Community of Practice: Evaluation of a Collaboration Program in an Educational Setting

A Dissertation

Presented to

The Faculty of the School of Education

The College of William and Mary in Virginia

_____

In Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

_____

By

Denise Citarelli Jones

May 2016

Community of Practice: Evaluation of a Collaboration Program in an Educational Setting

by

Denise Citarelli Jones

Approved February 2016 by

Dr. Michael DiPaola, EdD
Chairperson of Doctoral Committee

Dr. Margaret Constantino, PhD

Dr. Leslie Grant, PhD

Dedication

This dissertation is dedicated to my parents, Gilda and Robert, who raised me to be

optimistic even in the face of adversity, to my children, Ashley and Cole, who never fail

to bring out the best in me, to my siblings, Steven and Genene, who gave me the time and

support to become the first Jones with a doctoral degree, to my mother-in-law, Carol,

whose voice from heaven spoke to my spirit, and to my best friend and husband, Vincent,

who urged me to pursue this dream, and who remains the most loyal person I know.

I could not have done this without you.

Table of Contents

Acknowledgements

Pursuing and completing this degree would not have been possible without the unfailing support and guidance of many people. I take this opportunity to acknowledge those who gave feedback, encouragement, friendship and unlimited time so that I could reach my goal.

First, I thank my parents, children, siblings, their spouses and kids, and my husband. Without your advice, encouragement, and support, I would never have been able to make the journey.

Attending William and Mary was a decision I did not take lightly, especially given the long drive, time away from family for weeks and weekends on end, and the risk that comes with attending school so far from home. I especially want to thank the professors at The College of William and Mary for always making me feel a part of a larger family and for pushing me past the comfort zone of my experience. I knew I had made the right choice from the very first day. Your dedication to education and to your students is remarkable. Most especially, I thank Dr. Michael DiPaola for his generous support, his sense of humor, his ability to ask all the hard questions I wanted to avoid, and for getting me across the finish line by my deadline. I am always grateful that I asked for you to be my chair that first summer. Furthermore, I would be remiss if I did not acknowledge and thank Dr. Margaret Constantino, my mentor on all things, for her generous gifts of time, support, kindness and candor. She inspires me to do great things.

I would also like to thank and acknowledge Dr. Leslie Grant, the third member of my dissertation committee in addition to my other professors at The College of William and Mary: Dr. Steven Staples, Dr. Megan Tschannen-Moran, Dr. Eugene Roche, Dr.

James Stronge, Dr. Steven Constantino, and Dr. Jennifer Parrish. Each of you taught me how to be a thoughtful practitioner, an educational leader, a fully collaborative peer, and a master of my craft. My sincerest gratitude and appreciation goes out to each of you. I will pay it forward in kind.

To my work colleagues, Jennifer and Debbie, for minding the store and keeping it fully operational when I was away. Both of you made it possible for me to take this journey, and I would not have been successful without your support.

Finally, a special thanks to my cohort members who gave me their gifts of friendship and camaraderie and who always tolerated my Northern Girl fighting spirit: Ann, Pat, Mark, Warren, April, and Stephanie. I will remember our experiences together always.

LIST OF TABLES

LIST OF FIGURES

Abstract

Although collaborative programs are used in a variety of educational contexts, during the implementation of new curricula, collaboration among teachers is essential since the difference between curriculum-in-theory and curriculum-in-use lies specifically with teachers' adherence to the implemented curriculum rather than the curriculum that was written. When multiple teachers implement a curricular initiative and interact with the materials in different, teacher-specific ways, curriculum fidelity across teachers is a true concern, rendering an evaluation of the curricular program unstable. For this reason, consistent, embedded collaboration during the first year of new curricula has the potential to provide a vehicle for implementation alignment.

The purpose of this study was to evaluate a Community of Practice program designed to create a forum and system of collaboration among teachers during the first year of a new curricular program. The theory of action was that a Community of Practice program, if applied consistently throughout a new curriculum implementation year, would provide an effective collaboration vehicle for consistent and authentic implementation.

Results from the Community of Practice observations, participant interviews and reflection journals indicated that the collaboration program was effective over time. Training and practice in collaborative protocols, along with careful selection of participants is critical in that the collaborative effort is reliant on the willingness of participants to emerge from their isolation so as to learn from and with their peers. As it develops, a Community of Practice approach can successfully drive decision-making, support fidelity of implementation, and provide continuous evaluation and discussion.

Community of Practice: Evaluation of a Collaboration Program in an Educational Setting

Chapter 1

Introduction to the Study

Background

Standards-based reforms, such as the *No Child Left Behind Act* of 2001 (NCLB), the establishment of the National Education Standards and Improvement Council, and *Race to the Top*, linked teacher accountability to student achievement data. Such reforms have pressed the need for school districts to review programs, curricula, and practices over the past decade and a half with hopes that alignment to initiatives such as Common Core State Standards would ensure student achievement. Due to further pressure of a proficiency deadline of 2014, a major component of NCLB, school district adoption of curricular and remediation programs aimed at curriculum alignment and score improvement are not guarantees that those new programs will be implemented with fidelity. As teachers struggle to adapt quickly to new programs or instructional methods, they have a "tendency to gravitate toward approaches that are congruent with their prior practices" even in the face of new curricular reform (Stein & Coburn, 2007, p. 3). The difference between curriculum-in-theory and curriculum-in-use lies specifically with teachers' adherence to the implemented curriculum rather than the curriculum that was written. According to O'Donnell (2008), "How to distinguish between the effects caused by the materials and the effects caused by the teachers' interactions with the materials, however, becomes difficult and represents a conflict when measuring the fidelity of implementation construct" (p. 44). The differences between curriculum-in-theory and curriculum-in-use as applied to a single teacher's implementation of curriculum are

concern enough; however, when multiple teachers implement a curricular initiative in their individual classrooms and interact with the materials in different, teacher-specific ways, consistent curriculum fidelity across teachers is a true concern.

Darling-Hammond (2010) identifies an educational reality where "U.S. teachers work in isolation from one another with little time to plan with others or share their knowledge" (p. 62). Educators have a tendency to internalize their teaching and learning practices over time (Trowler & Cooper, 2002) so that they become "inextricably linked to academic identity" (Green & Ruutz, 2008). For a year of new curriculum implementation, such "pedagogical solitude" (Shulman, 1993, p. 6) has the potential to affect the outcomes of a formative or summative program evaluation not just between one teacher and his/her interaction with the curriculum, but across like teachers, all interacting with the curriculum in varied, isolated ways.

To combat teachers working in solitude, especially during an implementation year, teacher collaboration could aid teachers to "develop curriculum and solve problems of practice" (Darling-Hammond, 2010, p. 62). Stronge (2010) reports, "When asked what steps would they initiate to improve the effectiveness of teachers in their school, these effective teacher responded: 39% more social/collaborative time; 22% time for teachers to get together; 18% have teachers observe other teachers/schools" (p. 91).

For the purposes of this study, I evaluated a Community of Practice program designed to create a forum and system of collaboration among teachers during a year of new curriculum implementation to determine the feasibility of such a program in an educational setting.

Program Description

  Context. The Upper West School District's (UWSD) total population is approximately 3500 students with 300 full-time teachers, and 55 support staff members. The district has three elementary schools, all housing their own kindergarten half-day programs. Secondary schools include a middle level for grades 6-8 and one high school for grades 9-12. The district also provides services to students from other districts for Life Skills, Hearing Support, and Emotional Support programs, as well as an English Language Learners program through an intermediate unit consortium.

  Approximately 85% of UWSD is home to mid- to high-level income families with the remaining 15% receiving free and reduced lunch. For a variety of reasons, there are an above average number of students identified with special education status—a combination of gifted and learning disabled students. Upper West High School consistently graduates 97% of their seniors and received a 98.6% School Performance Profile rating based on SAT, AP, and State Standardized Test scores. With a small community of mixed socio-economic status, UWSD has largely enjoyed a collaborative relationship with its stakeholders in the community including the local college, Rotary Club, and the three upper middle class boroughs within the township. Upper West School District prides itself on achievement and quality programs that offer individualized instruction and an underlying Quaker philosophy.

  Curricular Program Change. In 2013, UWSD implemented Teacher's College Reading Workshop (TCRW) in grades 3-5 in an effort to infuse more literature and reading opportunities into the elementary curriculum. Research evidence suggests that volume of reading is linked to attaining higher-order literacy proficiencies (Allington,

2012) and that time spent reading was the best predictor of reading achievement. At the core, the program is designed to provide time for students to read and respond to texts with teachers acting as "a guide on the side" as students move toward independence (Atwell, 2009).

The learning outcomes of the newly adopted TCRW program were that students would exit fifth grade with established reading levels, goals and cognition of the TCRW approach, as well as the ability to analyze their reading and demonstrate meta-awareness of reading strategies (Calkins & Tolan, 2010). If the outcomes were to be realized, the 2014-2015 incoming sixth graders would arrive to the middle school with skills more advanced than the sixth grade curriculum could support.

Prior to 2014-2015, the sixth grade curriculum had been a conglomeration of teacher-selected texts, many of which varied from teacher to teacher. In addition, the curriculum was largely project-based with culminating craft-like projects as the means of assessing the learning. Students created yearlong scrapbooks filled with pictures and drawings related to readings. They spent nearly six weeks in groups writing a movie script, performing the script and viewing the movies of their classmates for a culminating "Movie Awards" event. To increase the rigor of the curriculum and instructional practices, a philosophical shift needed to occur, using a research-based approach to increase reading fluency, comprehension, and stamina for all levels of students.

With the hope of capitalizing on the incoming sixth graders knowledge of TCRW, the district administration chose to bring TCRW to the sixth grade as well—a decision that required immediate training and implementation for the 2014 fall semester. Adoption of such a paradigm-shifting approach could easily fall prey to implementation drift if the

sixth grade teachers did not collaborate consistently and focus on fidelity of implementation in and across the various classrooms during the initial year. Theoretically, authentic and consistent implementation of the curriculum would allow for a reliable evaluation method in two years' time when pre and post data became available. Implementing a collaboration program for the team of teachers had the potential to provide the vehicle for fidelity of curricular implementation.

  Description of the program. Variations exist among the available collaboration models, processes and programs, but in the context of this study, it was important to choose a program that created the opportunity for "teams of teachers working together to apply their new leaning to the student needs they are addressing through their study group action plans" (Blankenship & Ruona, 2007, p. 2). The Community of Practice (Community of Practice) program, including its developmental process, was intended to be self-governed and was often centered on the identification of a strategic need (Blankenship & Ruona, 2007). The Community of Practice program was chosen since it had the potential to continue past the initial year of new curriculum implementation and become part of the regular, cultural practices for collaboration. Based on a social distribution of leadership (Spillane, Halverson & Diamond, 2004), a Community of Practice program is one where "decisions are not made by a single individual; rather, decisions emerge from collaborative dialogues between many individuals, engaged in mutually dependent activities" (Scribner, Sawyer, Watson, & Myers, 2007, p. 70).

  Wenger, McDermott, and Snyder (2002) define Communities of Practice as "groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing

basis" (p. 4). This form of knowledge management comes from the view that "learning is not a property of individuals and the representations in their heads (the cognitive view), but rather a more relational property of individuals in context and in interaction with one another (the situated view)" (Hoadley, 2012, p. 288).

Embedded professional collaboration in the routine practice of the school (DuFour, 2011) provides much needed time for discussion, consensus-building, the creation of new knowledge, and the sharing of strategies and practices that support more faithful implementation of new programs. The expectation for the Upper West Middle School (UWMS) sixth grade teachers was that they would meet regularly in a Community of Practice to share contextual knowledge into the working, learning and innovation necessary for authentic and consistent curriculum-in-use.

The theory of action was that a Community of Practice program, if applied consistently throughout a new curriculum implementation year, would provide an effective collaboration vehicle for consistent and authentic implementation. As it develops, a Community of Practice approach can successfully drive decision-making, support fidelity of implementation, and provide continuous evaluation and discussion.
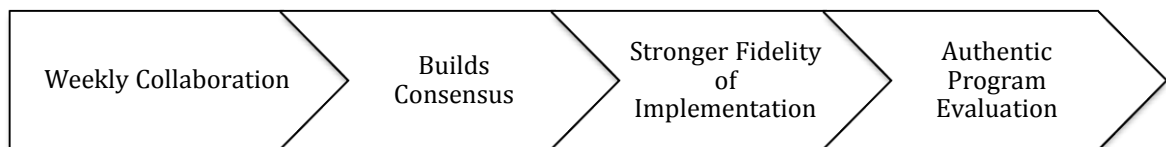

Figure 1. Value chain of sequenced outcomes.

Inputs. The logic model followed the CIPP model (Stufflebeam & Shinkfield, 2007) including inputs, outputs, and short-term, medium-term and long-term outcomes.

Figure 2 depicts the logic model, including the progression of the study as well as the

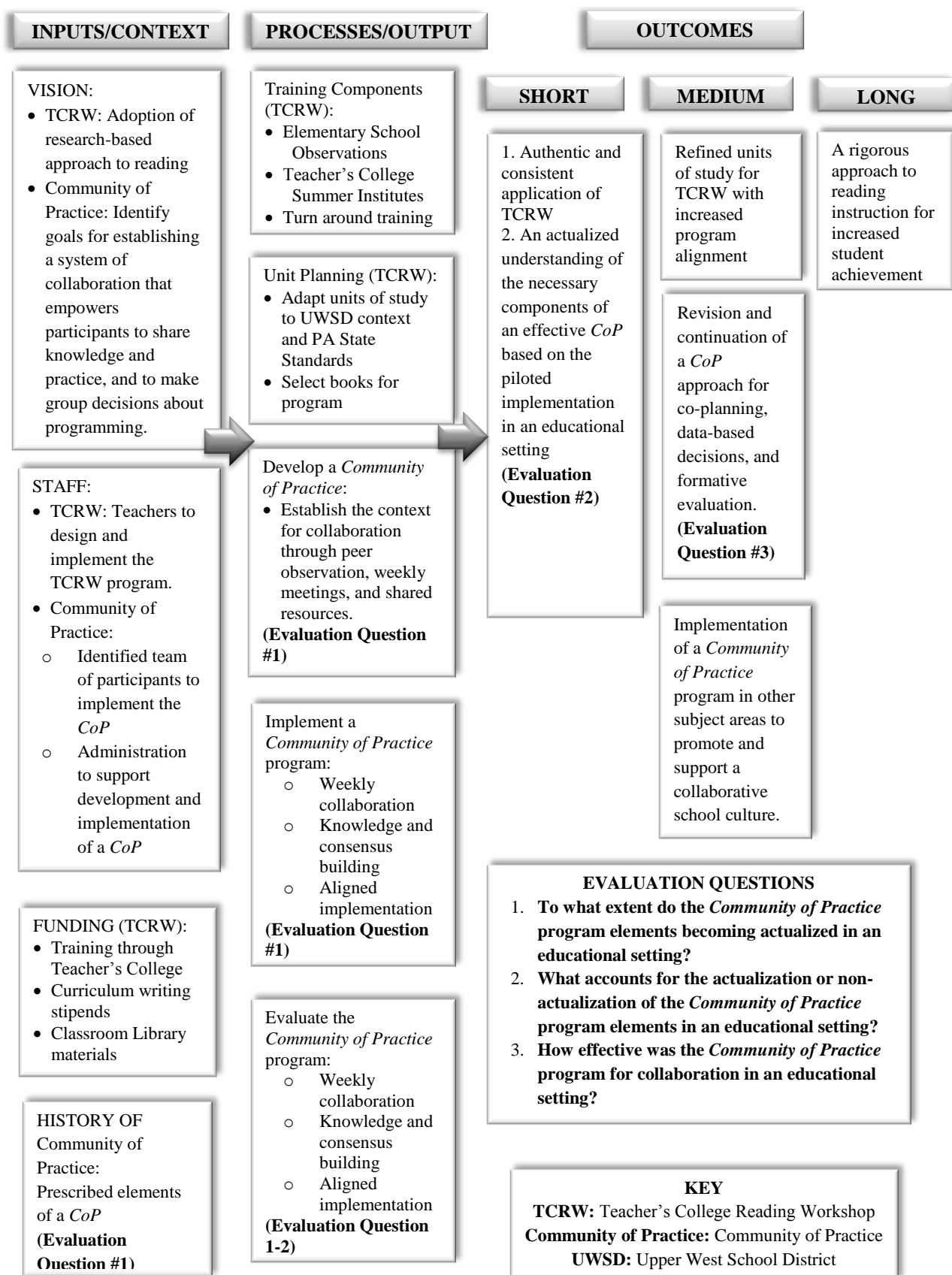evaluation questions as they occurred throughout each phase of the model.

INPUTS/CONTEXT	PROCESSES/OUTPUT	OUTCOMES		
		SHORT	**MEDIUM**	**LONG**

VISION:
- TCRW: Adoption of research-based approach to reading
- Community of Practice: Identify goals for establishing a system of collaboration that empowers participants to share knowledge and practice, and to make group decisions about programming.

STAFF:
- TCRW: Teachers to design and implement the TCRW program.
- Community of Practice:
  o Identified team of participants to implement the *CoP*
  o Administration to support development and implementation of a *CoP*

FUNDING (TCRW):
- Training through Teacher's College
- Curriculum writing stipends
- Classroom Library materials

HISTORY OF Community of Practice: Prescribed elements of a *CoP* **(Evaluation Question #1)**

Training Components (TCRW):
- Elementary School Observations
- Teacher's College Summer Institutes
- Turn around training

Unit Planning (TCRW):
- Adapt units of study to UWSD context and PA State Standards
- Select books for program

Develop a *Community of Practice*:
- Establish the context for collaboration through peer observation, weekly meetings, and shared resources.
(Evaluation Question #1)

Implement a *Community of Practice* program:
  o Weekly collaboration
  o Knowledge and consensus building
  o Aligned implementation
(Evaluation Question #1)

Evaluate the *Community of Practice* program:
  o Weekly collaboration
  o Knowledge and consensus building
  o Aligned implementation
(Evaluation Question 1-2)

SHORT

1. Authentic and consistent application of TCRW
2. An actualized understanding of the necessary components of an effective *CoP* based on the piloted implementation in an educational setting
(Evaluation Question #2)

MEDIUM

Refined units of study for TCRW with increased program alignment

Revision and continuation of a *CoP* approach for co-planning, data-based decisions, and formative evaluation. **(Evaluation Question #3)**

Implementation of a *Community of Practice* program in other subject areas to promote and support a collaborative school culture.

LONG

A rigorous approach to reading instruction for increased student achievement

EVALUATION QUESTIONS
1. **To what extent do the *Community of Practice* program elements becoming actualized in an educational setting?**
2. **What accounts for the actualization or non-actualization of the *Community of Practice* program elements in an educational setting?**
3. **How effective was the *Community of Practice* program for collaboration in an educational setting?**

KEY
TCRW: Teacher's College Reading Workshop
Community of Practice: Community of Practice
UWSD: Upper West School District

Figure 2: Logic Model.

9

The inputs for the Community of Practice investigation included a vision, staff and background on the Community of Practice program. The participants valued the collaboration opportunity and sought a program to help codify and sustain the collaborative work. Together, the six staff members developed a shared vision for the Community of Practice so that the sharing of knowledge, strategies, teaching practices and collaboration in decisions could occur.

In addition to the teacher volunteers, administrative support served as an input for the logistics and implementation of Community of Practice meetings. The central inputs for the Community of Practice study were the prescribed elements of an effective Community of Practice so that the participants could establish the program for better implementation. Each of these inputs optimized the program environment, incentivized the collaborative team of teachers and stabilized the implementation goals.

Outputs. The outputs acted as the main focus of the study and evaluation questions. Using the research of the prescribed elements of the Community of Practice program, the participants established the context that allowed for maximum collaboration surrounding the implementation of Reading Workshop. This occurred in the earliest stages of the study, prior to implementation of the Community of Practice. Through peer observation, weekly meetings, and reflection journals, participants established the context for the Community of Practice to build capacity as a collaborative system.

Lastly, the participants implemented their vision, contextual attributes, and research-based Community of Practice strategies to actualize the Community of Practice in the middle school. Throughout the initial year of program implementation, the Community of Practice approach was intended to drive decision-making, adjustment of

curriculum and instruction, data analysis and program evaluation. Doing so had the

potential to provide continuous evaluation and discussion, ensuring consistent and

authentic implementation of Teachers College Reading Workshop.

   Outcomes. Through the implementation of the Community of Practice program,

the theory was that teachers would develop an actualized understanding of an effective

Community of Practice. The expected short-term outcome was the shift in culture from a

curriculum implementation randomized by teacher interest and expertise to a team of

teachers who co-plan, use data for decision-making, and continuously evaluate curricular

implementation through a Community of Practice program.

   The medium-term outcome, achieved through the consistent implementation of

Community of Practice program, was the reflection and revision of the Community of

Practice program for year two of the TCRW curriculum-in-use. The expectation was that

participants would see the benefit of targeted collaboration during the initial

implementation years of new curriculum and seek to fully embed Community of Practice

programs in the middle school Language Arts department. This would provide a method

of evaluating the impact of a Community of Practice program within the context of an

educational setting.

   In the long-term, a fully embedded implementation of a Community of Practice

program across subject areas would support a collaborative school culture and diminish

the tendency for teachers to work in isolation. Additionally, this fully operationalized

TCRW program was expected to increase student reading achievement so that it could be

predictive and foundational for the 7th grade program. As a result, there was the potential

for an increase in student growth outcomes after two years of implementation.

Overview of the Evaluation Approach

The Community of Practice program evaluation provided the researcher a contextualized application of a Community of Practice program during implementation of new curriculum. Since "evaluation is an applied inquiry process for collecting and synthesizing evidence that culminates in conclusions about the state of affairs, value, merit, worth, significance, or quality of a program, product, person policy, proposal or plan" (Fournier, 2005, p. 139), this program evaluation inquired about the potential for actualizing a Community of Practice program within an educational setting so that conclusions for "both an empirical aspect (that something is the case) and a normative aspect (judgment about the value of something)" (Fournier, 2005, p. 140) can be determined. In this study, whether or not a Community of Practice program was the correct vehicle for collaboration (empirical aspect) and its potential for becoming a standard program during new curriculum implementation (normative aspect) was the primary focus.

With distributed leadership a component of the Community of Practice program, teacher participants had the opportunity to create new knowledge through document sharing, implementation ideas, shared practice, peer observation, and group discussion. These aspects of the Community of Practice program had the potential to increase the likelihood of the program elements becoming actualized. To incentivize the efforts, the participants completed Professional Growth Plans as they investigated the effectiveness of the new reading curriculum on student achievement. A Community of Practice program was implemented and studied by this evaluator for its effectiveness in providing a process of collaboration during the initial implementation year of TCRW.

Program evaluation model. Evaluating the effectiveness of a Community of Practice program for collaboration anchored the inquiry in the Constructivist Paradigm in that meaning was made from the participants who lived the experiences that fuel the work and therefore, "reality is constructed by individuals through reflection upon their experiences and interaction with others" (Mertens & Wilson, 2012, p. 136). Furthermore, the axiology of such a paradigm recognized that the researcher's values influence the process and therefore, the evaluator needed to be aware of its presence in the study (Mertens & Wilson, 2012, p. 135). As the Values Branch acknowledges the potential subjectivity of the researcher, qualitative analysis of participants' reality through interviews, reflection and dialogue took this subjectivity into account.

Purpose of the evaluation. Primarily, the evaluation was formative in that the aim of the study was to determine the feasibility of a Community of Practice program in an educational setting and to decide if a Community of Practice was an effective collaboration program. If deemed effective, the collaboration program had the potential to become part of the implementation formula for upcoming curricular initiatives. Although several schools in the district do not have common meeting time for the intensity needed for proper implementation of a Community of Practice, verifying its effectiveness through this program evaluation provided data to potentially consider Community of Practice a best practice program for collaboration. Although evaluating the actualized collaboration through a Community of Practice program was the primary purpose of the evaluation, a secondary long-term outcome was the determination of whether or not collaboration yielded consistent and authentic implementation of

curricular programs. This secondary long-term outcome was not part of the program evaluation for this study.

Focus of the evaluation. This evaluation focused on the fidelity of implementation of a Community of Practice program in a school setting during the implementation year of a new curricular program. Reliant on teacher participation with others, Communities of Practice do not require external experts, but do require the collaboration time necessary to support the implementation of the program. As Fuller (2007) explains,

> There is no expectation or inevitability that the expert should be a qualified or recognized teacher. The novice is not conceived as a (passive) recipient of codified knowledge made available through formal instruction; rather the curriculum is available to newcomers through their increasing participation (with others) in the relevant and inevitably structured social practices (activities, tasks, habits) of the community. (p. 19)

Through weekly meeting logs, reflection journals, and participant interviews, the applicability and feasibility of Communities of Practice could be evaluated as a vehicle for educational collaboration.

Evaluation Questions. The evaluation questions identified via highlighted boxes on the logic model (Figure 2) are concentrated in the area of a Community of Practice. The questions are both a horizontal and vertical theory of action. Since a Community of Practice approach begins with an investigation of the research-based elements of an effective Community of Practice, the evaluation began with that research, built the capacity with participants through identification of the prescribed elements, the

establishment of a Community of Practice program, the implementation of a Community of Practice, and finally, the evaluation of whether a collaborative culture had been achieved through its use.

1. To what extent do the Community of Practice program elements become actualized in an educational setting?

2. What accounts for the actualization or non-actualization of the Community of Practice program elements in an educational setting?

3. How effective was the Community of Practice program for collaboration in an educational setting?

The first evaluation question falls within both the "Input" and the "Outputs" of the CIPP (Stufflebeam & Shinkfield, 2007) model. This question relied on the effective Communities of Practice program elements (inputs) and sought to determine the extent to which the program elements were actualized. As a result, data for this question came from both the research of effective Communities of Practice as well as observations of participants in action.

The second evaluation question focused on the actualized Community of Practice program and considered why the program elements did or did not become actualized in the educational setting as a vehicle for collaboration. Observations of the collaboration and the discrepancy between the prescribed elements and the actualized ones provided data for this evaluation question.

The final evaluation questions fell within both the "Outputs" and "Short-term Outcomes" of the CIPP model. This question allowed for deeper analysis of the Community of Practice program for collaboration. To be considered effective, the

Community of Practice program yields a team where the prescribed elements of such collaboration have become part of the culture. Co-planning, data-driven decision-making, and alignment of curriculum-in-use all contribute to the outcomes of authentic and consistent implementation. The data drawn for this evaluation question came from observation of the Community of Practice in action, reflective journals from the participants, and interviews with the participants as to the effectiveness of a Community of Practice in an educational setting

Definition of Terms

Terms used throughout the program evaluation include the following:

1. *Community of Practice—*groups of people with a shared domain of common interest, engaging in joint activities to learn and grow together over time using a repertoire of resources (experiences, tools, best practices, approaches). Three prescribed elements are (1) Mutual Engagement (2) Joint Enterprise (3) Shared Repertoire (Wenger, 1998, p.73).

2. *Teacher's College Reading Workshop—*Based on the ongoing research of Richard Allington (2012) and Lucy Calkins (2010), this approach to reading is predicated on a pre-determined block of time set aside for reading activities. The session begins with a mini-lesson by the teacher, moves into an activity period where students read individually selected books, respond to books, or confer with the teacher, and ends with a sharing session. (Calkins & Tolan, 2010)

3. *Fidelity of Implementation—*The degree to which a program or intervention is delivered or actualized as intended. This allows for better measurement of the effectiveness of the program or intervention.

Chapter Two

Literature Review

School and district-based initiatives flood the world of education at a rapid pace as leaders and policy makers attempt to prop up the perception of failing schools in America. It is unfortunate that whether a response to mandates from the state or as a result of data based conclusions at any level, changes in practice occur so often that fidelity of implementation (FOI) cannot always be assured. Teacher isolation is a very real issue in education. In the case of implementation of new initiatives, teachers experience what Flinders (1988) calls, "adaptive isolation" where teachers are unable to implement the critical attributes of a new teaching strategy because there is no mechanism for teacher collaboration. They become overwhelmed trying to acquire and implement new resources and approaches (p. 19). Additionally, the teaching profession has a long history of fragmentation and individualism that countermands collegial efforts. This "pedagogical solitude" (Shulman, 1993, p. 6) is a product of the design of American education and for some, a right, earned after years of self-determined mastery. Darling-Hammond (2010) contends,

> As we have seen, instead of egg-crate classrooms offered by the factory-model schools developed in the United States, schools in most other high-achieving countries ensure that teachers have time for collaboration, collective planning, lesson study, peer coaching, developing curriculum and assessments, and joint examination of student work. (p. 324)

Ensuring that teachers have collaboration time, especially during a year of curricular implementation is not always a guarantee in school districts, but it may be more important than realized. Social capital, the idea that collective enterprise and relationships have value so that a group's performance can exceed more than the sum of its members, can be created through strong collegial ties among teachers (Gamoran, Gunter & Williams, 2005; Spillane et al., 2004).

Although the link between teacher collaboration and its influence on student outcomes is limited, some studies make the direct link. Daly, Moolenaar, Der-Martirosian & Liou (2014) explored the relationship between teacher social interaction and student achievement on benchmark tests. The results indicated that teachers' social capital and human interaction had a significant effect on student achievement on the benchmark tests even when controlled for demographics and prior achievement.

Results from a study of the impact of teachers' collegial relations on student achievement found that the flow of information, responsiveness regarding problems of practice, and consistency of performance all increase when teachers form strong, cooperative relationships (Yasumoto, Uekawa & Bidwell, 2001). Pil and Leana (2009) found similar results in a study of teacher social capital as a predictor of student success, concluding that the structure and content of teacher relationships significantly predicted school-level student achievement as measured by their reading and math test scores. DuFour (2011) believes the "situation would not change by merely encouraging teachers to collaborate, but would instead require embedding professional collaboration in the routine practice of the school (p. 58). The connection between collaboration and teacher development has increased in importance over time (Little, 2003; Eddy Spicer, 2011).

Collective teacher inquiry as a goal of collaboration "entails the additional dimension of negotiating difference in ideas" (Eddy Spicer, 2011, p. 3). During the implementation year of new programs, collaborative practice allows a vehicle for the necessary "reflective dialogue" (Bolam, McMahon, Stoll, Thomas &Wallace, 2005) among teachers in a way that furthers the "progressive discourse" (Wells, 1999) necessary for the common goals of the group.

Eddy Spicer (2011) reframes such discourse in that its presence requires a "progressive negotiation of difference in ideas" that relies on the "progressive negotiation of interpersonal difference" (p. 5). Negotiating the differences among the group members is a component of group dynamics theory, and as such, is an anchor component in any collaboration. Wheatley (2006) believes,

> We live in a universe where relationships are primary. Nothing happens in the quantum world without something encountering something else. Nothing exists independent of its relationships. We are constantly creating the world—evoking it from much potential—as we participate in all its many interactions. This is a world of process, the process of connecting, where 'things' come into temporary existence because of relationship. (p.69)

A Community of Practice (Community of Practice) program provides a collaboration process, designed to create opportunities for reflective practice and dialogue, and the generativity of ideas dependent on the generativity of social relations (Hasan, 2001). Furthermore, a Community of Practice has the potential to ensure implementation fidelity via collaborative discussion among colleagues. Throughout the

research study, qualitative data in the form of observations, interviews, and a review of teacher reflection journals informed the data collection and analysis.

In theory, a Community of Practice program can change individual behavior so that teachers do not default to a previous teaching style since collaboration during a year of curricular implementation provides a vehicle for collective inquiry. This study sought to evaluate the development of a Community of Practice program based on its prescribed elements as defined by Jean Lave and Etienne Wenger (1991) and to determine its effectiveness as a program of collaboration based on the qualitative evaluation of its participants.

Elements of the Program

The term, "Community of Practice" entered into the lexicon of learning with the Lave and Wenger *Institute for Research on Learning* report, later published as a book. Since that time, Communities of Practice have been the focus of learning theories, expanded on by Brown and Duguid (1991) and later by Saint-Onge and Wallace (2003). Wenger et al. (2002) define Communities of Practice as "groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in the area by interacting on an ongoing basis" (p. 4).

Theories of learning. Community of Practice programs draw from three theories of learning: Situated Cognition, Social Learning, and Knowledge Management. Despite their disparate philosophies, each of the theories undergirds the overarching definition of a Community of Practice; that is a program of collaborative learning that evolves when people interact with common goals through the sharing of cultural practices.

In Situated Cognition theory, knowledge is considered a verb, an action that takes place between the agent and the environment (Barab & Roth, 2006, p.3). Since cognition cannot be separated from the context of learning, the cultural and historical constructions are paramount (Lave & Wenger, 1991). Situated Cognition is one of the two foundational roots of the Brown and Duguid (1991) model of Community of Practice.

Social Learning theory posits that learning is a cognitive process, occurring in a social context where information is extracted through observations or the description of desired behavior (Grusec, 1992). A form of reciprocal learning, Social Learning theory allows interaction and observation of behavior to drive the collaboration among participants to construct knowledge. The theory is different from Situated Cognition in that the interaction relies more heavily on observation among participants although all participants share the responsibility of sharing and demonstrating. It is the foremost theory of learning on which the Lave and Wenger program is based.

Knowledge Management informs the Saint-Onge and Wallace model of Community of Practice, where Knowledge Management refers to the "process of capturing, distributing, and effectively using knowledge" (Davenport & Prusak, 2000, p. 107). Whereas knowledge is cumulative and transferable in this program, reserved originally for business corporations, in the context of a Community of Practice, knowledge does not have to be explicit, rather implicit and tacit knowledge is shared and distributed for the improvement of all participants.

Variations among the three models of Community of Practice exist, but what binds them together is that the development of knowledge and collective inquiry comes from the participants and their shared leadership. Although membership can be assigned

by the organization, Community of Practice members share a passion for the subject and share a strategic need for the collaboration. Only the Brown and Duguid (1991) model views the membership in a Community of Practice as completely voluntary and informal, where the community is egalitarian in nature.

Both the Lave and Wenger (1991) and the Saint-Onge and Wallace (2003) model claim that distributed leadership, both inside and outside of the community, fuels the collaboration. In some senses, this can influence the interaction within the group but can have a supportive impact for the maturation of the community (Wenger, 1998; Saint-Onge & Wallace, 2003). Still, the literature on Communities of Practice emphasizes the importance of social learning to form new knowledge regardless of the presence of external leadership.

Since the "concept of a Community of Practice assumes that humans are social beings, knowledge is a matter of competence, knowing is a matter of active engagement with the world" (Borg, 2012), it is important that participants in a Community of Practice seek to co-construct knowledge. As the ones who actively engage in the implementation of new curriculum, teachers are in a key position to facilitate their own learning through collaboration. Grossman, Wineburg, and Woolworth (2001) identify four markers for effective implementation of a Community of Practice program: the formation of a group identity and norms of interaction, understanding difference and navigating fault lines, negotiating the essential tensions and taking communal responsibility for individuals' growth.

Program Components. For the purposes of the program evaluation, it was important to focus on one model so as to identify the critical components of a

Community of Practice. As a continued authority and originator of the term, Community of Practice, the Lave and Wenger (1991) model provided the prescribed elements of the program and the expected developmental stages for this study. The literature in Wenger's book, *Communities of Practice: Learning, Meaning and Identity* (1998) provide a detailed roadmap to the identification, conceptualization, and operationalization of a Community of Practice.

Integral to a Community of Practice is the existence of a domain, a community and a practice (Wenger et al., 2002). The "domain" is an area of shared inquiry around key issues identified by the participants. The "community" refers to the sense of belonging as relationships and group identities are built. "Practice" indicates the body of knowledge, including the methods, stories, cases, tools and documents that live and breathe within the community. These three aspects are not as much a list of prescribed elements as they are the framework for the actualization of a Community of Practice. That is, to have all three indicates that a Community of Practice is in development. A Community of Practice may vary in size, continue over a long or short span of time, cross organizational boundaries, and may be instigated organically or through organizational assignment. The existence of a domain, a community and a practice are part of the Inputs/Context in the logic model (Figure 2).

Prescribed Elements. The prescribed elements in the Community of Practice program come from the Lave and Wenger (1991) model and include both Dimensions of Progress and Stages of Development. Wenger (1998) posits that the existence of both areas indicates that a Community of Practice program is progressing. Without them, the Community of Practice does not function.

Dimensions of Progress. Although there may be collaboration, the sustainability of the Community of Practice lies in the existence of three Dimensions of Progress

- Mutual Engagement

- Joint Enterprise, and

- Shared Repertoire. (Wenger, 1998, p. 73)

The existence of the three Dimensions of Progress contributes to the Processes/Outputs in the logic model (Figure 2). In Mutual Engagement, members of the Community of Practice engage through negotiation of separate realities. To enable such engagement, members must be included in what matters, their diversity and partiality fuel the community as much as their collectivity. In the Lave and Wenger model, each member "finds a unique place and gains a unique identity, which is both further integrated and further defined in the course of engagement in practice (Wenger, 1998, p. 76).

It is not the goal of a Community of Practice to create homogeneity as much as it is a sharing of discrete or universal knowledge just so long as it is given and received through mutual engagement. Forcing an idealized view is counterintuitive to a Community of Practice since meaning is made from the experiences of others, both observed and shared within the practice. Mutual Engagement, therefore, is not a matter of harmonious interactions. Indeed, the interpersonal conflicts and tensions authenticate the engagement and stimulate growth, resulting in relational norms (Wenger, 1998).

In studies of community development among teachers, there is "little sense of how teachers forge the bonds of community, struggle to maintain them, work through the

inevitable conflicts of social relationships, and form the structures needed to sustain relationships over time" (Grossman et al., 2001, p. 4). To simply declare a "community" is to ignore the lack of experience for professional community making among teaching colleagues, especially if the dual goal is to learn for the sake the students and to grow as teachers where "the latter goal, in contrast to the former, does not have a strong school-based tradition" (p. 16).

Joint Enterprise, the second Dimension of Progress in a Community of Practice program, is the result of Mutual Engagement. For a Community of Practice group, Wenger (1998) considers Mutual Engagement a "negotiated response to their situation and thus belongs to them in a profound sense, in spite of all the forces and influences that are beyond their control" (p. 77). Since Mutual Engagement embraces differences in experience, expertise and attitudes, Joint Enterprise is where the community negotiates the differences, resulting in a collective product or understanding. Wenger (1998) refers to this as "reification" – a part of a Community of Practice program where the members produce physical and/or conceptual artifacts that reflect the shared experience. It is around the artifacts that participation is organized.

Decision-making among teachers; however, requires navigation in the face of varying perspectives as well as the "tension created by the ever-shifting movements of personalities, identities and human desires" (Grossman et al., 2001) and often results in the "illusion of consensus" which leads to "pseudocommunities" (p. 16-21). These limitations would be inherent in a Community of Practice program as the work requires human interaction and consensus building.

In addition, there is a danger of groupthink (Janis, 1982) which has the potential to thwart innovation and creative known-problem solving as well as discovered-problem finding (Sawyer, 2006). Although the Community of Practice in this study was meant to create convergent thinking for curriculum fidelity of implementation, a regression toward groupthink had the potential to create false consensus. The development of such tensions and pseudocommunities was evaluated during the Processes/Outputs of the logic model (Figure 2).

The third dimension of a Community of Practice program is Shared Repertoire of routines, methods, symbols, and concepts defined and developed through the course of the Community of Practice and that have become part of the very discourse of their negotiated identity. The repertoire should "reflect a history of mutual engagement and remain inherently ambiguous" (Wenger, 1998, p. 83). In this way, members can capture, codify and store tacit knowledge from their valuable context-based experiences (Davenport & Prusak, 2000).

In Professional Learning Communities, strong emphasis can sometimes be placed "on the role of principal in establishing supportive conditions for team learning to take place, as well as their role in developing and implementing a shared vision and values" (Blakenship & Ruona, 2007, p. 5). In a similar way, the Community of Practice program may be guided by management or an organization leader, but the role is relegated to a sponsor-like position, referred to by Wenger (1998) as a "Broker."

The reliance on teacher-initiated and teacher-led collaboration rather than trainer or administration leaders theoretically builds capacity for teacher leaders and frees up supervisors from having to lead collaboration and professional development. Moreover,

knowledge is built upon the curriculum-in-use perspective of the participants and their

"canonical practice" (Brown & Duguid, 1991) since "knowledge equals practice in

authentic contexts by communities" (Hoadley, 2012, p. 289). The role, then, for school

leaders is a crucial one, since the establishment of such an infrastructure provides

necessary time and creates the expectations that teachers would meet to discuss and plan

together (DuFour & Marzano, 2011), but the Community of Practice cannot be reliant on

top-down management.

Stages of Development. In order to determine the fidelity of implementation of a

Community of Practice, it was not only important to understand the Dimensions of

Progress (Joint Enterprise, Mutual Engagement, Shared Repertoire); it was necessary to

understand how and where they existed within the defined Stages of Development. Such

phases are the ways in which participants come together, share knowledge and create a

new identity that services the work in practice. Identification of specific stages is a slight

paradox of the process; however, since the very nature of a Community of Practice

program is the organic development of shared knowledge and identity around a domain.

As such, the stages "must be considered indicative rather than prescriptive" (Wenger,

n.d., p. 1).

Wenger (n.d.) identifies five Stages of Development in the collaboration program:

Potential, Coalescing, Maturing, Stewardship, and Legacy. In the first stage, *Potential,* a

group of people with similar interests begins to form. This formation may occur

naturally and organically come together over a shared topic of interest or concern, but it

may also be "seeded by the organization" (Wenger, n.d., p. 1) just as long as the

participants recognize the community needs and are willing to build knowledge on them.

Andriessen (2005) considers these groups to function with high "institutionalization" in that they have a shared purpose, a defined membership, composition, and are formal, goal-oriented teams.

The Coalescing stage is often a transitional stage with spikes of energy as the community forms around ideas of interest and an understanding of the Community of Practice of work ahead sets in. The potential areas of concern for the Community of Practice formation in this stage is the drop off of interest as participants become absorbed in other projects, organizational leaders are pulled away and participants don't always find immediate value. According to Wenger (n.d.), "People may interpret the loss of interest as a lack of real value or become impatient. Building relationships, helping each other, discovering what knowledge is really useful to share, all this takes time and it is important to shepherd the community through this stage" (p. 3). Successful attributes of this stage include weekly meetings, documents that form and interactions become more systematic. Sharing of tools, templates, and new knowledge begins as the shape of the community builds.

In stage 3, Maturing, the Community of Practice has built a "communal identity" (Wenger, n.d.) and their commitment to the practice has grown into relevancy, reliance on the Community of Practice for making meaning, identifying gaps in the shared knowledge and searching for solutions to fix them (p. 3). The potential risk at this stage is the reluctance to "disrupt the formal intimacy of the initial group" and a resistance to steward knowledge to others outside of the Community of Practice (p. 3).

The final two stages of a Community of Practice program were not a part of the research study in that they are long-term stages that took place after the study ended if at

all. They have been included here for a deeper understanding of the Community of

Practice program in its totality. In the Stewardship stage, members may change as people

leave, leadership changes, etc., but that is part of the stage. If a Community of Practice

has truly been developed, the core members are fully prepared to steward knowledge and

equally important, become flexible to new practices and experiences of new members. In

this stage the practice has reached its full potential and the strategic thinking about the

knowledge created and still to come takes center stage. In this stage, the Community of

Practice "has to maintain energy and explore the leading edge of its practice" (Wenger,

n.d., p. 4). The potential risks at this stage occur when the external organization makes a

decision in the Community of Practice domain without consulting the Community of

Practice, devaluing its place in the larger context.

The final stage of development is Legacy, where the Community of Practice

naturally ends due to new projects or becoming fused into a larger context. Wenger (n.d.)

sees the ending as an integral part of any community and participants should do the work

to consider the legacy they want to leave behind. One of the dangers of

"overinstitutionalizing a community" is that participants want the Community of Practice

to survive for the sake of the work that has been done and the relationships that have been

developed (p. 4).

Modes of Belonging. Modes of Belonging are elements that support the

Dimensions of Progress. They include engagement, alignment, and imagination,

(Wenger, 1998), and are used most specifically during the Maturing and Stewardship

stages. Engagement includes the work of defining a common enterprise, accumulating

history of shared experiences, producing a local regime of competence, developing

interpersonal relationships, and trajectories for both the individual's practice and the group at large (p. 184).

Alignment is a prescribed element since its absence means the Community of Practice becomes a vehicle to develop procedures and urges compliance rather than shared new knowledge development. Alignment works in tandem with engagement, where participants create a focus to coordinate the investment of time, find common ground, use power to impose views, inspire, unite and convince, proposing stories of identity, devising proceduralization, and reconciling diverging perspectives (Wenger, 1998, p. 187). Without alignment, teachers' relations to the broader enterprise will be literal and procedural; coordination centers on compliance rather than participation in meaning" (Stein & Coburn, 2007, p. 7).

Imagination is also at work in a successful implementation of a Community of Practice program. Its presence allows participants to "disengage and look at the (Community of Practice) engagement through the eyes of an outsider" (Wenger, 1998, p. 185). Characteristics of this phase of a Community of Practice are recognizing and knowing about the experience of others, defining a connection of the knowledge in an extended way, conceiving of new contexts for the practice, opening access through excursions (observations, visiting), creating visuals and models, and documenting historical developments and defining them in new terms (p. 185). This is a significant portion of the Stewardship stage of development. As the Modes of Belonging can be attributed to Dimensions of Progress and are modes more specifically present in the latter two stage of a Community of Practice program, they have been suffused into the Dimensions of Progress for the purposes of this study.

The relationship between the Stages of Development and the Dimensions of

Progress during each stage are shown in Table 1. These prescribed elements provided

measures/markers for data collection during implementation similar program in an

educational setting and became part of the Process/Outputs section of the logic model

(Figure 2).

Table 1

Stages of Development of a Community of Practice and the Corresponding Dimensions of

Progress

Stage of Development	Stage Attributes	Dimension of Progress
Potential	A group with similar interests begins to form	*Mutual Engagement occurs*
Coalescing	Transitional stage where ideas of interest begin to merge	*Mutual Engagement* is sustained; *Joint Enterprise* begins
Maturing	A community identity is built and reliance on the Community of Practice is fully actualized	*Mutual Engagement & Shared Repertoire* are fully operationalized; *Joint Enterprise* may be revised
Stewardship	Members steward knowledge; new members and experiences are welcome and assimilated	*Mutual Engagement & Shared Repertoire* continue; *Joint Enterprise* may be revised
Legacy	Community of Practice project ends or is fused into a larger context	*Shared Repertoire* can transfer to external entities

Synthesis and Summary of the Research Findings on the Program

The literature on Communities of Practice demonstrates the benefits of collaboration as well as the potential issues of practice. With increased accountability, implementation of new programs without ensuring fidelity has the potential to erode evaluations of effective curricular initiatives.

Benefit of Collaboration. In support of Communities of Practice, teacher isolation, if pervasive, thwarts efforts to implement initiatives with fidelity. A study by Scholastic & Bill and Melinda Gates Foundation (2012) determined that teachers spend about 3 percent of their teaching day collaborating with other teachers (p. 14), which indicates the planning of curriculum and instruction occurs alone.

Without embedded collaboration, consistent and authentic implementation of common curricula and instructional practices cannot be determined, resulting in a skewed perception of FOI. Decades of research point consistently to the fact that teaching and learning are strengthened when "teachers collectively question ineffective teaching routines, examine new conceptions of teaching and learning, find generative means to acknowledge and respond to difference and conflict, and engage actively in supporting professional growth" (Little, 2002, p. 917).

These collaborative practices can vary in approach, but Brown and Duguid (1991) claim that work performed in a Community of Practice is more effective for relaying information and experience as a teacher of knowledge. Wheatley (2006) says,

> We know that the best way to create ownership is to have those responsible for implementation develop the plan for themselves. No one is successful if they merely present a plan in finished form to others. It doesn't matter how brilliant or

correct the plan is—it simply doesn't work to ask people to sign on when they

haven't been involved in the planning process (p. 68)

Moreover, we know that "effective teachers also work collaboratively with other

staff members. They are willing to share their ideas and assist other teachers with

difficulties. Collaborative environments create positive working relationships and help

retain teachers" (Stronge, 2007, p. 29). A system that supports such collaboration is one

that could capitalize on the research about effective collaborative practices.

Issues of Practice. In addition to support for Community of Practice formation,

the literature provides cautionary tales as well. Balkanization, when strong groups reflect

indifference and hostility to other groups, goes beyond the necessary loyalty needed in a

Community of Practice. Such factionalism inhibits initiatives and innovation as the

group fails to see their place in the larger organization (Wenger et al., 2002). Fuller

(2007) expands on this notion of group isolation, "The notion of learning in communities

of practice places too much emphasis on the learning that takes place 'inside the

community' and does not reflect the importance of the learning that takes place through

participation in multiple social places" (p. 26).

Another issue of practice arises within the participant group when members

cannot "put aside their personal perceptions and to adapt to the collective decisions of the

community of practice" (Flogaitis, Nomikou, Namoum & Katsenou, 2012, p. 225).

Wenger et al. (2002) contributes to this concern, suggesting that Community of Practice's

can suffer internal wars. Such disagreement is not altogether a problem as Fullan (2001)

argues that people "are more likely to learn something from people who disagree with us

than [they] are from people who agree" (p. 41).

Communities of Practice can also become places to share unproductive frustration and the collaboration disintegrates into venting sessions about the outside organization. This hampers the group who disengages from the original Joint Enterprise and instead forms a community of collective discontent (Wenger et al., 2002). Related to misplaced purpose, some communities focus too heavily on documentation so that the purpose becomes creating documents. Wenger (1998) says, "Competence can become so locally ingrained, and socially efficacious that it becomes insular" (p. 175).

Lastly, groups that function as Community of Practice's may sometimes be resistant to change and may not externalize their collective learning (Mittendorff, Geijsel, Hoeve, deLaat & Nieuwenhuis, 2006, p.301). A reluctance to change can hinder the groups' progress toward Mutual Engagement and sharing their repertoire since it indicates acceptance and support of change.

Chapter Three

Method

For the purposes of this program evaluation, I evaluated the development of a Community of Practice collaboration program and determined the feasibility and effectiveness of such a program in an educational setting.

Participants

The sixth grade Language Arts teachers at Upper West Middle School began the implementation of Teacher's College Reading Workshop (TCRW) in the 2014-15 school year. A varied group of teachers in expertise, background, and training in TCRW, the participants had not yet worked together in collaboration prior to the start of the study. As this was a study in the evolution of a community of practice, the background of each participant was a contributing factor to the analysis.

- Teacher A was the Department Chair for the Language Arts Department and had 11 years of elementary teaching experience before coming to the middle school in 2011. She received formal training in TCRW in the summer 2014 at Columbia University as well as informal observations of fifth grade teachers in the district during the 2013-14 year of TCRW implementation.

- Teacher B had been teaching sixth grade at Upper West Middle School for 38 years and had indicated an interest in retiring next year. She observed fifth grade teachers at a district elementary school as they implemented TCRW throughout the spring 2014 and spent the summer reading through the curricular materials and resources.

- Teacher C was a Reading Specialist at the high school from 2011-2014 and indicated to the district that she wanted to be back in a regular classroom. As a Reading Specialist for 22 years, Teacher C had exposure to various iterations of TCRW and indicated that she did not need more formal or informal training to be successful in implementation of the curriculum.

- Teacher D was beginning her first year at Upper West Middle School after a ten-year career in one of the district elementary schools, including instruction in fifth grade and Gifted learning. She did not receive formal or informal training in TCRW except through information gleaned from teachers in the elementary school where she taught prior to coming to Upper West Middle School.

- Teacher E was a new hire at Upper West Middle School after serving as a student teacher at one of Upper West School District's elementary schools where she worked with her cooperating teacher on implementation of TCRW. She also attended the summer institute in 2014 along with Teacher A to further her skills and provide turn-around training within the participants.

- Teacher F was a new hire whose experience the year before was as a long-term substitute at Upper West High School. She received no observation or formal training of TCRW, having been hired at the end of August 2014. She received the resources for TCRW, but had no time to familiarize herself with the concepts of the curriculum prior to the start of the school year. She indicated an interest in moving to a high school position as soon as one became available.

Table 2 details the disparate information on each of the participants of the study. All of the participants were female with ages ranging from 23 to 62. The participants were separated into two different middle school teams, each of which had three Language Arts teachers on the team. One team was located on the second floor in side-by-side classrooms. The other team was located on the first floor with classrooms located within walking distance from one another.

Table 2

Background and Comparison of Teacher Participants

Teacher	UWSD Years of Service	Training/TCRW Background	Other
Teacher A	13	Formally trained on Reading Workshop in a two-week summer institute	UWMS Department Chair
Teacher B	38	Reading Specialist with prior knowledge of RW	Set to retire at the end of the year
Teacher C	29	Reading Specialist with prior knowledge of TCRW	Requested a transfer to the middle school from the high school
Teacher D	12	No formal training in TCRW; observed TCRW in the elementary school in the previous year	Requested a transfer to the middle school from the elementary school
Teacher E	.5 (Student Teacher)	Implemented TCRW with UWSD cooperating teacher in the elementary school; formally trained on Reading Workshop in a two-week summer institute	
Teacher F	1 (Long-term substitute at UWSD high school)	No experience with TCRW	Hired following a late August retirement

Data Sources

The program evaluation included three collection methods: observations/recordings of weekly Community of Practice sessions from September 2014 through May 2015, individual reflection journals from each participant, and individual interviews of participants. As the purpose of this study was to contextualize the prescribed elements of an effective Community of Practice collaboration program and to determine its feasibility in the public school setting for curricular implementation, a qualitative methodology approach was used. Situated in the Constructivist Paradigm and the Values Branch, this program evaluation focused on the multiple values and perspectives of the participants since "reality is constructed by individuals through reflection upon their experiences and in interaction with others" (Mertens & Wilson, 2012, p. 136). In the case of this study, the evaluation was formative in that the evaluation conclusions informed the researcher about the feasibility of consistent use of Community of Practice in an educational setting.

Measure one. Full participation by all members and regular meetings were integral to the Community of Practice program. Firstly, full participation was a critical "source of identity" (Wenger, 1998) to "create mutuality within the community" (p. 57). Furthermore, it was important in that "participation can involve all kinds of relations, conflictual as well as harmonious, intimate as well as political, competitive as well as cooperative" (p. 56). This was important to observe as the group dynamics of a Community of Practice can influence its effectiveness and feasibility for continuation.

Secondly, to be fully effective, participants met regularly to discuss issues, concerns, and implementation strategies for Reading Workshop. To this end, the

participants were expected to meet during an after-school time period once a week with all members in attendance. The meetings were held in Teacher A's classroom and lasted for 45 minutes. All meetings were audiotaped and given to the researcher to be transcribed.

As the "Broker" (Wenger, 1998), I attended half of the Community of Practice meetings to address specific concerns related to the implementation of TCRW or as needed by request of the group. The other 50% of the meetings were run and attended exclusively by the participants to measure their development of a Community of Practice without outside pressure or influence from a supervisor/researcher.

Measure two. The second data source came from the reflection journals completed by each participant at the beginning, the mid-point and the end of the year. As the participants engaged in a Community of Practice regarding the implementation of TCRW, each teacher conducted her own Action Research with respect to the goals, interventions and outcomes of the TCRW implementation. The reflections and interviews; however, only contained qualitative data on the Community of Practice program as it was implemented/actualized. As such, the measurement provided data for evaluation of the actualization or non-actualization of the Community of Practice program elements as well as the participant perception of the effectiveness of the program.

The reflection journals were based on a two-part response where participant perception about curriculum-in-use alignment across teachers and the perception of whether or not the Community of Practice program contributed to the FOI. Responses to this question at the beginning, middle and end of the implementation year provided data

for the analysis and differ slightly in phrasing. Creswell (2009) recommends beginning

with a broad question "so as not to limit the inquiry" (p. 129) and indicates that the

research questions would "evolve and change during the study in a manner consistent

with the assumptions of an emerging design" (p. 131). Table 3 indicates the inquiry

question at each stage, reflecting the changing language over the course of the school

year of study.

Table 3

Reflection Journal Inquiry Questions

September Inquiry Question	January Inquiry Question	June Inquiry Question
How can we work collaboratively to ensure authentic and consistent TCRW (fidelity) implementation?	Has there been fidelity of implementation of TCRW across the grade? Is there a correlation between the Community of Practice program and the implementation fidelity or lack of fidelity?	Has there been fidelity of implementation of TCRW across the grade? Is there a correlation between the Community of Practice program and the implementation fidelity or lack of fidelity? How can the Community of Practice program be improved?

Measure three. The third data source came from pre and post implementation

interviews with participants on an individual basis. The pre-interview took place in

August prior to the start of the Community of Practice program and was scheduled for

approximately 60 minutes to allow for elaboration and follow-up questions. The

questions on the pre-implementation interview focused on perceptions of the Community

of Practice program, concerns, goals, and expected outcomes.

The post-implementation interviews with each participant took place in late May and focused on teacher perception, concerns, achievements and conditions for improvement. The interviews were individually held and participants were provided 90 minutes for full elaboration, follow-up questions, and a review of the participant's Action Research data. These data were not included in the study as the focus for the teachers' Action Research was the effectiveness of TCRW and not the Community of Practice program.

Interview Protocol. For the qualitative study, I implemented a semi-structured, face-to-face interview protocol. I took notes during the interviews, audiotaped the interviews and transcribed them. The interview protocol for both the pre and post-implementation interview included a set of questions asked of every participant in the same order with the option for elaboration and/or follow-up questions as needed. The interview protocol also included an initial statement regarding the nature of the interview and the opportunity to speak freely and with elaboration. The interview protocol and questions are located in Appendix A.

Data Collection

Each of the six teachers participating in this study was selected due to her assignment as a sixth grade Language Arts teacher in the Upper West Middle School. The sixth grade was the only middle school grade at Upper West Middle School implementing the new reading program during the study. This study was intended to inform the need for continued Community of Practice in subsequent years as well as new Community of Practice programs in 7th and 8th grade Language Arts once the TCRW program moved to those grades.

Even though each grade in Upper West Middle School is divided into two middle school teams; the Language Arts Department expects consistent implementation of the curriculum across all teachers. As the implementation year of a new reading program, the year of the research study correlated and required full participation in the collaboration program to adhere to that expectation.

As an incentive to participate, teachers were provided guidance on their district-mandated Action Research project. The project was meant to fulfill the Professional Growth Plan—a component of the differentiated supervision model of the Upper West School District. Teachers had the option of choosing a Portfolio, a Lesson Study, or an Action Research project. As a new component to the supervision model, Professional Growth Plans were an unfamiliar format for supervision, and as all of the participants had no experience using Action Research, each participant expressed interest in learning the methodology with Central Administration guidance.

In Upper West School District, all non-tenured teachers are placed on the Observation phase of the supervision model; therefore, two of the participants did not need to complete a Professional Growth Plan. Teacher E and F participated in the Community of Practice Program, as they were part of the TCRW implementation team; however, they did not complete Action Research Projects as well.

Each of the data sources had a different collection method. I took notes and audiotaped the Community of Practice meetings each week when I was in attendance (measure one). The participants were aware of the taping and note taking prior to the start of the meeting. The meetings where I was not in attendance, the Department Chair (Teacher A) taped the meetings using the provided taping equipment. Audiotapes were

picked up after the meeting and transcribed along with the meetings for which I was present.

Measure two (reflection journals) were collected at the beginning, mid-point and end of the study. Teachers had the option of handwriting or typing their responses. Typed responses could be sent via email and handwritten responses were sent via interschool mail.

Measure three (individual interviews) included both notes and audiotape, transcribed later for coding and analysis. These were collected at the time of the interview and available for review by the participants.

Data Analysis

The data from the Community of Practice program was evaluated based on the actualization of a Community of Practice as prescribed through the elements found in successful Communities of Practice. The theory of action was that a Community of Practice program, if applied consistently throughout a new curriculum implementation year, would provide an effective collaboration system for authentic and consistent implementation of new initiatives across participants. As such, the data reflected the feasibility of a Community of Practice program within the context of an educational setting. Using the prescribed elements of an effective Community of Practice program, I measured the progress of the actualized Community of Practice to its prescribed elements and then determined the possible reasons for discrepancies and/or alignment to the program's model stages. Evaluation questions, data sources and data analysis methods are indicated in Table 5.

Measure one. The observations and transcriptions based on the audio recording

of each meeting were analyzed through a coding system to evaluate the existence of the

prescribed elements of the Community of Practice program (Table 1). These codes were

"process codes" (Creswell, 2009, p. 187) based on the elements I "expected to find, based

on the past literature" as well as "codes that address a larger theoretical perspective in the

research" in this case, the expected development of a Community of Practice in an

educational setting (Creswell, 2009, p.186-187).

For measure one, the natural evolution of a Community of Practice in theory

includes Stages of Development. The observations and/or transcriptions of the

Community of Practice meetings were analyzed for the presence of each stage, noting the

dates of emergence and the consistency of evidence to indicate whether or not the

participants fully actualized the stage. In this way, I used a combination of

predetermined codes and fit the data to the established codes.

In addition, the transcriptions of the meetings were coded for evidence of the

Dimensions of Progress (Mutual Engagement, Joint Enterprise, and Shared Repertoire).

In this case, the codes were based on both the use of predetermined codes as well as

"emerging information collected from the participants" (Creswell, 2009, p. 187) since

participant statements did not necessarily fit the prescribed Dimensions of Progress, but

demonstrated progression or regression of the program nonetheless.

The codes for each category are listed in Table 4. It was conceivable that

statements made by participants could be coded for multiple categories. For example, a

teacher may have indicated through transcribed commentary that the meetings have

become a lifeline for understanding the TCRW curriculum and having materials to use.

In such an instance, the comment indicated the presence of the Maturing stage since in this stage the members have built a reliance on the community. Additionally, the comment indicated the presence of Shared Repertoire since sharing and storing resources indicated the presence of the group identity and responsibility to one another.

Table 4

Category Coding for Prescribed Elements of the Community of Practice

Category	Characteristic/Stage	Code
Stage	Potential	P
Stage	Coalescing	C
Stage	Maturing	M
Dimensions of Progress	Joint Enterprise	JE
Dimensions of Progress	Mutual Engagement	ME
Dimensions of Progress	Shared Repertoire	SR

Measure two. For measure two, reflection journals indicated the degree to which the participants saw the Community of Practice program as a contributing factor to the FOI of TCRW. These data came from the inquiry questions shown in Table 3.

The September inquiry question prompt established a base line of the participants' impressions of the Community of Practice program and their expected outcome. Responses were not coded by predetermined expectations; rather emerging information about the participant's perception of the experience and the connection between the Community of Practice program and FOI of the new curriculum were analyzed against the previous reflection journal entree. As such, these qualitative data established goals and concerns specific to each of the participants to be noted and analyzed in subsequent journal entries.

The January inquiry question prompt for the reflection journal sought participants' impressions on the implementation of TCRW and the correlation of the weekly Community of Practice program meetings to the FOI of TCRW. Answers to these questions were analyzed for direct commentary on the impact or lack of impact on Community of Practice meetings for better curricular implementation alignment. It was analyzed for whether or not the comments were consistent with the September expectations.

The June inquiry question prompt contained the same language as the January prompt with the addition of a third prompt that asked for feedback on improving the Community of Practice program. Participants' responses were noted and analyzed in the same manner as the January reflection journal. As the long-term outcome of the study was to implement a Community of Practice program in other subject areas with new curricular initiatives, suggestions for improvement had the potential to aid in future endeavors.

For the purposes of analyzing responses for qualitative data, answers to the third question were coded according to the category to which the response aligns. For example, if the response indicated that the participant believed the Community of Practice did not allow equal time to share experiences, it was coded as an indicator that the Community of Practice stalled in the Coalescing stage where ideas of interest begin. It was also be coded as an indicator that Mutual Engagement did not occur since all members did not feel comfortable sharing experiences.

Measure three. Pre-implementation and post-implementation interview questions aided in triangulating the data from measure two to increase the validity of the

study. As both were written and spoken perceptions of the participants, consistency of

participant responses were analyzed to "build a coherent justification for themes"

(Creswell, 2009, p. 191).

Table 5 attributes the data sources and analysis of data to the evaluation questions

found in Figure 2.

Table 5

Attribution of Data Sources and Analysis to Evaluation Questions

Evaluation Question	Data Source	Data Analysis
Question 1 To what extent do the *Community of Practice* program elements become actualized in an educational setting?	Observations/recordings/transcription notes of weekly Community of Practice meetings	Meeting transcriptions were coded for prescribed elements (Stages of Development and Dimensions of Progress).
	Reflection Journals	Reflection journals were analyzed for participant perception of correlation between FOI and the Community of Practice program.
	Pre-implementation and Post-implementation interviews with participants	Interviews were analyzed for baseline expectations of a Community of Practice compared with outcomes and to triangulate the data from reflection journals.
Question 2 What accounts for the actualization or non-actualization of the *Community of Practice* program elements in an educational setting?	Reflection Journals	Reflection journals were analyzed for participant perception of correlation between FOI and the Community of Practice program.
	Pre-implementation and Post-implementation interviews with participants	Interviews were analyzed for baseline expectations of a Community of Practice compared with outcomes and to triangulate the data from reflection journals.
Question 3 How effective was the Community of Practice program for collaboration in an educational setting?	Reflection Journals	Reflection journals were analyzed for participant perception of the impact and feasibility of continued Community of Practice program implementation.
	Post-implementation interviews with participants	Interviews were analyzed for perception of the impact and feasibility of continued Community of Practice program implementation.

Timeline

The timeline for the program evaluation is indicated in Table 6. The use of extant data for the study is reflected in the timeline.

Table 6

Program Evaluation Timeline

Date	Action
August 2014	Meeting with participants to introduce the Community of Practice program and to create the context for its implementation
August 2014	Individual pre-implementation interviews on perception and expected outcomes of Community of Practice program
September 2014-April 2015	Implementation of Community of Practice program through weekly or bi-weekly meetings with participants. All meetings were taped and transcribed. Researcher attended more than 50% of the meetings.
September 2014	First participant reflection journal were due to researcher.
January 2015	Second participant reflection journal were due to researcher.
May 2015	Individual post-implementation interviews on perception and actualized outcomes of Community of Practice program
June 2015	Third participant reflection journal were due to researcher
September 2015	Submission of Dissertation Proposal using extant data as a basis for research study
October 2015	Defense of Dissertation Proposal using extant data as a basis for research study
October-December 2015	Analysis of extant data
	Evaluation of Community of Practice program in an educational setting
January 2015	Report results of study to UWSD Central Administration Defense of Dissertation

Limitations

There are a variety of assumptions, limitations, and delimitations that were accounted for in the proposal.

Assumptions. It was assumed that the participants responded truthfully in the reflection journals and the pre-implementation and post-implementation interviews. It was further assumed that teachers participated in the Community of Practice program in good faith with attempts to collaborate on strategies for implementation of TCRW. Although the study was not organically developed – that is the participants did not come together on their own to devise a collaboration program – it was assumed they understood and valued the notion of collaborative work among colleagues of a similar subject area.

Limitations. A first limitation was my role as the Broker as well as the researcher. The Broker role, by definition, is one where a member functions as an organizational leader outside of the Community of Practice and "sponsors" the work of the Community of Practice (Wenger, 1998). Issues can arise from having a Broker since there exists "two opposite tendencies: being pulled to become full members and being rejected as intruders" and encourages that the "contributions lie precisely in being neither in nor out" (Wenger, 1998, p. 110). As the Director of Education the Upper West School District, I functioned as the curriculum coordinator of Language Arts. This limited the ability of the Community of Practice team to work through issues as a collective unit when resources or external solutions are the necessary intervention, and I functioned as the one in the position to supply them. My attendance at the Community of Practice meetings had the potential to limit the group's ability to take full ownership of the Community of Practice program.

My role as the researcher was an even greater limitation in the study. It was assumed that the researcher and Broker could be the same person; however, to serve as researcher and Broker to the organization, there was the potential for a two-fold complication. Consistently observing the process and interviewing the participants throughout the development of the Community of Practice had the potential to taint my membership by both the leadership and researcher role, potentially effecting the development by subtle pressure to conform to the typical development stages outlined in training. There was the threat of a form of "groupthink" (Janis, 1982) due to my presence in both roles. Although I did not directly supervise or evaluate the participants as teachers, my "past experiences and person connections" had the potential to create the illusion of consensus (Grossman et al., 2001) in Community of Practice meetings and still not guarantee compliance with the curriculum-in-use.

Secondly, evaluating the actualization or a non-actualization of a Community of Practice program required a comparison of the prescribed elements to the adherence of them in development. A Community of Practice, however, "evolves in organic ways that tend to escape formal descriptions and control" (Wenger, 1998, p. 118). This paradox made a measurement of FOI difficult, except in the comparison of potential stages against the actualized stages. Harn, Parisi, and Stoolmiller (2013) claim, "in education, treatments and interventions tend to be multidimensional—involving consideration of not just what and how long a practice is taught, but also how well" (p. 182).

Since the study was situated in the area of collaboration, the group dynamics and personality traits of the participants had the potential to limit the study as well. Although participants agreed to participate, they had not worked together as a complete team prior

to the implementation of TCRW. More importantly, the participants in the study did not

receive training in group dynamics or protocols for effective collaboration. This limited

the study in that the actualization of a Community of Practice was reliant on prior

knowledge or training for effective collaboration, a variable that was not controlled for in

the study.

A final limitation was the presence of the Language Arts Department Chair as a

participant in the study. There was the potential that her role as the leader of the

department could become a default role as the leader of the Community of Practice,

resulting in a non-actualization of a Community of Practice due to previously defined

department roles.

Delimitations. The study focused on the implementation of a Community of

Practice program within the context of sixth grade Language Arts. As such, a

delimitation of the study was the collaboration program chosen from which to test the

theory of action. Although collaborative programs and approaches could have been

equally relevant to the study, a Community of Practice program provided prescribed

elements that indicate the presence of collaboration was becoming actualized, thereby

allowing a measurement tool.

A second delimitation was the program evaluation focus along with the research

questions chosen for this study. Program evaluation as "an applied inquiry process for

collecting and synthesizing evidence that culminates in conclusions about the state of

affairs, value, merit, worth, significance, or quality of a program, product, person policy,

proposal or plan" (Fournier, 2005), provided a lens through which to understand the

development of collaboration and measure its effectiveness from the perspective of those involved in the program (p. 139).

The research questions were designed to evaluate the presence of the Stages of Development and the Dimensions of Progress so that I might determine the effectiveness of the Community of Practice program in an educational setting and for subsequent curricular initiatives.

Ethical Considerations

Creswell (2009) explains, "A core idea of participatory research is that the inquirer would not further marginalize or disempower the study participants" (p. 88). Important to the study was that the participants were willing to open their teaching practice to others in the Community of Practice program. I consistently stressed that the outcome data would be used solely to evaluate the feasibility of a Community of Practice program in an educational setting and not for evaluation or supervision purposes. Pseudonyms and other coding practices (Teacher A, Teacher B) were used in place of teacher names.

Propriety. In an effort to support what is fair, legal, and just, this program evaluation adhered to the area of propriety in the JCSEE (Yarbrough & Shulha, 2011) by being responsive to stakeholders and their communities, fair in addressing stakeholder needs, communicating findings, and addressing real or perceived conflicts of interest that could compromise the evaluation. As the study was intended for use by the school district to test the feasibility of implementing a Community of Practice program during new curricular initiatives, the stakeholders, including the participants, building administration and central administration had regular communication and feedback on

formative and summative results. Through consistent communication with each

participant, I discussed any perceived conflicts of interest in my role as the Broker so that

my role did not significantly interfere with the Community of Practice program Stages of

Development in the study (Potential, Coalescing, Maturing). This form of "member

checking" (Creswell, 2009, p. 191) was an accuracy measurement done through a follow-

up interview with each participant regarding a portion of the finalized product.

Utility. My professional background in curriculum development and

implementation as well as collaboration /committee work for joint ventures in education

provided a credible, qualified evaluator for this program study. Through the experience

in the Executive Ed.D. program at The College of William and Mary, I was practiced in

group dynamics as there was an informal Community of Practice in the cohort model of

the doctoral program.

The evaluation had relevant utility in that participants enter and exit collaborative

groups regularly in the UWMS. A realized understanding of the Community of Practice

program provided a model for negotiating knowledge and experience to reach consensus

on various aspects including cross-curricular lessons, child study, Individualized

Education Plans, and middle school team events and activities. The Community of

Practice program provided opportunities for participants to rediscover and reinterpret

their behaviors and gain an understanding of their part in the collaborative whole.

Identification of participants would be limited to Teacher A, B, C, D, E and F.

This protected the teachers from future evaluative use of the data for supervision or rating

purposes.

Feasibility. This program evaluation required that participants work together in the Community of Practice program to design, revise, and implement new curriculum. Where TCRW was unfamiliar to the participants, collaboration among teachers was familiar and occurred regularly in UWMS. Reflection journals were a necessary part of the Professional Growth Plans and provided participants a method of inquiry to provide qualitative data for this supervision requirement. Lastly, although formal curriculum interviews between the teachers and the Director of Education were uncommon in UWMS, teachers worked regularly in vertical teams with the Curriculum and Education Office and had developed an understanding of the two-way communication system between the two.

Accuracy. So as to ensure the dependability of findings and interpretations of the data, the study had multiple data points so as to cross-reference the interpretations. Perceptions of the researcher with respect to previous interactions and potential bias for or against the participants were eliminated through a coded system aligned to the essential elements of a Community of Practice according to Wenger (1998). Secondly, providing a portion of the study results to participants for member checking helped to create better accuracy. Feedback on the evaluation results had the potential to result in a revision of the findings.

Approval. The Upper West School District agreed to pilot a Community of Practice program in sixth grade Language Arts in an effort to empower teacher groups to work collaboratively without need of external trainers, system management or administration. Inquiry into this program originated at the Curriculum and Education Office after a reduction in staff and a decrease in Professional Development monies. The

data collection on the feasibility of a regularly applied Community of Practice program

occurred as a part of the pilot and would be used for the purposes of this program

evaluation.

Chapter Four

Findings

This chapter represents the findings of the study researching a Community of

Practice program in an educational setting. The extent to which the Community of

Practice became actualized, according to the prescribed elements, as well as the

effectiveness of a Community of Practice program as a means of collaboration has been

analyzed and is presented in this chapter. Findings are organized around the three

research questions:

1. To what extent do the Community of Practice program elements become

    actualized in an educational setting?

2. What accounts for the actualization or non-actualization of the Community of

    Practice program elements in an educational setting?

3. How effective was the Community of Practice program for collaboration in an

    educational setting?

Evaluation Question #1

Data analysis for the first evaluation question relied on the transcribed notes from

the Community of Practice meetings, the reflection journals from the six participants in

the study, and the pre and post-implementation interviews of the participants. The

transcription notes based on weekly Community of Practice meetings provided evidence

of the Stages of Development and Dimensions of Progress as they evolved throughout the

year of implementation. In this way, I was able to categorize the presence of the Stages

of Development and Dimensions of Progress through interpretation of participant

statements within the transcribed meetings based on the characteristics listed for each

Stage and Dimension according to Wenger (1998). The findings have been organized

according to the Stages of Development and the chronological months of expected

development. Dimensions of Progress are discussed in sub-sections according to the

Stages of Development in which they are expected to occur.

Potential Stage of Development (August & September). The initial stage of a

Community of Practice is Potential and is characterized by a common vision, the

establishment of Community of Practice goals, and the emergence of collaboration roles.

Furthermore, the Community of Practice emerges as a shared resource contributing to the

belief that there is benefit to collaboration in a Community of Practice. In this study, the

participants began meeting in August prior to the start of the school year. Statements

made during Community of Practice were analyzed in the first four meetings from

August through September to determine the extent to which the Potential stage was

actualized.

According to the transcribed meetings, Potential stage statements were made most

heavily during the first three meetings, referenced in Table 7. These data show an

alignment to the developmental stages that Wenger describes in his literature; although

the first and second meeting included statements aligned to the Coalescing and Maturing

stages as well. Table 7 also indicates the number of occurrences of the Dimensions of

Progress discussed later in this section.

Table 7

First Semester Meeting Date Summary of Stages of Development and the Corresponding
Dimensions of Progress Occurrences

Date	Potential	Coalescing	Maturing	Mutual Engagement	Joint Enterprise	Shared Repertoire
8-28-14	6	4	2	2	0	6
9-4-14	3	1	1	0	0	5
9-11-14	5	5	0	0	1	1
9-18-14	2	5	0	0	1	1
9-24-14	0	4	0	0	1	2
10-13-14	0	0	3	0	0	2
10-16-14	0	4	4	0	2	2

Statements of the Potential stage include examples that indicate the necessary
goal setting as a characteristic of this stage. For example, Teacher B said, "We should
maybe come up with the curriculum we want to use for September, the writing
curriculum, and a rubric to use along with the categories in MMS for the posters." In this
way, establishment of the work/tasks of the Community of Practice stands in for goal
setting as this Community of Practice program has been implemented to create a unified
approach to TCRW.

In another example, Teachers A, B, D and F engaged in the following dialogue
about goals. As they discussed the need to level classroom library books, they sought to
embed the decision into the larger goals of the Community of Practice meetings:

Teacher F: Should we decide how to level books?

Teacher D: That could take a few months plus organization.

Teacher F: We should do it the same way though.

Teacher B: Books from Scholastic come quickly and we can level them

right away.

Teacher F: The library also has books already leveled, so between these

options, I don't think we need to do leveling here.

Statements with characteristics of the Potential stage continued to be made throughout the

first month of meetings, resulting in consistent development of a shared vision and the

emergence of a seeing the benefits of shared resources.

The emergence of collaboration roles appeared the least among the indicators of

the Potential stage. Teachers A and C showed early signs of discontent with one another

and power struggles ensued. Hodge (2014) indicates, "the political dimension of

practices creates sites of contestation structured by power relationships" (p. 168).

Discontent among the members can be expected during the Potential Stage of

Development; however, it expected to diminish in the Coalescing stage where separate

realities begin to converge into an established group identity rather than individual

identity. During the Coalescing stage, participants must negotiate the difference in

knowledge base to bring about this group identity. There was a flawed assumption that

trust and respect already existed within the members of the group (Teachers A, B, C, and

D) who had worked together in the past.

According to the data from the Community of Practice transcriptions, the

reflection journals, and the post-implementation interviews, disharmony and ensuing

power struggle between Teachers A and C were not satisfactorily diminished throughout

the Community of Practice program and as such, contributed to some of the lagging

development of the Community of Practice. Mutual Engagement, a requisite Dimension

of Progress in a Community of Practice was not evident for these two teachers, but did

occur among members of the group at large. Discussion of this dimension and the

conflict between Teachers A and C occurs in the next section.

    Mutual Engagement. The Dimension of Progress most at work in the Potential

stage is Mutual Engagement according to Wenger (n.d.). Although there were two

statements made in the first month of meetings that indicate the enabling elements of

Mutual Engagement, several statements of interpersonal conflict occurred as well.

Whereas the Potential stage calls for an alignment of goals, Mutual Engagement is not

only characterized by establishing goals and developing a shared vision, but by

negotiating separate realities which authenticate the engagement and stimulate growth

(Wenger, 1998).

    The following conflict indicates the emergence of tension between Teachers A

and C as they attempt to build community knowledge from separate realties:

    Teacher A: Launching the writer's notebook, we have an entire week for

    setting that up.

    Teacher C: And that's all detailed? Where is that?

    Teacher A: In my head.

    Teacher C: Well, that's fabulous, but it's not in my head.

    Teacher A: I am not the curriculum director.

    Teacher C: I am not asking you to give me anything you should not be

    giving me.

    The two members of the Community of Practice continued to conflict in their

viewpoints throughout the first two months of the study, never moving into the Joint

Enterprise phase of Dimensions of Progress. This disharmony could be felt throughout

the study and is also discussed in later data sources, including reflections and post-interviews.

Although out of sequence with Wenger's (n.d.) Dimensions of Progress, participants made several Shared Repertoire statements during the Potential stage as they attempted to define procedures, tools, techniques and actions as shown in Table 7. This is a natural occurrence for implementation of new curricula since teachers operate daily with systems of instruction and may be anxious to establish these; however, in a Community of Practice program, Shared Repertoire should come much later in the program as part of the Maturing Stage of Development. The reason for this is that in the Potential stage, the relationships are built through recognition of member differences, negotiating those differences in prior experience, and the alignment of community goals builds trust among the Community of Practice members. In that way, when participants determine procedures, techniques, tools and actions in the later Stages of Development, trust in such decisions is part of the formula for implementation fidelity.

Coalescing Stage of Development (October). As seen in Table 7, participants' statements that reflected the presence of the Coalescing Stage of Development existed early in the program and continued to exist throughout the first two months of the program. Where the Potential stage of the program allows teachers to establish goals and share a common vision, Coalescing is a deeper stage for defining the Joint Enterprise, negotiating the community internally as well as the role of the Community of Practice within the larger organizational community. It is this latter, organizational community that figured more prominently in the participants' statements and the tasks of the Community of Practice in September and October. Statements regarding the community

within the Community of Practice occurred as well, just not as often. For example, in the September 18, 2014 meeting, Teacher A passed out notecards to the Community of Practice members and asked them to write down the topics they most wanted to discuss in the Community of Practice for the next six weeks. This evidence of developing an internal community was further increased when teachers each took turns sharing their lists.

Defining the role of the Community of Practice within the larger organization occurred regularly throughout the year as the Community of Practice determined the level of their autonomy given the fact that they were part of a learning sequence from 5th grade and acted as a feeder grade for the 7th grade program. For example, Teacher D said, "Wouldn't it be nice if we had the elementary reading specialists do a universal screening of kids for us, take an extra week?" Following the statement, several teachers indicated that the library would also be a resource and that the Community of Practice decisions could withstand external presence without an interruption of decisions made within the community.

Joint Enterprise. The presence of Joint Enterprise as a Dimension of Progress is seen in both the Coalescing and Maturing Stages of Development according to Wenger, where in the former, Joint Enterprise emerges and in the latter, it may be redefined as the context, roles, and membership changes. During the September 11, 2014 meeting, three teachers worked to define the ways in which they could engage in a Joint Enterprise although it is early in the Dimensions of Progress according to Wenger's (n.d.) literature:

Teacher C: It's not that I'm not familiar with Writing Workshop, but I want a direction and a framework. I think we should all be doing the same thing.

Teacher D: I felt like you wanted me to provide you something.

Teacher C: I'm not asking you to provide me anything. Just give me a book or something.

Teacher A: I would show you guys how to do it and how to avoid the worst ways. Let's do that next time.

In the September 24, 2014 meeting, teachers continued to define their Joint Enterprise with the following dialogue:

Teacher E: Can we do that next week? Can we take a band and find passages?

Teacher C: If we have grade levels already then we know the bands already and can do that.

Teacher E: If we are going to proceed with this, we should do it next time.

Teacher D: Yeah, it's just a matter of time before parents start asking how my kid is doing.

Teacher B: We can show you want we are doing for feedback on the second floor. Would that help?

At the end of October, the Community of Practice program members made the decision to temporarily discontinue the Community of Practice program for November and December in lieu of additional training in TCRW. Although participants continued to discuss upcoming units and shared their resources, the formal meeting times were used

instead to recalibrate the program with external training. Evidence of the Coalescing

stage dropped off once the Community of Practice resumed in January although Joint

Enterprise continued to build as the Community of Practice entered the Maturing stage of

development.

Maturing Stage of Development (January—May). In the Maturing stage of

development, a community identity is built and reliance on the Community of Practice is

fully actualized. Members see the community as a knowledge source for project

management, giving useful advice, sharing lessons learned, producing artifacts, and

renewing their interest in the Community of Practice. Relationships evolve in the

Maturing stage and members adapt to change.

From mid to late October, elements of the Maturing stage of development began to occur

regularly, despite the earliness of its presence, according to Wenger's (n.d.) literature;

however the greatest spikes of evidence were found in the second semester from January

through May shown in Table 8. This is concurrent with Wenger's literature on this

developmental stage of a Community of Practice

Table 8

Second Semester Meeting Date Summary of Stages of Development and the Corresponding Dimensions of Progress Occurrences

Date	Potential	Coalescing	Maturing	Mutual Engagement	Joint Enterprise	Shared Repertoire
1-7-15	0	1	8	0	4	6
1-21-15	0	0	2	2	3	1
1-28-15	0	0	4	0	0	0
2-2-15	0	0	5	0	1	1
2-11-15	0	1	6	2	2	2
2-25-15	0	0	7	0	0	0
3-3-15	0	0	3	0	2	3
3-11-15	0	1	3	0	0	2
3-18-15	0	0	6	0	5	5
4-8-15	0	3	6	0	4	5
5-13-15	0	0	6	4	4	5
5-27-15	0	0	5	3	3	4

January saw more examples of socializing that might have typically occurred in the Potential stage. Evaluating the latent development of characteristics of an earlier stage would require data that measured the participants' relationships prior to the study against the evolution of relationships once the program began. As that was not the case in this study, any conclusion about the socialization data is theoretical only. One theory for the increased socialization was that the TCRW program was more familiar to teachers by the second semester and the Community of Practice members had grown more comfortable sharing resources, collaborating on artifacts and offering advice based on data taken from transcriptions of the Community of Practice meetings. Trust in the

TCRW program, the participants' intentions, and the Community of Practice program may have provided an eased atmosphere that led to better camaraderie, which in turn appeared to engender greater interest in aligning practices.

In the February 25, 2015 meeting after almost 10 minutes of what Teacher F called, "Adult Conversation", Teacher D shared,

> Today was the official launching of student book groups. I gave them a few minutes at the end of class to jump start their reading. A student came and asked if she could do a harder book. I kind of made an on the spot decision, but we should talk about what we would do in those situations.

A discussion about best practices ensued and a decision was made without much debate.

Additionally, teachers began to share their classroom experiences and indicated through the following dialogue how their reliance on Community of Practice has increased:

> Teacher D: How is everyone doing with *Tangerine*?
>
> Teacher B: I'm halfway through it and I love it. The kids love it. I have a few students who figured things out ahead of time.
>
> Teacher D: I wish I had read it ahead of time because when I got to the part where Mike died, I was completely thrown for a loop.
>
> Teacher A: I am so glad that you read ahead of me and told me that because now I know what to do in my class.

By the end of January, inquiry into Community of Practice consensus became a consistent part of the dialogue. Statements such as "Is everyone okay with this?" and "Does it look alright to everyone?" and "Is everyone comfortable with next week?"

became routine for nearly all issues of Joint Enterprise. Furthermore, participants began to visit one another in their classrooms to gain understanding of teaching style. As this is a characteristic of Joint Enterprise, where participants feel responsible for one another and enforce themselves.

Teacher D: I was wondering how everyone feels about the nonfiction unit.

Teacher E: We haven't given it.

Teacher B: I'm giving it next week.

Teacher D: I thought it went pretty well. So I found with my class that they managed with the multiple choice comprehension questions. I felt better. It reinforces some things for me. The open-ended questions were not as good as I would have thought they would have been and what I would have liked to see.

Teacher B: I'm sure I'll find that too.

Teacher E: You're totally right.

Teacher D: It's fascinating to me how I can read directions out loud and they are still unable to follow directions.

Teacher B: That's a good point.

It should be noted that Teacher C chose not to attend the three of the five Community of Practice meetings in January and early February and went on medical leave at the end of February. Noticeable differences took place in the Community of Practice at that point regarding the increase in socialization at the beginning of the Community of Practice meetings. Three of the six post-implementation interviewees indicated that the Community of Practice changed as a result of this absence. Statements

included phrasing such as "easier atmosphere", "friendlier" and "minimal tension" related to the tone of the meetings during this part of the year.

Shared Repertoire. In the Maturing Stage of Development, Shared Repertoire is a Dimension of Progress that is fully operationalized. Participants share experiences and artifacts, but in addition, there is ambiguity so that shared information can be interpreted and used differently by participants. What sets this Dimension of Progress apart from earlier iterations of sharing is that the community identity is formed and participants begin implementation of curricular components from the community norms and areas of agreement. Variations are not considered rogue moves; rather, the risk and outcomes would be shared with the group at a later Community of Practice meeting. By mid-March, the instances of Shared Repertoire increased and were sustained through the second semester of school.

In the following dialogue from the March 11, 2015 Community of Practice meeting, the participants demonstrated their Maturing stage and Shared Repertoire:

Teacher F: I told my kids that I was going to collect their jots and grade them, so how are you going to grade the book clubs?

Teacher A: I am going back to their post-its and see what I assign and I'm thinking maybe I'll give a point value.

Teacher B: Maybe just give six points for comprehension, seven points for referencing pages, etc.

Teacher A: Best guide is to use the jot rubric that we have been doing all year and then grade based on that.

Teacher B: Can I have a copy of that? I would love to have a copy of that.

Further analysis of participants' reflection journals and the data from the pre-implementation and post-implementation interviews provides additional evidence of the extent to which the Community of Practice elements become actualized in the educational setting. In pre-implementation interviews with the participants, all six teachers indicated a similar expected outcome. That is that throughout the Community of Practice program, the teachers would share ideas and knowledge, implement the TCRW program in similar ways and that there would be strong reliance on the Community of Practice. Five of the six teachers used the words, "share" and "collaborate" consistently in their answers.

As the six Language Arts teachers were split along middle school team structures with three teachers on each team, the classrooms of the teachers were on two different floors. As a result, mini-Community of Practice's emerged due to proximity and immediacy of need between the two separate floors/teams. Furthermore, since a recalibration of the TCRW program took place in November and December, the Community of Practice time was replaced with external training. This further reinforced the evolution of smaller, informal Communities of Practice on each floor with three teachers working within each. I did not attend or transcribe these meetings, as they were not formally run; however, the mid-year reflections of the participants spoke to the effectiveness of the mini-Community of Practice program throughout the two months.

Four of the six teachers indicated that a split had taken place in the larger Community of Practice during this period of time. All six teachers indicated some implementation drift of the TCRW program due to the split since collaboration could only take place separately. According to the reflection journals, decisions made within

the mini-Community of Practice's led to tension once the larger Community of Practice fused again since the group had to realign their practices from the November-December time period.

      Teacher B indicated in her mid-year reflection journal,

      I cannot attest to how the TCRW functions on the first floor of our building. I

      know that the teachers on the second floor meet almost daily to plan and share

      TCRW lesson in our classrooms. I assume from our weekly meetings and

      discussions for Community of Practice that, in general, we all follow the model.

Teacher D from the first floor concurred, "There have been various attempts to implement the program with fidelity this year. There still seems to be an issue of consistency across the two teams."

      By the end of the school year, the post-implementation interviews indicated a return to better implementation fidelity of TCRW where three of the six teachers specifically attributed the FOI of TCRW to the existence of the Community of Practice. Teacher D said, "Collaboration was essential. We all shared what we were doing in the classroom and that made the difference." Teacher E said that collaboration should not be confused with compliance since agreement may happen in the Community of Practice but still fail to translate to the classroom. On the other hand, she commented that there would have been no alignment if there had not been a Community of Practice program implemented at the same time as the new curriculum.

      Four of the six teachers interviewed in May indicated that they wanted to continue the Community of Practice in year two of TCRW implementation. They saw the Community of Practice as critical to FOI, rating the program at an 8 or 9 out of 10 across

all four teachers. The two remaining teachers were no longer involved in the Language

Arts program as one was retiring and one was changing positions in the district although

both indicated that they would continue a Community of Practice into the second year.

The first evaluation question examines the extent to which the Community of

Practice program elements became actualized in an educational setting. In this study, the

Community of Practice program components were actualized by the end of the school

year although the Stages of Development and Dimensions of Progress did not follow the

precise sequence outlined in the literature and did not occur in a consistent, rigorous

pattern of progression. Recommendations based on these findings will be discussed in

Chapter Five.

Evaluation Question #2

Based on findings from Evaluation Question 1, there is evidence that the

Community of Practice program elements progressed according to Wenger's Stages of

Development. That said, at times, the Community of Practice broke down and FOI of the

TCRW program resulted in a fractured implementation according to data from both the

reflection journals and the post-implementation interviews. Evidence for the findings for

Evaluation Question 2 come from these data sources to explore what accounts for the

actualization and non-actualization of the program elements.

Potential Stage of Development. The Potential Stage of Development worked in

part because the participants needed one another for the formation of artifacts, lesson

ideas, and feedback. Responses to both the reflection journals and the pre/post-

implementation interviews concur with this conclusion. Teachers B, D, E, and F

indicated that the TCRW curriculum would have been very difficult to implement

without the benefit of the Community of Practice program especially in the beginning Stages of Development. In her end-of-year reflection journal, Teacher D said, "I don't know how we would have survived without it."

The area where the Potential Stage of Development broke down was in the emergence of the Community of Practice as a shared resource. Too many goals early on in the implementation of the curriculum created a sense of "panic" according to Teacher A. Her concern was that they would do something wrong and that the standardized test scores would reflect the deficit. Transcriptions of the Community of Practice meetings in September validate this reflection entrée. In the September 18, 2014 meeting, Teacher D said, "The writing workshop is a little fluffy. We can throw in mentor texts, but at the end of the day, they need a model. They would still have to take a test in the spring." Again in the September 24, 2014 meeting, the teachers showed their concerns for accountability in the following dialogue:

Teacher C: Do we need to compile a list of skills we need to target?

Teacher B: They are all in the unit. How you make sure they are learning

it is another thing.

Teacher C: Are you comfortable saying we are all doing the same thing?

Teacher B: We developed a rubric.

Teacher C: But it is an approved rubric? Who says that's going to help

with their spring tests?

Additionally, Teacher A was also the Language Arts Department Chair. Used to leadership, she began the Community of Practice with an agenda similar to the method she used to run department meetings. This mode of operation was further intensified

with the way the sharing took place in the first two Community of Practice meetings. During the August meeting, when teachers offered suggestions, Teacher A responded to the suggestions with her view on whether or not the idea was feasible based on time, budget, and other limitations. What resulted from these exchanges was a false harmony, where the Community of Practice members agreed with the Department Chair in the interest of group accord rather than engaging in the healthy discourse of disagreement in order to reach consensus. Teacher F indicated in her post-implementation interview, "[Teacher A] could not let go of the leadership role. She naturally emerged as the dominant person and didn't want to take suggestions. Being new to the school, I wasn't going to challenge her."

This reality hampered the presence of Mutual Engagement as the teachers' various backgrounds and expertise were dismissed in the interest of time and created an illusion of agreement. In her post-interview, Teacher E said, "I agreed to keep the peace in the beginning. There were some bad attitudes about the way things were going, too much prior baggage, and I didn't want to waste everyone's time with discussion." Teacher D said a similar statement in her post-implementation interview, "This year had to be task-oriented. Some of us spoke too much to drown out the others. I was guilty of this." The hierarchy of existing roles and the presence of trust and respect among the teachers who had worked together in the past posed a flawed assumption for this study. Recommendations to ameliorate their presence are discussed in the next Chapter.

Coalescing Stage of Development. The second Stage of Development is characterized by the Joint Enterprise of the Community of Practice as well as the negotiation of the internal community and its place in the external organization. The

74

Coalescing stage took place in the first part of the year largely due to the need to explore the connections within the community to have a successful TCRW program. This combined with understanding the extent to which the Community of Practice could act autonomously from the other grades in the school fueled the collaboration. Three of the six teachers in post-implementation interviews indicated that issues were best settled when teachers remembered that students were at the heart of the collaboration.

On the other hand, Teachers B and C felt that they were disrespected in the Community of Practice since they brought knowledge from many years of being Reading Specialists and were not given the opportunity to share as much. Teacher B said, "I stopped bringing ideas and artifacts to the meetings in October because I wasn't welcome to share them." Acknowledging differences is a critical component of the Coalescing stage and it's absence likely contributed to the varied post-implementation perceptions.

Joint Enterprise continued in November and December when the teachers made the decision to receive external training in TCRW to recalibrate the program. This decision represents Joint Enterprise in that the community renegotiates the goals of the community. They recognized that without mutual accountability, the Community of Practice program would not succeed. This was stated in all six of the reflection journals.

Maturing Stage of Development. The strongest program element in the Community of Practice program occurred in the Maturing stage. During this time, the teachers had developed a rhythm of collaboration that allowed its' members autonomy and accountability at the same time. Evidence for this can best be found in the transcribed meetings and the post-implementation interviews.

Shared Repertoire, a key component in the Maturing stage, reached a high point in the second semester along with an even distribution of Mutual Engagement and Joint Enterprise as shown in Table 8. In her post-implementation interview, Teacher E categorized the Community of Practice program in the second half of the year as one of "active discussion" where the members "gave and received feedback" from colleagues. Teachers arranged to visit one another's classrooms based on self-identified strengths and weaknesses of each teacher. Communication, evidenced through email correspondence and the transcription of meetings, became more fluid. In post-implementation interviews, two of the six teachers attributed the improved communication to the relationship building that had taken place over time.

At times, the Maturing Stage of Development became stymied due in part to the presence of the Broker. As both the researcher and the Broker to the Community of Practice program, I attended half of the meetings, most typically when issues rose related to areas such as budget, external training, standardized tests, and student placement for the coming year. In post-implementation interviews, two of the six teachers indicated that my presence created a different atmosphere at meetings. "When you were not present and the recorder was shut off, the Community of Practice program was not as functional," stated Teacher C in her post-implementation interview. Teacher E believed that my presence kept her from speaking up as much in the beginning. "Once I got to know you, it didn't matter that an administrator was present," she indicated in her post-implementation interview. Lastly, Teacher D believed an administrative presence, regardless of the research study, would have been the most effective in the early months when the program was new.

In summary, the need for common artifacts, systems and lessons on a weekly basis helped to propel the Community of Practice forward. The awareness of student achievement with looming standardized tests further actualized the Community of Practice. According to the participants' responses, communication improved over time, and the Community of Practice meetings became essential.

On the other hand, the non-actualizing factors included the number of tasks, layered early in the program for the start of the school year that caused a sense of urgency, which in turn kept the Community of Practice from functioning as a non-hierarchical collaboration. The role of Department Chair leadership could not be set aside and the Community of Practice was less an exchange of ideas and experience and more a dissemination of information, especially in the earliest stages. It was assumed at the start of the study that the hierarchical roles could be set aside for the purposes of the Community of Practice; however this proved to be untrue and contributed to some of the power struggle that occurred throughout the year.

Lastly, the role of Broker can be an important component to a Community of Practice; however the added layer of researcher stymied the organic development of the Community of Practice since the members' awareness of the study in progress kept them from fully embracing their own feelings about TCRW and engendered an "illusion of consensus" (Grossman et al., 2001, pp. 16-21). In this case, there was a flawed assumption that the Broker role and researcher role could be separated in this study.

The actualizing and non-actualizing factors will be discussed more fully in the next session as they contributed to the themes that emerged for Evaluation Question #3.

Evaluation Question #3

        The reflection journals and post-implementation interviews provide data to determine how effective the Community of Practice was for collaboration in an educational setting. In the first level of analysis, transcribed interviews and reflection journals were read for key phrases and words. They were then grouped into emergent themes. Based on these qualitative data three themes emerged to indicate the effectiveness of a Community of Practice program in UWMS. The first theme was the need for a Community of Practice program during a year of curricular implementation in that the need to have a successful TCRW curriculum increased the Community of Practice value. The second theme involved the ineffectiveness of a Community of Practice program when personality clashes exist. The third theme involved the role of leadership in the Community of Practice.

        The number of times each of the three themes was touched upon in post-implementation interviews and reflection journals is indicated in Table 9. Discussion about the statements follows the chart.

Table 9

The Frequency of Themes in Teacher Reflection Journals and Post-implementation
Interviews

Theme	Survival necessitated compliance and engendered reliance on the Community of Practice	Personality clashes caused dissention within the Community of Practice.	Leadership took too large a role.
Number of times the theme was stated in reflection journals	4	11	5
Number of times the theme was stated in post-implementation interviews	8	12	4

Theme 1. When questioned about the effectiveness of the Community of Practice program as a vehicle for collaboration, 8 statements linked the effectiveness to the need for survival in a new program. "We were flying the plane and building it," stated Teacher A. "If we didn't have each other to bounce ideas off of, we would not have survived this year." Likewise, Teacher F felt that the TCRW program was "nebulous at times" and that she relied heavily on the Community of Practice program to gain clarity as a new teacher. Lastly, participants indicated that in the year of new curricular implementation a Community of Practice is needed, two teachers going so far as to call it "critical."

This theme was further demonstrated in reflection journals where Teachers A, D, E, and F stated that the need for "survival" in implementation of TCRW would have naturally concluded in the formation of a Community of Practice; however Teachers B

and C stated that smaller Communities of Practice would have been equally effective

because their formation would have been based on teacher choice for collaboration

partners. The idea of teacher choice in collaboration will be considered in Chapter Five.

Theme 2. Post-implementation interviews yielded data that indicates the

perception of effectiveness of the Community of Practice based on the expected

outcomes of collaboration in an educational setting. These data are summarized in Table

10. Consistently in each answer, the difference divided along veteran lines with the new

and mid-career teachers (Teachers A, D, E, and F) assenting and the two veteran teachers

(Teachers B and C) dissenting.

Table 10

Post-implementation Interviews

Question	Did your perception of Community of Practice before and after implementation match?	Did shared responsibility to discuss issues exist throughout the year?	Was there a willingness to teach and learn from one another?	Was new meaning created from individual experiences?	When would a Community of Practice program make the most sense in the implementation of a new curricular program?
Affirmative Response	66.6% YES	66.6% YES	66.6% YES (in the spring semester)	100% YES	100% During the first year of implementation
Negative Response	33.3% NO	33.3% NO	33.3% NO		

In follow-up questioning, all six of the participants indicated that the power

struggles among the members of the Community of Practice group were the most likely

reason behind the disparity in response shown in Table 9. Trust and respect among the Community of Practice members was assumed in this study; however, this was not the case as power struggles and diminished capacity for mutual engagement emerged as a theme both in the post-implementation interviews and the reflection journals. Teacher C noted, "There was the wrong mix of teachers for this level of collaboration. A Community of Practice can be effective in an educational setting if there is more trust and respect among the participants." In her reflection journal, Teacher A indicated, "While our intention was to have a 6-pronged, cohesive unit, we slowly drifted into two groups." Teacher F saw this split as a result of the disengagement of Teachers C and D since one was retiring at the end of the year and did not need to invest in building relationships and the other was disenfranchised with the other members early on and then left the school for medical reasons for about a month during the process.

Wenger (1998) recognizes that conflicts of interest and power struggles are a natural part of group dynamics theory; however, he views it as "unnecessarily pessimistic" to use the presence of them as justification of why a Community of Practice may not work,

> We must also remember that out institutions are designs and that our designs are hostage to our understanding, perspectives, and theories. In this sense, our theories are very practical because they frame not just the ways we act, but also—and perhaps more importantly when design involves social systems—the ways we justify our actions to ourselves and each other. (Wenger, 1998, pp. 10-11)

This difference in experience and perspective is precisely the theory behind the Community of Practice program where both the theories of social structure (cultural

systems and discourses) and the theories of situated experience (the interactive relations

of people with their environment) must meet in the middle (Wenger, 1998, pp. 12-13).

Theme 3. The last theme involved the role of leadership in the Community of

Practice, specifically whether or not the Community of Practice required more or less

leadership. Over the post-implementation interviews and the mid-year and end-of-year

reflections journals, the issue of leadership appeared nine times as shown in Table 9.

Leadership roles emerge naturally in the Community of Practice program; however, the

time constraints and immediacy of need propelled this Community of Practice toward a

more hierarchical structure. As noted previously, Teacher A, as the Language Arts

Department Chair, took a conductor role early in the program, creating an agenda,

facilitating the discussion, and making the final decision on areas of interest. According

to statements in the post-implementation interviews, Teachers B, E, and F believed that

Teacher A needed to be in that role or "nothing would get finalized" (Teacher B).

Wenger (1998) acknowledges that "privileging certain perspectives and certain

forms of knowledgeability can simplify alignment by decreasing the need for

negotiation," but the cost of such privileging is imagination and engagement by all

members. As such, the Community of Practice "gives up some of its ability to combine

institutional reification with local participation, to engage the designed with the

emergent, to connect the global with the local, and to inspire identification with

negotiability" (p. 261). In the case of curricular implementation, to "engage the designed"

(curriculum-in-theory) with the "emergent" (curriculum-in-use) requires local

participation, perspective and joint input.

Four of the six teachers indicated that training in the Community of Practice program along with a complete understanding of the prescribed Stages of Development, Dimensions of Progress, and other collaboration protocols would have been helpful and perhaps would have increased the privileging of all members so that leadership from the Department Chair might have been lessened. Three of the four teachers in that group thought that training would have created a "green light" (Teacher E) for all of them to "have a voice" during Community of Practice meetings. Teacher F specifically wanted pre-implementation training because she was new and was not sure how large a role she could play in the Community of Practice program as a new teacher. Later in the same reflection, she noted, "Even if we had training, you can't train personalities. We probably would have had the same clashes no matter how many protocols we learned about."

Leadership in the form of the Broker accounted for three of the nine comments made along this theme (Table 9) all of which came directly from the open-ended reflection journals since post-implementation interviews did not include a question about the role of the Broker. The three statements made indicated that both my presence as the Broker and secondly as the researcher created an initial stage of compliance. Teacher F indicated, "Having an administrator at our meetings created the need to filter our comments and maybe we got less work done in the beginning." Teacher C stated that the recording and/or my presence at the meetings made it less truthful.

The role of Broker, discussed as a limitation of the study, was not optional since the Broker provides necessary resources and connections to the larger organizational context. In the case of TCRW implementation, the new curriculum required the

consistent development of documents, infusion of new classroom library books, and training, all of which came from the Broker. It could not be controlled for in the study due to this critical nature.

The third evaluation question sought to determine the effectiveness of a Community of Practice program for collaboration based on the perspective of its participants. Effectiveness increased most especially in the later Stages of Development when collaboration efforts were routine and relationships began to solidify, bringing about greater trust in perspective.

Summary

In summary, the Community of Practice program provided an effective vehicle for collaboration in an educational setting given the parameters of the study and the context of the new curricular initiative. The Community of Practice program elements became actualized according to the Stages of Development and Dimensions of Progress outlined by Wenger (1998) over the course of the school year during an implementation year of new curriculum. Some stages entered the program earlier than prescribed out of necessity for curricular documentation and systems of accountability. Furthermore, the Potential stage was rushed and caused an early breakdown in the development of relationships. This did not keep the outcomes from becoming actualized; however, as there were 12 statements of affirmation made from all six participants regarding the development of artifacts, new knowledge, and the sharing of ideas through the collaboration program.

Participants in the study attributed the actualization of the Community of Practice to the need to be effective in the implementation of TCRW. The threat of standardized

test scores and the presence of the Broker as researcher also kept the Community of Practice functioning throughout the year. The areas where program elements were not actualized were attributed to a breakdown in relationships due to conflicting personalities, lack of investment in developing internal connections among some members, and a need for external training in TCRW. Ways in which to improve the actualization of a Community of Practice program is discussed in Chapter Five.

Chapter Five

Recommendations

The recommendations in this section are based on the findings of the study related to a Community of Practice in an educational setting. The recommendations relate to the three evaluation questions and make suggestions for continued research studies that further the investigation of effective collaboration programs for K-12 school implementation of new curricular programs and other school initiatives. A summary of the findings and related recommendations are shown in Table 11 with discussion of the recommendations in subsequent sections.

Table 11

Findings of the Study and the Related Recommendations

Findings	Related Recommendations
Evaluation Question 1: To what extent do the Community of Practice program elements become actualized in an educational setting? The program components became actualized throughout the scope of the school year as the participants' roles emerged and interactions improved. Although the Stages of Development and Dimensions of Progress did not follow the precise sequence from the literature and was not a consistent, rigorous pattern of progression, the collaboration program led to better alignment of practices by spring semester.	o Prior training in Community of Practice and/or the development of collaboration protocols would establish expectations for the group interactions early in the program and ameliorate the mutual engagement and joint enterprise needed for effective collaboration. o Beginning the Community of Practice prior to the year of new curricular implementation would have eliminated the urgency of task-oriented needs and would have provided the necessary time to build the trust and respect essential to the community.
Evaluation Question 2: What accounts for the actualization of non-actualization of the Community of Practice program elements in an educational setting? Actualizing Factors: o Need for common artifacts, systems, and lessons o Student success was important o Communication over time Non-actualizing Factors: o The amount and overlap of tasks o The role of leadership o The Broker/researcher role	o Prior to the start of the implementation year, establish areas of the Community of Practice discussion where consensus was or was not mandatory. This will lessen the power struggles and help to curtail the need for privileged leadership. o Broker must be a non-supervisor of the group to reduce the need to perform for a study. This person can also function as a collaboration advisor/group counselor to support the health and effectiveness of the group interactions.
Evaluation Question 3: How effective was the Community of Practice program for collaboration in an educational setting? The Community of Practice was an effective collaboration program most especially in the later Stages of Development when collaboration efforts were routine and roles became defined. Relationship building to engender trust and respect was identified as a critical component of a successful Community of Practice program.	o Include lesson study, classroom visits, and collaboration partners within the scope of the Community of Practice program to increase the opportunities to share and learn from individual experiences. o Increase the frequency of meetings and strive for classroom proximity among the Community of Practice members to allow time for all of the tasks inherent in the implementation of new programs.

Recommendation #1

The Stages of Development in a Community of Practice rely on a number of essential program elements to bring about true collaboration according to Wenger (1998). The Potential stage is arguably the most critical since it seeds the vision of the community, fuels the establishment of goals, and allows individual members with diverse backgrounds and experiences to establish a system of collaboration for new knowledge. In keeping with the Community of Practice program theory that progression through the stages cannot be rushed, the UWMS Community of Practice did not have the latitude to enter and exit this stage organically. Instead, the implementation of new curriculum, specifically TCRW, required immediate lesson planning, development of common assessments, and a system of grading.

In this study, training on the Community of Practice program was not possible given the limitations of time. The TCRW approach was chosen in the Spring 2014, and training in TCRW was the top priority over the summer prior to a Fall 2014 implementation. Even then, not all teachers participated in formal training for TCRW. The teacher contract prohibits mandatory teacher training over the summer, and only three teachers were able to attend TCRW training. The Community of Practice program training would have incurred the same limitations. Without full membership in the Community of Practice program training, fractured understanding and power struggles within the community for those who did and did not participate in the training might ensue. Lastly, the Language Arts staff of sixth grade teachers had not been fully hired at the time, so training in a Community of Practice program could not take place until the final hire in August – far too late to be effective.

The first recommendation to improve the use of a Community of Practice program in an educational setting, most specifically during a year of curricular implementation, is two-fold. The first recommendation is to provide prior training in the Community of Practice program and/or establish collaboration protocols by which the Community of Practice might operate. Little (2002) contends that, "certain heuristics provide a way to illuminate the multiple possibilities for learning" and further suggests that collaboration members "treat all of what is said and done as evidence of what is known and as a potential resource for learning" (p. 932). This kind of openness did not occur during the formative Stages of Development in the Community of Practice program and lessened the potential until January, causing a stalemate of progress in building community in favor of artifact development and other task-oriented goals.

Prior training would have provided the Community of Practice members an opportunity to establish expectations of practice within the community and define protocols of communication so that engagement was mutual, enterprises were joint ventures, and repertoire was universally shared. Participants who are ill equipped with a process of self-critique and social participation had difficulty with trust in the kind of communication occurring in a community of practice (Flogaitis et al., 2012; Gough, 2005). Although prior training and defined protocols would not eliminate the inevitableness of struggles among community members, especially in an educational setting where teacher isolationism is ubiquitous and contributes to teacher identity, such pre-implementation strategies would have provided a resource for conflict resolution, process management, and a framework for the program.

The second part of this recommendation involves the timing of Community of Practice implementation in an effort to establish the aforementioned protocols and provide the needed training. Where possible, the Community of Practice program should begin at least six months before the implementation of new curriculum. The preparation period would include Community of Practice program training and the establishment of community goals and protocols of communication. Since much of the training for new curricular programs occurs in the year prior to implementation, Community of Practice training would occur simultaneously and the establishment of protocols would be the first negotiation of the community.

Cambridge, Kaplan & Suter (2005) believes that "without conscious facilitation, momentum may be lost during the launch phase and the Community of Practice may not achieve the critical mass needed to evolve into a sustainable entity" (p. 2). With prior training in the Community of Practice program, teachers would have time to develop relationships without the pressure of implementing a new curriculum at the same time. Issues of practice could be anticipated and discussed in a less frenetic way. This would also provide time to engage in the necessary discourse of disparate viewpoints and experience levels so that when the TCRW implementation occurs, the members of the Community of Practice do not have to contend with variations in thinking among the members for the first time. As cited consistently in the literature, sustaining teacher communities relies on strong interpersonal relationships (Borg, 2012; Grossman et al., 2001; Wenger et al., 2002). Training in the Stages of Development and Dimensions of Progress of a Community of Practice would provide a framework for communication and

expectation within the Community of Practice as well as a time for interpersonal relationships to form.

Recommendation #2

It can be argued that the immediate need for lessons, assessments and other artifacts obstructed the critical development of positive relations among the Community of Practice members to some degree, these needs succeeded in keeping the members invested in the consistency of the Community of Practice meetings. As shown in the Table 9, post-implementation and reflection journals indicated that compliance and reliance on the Community of Practice came about through the need to develop a curriculum practice. Without such immediate need, the Community of Practice program might not have developed or been sustained for the year. This and other actualizing factors helped to push the Community of Practice program forward, gaining momentum throughout the second semester. The non-actualizing factors include the amount of tasks, the role of leadership in the Community of Practice and the Broker role when combined with the research role. Recommendations for improvement of the Community of Practice program in an educational setting address these non-actualizing factors.

First, the development of protocols recommended in the prior section would include an agreement as to which areas of the curriculum collaboration required group consensus and which could be left to individual teacher interpretation. Little (2002) discusses such differences when she acknowledges the existence of practices that "are bound up with teachers' individual preferences and beliefs regarding teachers' and students' roles in the classroom" (p. 932). When "pedagogical solitude" (Shulman, 1993, p. 6) goes unchecked through methods such a collaboration program, implementation

91

drift is risked. Findings in the Flogaitis et al. (2012) study concur with this study's findings in that some participants had "difficulties in practice to put aside their personal perceptions and to adapt to the collective decisions of the community of practice. Some even manifested regal tendencies, seeking to promote their personal views in the learning community's work" (p. 225).

For new curricular implementation, areas of the curriculum may be up for interpretation and individualization by members. However, those areas where consensus of implementation is essential for alignment and measurement purposes should be determined prior to the start of the Community of Practice program where possible. As a natural course of evolution, all areas of discord cannot be pre-determined; however protocols for the discussion of such cognitive conflicts would aid the development and actualization of the Community of Practice. It might be said that teachers must agree on the overarching, summative assessments in the curriculum, but not the smaller formative assessments for example. In this way, a pre-implementation negotiation of areas where consensus must be reached could lessen the power struggles and help to curtail the need for privileged leadership already in existence in a Community of Practice, especially if an internal leader is one of the participants. Furthermore, such an agreement could potentially lessen the likelihood of "pseudo-communities" that lead to the "illusion of consensus" (Grossman et al., 2001, pp. 16-21). In that way, fidelity of implementation of the new curriculum might have a better chance since "strong assertions of individual preference would otherwise go unchallenged, leaving individual autonomy to take precedence over group decision" (Little, 2002).

Recommendation #3

In an attempt to eliminate reliance on top-down management and to empower teachers to work collaboratively without the oversight of administration, a Broker role exists mainly to mitigate the resource needs of the group. As my role was both Broker and researcher, attendance at 50% of the meetings and a recording device at 100% of the meetings created the sense of supervisory oversight that undermined the authenticity of the Community of Practice according to the data findings.

The dual-role, listed as a limitation in the study, was a component in this particular study, but would not exist in future implementation of the Community of Practice program. Recommendation in this area includes limiting the Broker role to the ideology of its intended function—a non-supervisory resource for the Community of Practice, "yielding enough distance to bring a different perspective, but also enough legitimacy to be listened to" (Wenger, 1998, p.110).

The continued presence of a Broker in a Community of Practice is a necessary one in that the Community of Practice does not operate in isolation; rather, it relies on and contributes to the larger organization. To be successful, a Community of Practice must maintain the Broker role and it is recommended here that the role include a secondary function. First, the Broker would participate in the Community of Practice training and the pre-implementation negotiation of areas of non-consensus. With this knowledge, the Broker could serve as a collaboration advisor/counselor to support the health and effectiveness of the group interactions, especially in the case of affective conflicts where the group moves from the identification of problems to the identification of which of the members is to blame for the problem. In this way, the collaboration

advisor has no other investiture other than helping the group facilitate their interactions with respect, trust and safe-space thinking so that effective collaboration and new knowledge can emerge. Over time, this role would be diminished as the Coalescing and Maturing Stages of Development emerge and eliminate the need for group dynamics intervention. That is not to say that over time, power struggles and conflicts would not continue, but the protocols for navigating such instances would be firmly established and execution of them could be implemented by the members.

Recommendation #4

To increase the effectiveness of the Community of Practice, increasing the exposure of the members to one another has the potential to build stronger collaboration. At the start of the Community of Practice, it is recommended that the participants engage in Lesson Study, a collaboration process where teachers jointly design a lesson, then observe the implementation of the lesson and discuss revisions and new thinking. The benefit would be three-fold. Teachers would become invested in the group learning process, gain respect for various approaches to lesson design and implementation, and incite their reliance on the Community of Practice in the early Stages of Development.

In addition to Lesson Study, a consistent system of classroom visits would improve respect for isolated teaching practices and provide curriculum-in-use views of other members of the Community of Practice During the Coalescing Stage of Development, sharing begins, as does the negotiation of separate realities. Classroom observations have the potential to increase respect in that teachers can learn and share from seeing colleagues in action (Flogaitis et al., 2012). In this way, members can "take

communal responsibility for individuals' growth" (Borg, 2012, p. 302) and "investigate the value and prospect of alternative approaches or choices" (Flogaitis et al., 2012).

Establishing collaboration partners within the Community of Practice is also recommended here. Due to classroom proximity and other issues of educational design such as joint planning periods, lunch, and teaching style, members of the Community of Practice will naturally gravitate toward other specific members. Suggesting that all relationships will remain equal and that sub-groups will not form is naïve. Instead, protocols for the operation of the Community of Practice could include collaboration partners where two or more teachers may work jointly on an enterprise and bring it back to the Community of Practice at large for discussion and review. The inclusion of such a system could go a long way to eliminate the guilt and hurt feelings when smaller factions emerge due to educational structures. Moreover, it provides a vehicle for attempting new instructional methods without one member feeling intimidated by the larger group, especially for non-veteran teachers who may acquiesce to decisions/ideas out of fear of rejection.

Another way in which to increase the effectiveness of the Community of Practice is to increase the amount of time the Community of Practice meets. Time is consistently cited in the literature as a clear restrictive factor to the actualization of a collaborative practice (Borg, 2012; Flogaitis et al., 2012; Grossman et al., 2001; Hodge, 2014). Similarly, findings in this study indicate discontent with the amount of time teachers had to collaborate. Combined with issues of proximity where the six participants were spread out over two floors, time constraints limited the opportunity to develop trust as the immediate need for systems, artifacts, and outcomes for learning crowded out

relationship building. Wenger et al. (2002) suggest that physical proximity within the community is a contributing factor to the success of the practice. They further advise that organizations committed to the growth of the community of practice must prioritize the availability of time and space so that "characteristics of practice can become embedded into the social structure of the practice" (Hodge, 2014, p. 169).

As such, it is recommended here that to be more effective, the Community of Practice should meet at least twice a week so that the two-fold need of the Community of Practice has time to expand fully. In an educational setting, collaboration is important as shown the literature. In a year of new curricular implementation that collaboration is critical. One Community of Practice session in the week could be dedicated to the development of artifacts, lessons, assessments, and systems and resource sharing. The second session could be dedicated to analysis, reflection, sharing, and the identification of new issues of curricular and instructional practice. In this way, the Community of Practice would not devolve into a meeting-type session where the most pressing issues take precedent and the sharing/learning aspect—most critical to the development of trust and respect—would have time to grow.

Further Research

Further study of collaboration is necessary in order to understand the best ways in which to foster and support teachers working together in the alignment of curriculum and best practices. Grossman et al. (2001) indicated, "We have little sense of how teachers forge the bonds of community, struggle to maintain them, work through the inevitable conflicts of social relationships, and form the structures needed to sustain relationships over time" (p. 4). More significant research has been done since that study in an attempt

to codify and understand the inner workings of collaborative groups in an educational setting; however, the aforementioned recommendations indicate areas in which the educational community could benefit from further research.

First, where the Community of Practice program provided a vehicle for alignment of practices, a better understanding of the influence of group dynamics in collaborative efforts would provide stronger sustaining factors for its success. A continuation of the research would include an examination of group dynamics theory, participant training in protocols to increase the capacity for effective collaborative work, and a measurement tool for the protocol's effectiveness. Research and further study in each of these areas would provide important data for determining the appropriate collaboration program for a particular group of teachers and provide benchmark measures for on-going evaluation.

Secondly, the Community of Practice program in this particular study necessitated the joint role of Researcher and Broker. A follow-up study without the duality of responsibility could improve the authenticity of the study in that the participants could interact more naturally and without the pressure to perform for the Researcher. The Broker role is critical in a Community of Practice in that such a person provides external support for the needs of the group; however, the expectations and presence of the Researcher played a role in the development of the various stages. A study that does not include the joint role would demonstrate the degree to which the Community of Practice could be effective without such influence.

Lastly, further research in the Community of Practice program in subsequent years could shed light on the final two Stages of Development: Stewardship and Legacy. An additional study that continues the work of the first year of new curricular

implementation for a second year would provide data regarding the improvement of collaborative practice. In theory, as familiarity, trust, and relationships improve over time so does the capacity for collaboration. This increased capacity would include the addition of Lesson Study, Action Research, and other formal processes for collaboration.

Summary

In this study, six Language Arts teachers were asked to formally collaborate on a new curricular initiative using the Community of Practice program over the course of the year of implementation. In theory, the teachers would build trust among the members, come to understand the value of collaboration, and commit to consistent and authentic alignment of practices.

In the earliest iterations of the Community of Practice program, volunteerism is a component; however, in an educational setting, with curricular alignment paramount to avoiding teacher isolationism and implementation drift, teachers were not in a position to opt out and instead were placed in a Community of Practice by the school district. As demonstrated in the findings of this study, teacher personalities had an impact on the functionality of the Community of Practice, leading to frustration and disharmony early in the process. Such clashes, along with the presence of the Broker as researcher and the immediacy of need for artifacts, systems, and lessons, thwarted efforts to build relationships—a key component of the first stage of the Community of Practice program.

That is not to say that the participants in the study did not reach the later stages of the Community of Practice where reliance on the community to build new knowledge, share resources and mutually engage in Joint Enterprise is fully actualized. To a large degree, these Dimensions of Progress did occur and continue to occur in the second year

of the Community of Practice program. Perhaps even more importantly, the teachers

jointly defined their difference between the curriculum-in-theory and curriculum-in-use

of the TCRW approach based on their individual and collective experiences in the

classroom.

Studying the effectiveness of a Community of Practice collaboration program

during a year of new curricular implementation heightened the pressure of the process

and to some extent, limited the study; however, the reality of teacher isolationism and

curricular implementation drift require the identification of programs and systems that

support ongoing, embedded collaborative practices. In that way, teachers can improve

alignment of curriculum and instruction with fidelity to the curriculum-in-theory and

curriculum-in-use.

A Case for Community of Practice

In a comprehensive study of factors that affect schooling, John Hattie (2009)

concluded that ensuring teachers work in collaborative teams to plan, assess, and use

evidence to evaluate and improve instruction is among the most powerful strategies.

Suggesting to teachers that collaboration would benefit student learning is not enough.

Rather, collaboration must become embedded into the culture of the schools. It is an

essential goal that cannot be set aside for the pedagogical solitude lavished upon teachers

in the past.

What is most clear is that changes to the way in which teachers have been allowed

to work in solitude cannot be achieved all at once. Carefully supported systems of

collaboration and adequate time are required to help teachers learn to routinely practice

together and to build the collaborative culture needed in education. Such a paradigm shift

in thinking, where teachers compare classroom experiences to gain more insight into their own practices and seek to align such practices, is critical in this education era. Student learning accountability and standards-based learning require alignment of curriculum and practices that heretofore have gone unchecked.

As long as embedded collaboration occurs, especially in the case of new curriculum implementation, the educational institute would be better for it. Curricular reform is only as good as its application. With routine space, time and authority to examine real time practices of new curricular programs, teachers can learn from one another and open the classroom doors to more authentic and consistent alignment of practices. Insomuch that teacher experience and situated, social learning draw the line between curriculum-in-theory and curriculum-in-use, a Community of Practice as a collaboration model is sound in that the model allows for internal control of the vision and goals, and its foundation is based in knowledge constructed through individual experience rather than the curriculum-in-theory. Curriculum is changed and redistributed in practice, and alignment of the curriculum-in-use is perhaps more important than adherence to the curriculum as it was written, especially given the tendency for externally developed curricula to have universal design, lacking the nuances of individual schools and classrooms. For those involved in the implementation of new curriculum, the theories of a curricular program are only as sound as the teachers who implement it. Honoring their individual experience, the unique aspects of their classrooms and the school culture at large, and the goals indigenous to the adoption of the new curriculum at the start engenders a sense of community to develop and revise the curriculum-in-theory.

Furthermore, for school districts in short supply of leadership layers, a Community of Practice program lessens the need for external support except in the role of the Broker. The level of support can look different from context to context depending on the level of need. For example, schools may require a stronger Broker presence in the first year of curricular implementation. The empowerment of teachers to use their authentic experiences in the classroom as a basis for decision-making works in tandem with the Broker so that the collective decisions do not drift too far from the curriculum-in-theory.

As schools and school districts continue to explore the work of consistent teacher collaboration, it will become more important than ever to define the systems, expectations, and improvement of the adopted model. Collaboration in education as a concept is simple to dictate but complex in its development, requiring joint efforts among leadership, teachers, and the school culture. Careful selection of initial participation is critical in that the success or failure of a collaborative effort is reliant on the willingness of the participants to emerge from their isolation so as to learn from and with their peers. This cannot always be accounted for, especially in the case of curricular implementation where teachers of a subject are pre-determined; however, established protocols, training in the collaboration model, and a group counselor in the form of a Broker would go a long way to improving the odds.

As a model of collaboration, Communities of Practice can take many forms in an educational system. Teachers working on a new instructional strategy could implement the strategy, meet to discuss the effects in the classroom, examine data and revise old thinking. Non-curricular programs, such as a new system for anti-bullying efforts are

ripe for a Community of Practice. In that example, teachers, counselors and other implementers have a system for discussion of the program elements, revision of assumptions, and consistent communication regarding the effect of the program on student behavior. Teachers across content areas interested in adopting a cross-curricular unit of study could form a Community of Practice to study the implementation, share experiences, refine the lessons, and make experience-based decisions as to its effectiveness.

In each of these examples, the sequence of the Community of Practice support is essential. A Community of Practice is most effective during the implementation of a new program, curriculum or unit of study rather than after implementation. It is quite possible that implementation drift has occurred and renders the evaluation unreliable as it is based on randomized teacher implementation. Meeting and learning about individual experiences in real time, before protectiveness of style and disinterest in change become fossilized, is the critical component for educational collaboration. Adoption of Communities of Practice, as consistent vehicles for teacher input and collaboration, support inclusion efforts in that they are teacher-led, experience-dependent, and a satisfying solution to top-down mandates. Wenger (1998) reminds us that

> Communities of Practice are the locus of 'real work.' Their practices are where the formal rests on the informal, where the visible counts on the invisible, where the official meets the everyday. Designing processes and policies is important, but in the end it is practice the produces results. (p. 243)

In an educational setting, where hostility and blame threaten to topple teacher self-efficacy and morale, embedded collaborative practice that relies on teacher experience brings value and insight to educational reform efforts.

Appendix A

Interview Protocol and Questions for the Interviews

- The interview would take place in the classroom of the teacher participant during an agreed upon time within the contractual day. Coverage for classes may be provided upon request.

- The interviewer would explain the purpose of the pre-implementation interview and the post-implementation interview prior to the first interview.

- The interviewer would ask if there are any questions and upon the completion of questions, would turn on the audio recorder.

- The interviewer would read the following statement prior to the start of the interview:

  > The purpose of the pre-implementation and post-implementation interviews are to collect data regarding the participant's perception of the Community of Practice program implemented in the 2014-15 school year at Upper West Middle School. All statements made during the interview are non-evaluative for supervisory purposes and pseudonyms would be used in place of real names. I would ask four questions during the pre-interview and five during the post-interview. The questions would not be the same; however, they are intended to measure your perception of the program over time. Please take as much time as needed to answer the questions to your satisfaction. Some responses may generate a follow-up question. Please be as candid as possible so as to provide as deep an understanding of your perception as possible. I

would take notes during the interview, but the documents would in no way

become a part of your teacher evaluation. Do you have any additional

questions?

- The interviewer would ask the four/five questions and take notes during the

  interview for comparison purposes or in the event that the recording device fails

  to capture the interview.

- Following the interview, the interviewer would thank the interviewee for

  participating.

Pre-Implementation Interview Questions

1. What is your initial perception of the Community of Practice program as it was

   explained to you during the training session?

2. There are several prescribed elements within the Community of Practice program

   that are universal to the program. Included in the prescribed elements is (1) a

   shared responsibility for discussion, (2) a willingness to teach and learn from each

   other, (3) the recreation of new meaning from the collaboration. To what degree

   do you believe these goals are possible within the Community of Practice

   program at Upper West Middle School?

3. What concerns, if any, do you have prior to the start of the Community of Practice

   program?

4. What goals do you have for the Community of Practice program and how do you

   see your role in the Community of Practice?

Post-Implementation Interview Questions

1. Did your initial perception of the Community of Practice program prior to implementation match your perception now?

2. There are several prescribed elements within the Community of Practice program that are universal to the program. Included in these elements is (1) a shared responsibility for discussion, (2) a willingness to teach and learn from each other, (3) the recreation of new meaning from the collaboration. To what degree were these prescribed elements present in your Community of Practice program?

3. What improvements or changes to the program would you recommend for future participants?

4. When would a Community of Practice make the most sense in an educational setting based on your experience with the Community of Practice?

   a. During the first year of a curricular initiative

   b. After the first year of curricular initiative

   c. It does not work in an educational setting

5. What have you discovered about yourself through your participation in the Community of Practice program?

References

Allington, R. L. (2012). *What really matters for struggling readers: Designing research-based programs* (3rd ed.). Boston, MA: Allyn and Bacon.

Andriessen, J. H. E. (2005). Archetypes of knowledge communities. In P. van den Besselaar, G. De Michelis, J. Preece, & C. Simone (Eds.), *Communities and technologies* (pp. 191-213). New York, NY: Springer.

Atwell, N. (2009). *In the middle: New understandings about writing, reading, and learning* (2nd ed.). Portsmouth, NH: Boyton/Cook.

Barab, S. A., & Roth, W. (2006). Curriculum-based ecosystems: Supporting knowing from an ecological perspective. *Educational Researcher, 35*(3). Retrieved from http://edr.sagepub.com/content/35/5/3

Blankenship, S. S. & Ruona, W. E. A. (February 28 – March 4, 2007*). Professional learning communities and communities of practice: A comparison of models, literature review*. Paper presented at the meeting of the Academy of Human Resource Development International Research Conference in The Americas, Indianapolis, IN.

Bolam, R., McMahon, A., Stoll, L., Thomas, S., & Wallace, M. (2005). *Creating and sustaining effective professional learning communities.* London, UK: Department for Education and Skills.

Borg, T. (2012). The evolution of a teacher community of practice: Identifying facilitating and constraining factors. *Studies in Continuing Education, 34*(3), 301-317.

Brown, J.S. & Duguid, P. (1991). Organizational learning and communities of practice: Toward a unified view of working, learning, and innovation. *Organization Science, 2*(1), 40-75.

Calkins, L., & Tolan, K. (2010). *A Guide to the TCRW.* Portsmouth, NH: Heinemann.

Cambridge, D., Kaplan, S. & Suter, V. (2002). *Community of practice design guide: A step-by-step guide for designing and cultivating communities of practice.* Retrieved from https://net.educause.edu/ir/library/pdf/nli0531.pdf

Creswell, J. W. (2009). *Research design* (3rd ed.). Thousand Oaks, CA: SAGE.

Daly, A.J., Moolenaar, N.M., Der-Martirosian, C. & Liou, Y. (2014). Accessing capital resources: Investigating the effects of teacher human and social capital on student achievement. *Teachers College Record. 116*(7), 1-42.

Darling-Hammond, L. (2010). *The flat world and education.* New York, NY: Teachers College Press.

Davenport, T.H. & Prusak, L. (2000). *Working knowledge: How organizations manage what they know* (2nd ed.). Cambridge, MA: Harvard School Press.

DuFour, R. (2011). Work together but only if you want to. *Kappan. 92*(5), 57-61.

DuFour, R. J. & Marzano, R.J. (2011). *Leaders of learning: How district, school and classroom leaders improve student achievement.* Bloomington, IN: Solution Trees.

Eddy Spicer, D.H. (2011). Power and knowledge-building in teacher inquiry: Negotiating interpersonal and ideational difference. *Language and Education. 24*(1), 1-17.

Flinders, D.J. (1988). Teacher isolation and the new reform. *Journal of Curriculum and Supervision. 4*(1), 17-29.

Flogaitis, E., Nomikou, C., Naoum, E., & Katsenou, C. (2012, April). Investigating the

    possibilities of creating a Community of Practice. Action Research in three

    educational institutions. *Journal for Critical Education Policy Studies*, *19*(1), 217-

    233. Retrieved from http://www.jceps.com/?pageID=article&articleID=251

Fournier, D.M. (2005). Evaluation. In. S. Mathison (Ed.), *Encyclopedia of evaluation*

    (pp. 139-140). Thousand Oaks, CA: SAGE.

Fuller, A. (2007). Critiquing theories of learning and communities of practice. In J.

    Hughes, N. Jewson, & L. Unwin (Eds.), *Communities of practice: Critical*

    perspectives. Milton Park, England: Routledge.

Fullan, M. (2001). *Leading in a culture of change.* San Francisco, CA: Jossey-Bass.

Gamoran, A., Gunter, R., & Williams, T. (2005). Professional community by design. In

    L.V. Hedges & B. Schneider (Eds.), *The social organization of schooling* (pp.

    111-126). New York, NY: Russell Sage Foundation.

Gough, A. (2005). Sustainable schools: Renovating educational processes. *Applied*

    Environmental Education and Communication. 4, 339-351.

Green, W. & Ruutz, A. (2008, July). *Fit for purpose: Designing a faculty-based*

    community of practice. Paper presented at the Engaging Communities,

    Proceedings of the 31st HERDSA Annual Conference, Rotorua, New Zealand.

Grossman, P, Wineburg, S. & Woolworth, S. (2001). Toward a theory of teacher

    community. *The Teachers College Record,* 103, 942-1012. Retrieved from

    https://cset.stanford.edu/sites/default/files/files/documents/publications/Grossman

    -TowardATheoryOfTeacherCommunity.pdf

Grusec, J. (1992). Social learning theory and developmental psychology: The legacies of

    Robert Sears and Albert Bandura. *Developmental Psychology* 28(5).

Harn, B., Parisi, D., & Stoolmiller, M. (2013). Balancing fidelity with flexibility and fit:

    What do we really know about fidelity of implementation in schools. *Council for*

    Exceptional Children. 79(2), 181-193.

Hasan, R. (2001). The ontogenesis of decontextualized language: Some achievements of

    classification and framing. In S. Morais, I. Neves, B. Davies, & H. Daniels (Eds.),

    *The contribution of Basil Bernstein to research (*pp. 47-79). New York, NY: P.

    Lang.

Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to*

    achievement. New York, NY: Routledge.

Hoadley, C. (2012). What is a community of practice and how can we support it?

    Theoretical Foundations of Learning Environments. (2nd ed., pp. 286-299). New

    York/London: Routledge. Retrieved from

    https://steinhardt.nyu.edu/scmsAdmin/uploads/006/677/CHAP12HOADLEY.pdf

Hodge, Steven. (2014). Transformative learning as an inter-practice phenomenon. *Adult*

    Education Quarterly. 64(2), 165-181.

Janis, I.L. (1982). *Groupthink: Psychological studies of policy decisions and fiascoes* (2nd

    ed.). Boston, MA: Houghton Mifflin.

Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation.*

    Cambridge, NY: Cambridge University Press.

Little, J. W., (2002). Locating learning in teachers' communities of practice: Opening up

    problems of analysis in records of everyday work. *Teaching and Teacher*

    Education. 18(8), 917-946. Retrieved from

    http://www.sciencedirect.com/science/article/pii/S0742051X02000525

Little, J.W. (2003). Inside teacher community: Representations of classroom practice.

    Teachers College Record. 105(6), 913-45.

Mertens, D.M. & Wilson, A.T. (2012). *Program evaluation theory and practice*. New

    York, NY: The Guildford Press.

Mittendorff, K. Geijsel, F., Hoeve, A., deLaat, M., & Nieuwenhuis, L. (2006).

    Communities of practice as stimulating forces for collecting learning. *Journal of*

    Workplace Learning, 18(5), 298-312.

O'Donnell, C.L. (March 2008). Defining, conceptualizing, and measuring fidelity of

    implementation and its relationship to outcomes in K-12 curriculum intervention

    research. *Review of Educational Research. 87*(1), 33-84.

Pil, F.K., & Leana, C. (2009). Applying organizational research to public school reform:

    The effects of teacher human and social capital on student performance. *Academy*

    of Management Journal. 52(6), 1101-1124.

Saint-Onge, H. & Wallace, D. (2003). *Leveraging communities of practice for strategic*

    advantage. Boston, MA: Butterworth-Heinemann.

Sawyer, R.K. (2006). *Explaining creativity: The science of human innovation.* New York,

    NY: Oxford University Press.

Scholastic & Bill and Melinda Gates Foundation. (2012). *Primary Sources: 2012 America's Teachers on the Teaching Profession.* Retrieved from http://www.scholastic.com/primarysources/pdfs/Gates2012_full.pdf

Scribner, J.P., Sawyer, R.K., Watson, S.T., Myers, V.L. (2007). Teacher teams and distributed leadership: A study of group discourse and collaboration. *Educational Administration Quarterly, 43*(1), 67-100.

Shulman, L. (1993). Teaching as community property: Putting an end to pedagogical solitude. *The Magazine of Higher Learning. 25*(6). 6-7.

Spillane, J., Halverson, R. & Diamond, J.B. (2004). Towards a theory of leadership practice: A distributed perspective. *Journal of Curriculum Studies, 36,* 3-34.

Stein, M.K. & Coburn, C. (2007). *Architects for learning; A comparative analysis of two urban school district.* Seattle, WA: University of Washington, Center for the Study of Teaching and Policy.

Stronge, J. H. (2007). *Qualities of effective teachers* (2nd ed.). Alexandria, VA: Association for Supervision and Curriculum Development.

Stronge, J. H. (2010). *Effective teachers = student achievement.* New York, NY: Eye on Education.

Stufflebeam, D.L. & Shinkfield, A.J. (2007). *Evaluation theory,models & applications.* San Francisco, CA: Jossey-Bass.

Trowler, P. & Cooper, A. (2002). Teaching and learning regimes: Implicit theories and recurrent practice in the enhancement of teaching and learning through educational programmes. *Higher Education Research and Development, 21*(3), 221-240.

Wells, G. (1999). *Dialogic inquiry: Towards a sociocultural practice and theory of education.* Cambridge, NY: Cambridge University Press.

Wenger, E., (1998). *Communities of practice: Learning meaning and identity.* Cambridge, NY: Cambridge University Press.

Wenger, E. (n.d.) Communities of practice: Development of stages. Retrieved from www.partnership.esflive.eu/files/Community of Practice_development_stages.pdf

Wenger, E., McDermott, R. & Snyder, W. (2002). *Cultivating communities of practice.* Boston, MA: Harvard Business School Press.

Wheatley, M.J. (2006). *Leadership and the new science.* San Francisco, CA: Berrett-Koehler.

Yarbrough, D.B., & Shulha, L.M (2011). Joint Committee on Standards for Educational Evaluation. (2011). *The program evaluation standards* (3rd ed.). Thousand Oaks, CA: SAGE.

Yasumoto, J., Uekawa, K., Bidwell, C.E. (2001). The collegial focus and high school students' achievement. *Sociology of Education. 74*(3), 181-209.

Vita

Denise Citarelli Jones was born in Wilmington, Delaware and attended Padua Academy before entering the University of Delaware in 1986 where she completed her Bachelor of Arts degree as an English Education major with minors in Social Studies and Theater. Her graduate studies include a Master of Arts degree in English and Publishing from Rosemont College and a certification degree in Educational Leadership from St. Joseph's University.

Denise was employed as an English teacher and theater coach in Upper Darby High School and West Chester East High School after which she was employed as an Assistant Principal for Curriculum and Instruction in the Upper Moreland School District. After two years as the Assistant Principal at Strath Haven Middle School in the Wallingford-Swarthmore School District, she was promoted to Director of Secondary Education and attended The College of William and Mary for her doctoral degree in Educational Policy, Planning, and Leadership.