses. Surveys might give important clues regarding every stakeholder’s experiences of an innovation. Student discussions or writings would offer their impressions and perspectives. Discussion with the principal or PTO members might also help to surface others’ perceptions of the climate within the school.

What was in place at this time was a project-based instructional program. The accountability environment was different than today’s. At the time of PRIME, instruction was aligned with the county curriculum. At the present time we have a standards and
outcome-based environment. This seemed to be our biggest omission. The lesson plans and instructional activities were not aligned with standards-based outcomes. This very strong overlay of standards, testing, and accountability would need to be a major component of planning for research-based instruction in the future. Our PRIME students didn’t lose anything academically but were able to have deep learning experiences. As we have found within this study, teachers do maintain a sense of agency and empowerment. Their locus of control remains internal. Teachers believe that they can make learning happen even within the external conditions they find themselves operating under. They must accommodate for these external conditions, but they do not feel that this prevents them from achieving what they believe to be important goals. The creation of PRIME showed that an innovation can be created to affect the sorts of deep learning called for in project-based instruction without sacrificing performance on standard measures.

The reality of this research is that a lengthened time span with a particular set of teachers, instructional methods, or educational setting does not guarantee improved academic learning outcomes that can be measured through norm referenced standardized tests. Designing an innovative practice takes strategic planning to bring together the essential components of an improvement strategy (Simmons, 2006), and although teaching should be more than focusing on test scores, improving academic achievement in an equitable manner is a critical educational issue. My recommendations are to research the conditions and practices that support effective instruction within effective instructional environments while continuing to improve outcome measures. A learning community may provide the groundwork while research moves forward.
In the interview reflections of the key participants of PRIME, when asked about the significance of the test score data, the teachers frequently treated improved test scores as ancillary to the intention of the PRIME community and turned the focus of those questions regarding test scores to other outcomes. The participants’ responses seemed to reflect a learning community philosophy that had instead, as a focus, a set of outcomes aside from test scores. The focus on community building, social bonding, increased motivation, and increased collaboration provided participants of the PRIME learning community the faith that these attributes would produce better educational outcomes, however, these goals are somewhat more complex and difficult to pinpoint and measure.

In the collection, Letters to the Next President: What Can We Do About the Real Crisis in Public Education, George Wood (2004) wrote, “Rather than worry about outcomes such as test scores we should focus on the quality of daily life inside the school and the school experience as an end in itself” (p. 93). Rose asks “What should be valued as achievement?” and says that, “teaching carries with it the obligation to understand the people in one’s charge, to teach subject matter and skills, but also to inquire, to nurture, to have a sense of who a student is” (Rose, 2009, p. 168). Learning communities such as PRIME may create an environment where outcomes such as these are possible while still balancing the need to prepare students for academic success on standardized tests.

Implementation of a multiyear learning community costs little beyond what is spent for a conventional setting. Implementation is easy and education literature abounds with references of long-term student-teacher relationships to provide more extended contact for providing effective instruction. Training beyond expertise in the content area is not necessary.
Recommendations for Future Research

The learning community research base is strongly supported. Based on this support, research pertaining to multiyear learning communities should continue. More extensive research is needed to answer the questions related to multiyear elementary school learning communities and academic improvement. Future research might lead to a study of learning communities in which the researcher is an observer and can collect various forms of ongoing qualitative and quantitative data over a period of time. The DOE is presently involved in various high school Smaller Learning Communities in which the researcher might follow and compare what have been the results of the past with the results in the present and the future. Future research might analyze the funding costs of a learning community for comparison efficiency. As a continuation of the PRIME learning community the study might be broadened to include another cohort group or to follow the correlations of the students’ academic outcomes through their college coursework. A focus on learning within a continuous culture of collaboration, with a focus on results, is my recommendation for the creation of a future learning community. Further research could offer strategies and techniques that promote increased learning and achievement in learning communities. Future research could reflect the use of valid measures of achievement. Using both reflective practice and attribution theory to understand the results, energies would be redirected so that there would be a high likelihood for change to occur in a way that may result in higher levels of academic achievement for these future students. Finally, further research could include aspects of innovation in education. The shared reflections of the teachers who collaboratively created this authentic learning community provided multiple instances of perceived
innovative teaching and learning. Comparisons and contrasts were made by both the principal and the teachers between the learning community and the more conventional learning environments that were happening at the time. In the second set of interviews the principal made reference to the level of innovation and her desire for even more “out of the box” thinking. More questions involving innovative changes emerge from these seemingly contradictory stances.

Concluding Remarks

The study of long-term close relationships within a multiyear learning community environment, as opposed to reorganizing with a new group of students and a new teacher on an annual basis, is an area deserving of increased attention in education. The essence of these positive relationships is the continuity for the stimulation of improved learning outcomes for students, with the effects being mediated through outcomes other than direct academic achievement results. We all share a partnership in educational reform, and learning communities such as PRIME may offer a meaningful position for everyone involved to work together toward future success. Even while school districts and states are developing standards for student learning to guide curricula, teaching, and assessment it is important that teachers are supported in planning intellectually sound curricula that fully engage students, teachers, and parents.

Furthermore, our democratic vision of the purpose of education is as The National Research Council (2000, p. 5) stated, “not to teach children to just read and write but to also prepare them for the future by giving them the intellectual tools and learning strategies necessary to make them lifelong learners and productive members of society.”

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EPILOGUE

I understand now that the popularity of PRIME may have contributed to our eventual demise. With more parent involvement than could be contained in three classrooms filled with students, PRIME learning overflowed into the hallways, library, cafeteria, and schoolyard. Other teachers saw this enthusiasm and sometimes found this excitement a distraction. Students who were not a part of PRIME saw it and wondered why they were not involved. Parents walked past and wondered when their children would have the kind of opportunity to learn of Florida flora and fauna through an engaging visit from a local wildlife expert and his endangered Florida panther.

The original group of PRIME students were not chosen specifically for this innovation but were randomly placed at the end of the previous year’s traditional placement process even before PRIME was created. At the end of the first year of this innovation, however, parents were in line and applications were time-stamped to be placed on the waiting list for this program. We were willing to take more than the average share of students but there was not enough room to take all of the students who wished to be in PRIME. The PRIME teachers saw the positive aspects of this situation. Among those outside of the learning community, however, a more negative dynamic began to surface.

Within PRIME we shared the successes, failures, and celebrations with happy students and involved parents. This program was a unique situation for us as teachers and
we were excited to be part of this feeling of community. When other teachers saw us going beyond expectations, it was clear to us they did not always have a positive view of the situation. We sometimes felt their “daggers,” but wondered why they did not envision and set up a situation such as PRIME in which they also could feel empowered and supported.

The principal must have been fielding questions and dealing with this resentment because as the years progressed, our list of students placed in PRIME began to change. Rather than a cohort of students who were placed due to parent request and interest, we found ourselves with classrooms containing more than our share of students with special needs. This change seemed to be the principal’s attempt to put to rest rumors that PRIME got “the best of everything.” Despite this change in student make-up, PRIME continued to thrive. The engagement and consistency provided in this 3-year learning community had a positive influence on all participants.

What parent would not want to attend the culmination of our learning units? At the end of a science unit on ocean geography and geology, a parent of one of our students came in to talk about a local fish farm he managed. A trip to an aquarium with lunch at the beach was another special learning opportunity. A dinner theater performance, presented by students replete with knowledge regarding their chosen topics, filled the cafeteria one night. The decorations were ocean creatures created by the students, and the event was catered by our local fish market. The parents planned, coordinated, and served. This evening was the talk of the school for months. But, of course, only those students and parents in PRIME were involved.
Even students and parents who had no nighttime transportation would take the bus or carpool to get to our “Evening with the Stars,” where local astronomers hitched their huge telescopes on trailers and brought them to our school. We viewed the nighttime sky while eating cookies baked by the students, fashioned in the shapes of their favorite heavenly bodies; punch was served from a vat topped with dry ice. The long lines to look at the stars and planets were filled with even more parents than students, waiting for their second and third looks.

These nighttime presentations filled the parking lots and cars overflowed into the streets. Of course, these events were noticed by the neighbors and members of the school community who were not part of the PRIME innovation. As we felt successful and happy within our small learning community, resentment was brewing on the outside, and our new principal needed to find a way to keep it from bubbling over. Her solution was to mandate learning communities throughout the school. Each teacher was to find a teaching partner, spanning the grades so that each team would have one teacher for grade levels K-5. PRIME was also asked to expand our 3-5 classrooms to accommodate K-2 as well. Each group of teachers was asked to discuss and write a philosophy that would describe the pedagogy within its individual team. These philosophies were presented to the parents at the end of the year. Parents then had a choice as to the placement of their children. It was hoped that this would solve the problems and contribute to teacher empowerment and parent buy-in school wide.

Some problems were solved, or at least put on the sidelines, with this choice solution. However, these learning communities did not come about organically, as
PRIME had, and did not fit the needs of all teachers; the new plan diffused but did not completely eliminate the uneasiness and resentment of some teachers.

As with many innovations, PRIME’s time to dissolve came with another change in administration and the advent of our new state accountability program. We were told to take our program to one single grade level. The three PRIME teachers chose 5th grade and attempted to continue the innovative teaching and engaging presentations. Although we continued to use similar teaching strategies, we found we did not have the parent involvement, student interest, and appropriate behavior necessary to continue our presentations. Three classes of 5th graders shared for only 1 year did not exhibit the same caring and cooperative bonding that our multiage, multiyear classrooms had. As teachers without the huge parent involvement component, we did not have the time or motivation to dedicate to the “outside of the classroom” learning. Cooperative learning, project-based learning, and collaboration became troublesome and frustrating as the students did not have each other to depend upon.

I remember this learning community environment fondly. This satisfaction was most likely due to a number of factors. Being in on the ground floor with a new innovation was challenging. This challenge produced a feeling of pride that I was chosen to lead in this capacity. My ideas and suggestions were elicited and supported. I was treated as a professional. The invigoration of this creative role carried my colleagues and me through these PRIME years. When we worked long hours, when parents frustrated us, and when we were burdened with the everyday chores and demands of teaching, our collaborative skills and supportive friendships got us through. We shared responsibilities and these responsibilities became fun. The teachers, students, and parents enjoyed
teaching and learning. My disappointment at the culmination of the PRIME innovation was profound but fleeting. Within this 35-year career, many more challenges and creative innovations were presented and developed. Outside requirements and boundaries peppered the landscape along the way. Scientific research has taken us many steps forward in realizing how children learn and how we should assess that learning. Our communities have changed greatly over the years. The present negativity toward education, teachers, and public schools cannot be healthy for our society. It seems to me that now, more than ever, our students need the support, safety, and consistency that a learning community offers. I only hope that we can find a way to take the positives experienced within this learning community and add to this the understandings gained from ongoing research, to find a way to bring community into the classroom and to take the classroom into the community.
REFERENCES


Elliot, D. C., & Capp, R. (2003). The gift of time: Multi-age teaching and curriculum design, or looping, work to provide a continuum that maximizes learning. Leadership. 33, 34-36.


APPENDIX A: CONSTRUCTIVIST PRINCIPLES IN PRACTICE: PRIME
A Learning Community: The Culture

The name reflected the vision. Positive Realistic Instruction will Motivate to Educate. As a 3-year continuous progress learning community, respect and trust between teachers and students would build and be nurtured. With three teachers and active learning opportunities, equity and inclusion would be guaranteed and all would benefit from the diversity of others. The vision would be shared among students, teachers, and parents. The program of multi-grade level continuous instruction would allow students more continuous and sustained time for working and learning than was typical in classrooms. Within any given period of time, whether it was the three years, one year, one semester, one day, or one period, students would have time: time to learn, time to reflect, and time to revisit a concept or skill. Both students and teachers would benefit with time to engage and remain engaged in an experience within the ongoing unit of study. This benefit of time would provide students with opportunities to engage in deep learning. Students would be placed in groups for necessary personalized teaching and learning or instruction and necessary groupings would continue for as long as was necessary. This flex grouping and team teaching would differentiate instruction. Teachers would share their goals with one another resulting in the goals building on each grade level. Each teacher would acknowledge and build on their colleagues’ earlier grade level and content area accomplishments. Each teacher would be responsible for developing children who would succeed and even thrive in the following grade level. This collaboration would help teachers fashion a continuum of learning opportunities in a mutual and reciprocal way. They would be collectively responsible for improving student learning. Each teacher would feel responsible for the other teachers’ students as well as
their own and this would lead to a sense of security and pride in “the way things are done in PRIME.”

**A Learning Community: The Teachers**

The teachers would have common planning time and during this time important decisions about instruction and resources would be made as a team creating an interdependence and culture of sharing. Through these professional conversations, the teachers would learn and help to sustain each others’ commitment to the often difficult work of teaching. Shared and collective responsibility of the students and the responsibility of improving student learning was evident as the teachers would talk with one another about what they have observed in their own experience and the learning of their students. The overarching ethos of sharing, caring, and mutual help even extended to the music and art teachers as they worked with these students within the school community. Collectively they believed they would make a difference and were committed to the success of the students. The teachers shared a common philosophy of education and beliefs about teaching, that key to their role was to act as coaches and facilitators in order to promote more active learning. The three teachers in this learning community would share the common characteristics of age, experience, teacher preparation, education, and professional development.

Because the teachers in the learning community departmentalized, and chose their own content area, they showed passion for their subject matter. Because these teachers taught within one discipline, they would become experts and emphasize in-depth content coverage, thorough subject matter knowledge, and would present this content knowledge in a way that would be engaging for students at every grade level. The teachers would
Appendix A (Continued)

reflect the belief that interest in the subject material is strong motivation and that learning should be exciting. They would have latitude in curricular and spending decisions that would support the motivation and excitement of their instruction. Grants would be written for additional funding of instructional materials, community support, and fieldtrips. The presentation of their subject matter would offer possibilities to inspire anticipation, action, and emotion, all of the connections that would offer the possibility for real learning to take place.

The continuity of a three year learning environment has many benefits for both students and teachers. It takes time to know one’s students as persons with differing work habits, talents, character, and personality. In this three year mutual arrangement a relationship of trust and care would have time to establish. The following year the students and teachers would know each other well and pick up where they had left off while only one group of students would come into the program with the remaining students competent and confident to help this new group adjust to the common, core expectations.

A Learning Community: The Students

A major intent of the creation of a learning community was to apply and sustain a best practice environment. Through the active learning process, students would be engaged in a variety of meaningful instructional activities that would include real-world applications. These instructional learning activities would include discovery and inquiry based opportunities for sense making. These instructional learning activities would include discovery and inquiry based opportunities for sense making. The experiences would include explorations and investigations. There would be multiple opportunities in
Appendix A (Continued)

science and social studies to deviate from the texts to make learning more interactive, to use multiple intelligences, and for the application of this learning to authentic learning projects, oral reports, and to family and community service learning culminating presentations.

A further intent of the creation of a learning community was that within this best practice environment, and through these active learning processes, the curriculum would be taught in depth, with the coordination of the curriculum for three years. This would allow for growth, development, and transitions within concepts, content areas and grade levels. A critical attribute of the learning community would be that students would have interactive, interdisciplinary connection within ten-week long thematic units, with three teachers teaching and revisiting three years of content. The curriculum would be integrated and interdisciplinary based around thematic teaching. The ten-week units in social studies and science allowed for a depth versus breadth of coverage of the content. The strong parent involvement would compliment the application of this learning throughout the unit. The thematic units culminated through plays and performances.

A result of the learner centered instruction was that it would reinforce the belief that all students would achieve, no matter the cultural or socioeconomic differences, or individual progress. Many advantages would be embedded in small group learning. On any given day in PRIME one might see students working throughout the content areas. For example, during a walk through one might see in one classroom the science and social studies themes of geography and culture through Native American studies and in the math classroom, the students working on patterns through string art, while in the language arts classroom, the students are reading a story about Native American customs.
Appendix A (Continued)

while working with an art project of simulated buffalo hides and Native American symbols.

The learning community with the learner centered and thematic instruction would prove to provide numerous instructional tools beyond the conventional format to reach individual students. Pairs of students would work together to reach and present a solution then each pair would provide an explanation. A community of sharing and trust would nurture small failures or inadequacies that would provide further opportunities for growth. Students teaching students through the working together of cooperative learning would provide opportunities for the attainment of not just academic skills, but also of the skills of teamwork. These cooperative learning situations would provide experiences for individual learning styles. Collaborative experiences would provide opportunities to develop interaction and consensus skills in addition to reaching the higher order processes of inquiry, evaluation, and justification. Through the communities of knowledgeable peers, would develop learning investigations that the students could not have carried out as individuals. Social learning opportunities would nurture independence and student generated topics of study. Through social studies and science themes, rather than being teacher imposed, a wonderful opportunity might arise for students to choose their research of interest. A group of students who share the same particular interest and topic might work together, share the results with each other, and finally with the whole class. This process would invite student participation, rich content, and possibly introduce students to a lifelong interest.

The “Wall of Presidents” or the “Voyage of the Mayflower” would provide opportunities for students to study and remember basic history facts and concepts in a
Appendix A (Continued)

meaningful and sense making construct. Students return to this day to talk about the
president or famous American they researched and represented on the timeline of
American history. Florida studies included a vast study of the unique physical features
such as the oceans, wetlands, and Everglades; the people who call Florida home, now and
in the past; and the motivating flora and fauna of this beautiful state. With an
environmental focus the importance of water to the state and the impact they might make
in their current choices and in the future, was investigated and made available with the
various grants that provided the motivational and meaningful active learning situations. A
further study of the climate, with comparisons to other areas and times would take this to
a national and global level. In this learning community environment there would be
numerous opportunities to stretch out and enrich the standard study of geography and
map skills through exploration and travel to exotic places such as Egypt to include the
interests and talents of all children throughout the study of this ancient history, its cultural
customs, its sense of mystery, with a culminating final trip (all expenses paid thanks to
the environmental t-shirt sales) for teachers, students, and family members to the local
Busch Gardens to see a simulation of Egypt, grasp the connection of learning, and enjoy
the fun and companionship of family and classroom friends away from the classroom.

A strong science component would through hands-on experimentation, teach the
students the scientific process with the real-world sequence and laboratory skills
necessary for the problem solving of authentic situations. Technology, simulations,
research, and working with tools would promote less lecturing and yearly expectations of
better work. The program would provide for many experiences for science outside of the
four walls of the classroom. Both vegetable and a butterfly garden provided additional
pleasurable connections to nature. Parent volunteers were abundant in this setting and would provide opportunities to share in the knowledge and pleasure of this informal and incidental learning. This social connection would enhance and delight both students and parent volunteers. In addition, these talents and interests would provide opportunities for service learning and community connections.

Project learning opportunities would transpire rich and engaging content with project ideas springing from students’ own interests and natural curiosity. These student applications would provide the time and visible worth for social studies and science, subjects that elementary teachers leave by the wayside to provide sufficient math and reading coverage. In this PRIME classroom a student might make a three dimensional model of a planet, visit an interactive NASA web-site, interview an astronomer brought in by the community science museum, make a rocket with one of the parents, or position themselves around the schoolyard to simulate the relative distances between the planets.

Ongoing embedded assessment in the forms of journals, word notebooks, science logs, data sheets, experiment forms, oral presentations, student reflections, photographs of projects and presentations would all be authentic outcome documentation and primary sources for evidence of success. Check lists of observations or skills, rubrics of participation, completion, cooperation and motivation would help to ensure engagement, diagnose strengths and weaknesses and prescribe alternate strategies. The experience of the learning community would provide for collaboration of student, teacher and parent reflection. The research involved through cooperative learning would provide for representations and evaluations of academic progress. Opportunities for students to do something with what they have learned would be demonstrated in creating the projects,
Appendix A (Continued)

plays, and service learning situations. A three year progression would allow the teachers
to follow the students in this intensive and meaningful way.

If, as research says, learning is both social and emotional, these strategies would
make sense and the proof would be in the pride seen on the students’ and their parents’
faces at the culminating interdisciplinary presentations that would include reaching the
multiple intelligences through poetry, music, art, movement, video making, internet
research, and oral presentations. Success would be accomplished and seen in both higher
achieving and struggling students.

A Learning Community: The Parents

The extremely strong family support and commitment would help students
succeed. This intimate and non-intimidating learning community built a huge parent
volunteer base since this support drew from and reached across three grade levels. The
learning environment contributed to successful communication with parents and the
community as a whole. A significant parent buy-in and family participation offered
abundant opportunities for mentoring within the classroom and continuous learning
outside of the classroom. Parents would always know what the students were learning as
they would be involved and engaged in take-home tests, projects, service learning, and
presentations, building respect and trust between student and teacher and parent.

Because PRIME would have environmental awareness as a dominating theme,
parents would be involved in the construction and maintenance of a butterfly garden,
vegetable and flower gardens, school yard, community and beach clean-ups, funding,
environmental t-shirt sales and the writing of grants to provide funds for these service
learning authentic experiences. At the end of the year field trip, the adults would out-
Appendix A (Continued)

number the students three to one as many parents took the day off from work and brought sisters and brothers, grandmothers and grandfathers, to experience the fun and camaraderie of the PRIME experience. Informal learning continued on with the positive interaction between parents and children both inside and outside of the classroom, the school day, and in many instances throughout the summer as family vacations were planned with these history or science themes in mind.

All of this and more would be possible in a learning community.
APPENDIX B: QUANTITATIVE RESEARCH
A quasi-experimental exploration of the PRIME multiyear learning community was performed to determine whether the initiative had an influence on student test scores. To accomplish this I utilized existing quantitative archival standardized scaled score data as “scaled scores are especially suitable for studying change in performance over time” (Harcourt Brace, 1997, p. 17), from Grades 2 through 10 to track student performance over time with the intent of determining if participation in PRIME had differential effects on the students’ ultimate school performance.

I compared two samples of students: the PRIME cohort and a conventional group of students. The conventional group is non-equivalent because the students in the PRIME cohort were in intact classes. The groups were not intentionally randomly assigned nor matched on planned variables.

Data consist of standardized test scores to determine if the participants in the PRIME learning community differ from the participants in a conventional setting. In this longitudinal study, the quantitative measures were repeated at chosen benchmark times with the same subjects on equivalent standardized tests to see how these measurements might have changed over time. Students who missed a particular standardized test within this time period were dropped from the study.

**Population and Sample Selection**

I collected data for students who took part in the PRIME multiyear learning community during elementary school. Students of intact classes were used for the PRIME cohort; there was no random assignment or matching of participants. The goal was to compare the academic performance of this PRIME cohort of students with the academic performance of a conventional group of students at various points in
time. The conventional group of students was randomly selected from the school’s remaining third-grade students while accounting for missing data. Students were measured at second grade (before the PRIME intervention) at Grade 4, Grade 5 (at the end of the PRIME intervention), and at Grades 8 and 10 (after the PRIME intervention). They were given the National Achievement Test for grades 2–5, the Stanford 9 for grades 8–10, and the Florida Writes for Grades 4, 8, and 10.

This convenience sample of the target population of third-grade students was typical to the school (Table B1), and the comparison of elementary students in this school to Florida is as follows: The average population of white students for this school was 86% compared to the state at 59%. The average for African American students was 11% compared to a state average of 25%, 3% of the students were classified as Hispanic while the state recorded at 15%. The free and reduced-price lunch rate (which is frequently used as an indicator of socioeconomic standing) was 41% to 43% respectively, while the mobility rate compared at 34% to 36%. Both of these indicators, socioeconomic and mobility, were higher than the county median at 21% and 26%, thus in these areas, this sample compared more closely with the state than with the county.

Table B1
Description of Sample

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th>%</th>
<th>Females</th>
<th>%</th>
<th>White</th>
<th>%</th>
<th>Other</th>
<th>%</th>
<th>ESE</th>
<th>%</th>
<th>No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRIME</td>
<td>8</td>
<td>40</td>
<td>12</td>
<td>60</td>
<td>19</td>
<td>95</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td>Comparison</td>
<td>13</td>
<td>50</td>
<td>13</td>
<td>50</td>
<td>23</td>
<td>88.5</td>
<td>3</td>
<td>11.5</td>
<td>2</td>
<td>8</td>
<td>26</td>
</tr>
</tbody>
</table>

To select the participants for the project, the third-grade classroom assignments were chosen at the year-end articulation meeting of second-grade teachers. Students were assigned to classes to achieve an even distribution of gender, race, and Exceptional
Appendix B (Continued)

Student Education (E.S.E.) population. Any students registering throughout the summer were placed by the administration in order to maintain balance in class numbers.

The students placed in the PRIME classrooms were the beginning cohort of a 3-year continuous progress instructional learning community. The conventional group of students was randomly selected from a stratified sample of the school’s remaining third-grade population. As these students progressed, they became the fourth and fifth grade students of this study. The sample began with a possible 27 students from the PRIME group with a remaining group of 81 third graders for the conventional group. Incomplete cases were deleted and the PRIME group sample ultimately consisted of 20 students, and the convention group comprised 26 randomly chosen students. Test scores of each of these groups were compared as dependent variables.

The analysis included only students who continuously attended this school over the time period studied (1993–2001). Missing data in all treatments were handled by the elimination of incomplete cases, thus only students having a complete set of scores in Grades 2–10 were included in the samples. Missing data were a problem in this longitudinal study, limiting the number of cases that could be used. In many instances a respondent would have missing data on a single variable, as this missing data may have occurred for reasons of absence or transitions. More complete data for the student scores would lead to a greater probability of making an accurate conclusion. These quantitative data were available with permission and on a limited basis, as to the location, students, and time allowed to me through the District’s AS-400 computer data bank.
Appendix B (Continued)

Quantitative Instrumentation and Data Collection

Prior to collecting this data, approval from the University of South Florida Institutional Review Board was obtained in addition to approval from the appropriate authorities in the county school system relative to the school used in the study (Appendix E). The use of archival data helped to test the specific research questions under investigation. This data consisted of continuous standardized scores that had been routinely entered in the AS-400 computer data bank. The integrity of this data bank is protected with stringent regulations for its use.

Specific archival longitudinal data was collected from 1993 (2nd grade scores) through 2001 (10th grade scores). The collection points were in 2nd, 4th, 5th, 8th, and 10th grades for the standardized scores. The data for the groups were then compared and analyzed. Students’ names with addresses were initially coded, and further reference to this information was not needed. Academic information, as well as gender and ethnicity, will be held strictly confidential until five years after the completion of this study at which time all copies will be destroyed.

Secondary archival data for the quantitative portion of the study was used, consisting of the National Achievement Test, Stanford 9 Achievement Test, and Florida Writes (Table B2). These data were collected as part of the ongoing routines, processes, and annual assessments of students conducted by the district as required by board policy and state law. These data were not collected specifically for this study.
Table B2
Framework for Achievement Testing

<table>
<thead>
<tr>
<th>Grade 2 (Pre-PRIME)</th>
<th>Grade 4</th>
<th>Grade 5</th>
<th>Grade 8</th>
<th>Grade 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAT Reading and Math</td>
<td>Florida Writes</td>
<td>NAT Reading and Math</td>
<td>Stanford 9 Reading and Math</td>
<td>Stanford 9 Reading and Math</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Florida Writes</td>
<td>Florida Writes</td>
</tr>
</tbody>
</table>

The primary claim to validity of the National Achievement Test rests on content validity resulting from the extreme care given to sampling of valued learning outcomes. References from the technical manual report on studies supporting the criterion related validity of the tests (Kramer & Conoley, 1992). The NAT is a well designed battery that reflects great care in both instrument design and standardization. Reliabilities for various subtests are very respectable (Kramer & Conoley, 1992). The National Achievement Test, Second Edition, had test reliability coefficients ranging from the high .80s to mid .90s at the lower grades and high .80s to high .90s for the upper grades. The inter-correlations among tests are high with one reliability factor accounting for 70-75% of the total variance and 45-55% of the variance of the subtests.

“Careful planning and implementation of each step in the development process of a major achievement test series ensure the test’s validity and reliability.” (Harcourt Brace, 1997, p. 8) Reliability and validity information regarding the Stanford Achievement Test, Ninth Edition is as follows: The majority of the full length test, (Forms A and B), have high internal consistency coefficients ranging from the mid .80s to mid .90s. Additionally alternate forms of the test battery had correlations across the various tests ranging from .53 to .93, but for the most part were in the .80s (Berk, 1998).
Appendix B (Continued)

The Stanford 9 has eight test levels that have been vertically equated so that scores are reported on a single scale for each subtest. These scaled scores allow comparisons of scores from different test levels and permit examination of longitudinal growth in the achievement of individual students over time. Each test level was designed to measure curriculum content commonly taught throughout the United States in specific grades. Although the tests were designed to compare content level progress with students across the nation, they also can be used to compare results vertically within these content areas (Harcourt Brace, 1997). In addition to longitudinal comparisons, I focused on comparisons within each grade level or Grade 2 PRIME to Grade 2 conventional, Grade 4 PRIME to Grade 4 conventional, Grade 5 PRIME to Grade 5 conventional, Grade 8 PRIME to Grade 8 conventional and Grade 10 PRIME to Grade 10 conventional, respectively.

Variables

The categorical independent variable will be the PRIME learning community. The dependent variables will be the continuous (high score indicates higher achievement and a low score means lower) standardized scaled score in reading, math, and writing.

Method of Analysis of Quantitative Achievement Data

Using secondary archival data of standardized test scores on the math and reading portion of the National Achievement Test, and the Stanford 9 Achievement Test in addition to using the writing scores from the Florida Writes:

1. I completed central tendency analyses (means and standard deviation) on the interval data available for the math and reading standardized test scores for grades 2, 5, 8, 10 and Florida Writes scores in grades 4, 8, and 10.
Appendix B (Continued)

2. I utilized benchmark scores on the standardized tests within each grade level for a comparison of the two groups (PRIME and conventional). These comparisons were made using a repeated measures analysis of variance (ANOVA). Alpha was specified at the .05 level. In the event significant F values were found, multiple comparisons were made using the Tukey MC method to determine which pairs of means are significant.

Threats to Validity

Within this study the following factors can affect internal validity:

1. Comparison Group: Random assignment was not feasible or practical. A generally equivalent comparison group was used, and the progress of the two groups of students was followed and compared over several years.

2. History: This period of time (a 3-year continuous-progress instructional environment) provides opportunities for other things to occur besides the designed initiative’s influence. Both the comparative and the PRIME cohort would have been influenced by these environmental changes.

3. Maturation: Within this longitudinal study (Grade 2 through high school), biological and psychological changes in students are likely to have taken place. These would have occurred across treatments in both the comparative and the PRIME cohort.

Quantitative Data Analysis

The quantitative component of this study consists of a quasi-experimental exploration of the PRIME multiyear learning community to determine the initiative’s influence on student achievement. With any new initiative, it is vital to monitor achievement levels to determine unintended and positive outcomes. Thus, I utilized existing quantitative archival standardized scaled score data from Grades 2 through 10 to
Appendix B (Continued)

track student performance over time to determine whether participation in PRIME had
differential effects on the students’ ultimate school performance compared to a group of
students in a conventional setting who were not involved in a multiyear learning
environment.

To what extent, if any, do the students of the PRIME learning environment
perform higher on standardized test scores in reading on the selected benchmark
assessments in Grades 5, 8, and 10, compared to students in a conventional learning
setting?

To answer this question, student standardized reading scores from the National
Achievement Test in 2nd and 5th grades and the Stanford 9 Achievement Test in 8th and
10th grades were used.

Table B3 provides the descriptive statistics for the reading scores by group. At
Grades 2 and 5, the conventional group had a smaller average than PRIME. Both groups
had a substantial increase at Grade 8. The difference between the means was very small
at Grades 8 and 10.
Table B3

Descriptive Statistics for Reading Score by Group

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group</th>
<th>M</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading Score 02</td>
<td>PRIME</td>
<td>527.45</td>
<td>74.71</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Conventional</td>
<td>506.08</td>
<td>53.35</td>
<td>26</td>
</tr>
<tr>
<td>Reading Score 05</td>
<td>PRIME</td>
<td>596.75</td>
<td>45.45</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Conventional</td>
<td>589.19</td>
<td>45.37</td>
<td>26</td>
</tr>
<tr>
<td>Reading Score 08</td>
<td>PRIME</td>
<td>708.35</td>
<td>32.84</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Conventional</td>
<td>709.00</td>
<td>25.61</td>
<td>26</td>
</tr>
<tr>
<td>Reading Score 10</td>
<td>PRIME</td>
<td>700.35</td>
<td>34.31</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Conventional</td>
<td>708.81</td>
<td>33.13</td>
<td>26</td>
</tr>
</tbody>
</table>

As shown in Table B4, I used Levene’s tests to test the assumption of homogeneity of variance (approximately equal within group variances). In addition I used the Mauchly test to test for a violation of the assumption of sphericity (variances and covariances of transformed variables are all equal). The Levene’s test was nonsignificant for each of the following variables: Reading Grade 2, Reading Grade 5, Reading Grade 8, and Reading Grade 10. These results suggest that the assumption of equal variances was not violated for each of the variables listed.
Table B4
Levene’s Tests for Reading Scores

<table>
<thead>
<tr>
<th>Variable</th>
<th>F</th>
<th>df1</th>
<th>df2</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading Score 02</td>
<td>.84</td>
<td>2</td>
<td>61</td>
<td>.44</td>
</tr>
<tr>
<td>Reading Score 05</td>
<td>.15</td>
<td>2</td>
<td>61</td>
<td>.86</td>
</tr>
<tr>
<td>Reading Score 08</td>
<td>2.00</td>
<td>2</td>
<td>61</td>
<td>.14</td>
</tr>
<tr>
<td>Reading Score 10</td>
<td>.47</td>
<td>2</td>
<td>61</td>
<td>.63</td>
</tr>
</tbody>
</table>

The Mauchly test was significant, suggesting that the assumption of sphericity was violated for the reading scores (Table B5). A Greenhouse Geisser test has been adjusted to compensate for this violation of the sphericity assumption.

Table B5
Mauchly’s Test for Reading Scores

<table>
<thead>
<tr>
<th>Within-Subjects Effect</th>
<th>Mauchly’s W Approx</th>
<th>$\chi^2$</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td>.68</td>
<td>23.10</td>
<td>5</td>
<td>.00</td>
</tr>
</tbody>
</table>

The following F tests examined differences on the repeated measure and the interaction of the independent variable (Table B6). The F test for the repeated measure was significant while the F test for the Group by repeated measure interaction was nonsignificant. The reading scores showed a significant change over time, which did not, however, differ by group.
Appendix B (Continued)

Table B6

Repeated Measures Tests for Reading by Group

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td>1,692,501.78</td>
<td>2.33</td>
<td>725,366.91</td>
<td>583.36</td>
<td>.00</td>
</tr>
<tr>
<td>Reading * Group</td>
<td>7,808.61</td>
<td>4.67</td>
<td>1,673.30</td>
<td>1.35</td>
<td>.25</td>
</tr>
<tr>
<td>Error (Reading)</td>
<td>176,978.69</td>
<td>142.33</td>
<td>1,243.43</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table B7 shows individual between-groups comparisons at each point in time.

There were no significant differences between groups at any grade level.

Table B7

Individual Between-Groups Comparison by Grade for Reading

<table>
<thead>
<tr>
<th>Reading Score</th>
<th>(I) Group</th>
<th>(J) Group</th>
<th>Mean Difference (I-J)</th>
<th>p</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>02</td>
<td>Conventional</td>
<td>PRIME</td>
<td>-21.37</td>
<td>.25</td>
<td>18.52</td>
</tr>
<tr>
<td>05</td>
<td>Conventional</td>
<td>PRIME</td>
<td>-7.56</td>
<td>.57</td>
<td>13.32</td>
</tr>
<tr>
<td>08</td>
<td>Conventional</td>
<td>PRIME</td>
<td>.65</td>
<td>.96</td>
<td>11.34</td>
</tr>
<tr>
<td>10</td>
<td>Conventional</td>
<td>PRIME</td>
<td>8.46</td>
<td>.38</td>
<td>9.57</td>
</tr>
</tbody>
</table>

As shown in Table B8, individual effect sizes for these test scores were very small (under 0.2). This is consistent with the descriptive statistics. The corresponding power levels were very low.
Table B8

Effect Size and Power for Reading Scores

<table>
<thead>
<tr>
<th>Source</th>
<th>Dependent Variable</th>
<th>Effect Size</th>
<th>Observed Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRIME vs.</td>
<td>Reading Score Grade 2</td>
<td>.03</td>
<td>.20</td>
</tr>
<tr>
<td>Conventional</td>
<td>Reading Score Grade 5</td>
<td>.01</td>
<td>.09</td>
</tr>
<tr>
<td></td>
<td>Reading Score Grade 8</td>
<td>.00</td>
<td>.05</td>
</tr>
<tr>
<td></td>
<td>Reading Score Grade 10</td>
<td>.02</td>
<td>.13</td>
</tr>
</tbody>
</table>

To what extent, if any, do the students of the PRIME learning environment perform higher on standardized test scores in math on the selected benchmark assessments in Grades 5, 8, and 10, compared to students in a conventional learning setting?

To answer this question, student standardized math scores from the National Achievement Test in 2nd and 5th grade and the Stanford 9 Achievement Test in 8th and 10th grades were used.

Table B9 shows the descriptive statistics for the math scores by group. This shows that PRIME had a smaller average than the conventional group at Grade 2. In Grade 5, math scores increased from Grade 2. At Grade 5, the conventional group had the smaller average. Both groups increased from 5th to 8th grade and from 8th to 10th grade.
Appendix B (Continued)

Table B9

Descriptive Statistics for Math Score by Group

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group</th>
<th>M</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math Score 02</td>
<td>PRIME</td>
<td>498.90</td>
<td>47.64</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Conventional</td>
<td>500.38</td>
<td>37.40</td>
<td>26</td>
</tr>
<tr>
<td>Math Score 05</td>
<td>PRIME</td>
<td>616.90</td>
<td>61.24</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Conventional</td>
<td>597.12</td>
<td>44.87</td>
<td>26</td>
</tr>
<tr>
<td>Math Score 08</td>
<td>PRIME</td>
<td>687.95</td>
<td>39.02</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Conventional</td>
<td>691.46</td>
<td>32.85</td>
<td>26</td>
</tr>
<tr>
<td>Math Score 10</td>
<td>PRIME</td>
<td>713.15</td>
<td>37.25</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Conventional</td>
<td>721.54</td>
<td>34.12</td>
<td>26</td>
</tr>
</tbody>
</table>

Levene’s tests, shown in Table B10 were nonsignificant. These results suggest that the assumption of equal variances was not violated for the math variables.

Table B10

Levene’s Tests for Math Scores

<table>
<thead>
<tr>
<th>Variable</th>
<th>F</th>
<th>df1</th>
<th>df2</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math Score 02</td>
<td>.67</td>
<td>2</td>
<td>61</td>
<td>.52</td>
</tr>
<tr>
<td>Math Score 05</td>
<td>1.33</td>
<td>2</td>
<td>61</td>
<td>.27</td>
</tr>
<tr>
<td>Math Score 08</td>
<td>1.37</td>
<td>2</td>
<td>61</td>
<td>.26</td>
</tr>
<tr>
<td>Math Score 10</td>
<td>.05</td>
<td>2</td>
<td>61</td>
<td>.96</td>
</tr>
</tbody>
</table>
The following Mauchly test (Table B11) was nonsignificant for math. This is evidence that the Sphericity assumption was not violated.

Table B11

Mauchly’s Test for Math Scores

<table>
<thead>
<tr>
<th>Within-Subjects Effect</th>
<th>Mauchly’s W Approx</th>
<th>$\chi^2$</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math</td>
<td>.86</td>
<td>8.98</td>
<td>5</td>
<td>.11</td>
</tr>
</tbody>
</table>

Table B12 shows that the main effect of the repeated measure was significant. Overall the math scores experienced a significant change over time. The group by math interaction term was nonsignificant.

Table B12

Repeated Measures Tests for Math by Group

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math</td>
<td>1,814,492.21</td>
<td>3</td>
<td>604.830.74</td>
<td>894.58</td>
<td>.00</td>
</tr>
<tr>
<td>Math * Group</td>
<td>5,418.20</td>
<td>6</td>
<td>903.03</td>
<td>1.34</td>
<td>.24</td>
</tr>
<tr>
<td>Error (Math)</td>
<td>123,727.98</td>
<td>183</td>
<td>676.11</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table B13 displays individual between-groups comparisons for math at each benchmark. All differences between groups are nonsignificant.
**Appendix B (Continued)**

Table B13

Individual Between-Groups Comparison by Grade for Math

<table>
<thead>
<tr>
<th>Math Score</th>
<th>(I) Group</th>
<th>(J) Group</th>
<th>M</th>
<th>Sig. Difference (I-J)</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>02 Conventional</td>
<td>PRIME</td>
<td>1.49</td>
<td>.91</td>
<td>13.03</td>
<td></td>
</tr>
<tr>
<td>05 Conventional</td>
<td>PRIME</td>
<td>-19.79</td>
<td>.18</td>
<td>14.53</td>
<td></td>
</tr>
<tr>
<td>08 Conventional</td>
<td>PRIME</td>
<td>3.51</td>
<td>.77</td>
<td>11.74</td>
<td></td>
</tr>
<tr>
<td>10 Conventional</td>
<td>PRIME</td>
<td>8.39</td>
<td>.45</td>
<td>11.04</td>
<td></td>
</tr>
</tbody>
</table>

Both effect sizes and power levels are very low (Table B14) reflecting the very small differences between means.

Table B14

Effect Size and Power for Math Scores

<table>
<thead>
<tr>
<th>Source</th>
<th>Dependent Variable</th>
<th>Effect Size</th>
<th>Observed Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRIME vs.</td>
<td>Math Score Grade 2</td>
<td>.00</td>
<td>.05</td>
</tr>
<tr>
<td>Conventional</td>
<td>Math Score Grade 5</td>
<td>.04</td>
<td>.24</td>
</tr>
<tr>
<td></td>
<td>Math Score Grade 8</td>
<td>.00</td>
<td>.06</td>
</tr>
<tr>
<td></td>
<td>Math Score Grade 10</td>
<td>.01</td>
<td>.12</td>
</tr>
</tbody>
</table>
Appendix B (Continued)

To what extent, if any, do the students of the PRIME learning environment perform higher on standardized test scores in writing on the benchmark assessments in Grades 4, 8, and 10 compared to students in a conventional learning setting?

Standardized scores from the Florida Writes in the 4th, 8th, and 10th grades were used to answer this question.

Table B15 provides the descriptive statistics for the writing scores by group. This table shows that in 4th grade PRIME and the conventional group had equal means. In 8th grade PRIME had a higher mean score than the conventional group. PRIME was higher than the conventional group in 10th grade. At Grade 4, the means for each grade level were very similar. The means were also very similar at Grade 8. At Grade 10, PRIME was slightly higher than the conventional group. Over time, scores tended to increase with grade level.

Table B15

Descriptive Statistics for Writing Score by Group

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group</th>
<th>M</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Writing Score 04</td>
<td>PRIME</td>
<td>2.50</td>
<td>.65</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Conventional</td>
<td>2.50</td>
<td>.81</td>
<td>23</td>
</tr>
<tr>
<td>Writing Score 08</td>
<td>PRIME</td>
<td>3.54</td>
<td>.80</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Conventional</td>
<td>3.46</td>
<td>.74</td>
<td>23</td>
</tr>
<tr>
<td>Writing Score 10</td>
<td>PRIME</td>
<td>4.31</td>
<td>.93</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Conventional</td>
<td>3.74</td>
<td>.88</td>
<td>23</td>
</tr>
</tbody>
</table>
Appendix B (Continued)

Each of the corresponding Levene’s tests (Table B16) was nonsignificant. This suggests that the assumption of equal variances was not violated.

Table B16
Levene’s Tests for Writing Scores

<table>
<thead>
<tr>
<th>Variable</th>
<th>F</th>
<th>df1</th>
<th>df2</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Writing Score 04</td>
<td>.42</td>
<td>2</td>
<td>44</td>
<td>.66</td>
</tr>
<tr>
<td>Writing Score 08</td>
<td>.27</td>
<td>2</td>
<td>44</td>
<td>.77</td>
</tr>
<tr>
<td>Writing Score 10</td>
<td>.14</td>
<td>2</td>
<td>44</td>
<td>.87</td>
</tr>
</tbody>
</table>

The Mauchly was nonsignificant, which suggests that the assumption of sphericity was not violated (Table B17).

Table B17
Mauchly’s Test for Writing Scores

<table>
<thead>
<tr>
<th>Within-Subjects Effect</th>
<th>Mauchly’s W</th>
<th>Approx $\chi^2$</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Writing</td>
<td>.99</td>
<td>.33</td>
<td>2</td>
<td>.85</td>
</tr>
</tbody>
</table>

Table B18 shows the repeated measures tests for the Writing scores. The effect for change over time was significant; however, the interaction with the group was not significant. There was no tendency for one group to change more over time than another on the writing scores.
Table B18
Repeated Measures Tests for Writing by Group

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Writing</td>
<td>49.11</td>
<td>3</td>
<td>24.56</td>
<td>6.23</td>
<td>.00</td>
</tr>
<tr>
<td>Writing*Group</td>
<td>1.66</td>
<td>4</td>
<td>.42</td>
<td>.95</td>
<td>.44</td>
</tr>
<tr>
<td>Error (Writing)</td>
<td>38.43</td>
<td>88</td>
<td>.44</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table B19 displays the individual between-groups comparisons at each point in time. All tests were nonsignificant. The test for PRIME to Conventional at Grade 10 approached significance; however, the probability was greater than .05.

Table B19
Individual Between-Groups Comparison by Grade for Writing

<table>
<thead>
<tr>
<th>Writing</th>
<th>(I) Group</th>
<th>(J) Group</th>
<th>Mean Difference (I-J)</th>
<th>p</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Writing</td>
<td>Conventional</td>
<td>PRIME</td>
<td>.00</td>
<td>1.00</td>
<td>.26</td>
</tr>
<tr>
<td>Score 04</td>
<td>Conventional</td>
<td>PRIME</td>
<td>-.08</td>
<td>.76</td>
<td>.27</td>
</tr>
<tr>
<td>Score 10</td>
<td>Conventional</td>
<td>PRIME</td>
<td>-.57</td>
<td>.06</td>
<td>.30</td>
</tr>
</tbody>
</table>
Appendix B (Continued)

Summary

ANOVA results showed no significant differences in the results of the standardized test scores chosen for the comparison of the PRIME learning community to the conventional setting.
Federal Legislation: Goals 2000

The educational goals expressed during the George H. Bush administration (1989–1993) were as follows:

- children ready to learn when they enter school;
- highly trained, professional teachers who teach well and regularly update their pedagogical and content knowledge;
- safe, disciplined, drug-free schools;
- a high level of student performance coupled with good citizenship;
- particularly excellent student performance in science and mathematics;
- a high rate of school completion;
- and a highly literate adult population dedicated to lifelong learning.

These America 2000 goals were at the beginning of the standards in educational reform (GOALS 2000, 1994).

President Clinton headed the delegation of state governors who met with the Bush administration at the 1989 Education Summit to set these National Education Goals. The framework would deliberately provide a broad and flexible trust in the states’ abilities to work out the details. Academic disciplinary groups were then contracted to develop the model content standards and assessments. State education agencies, in collaboration with local education agencies, were consequently assigned to develop the standards and assessments for the particular states. This process modeled the reform in action (Johnson, 1994).

Following Bush’s lead, in 1994 Clinton retained the reform goals agreed to by the governors during the Bush administration; these evolved into Clinton’s Goals 2000.

David Johnson, longtime executive director of the Federation of Behavioral, Psychological, and Cognitive Sciences (1989–2000), wrote in 1994 of the then three
Appendix C (Continued)

recent waves of educational reform. In summary, the first wave was a top-down process, and the goal was to boost basic skills by changing things that could be controlled, such as the length of the school day, requirements for graduation, and teacher performance requirements. The second wave involved a change in the process of schooling. This bottom-up wave involved concepts such as the professionalizing teaching, the decentralization of authority, and the inclusion of teachers in the change process; this was the stage of reform that President Clinton began to build on. The third wave of reform called for a change in the structure, content, and pedagogy of education (Johnson, 1994). In the Clinton administration’s view, “comprehensive, effective, lasting reform would require a continuing partnership between higher level authorities and the teachers, district and school authorities, and parents who are immediately responsible for educating” (Johnson, 1994, p. 118).

President Clinton’s educational reform encompassed three principles (Johnson, 1994). According to Johnson (1994) “the first principle was that the highest level in a system should be the enabler, not the director, of reform” (p. 117). The second principle of President Clinton’s reform stated “that to accomplish lasting changes, it is necessary to begin by understanding how the parts of the large system fit together, but the change is accomplished by attending to details in the places where the details matter” (Johnson, 1994, p. 117). The third principle of this reform was that this change would be measurable (Johnson, 1994).

Johnson (1994) listed three tasks to clarify the federal government’s role in this reform. The first was to voice these commonly held goals and the objectives that must be met. Second, the federal government was to enable production of the model standards
Appendix C (Continued)

and assessments that would guide the states in developing their own standards and assessments. The third task was to create the mechanisms that would help the states determine the quality of their timely efforts in addition to nationwide progress.

Controversy surrounded the use of assessments even then, and a 5-year moratorium was placed on the use of assessments to determine promotions and graduations. The federal government would not mandate the individual states to develop and adopt such standards but would create the mechanisms to facilitate states’ development of those standards. The actual development would be the responsibility of the people near the change site (Johnson, 1994).

State Legislation: Blueprint2000

In 1991, the legislature enacted Florida’s system for school improvement and accountability, referred to as Blueprint2000 (s. 229.591, F.S.). The philosophy of this legislation was that communities and schools collaborate to prepare children and families for success in schools. The primary purpose of Blueprint2000 was to return the responsibility for education to those closest to the students—the schools, teachers, and parents. The intent was that the state would no longer dictate to local schools and districts the processes or programs to be followed (Florida Legislature Office of Program Policy Analysis and Government Accountability, 1996).

A Local Response

In response to Florida’s Blueprint2000, the school under study attempted to create an effective practice, a curricular design that would serve the needs of both teachers and students. When Blueprint2000 first took effect, the school principal asked the teachers (those closest to the students and thus those whose opinions might have the most
relevance) for ideas. A group of three teachers (including the researcher) would put
together a learning community called PRIME. This was an acronym for Positive Realistic
Instruction will Motivate to Educate and was a reflection of the philosophy of the
program. It would have three teachers of like mind in regard to learning philosophies,
teaching pedagogy, and behavioral strategies. These three teachers would work as a
collaborative team. The program would address multiple grades for continuous progress
(third, fourth, and fifth grade). The same students would continue as a large group for 3
years. The teachers would each teach the content area of her expertise and choice.

The core disciplines would be math, language arts, and social studies/science.
Each of the three teachers would specialize in one of these areas for professional
development, training, research, and ideas. This approach would allow for peer teaching;
cooperative learning and coaching; multilevel and multiage groupings; and literature,
authentic, and primary-source-based situational learning, with interdisciplinary and unit
教学 for relevance, connection, and authenticity. Best practices would be employed,
with an immersion of hands-on experiential learning opportunities. All modalities would
be developed and attained through drama, art, movement, and music opportunities and
activities; projects; and presentations for service learning. Culminating programs would
motivate exciting and positive parent and family involvement.
APPENDIX D: SEMI-STRUCTURED INTERVIEW SCRIPTS
Format #1

Date of Interview: May 17, 2010
Time of Interview: 3:00 – 4:00 and 4:00 – 5:00
Setting: High School Administration Office
Interviewer: Cohort Colleague
Principal: Respondent #1
Core Group of Teachers:
Respondent #2
Respondent #3

1. Introduction: Multiyear Learning Community of 1994

2. What can you tell me about the policies at the time of implementation? Do you have access to any documents, proposals, board reports?

3. Tell me anything you remember about the context of this multiyear learning community

4. What motivated the creation of this elementary learning environment?

5. What were the outcome expectations? Probing: for academic, social, organizational, or any others.

6. What were the strengths and weaknesses of this learning environment?

7. What were the major challenges?

8. Please differentiate between this program and any other elementary classroom environment of the time taking into consideration: the students, the teachers, and their families?

9. How was the curriculum planned? What was the usual procedure for the county at this time? Who was responsible for planning the curriculum? What kind of support was available for schools or individual classes at the time?

10. What instructional strategies were used to benefit learning?

11. What can you tell me about the lessons learned from this experience and how it affected future teaching, curriculum planning or classroom organization? Did this program have any effects on the school or school-wide organization?

12. Why and how did this program end? What do you remember about the effects of this ending on the teachers, the students, and the school?
Appendix D (Continued)

13. Is there anything I didn’t ask you about that you think is important in understanding this program?
Appendix D (Continued)

Format #2

Date of Interview: November 1, 2010
Time of Interviews: 3:30-4:30, 4:30-5:30 and 5:30-6:30
Setting: High School Administration Office
Interviewer: Cohort Colleague
Principal Respondent #1
Teacher Respondent #2
Teacher Respondent #3

1. When you think about the creation and experience of the PRIME learning environment you were involved in, what would you say were the major components as you remember them?

2. What are some recollections and perceptions of your roles in this learning community?

3. Do you believe that this learning experience influenced students? Influenced parents? Influenced you? Influenced other teachers? To what do you attribute this influence? How do you think this learning community environment influenced students (learning, behavior)? How do you think this learning community environment influenced the parents of these students to contribute to student learning? Time volunteering? How do you think this learning community environment influenced you (in your leadership role) (as a teacher)? Influenced other teachers?

4. Do you know that there is quantitative data on this program? Are you aware of what it says? What would you have thought standardized test scores might have shown in a comparison with non-PRIME classes? The quantitative data suggests that there was not a significant difference in test scores between this learning community and a group of representative students. Are you surprised? What other areas of student performance do you think might have been affected by this experience? Why?

5. Therefore, when you look back at the construction or creation of this program, can you think of some steps we may have missed from the beginning as we set the program up?
As the program progressed? Could we have collected a different kind of data? Do you have suggestions?
What did you expect to happen in this program? Is there evidence that this did happen?

6. Upon reflection, do you remember changes in the evolution of this learning community and what you may have learned about teaching methods along the way?

7. Upon reflection do you remember changes in the evolution of this learning community
Appendix D (Continued)

and what you may have learned regarding student learning along the way?

8. You talk about a feeling of community in your earlier interview. To what do you attribute this feeling? Do you think the students, other teachers, and parents shared your feelings?

9. What kinds of things were you able to do with this multiyear learning community that you did not do in a traditional one-year setting?

10. If you were to create this program today, what would you do differently? What did you learn from this experience that may have impacted curriculum and instruction in your future years?

11. In our earlier interview you spoke of student and teacher energy and motivation. The quantitative data did not show us what happened. We had to try to understand this experience and why it persists in our memories. Can you speak to this and help us to understand?

12. To what experiences in the program do you attribute changes in your teaching philosophy and approach to curriculum and instruction?

13. There seems to be some nostalgia about the program among teachers and administrators, and even some parents and students have commented on their good memories and feelings about it. Do you think there is nostalgia about the program? If so, what do you think produces it?

14. Based on this experience, what do you think makes an innovation successful – or enduring? Why do you think PRIME ended? Why do you think many innovations end?

15. Is there anything else about the PRIME program that I didn’t ask that you think was very significant or really makes it stand out in your memory?
APPENDIX E: INSTITUTIONAL REVIEW BOARD
February 24, 2011

Susan Ganley MAEd
11016 Water Lily Way
Bradenton, FL 34202

RE: Approved Modification Request
IRB#: 102752
Title: A Longitudinal Exploration of a Multiyear Elementary School Learning Community Study Approval Period: 08/06/2010 to 08/06/2011

Dear Susan Ganley:

On February 17, 2011 the Institutional Review Board (IRB) reviewed and APPROVED your Modification Request. The submitted request has been approved from 02/17/2011 to 08/06/2011 for the following:

Change in title of study to "A Reflective Exploration of a Multiyear Elementary School Learning Community Experience" to more clearly define the results of the study.

Please note, if applicable, only use the IRB-Approved and stamped consent forms for participants to sign. The enclosed informed consent/assent documents are valid during the period indicated by the official, IRB-Approval stamp located on page one of the form. Make copies from the enclosed original.

We appreciate your dedication to the ethical conduct of human subject research at the University of South Florida and your continued commitment to human research protections. If you have any questions regarding this matter, please call 813-974-5638.

Sincerely,

[Signature]

John Schinka, Ph.D., Vice-Chairperson
USF Institutional Review Board

Cc: Anna Davis, USF IRB Support Staff