NOTE TO USERS

This reproduction is the best copy available.

UMI®

©Copyright 2005
Carl Bruner

SCHOOL IMPROVEMENT PLANNING AND THE DEVELOPMENT OF PROFESSIONAL COMMUNITY

Carl Bruner

A dissertation submitted in partial fulfilment of the requirements for the degree of

Doctor of Education

University of Washington

2005

Program Authorized to Offer Degree: College of Education

UMI Number: 3198770

Copyright 2005 by
Bruner, Carl

All rights reserved.

INFORMATION TO USERS

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleed-through, substandard margins, and improper alignment can adversely affect reproduction.

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

UMI®

UMI Microform 3198770

Copyright 2006 by ProQuest Information and Learning Company.
All rights reserved. This microform edition is protected against
unauthorized copying under Title 17, United States Code.

ProQuest Information and Learning Company
300 North Zeeb Road
P.O. Box 1346
Ann Arbor, MI 48106-1346

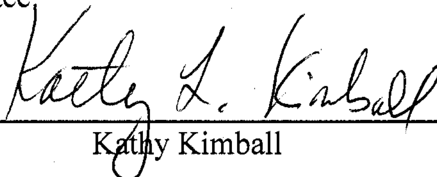
University of Washington
Graduate School

This is to certify that I have examined this copy of a doctoral dissertation by

Carl Bruner

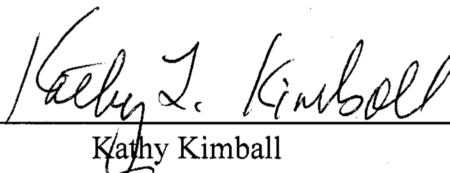
and have found it complete and satisfactory in all respects, and that any and all revisions required by the final examining committee have been made.

Chair of Supervisory Committee:

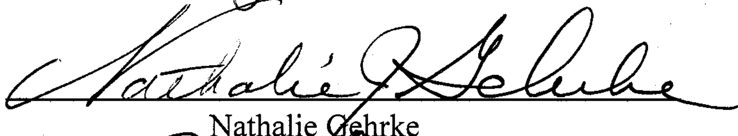


Kathy Kimball

Reading Committee:



Kathy Kimball



Nathalie Gehrke

Mike Copland

Date: October 19, 2005

In presenting this dissertation in partial fulfillment of the requirements for the Doctoral degree at the University of Washington, I agree that the Library shall make its copies freely available for inspection. I further agree that extensive copying of the dissertation is allowable only for scholarly purposes, consistent with "fair use" as prescribed in the U.S. Copyright Law. Requests for copying or reproduction of this dissertation may be referred to Proquest Information and Learning, 300 North Zeeb Road, Ann Arbor, MI 48106-1346, to whom the author has granted "the right to reproduce and sell (a) copies of the manuscript in microform and/or (b) printed copies of the manuscript made from microform."

Signature Carol Bruner

Date September 26, 2005

University of Washington

Abstract

School Improvement Planning and the Development
Of Professional Community

Carl Bruner

Chair of the Supervisory Committee:
Assistant Professor Kathy Kimball
College of Education

Rigorous, standards-based accountability systems have strengthened the call for educators to pay more attention to the nature of change in schools and to invest in developing a culture of ongoing improvement. Curricula designed to assist schools in learning how to engage in self-reflective improvement are increasingly common. In contrast to packaged reform models, these programs are founded on the belief that, when trained in a structured process of inquiry, school communities can learn to identify their own challenges in addressing student achievement and create, implement, monitor, and adjust powerful solutions over time.

This study employed a mixed methods design to investigate the effects of a structured improvement planning process on schools' professional learning culture. Structured surveys were administered to teachers and administrators of four elementary schools that had participated in the Northwest Educational Service District's School Improvement Technical Assistance Project (SIPTAP) during the 2002-03 school year. Two of the four schools were selected for on site interviews with teachers, administrators, and SIPTAP coaches.

Findings suggest that these schools showed evidence of significant improvements in their professional learning culture following their participation in the SIPTAP project. These improvements were most noticeable in the areas of (1) peer collaboration focused on instructional improvement; (2) reflective dialogue pertaining to teaching and learning; (3) focus on student learning in school decisions; and (4) overall focus on improvement. Evidence of sustained growth in school-wide collaboration, focus on student achievement, and databased decision-making was apparent in those two schools in the interview sample. There was evidence that some teachers were beginning to take place in teachers' classroom practice. Schools' levels of readiness for change did not predict gains in characteristics of their professional learning culture post-SIPTAP, though time to plan and principal support were clearly important factors. Findings suggest a structured, school wide improvement planning process can build readiness for improvement, even in those schools that lack capacity initially.

Results point to the need for longitudinal research on the effect of school improvement planning on student achievement and the differences in how elementary secondary schools experience school improvement planning.

TABLE OF CONTENTS

Page

List of Figures iii

List of Tables iv

CHAPTER 1 1
Introduction 1
Continuous School Improvement Models 4
KEYS Initiative 4
Bay Area School Reform Collaborative 5
Center for Collaborative Education 6
Context of the Study 6
The SIPTAP Curriculum 7
Theoretical Underpinnings of SIPTAP 9
Research Questions and Methodology 12
Rationale for the Study 13
Organization of this Report 15

CHAPTER 2 16
Study Conceptualization and Framing Ideas 16
Theory of Action 16
Continuous, Inquiry-Driven Improvement 18
Readiness for Change 27
Professional Learning Community 32
Professional Learning 32
SIPTAP's Professional Learning Design 39
Coaching Support for School Improvement 40
The SIPTAP Coaching Model 46
Summary 46

CHAPTER 3 48
Methods 48
School Selection 51
Research Methods and Procedures 55
Quality of Inquiry 62

CHAPTER 4 68
Findings: Part One 68
Question #1: Changes in Their Professional Learning Culture 69
Question #2: Sustainability 98
Summary 103

Chapter 5 105
Findings: Part Two 105
Question #3: Changes in teachers' classroom practice 105
Question #4: Contextual readiness factors 111
Summary 125

CHAPTER 6 128
DISCUSSION 128
Discussion of Findings 129
Limitations 150
Conclusions and Directions for Future Research 153

References 163

APPENDIX A: SITE AGREEMENT LETTER 172

APPENDIX B: PRINCIPAL SURVEY 173

APPENDIX C: TEACHER SURVEY 180

APPENDIX D: INTERVIEW PROTOCOLS 187

APPENDIX E: SEMI-STRUCTURED INTERVIEW ANALSYSIS 191

APPENDIX F: CRONBACH'S ALPHA COEFFICEINTS AND SCALE DESCRIPTIONS FOR TEACHER SURVEY 202

LIST OF FIGURES

Number | Page

Figure 1: Theory of Action......16

Figure 2: Principal Survey Readiness Score by Item and School......112

Figure 3: Teacher Survey – Readiness Scale......113

Figure 4: Teacher Survey – Mean Readiness Scores by School......114

Figure 5: Teacher Survey – Mean Readiness Scores by Item......115

Figure 6: Revised Theory of Action......155

LIST OF TABLES

Number Page

Table 1: Demographics of Survey Schools 53

Table 2: Response Rate for Survey Schools 65

Table 3: Sources of Information for Research Questions 67

Table 4: Principal Survey: Professional Community Items 71

Table 5: Teacher Survey - Professional Community Items 72

Table 6: Principal Survey: Total Scale Scores by School 73

Table 7: Teacher Survey: Total Scale Scores by School 74

Table 8: Evaluating Goals Rubric 92

Table 9: Action Plan Rubric 93

Table 10: Meeting Artifacts 95

Table 11: Correlations – Gain and Readiness Scores 116

CHAPTER 1

Introduction

Perhaps no challenge is more pressing and daunting for school administrators as the responsibility for providing leadership for ongoing school improvement. While it could be argued this has always been the primary focus of school and district leaders, federal and state policy environments have created a sense of urgency, the likes of which many practicing administrators have never before experienced. Between 1996 and 2002, the number of states with standards-based accountability systems increased from 14 to 49 (Schwartz, 2002). Accountability stakes were raised substantially with the reauthorization of the Elementary and Secondary Education Act (No Child Left Behind Act, 2002). The law requires all states to develop or align their existing accountability plans to ensure all students meet state-established standards in reading and math by the year 2014. Failure on the part of districts or schools to meet annual benchmarks for all or any subgroup of students triggers a series of progressive sanctions that call for increasing levels of state intervention over time, culminating with implementation of a plan for alternative governance for districts or schools failing to meet standards for five consecutive years.

These rigorous, standards-based accountability systems have strengthened the call for educators to pay increased attention to the nature of change in schools and to invest in developing a culture of ongoing improvement (Fullan, 2001b; Hale, 2000; Hightower, Knapp, Marsh, & McLaughlin, 2002). In many cases, state lawmakers have created policies which require all public schools to engage in ongoing improvement planning

(Christ, 2002; Hull & Petit, 1998; Sievers, 2003). In 2002, the State of Washington passed legislation requiring all schools to implement a planning process which promotes "continuous improvement of student academic achievement of the state learning goals and essential academic learning requirements" and address "the characteristics of successful schools as identified by the superintendent of public instruction and the educational service districts" (Wash. Admin. Code ch. 180-16-220 § 2bii and 2di, 2002). As in other states, this policy has spurred significant work on the part of the state education office and intermediate educational service districts focused on developing processes and tools to help districts and schools undertake the difficult and complex work of comprehensive improvement planning (Christ, 2002; Davis, 2005). Nationally, these models tend to be grounded in principles of total quality management developed by Deming in the 1950s (Schmoker & Wilson, 1993; Walton & Deming, 1988) and differ in important ways from those change processes concerned primarily with successful implementation of packaged school reform models. This distinction is an important one and requires additional explanation.

The Comprehensive School Reform Demonstration Program (CSRD), created by Congress in 1998 under PL 015-78 and authorized in 2001 under the No Child Left Behind Act, provides financial incentives for schools implementing externally developed, research-based, whole-school and reading/language arts reform models (Paige, 2004). Examples of those models endorsed by the National Clearinghouse for Comprehensive School Reform include Accelerated Schools, Core Knowledge, Modern Red Schoolhouse, and Success for All/Roots and Wings (*The Catalog of School Reform*

Models, 2004). Qualifying schools are eligible for up to $50,000 per year for each of three years. These funds are used to purchase curriculum materials and to contract with program consultants for training and implementation support. Put simply, the CSRD theory of action is based on the belief that (1) lasting school improvement must be centered on a comprehensive effort which integrates and aligns schools' curriculum, assessment, instruction, and management structures and (2) most schools are unable to develop a comprehensive program for reform locally, requiring instead, the framework and structure of an externally developed model to be successful.

By contrast, continuous school improvement or process models assume that meaningful, sustainable change requires schools to develop cultures of self-reflection and renewal. Rather than focusing on implementing a prescribed curriculum or instructional approach, these models teach school communities how to engage in ongoing, collaborative inquiry, centered on elements of effective schooling.

The theoretical and research literature on school improvement provides substantial support for an emphasis on process over content. The Rand Change Agent Studies of the 1970s, one of the early attempts to investigate the implementation of improvement efforts in schools, concluded: "the way in which the change process is conceptualized is far more fateful for success than the educational method or content…one seeks to implement" (Sarason, 1971, p. 78).

But what capacities and support are needed for a school to engage in ongoing self-renewal and how do the processes they employ factor in to their success? Is it likely, as Slavin (1997) suggests, that even among those schools which are oriented toward change

and possess the abilities and stability that would seem to predict positive outcomes, few are able to "create their own path to reform, even with external assistance" (Slavin, 1997, p. 5)? This question is critical to local districts in Washington State. Faced with regulatory requirements mandating school improvement planning, these districts are investing significant financial and human resources in continuous planning efforts.

Continuous School Improvement Models

Several national and regional initiatives provide a picture of how the continuous school improvement process plays out in practice. Three of these are described below.

KEYS Initiative

In the early 1990s, the National Education Association (NEA) launched the Keys to Excellence in Your Schools (KEYS) project in an effort to assist schools in reflecting on their performance relative to six indicators of school excellence: (1) authentic, learner-centered instruction, (2) shared understanding and commitment to high goals, (3) open communication and collaborative problem solving, (4) continuous assessment for teaching and learning, (5) personal and professional learning, and (6) resources to support teaching and learning (Rollie, 2002). Participants are administered a survey designed by the NEA to measure the extent to which these indicators are present in their school. NEA facilitators, or coaches, work with school staff and community members to analyze survey results, identify barriers to improvement, and identify targets and strategies for change. Rollie (2002) explains: "...KEYS is a school-based improvement strategy concerned with an organization's enabling conditions and relationships, not specific

programs" (p. ix). In their summary of an evaluation of the KEYS initiative in nine districts from across the country, Portin, Beck, Knapp, and Murphy (2003) note:

> ...the initiative's theory-of-action holds that school improvement can be set in motion through a reflective tool...acting as a mirror, stimulating action, providing a source of important issues to attend to, and offering an organizing rubric for a variety of activities that schools might pursue. (p. 180)

Bay Area School Reform Collaborative

Formed in 1995 as part of the Annenberg Challenge, the Bay Area Schools Reform Collaborative (BASRC) strives to support schools in the San Francisco Bay area in their efforts to close the achievement gap between middle class, white students and disadvantaged and minority students through improved teaching and learning. Participating schools are taught the "Cycle of Inquiry," a six-step collaborative process which engages staffs in identifying a problem of practice, identifying measurable goals, creating and implementing action steps, and evaluating results (Coggins, Stoddard, & Cutler, 2003; Copland, 2002). Copland (2002) explains that BASRC's theory-of-action is founded on three principles:

1. Those at the school level must accomplish the work of improving schools collectively.
2. Leadership for improving teaching and learning is rooted in *continual inquiry* into work at the school, inquiry focused on student learning, high standards, equity, and best practices.

3. The decisions made in the schools regarding identification of critical problems, and development of solutions for same, should be made *collectively*, and focus on improving the learning of all students. (p. 2)

As with the KEYS project, schools are supported in their work by external "reform coaches."

Center for Collaborative Education

The Center for Collaborative Education (CCE) was founded in 1994 to support improvement efforts in schools in the greater Boston area. Currently leading a number of initiatives involving dozens of schools and districts, CCE's theory-of-change holds that successful improvement efforts require: (1) a collaborative culture focused on improving learning, teaching and (2) a culture of data-based inquiry and decision making (Tung & Feldman, 2001). Coaching, professional development, and teacher collaboration all focus on increasing school-based practices (i.e., improving teaching and learning, building leadership capacity and a professional collaborative culture, data-based inquiry, and creating structures to support high achievement) and external practices (i.e., developing district capacity to support school change and networking with other schools).

With these three models of continuous educational improvement in mind, I now turn to the context of this study in Washington State.

Context of the Study

This study focuses on a continuous improvement planning process developed by Northwest Educational Service District #189 (NWESD). One of nine intermediate service districts in the state of Washington, NWESD provides support for 35 local

districts in the northwest portion of the state. These districts range in size from less than 50 to almost 22,000 full time equivalent students. The percentage of students qualifying for the free and reduced lunch program ranges from 7% to 60%.

In the fall of 2001, ESD 189 launched the School Improvement Planning Technical Assistance Project (SIPTAP), designed to train and support schools in a comprehensive school improvement planning process. Although board approved plans for each school were not required at the time SIPTAP was first implemented, it was well known such a requirement was imminent. The project was a proactive effort on the part of NWESD to assist schools in preparing to meet this mandate. To date, 12 high schools, 17 middle schools, 36 elementary schools, and three K-8 schools from 24 different districts across the NWESD region have participated or are currently participating in the project. This study focuses on four of these schools in four separate districts.

The SIPTAP Curriculum

As with the processes promoted by the KEYS, BASRC, CCE initiatives, it is helpful to think about the SIPTAP process as a professional development curriculum aimed at teaching administrators and staff how to engage in and sustain an inquiry-based approach to identify and address problems of practice in schools, leading to improved student achievement. The steps which comprise the content of the curriculum are similar to those in the BSARC Cycle of Inquiry and the Annenberg school improvement process (Barnes, 2004). Derived from Shewhart's "plan-do-study-act" inquiry cycle (Walton & Deming, 1988), the process proceeds according to the following steps:

1. Establishing a shared purpose or aim

2. Collecting and analyzing data
3. Setting Goals focused on improving student achievement outcomes
4. Researching solutions to barriers
5. Developing an Action Plan
6. Monitoring plan implementation
7. Evaluating results based on student performance

The curriculum includes an emphasis on assessing and developing staff readiness to move from one step in the process to another and on learning specific processes for gathering staff input and arriving at consensus.

While the content of NWESD's curriculum is similar to other school improvement planning initiatives, the model for delivering, or teaching, the curriculum to school staff using a highly structured and tightly scaffolded process is unique. NWESD project staff work with school leadership teams comprised of administrators, teachers, classified support staff, and parents in a cohort model for a total of five days over several months. Trainings are scheduled to allow teams to implement specific steps of the process with their school faculties between sessions. External coaches, who are primarily retired school administrators with reputations for facilitating change in their own schools and districts, are trained by NWESD staff to provide on-site support for leadership teams as they implement the planning process at their schools. Feedback from coaches and teams as they work together to implement what teams have learned informs curriculum planning for subsequent trainings.

Theoretical Underpinnings of SIPTAP

The theoretical underpinnings of the SIPTAP model will be explored in detail in the following chapter. However, it is important to briefly address some of the major concepts underlying the process.

Order of Change

The SIPTAP project aims to create capacity for meaningful, systemic, and lasting improvement in schools. Improvements of this kind require changes in "the underlying philosophical beliefs driving practice" (Fouts, 2003, p. 13) and contrast with non-transformational changes so common in schools today. The terms first and second order change were first used in the 1970s by theorists in the fields of cybernetics and psychology to contrast changes which leave systems fundamentally unchanged (first order) as opposed to those which are based on new learning and new ways of thinking (second order) (Bateson, 1979; Watzlawick, Fisch, & Weakland, 1974). The SIPTAP curriculum is founded on the belief that second order change in schools can only be achieved through systematic, collaborative, and continuous inquiry.

Professional Learning

The importance of collaborative professional learning to school improvement is, in theory, modeled in all aspects of SIPTAP. School leadership teams learn about the process together and, in turn, facilitate collaborative learning and planning with their staffs. As more and more districts have begun to involve multiple schools in a district cohort model, opportunities for collaboration within districts have increased. Principals from participating schools meet monthly with project staff to discuss issues and problem

solve. Coaches and project staff meet regularly to review progress, explore common issues, and discuss strategies. The NWESD chief academic officer, who serves as the lead project facilitator, meets throughout the year with her counterparts from around the state to share practices and explore ways to improve the SIPTAP process. As the model has developed, NWESD staff have become knowledgeable about the role of the SIPTAP process in teaching schools how to create a culture of professional learning and inquiry that is so vital to ongoing improvement (L. Dobbs, personal communication, August 7, 2003).

Staff Readiness

Multiple school reform initiatives have emphasized the importance of school and district context in school improvement planning outcomes. Portin et al. (2003) found that the degree of "institutional readiness for renewal," defined as the "the interaction of the internal and external context influenced by the context of the renewal initiative" was a strong predictor of which schools were successful in the National Education Association's KEYS process (p. 188). However, while this and other approaches acknowledge the importance of readiness, they address factors contributing to readiness through the planning process, rather than making evidence of readiness a requirement for participation.

The SIPTAP application process designed by NWESD is intended, in part, to screen out schools that are not likely to benefit from involvement either because of a lack of district-level commitment or a lack of readiness on the part of the school. For example, if a district is unwilling or unable to provide a school with the time and

resources necessary to support their meaningful involvement in the process, and/or if a school is experiencing conflict at a level that is likely to interfere directly with the staff's ability to work together towards improvement, they would be discouraged from participating. This said, NWESD staff clearly recognize that schools vary in their readiness to move through one or more of the planning steps. Drawing on Paul Hersey's work in "situational leadership" (Hersey, Blanchard, & Johnson, 2001), they address this variability by providing ongoing instruction and support for leadership teams in strategies for assessing and developing readiness levels along the way.

Coaching

An increasingly common practice in the last 15 years is the use of external coaches to facilitate and support schools' change efforts. Schools involved in the SIPTAP process are provided with the support of a facilitation coach, charged with guiding the Leadership Team as they work with their faculties to implement the planning process. Nuefeld and Roper (2003), distinguish change coaches from content coaches, who are involved in working with teachers and administrators to improve teaching and learning in a specific content area. The use of change coaches is grounded in the belief that expertise and perspectives which are not enmeshed in a school's existing social and political culture are necessary to help schools engage in meaningful self-reflection and change (Muncey & McQuillan, 1996).

Unlike some models that use teacher leaders and district administrators to fulfill coaching roles for their own schools or other schools within their district (e.g., Kirby &

Meza, 1997), SIPTAP typically employs external coaches who have no relationships to the districts and schools to which they are assigned.

Research Questions and Methodology

This study was designed to investigate the effects of the SIPTAP model for continuous school improvement on the professional learning culture in schools. Specifically, the following questions were addressed:

1. How, if at all, is a school's participation in the SIPTAP project associated with participants' perceived changes in their professional learning culture?
2. In cases where the SIPTAP process appears to be associated with participants' perceived changes in a school's professional learning culture, to what extent does this culture continue after involvement in the project has ended?
3. What evidence is there, if any, that perceived changes in professional learning culture associated with a school's involvement in the SIPTAP process have lead to changes in teachers' perceptions of their own classroom practice?
4. What contextual readiness factors, if any, are associated with perceived changes in an enhanced professional learning culture in participating schools?

I employed a mixed methods research design, combining a structured survey of certified staff and principals from four elementary schools, follow-up interviews with principals, certified staff, and NWESD coaches in two of those schools, and a review of documents from the two schools in the interview sample. All schools in the sample participated in the SIPTAP project during the 2002 – 2003 school year.

Rationale for the Study

Beyond my academic interest in the SIPTAP project, I have a keen practical interest in understanding more about how the model affects a culture of collaborative inquiry in schools. Until recently, I worked in a district that made a commitment to fund SIPTAP participation for all schools over a three year period. Having been closely involved in school improvement at the district level, I observed first-hand how a carefully designed and delivered planning curriculum for school teams could enhance the capacity of school staffs to focus collaboratively on student performance and identify steps to address areas of need.

In July 2004, I assumed the superintendency of a neighboring district, which has chosen to use leadership from the curriculum office to facilitate school improvement efforts. Currently, the district's assessment director meets with each school's improvement team twice a year. After an overview of the characteristics of effective schools and a presentation of the school's achievement data, teams work together to identify strengths and weaknesses, and to identify targets and strategies. They then take their work back to their school and solicit feedback from their staff.

With the price for SIPTAP at approximately $15,000 per school and my current district's fund balance below 5%, this approach has, in large part, been motivated by cost. Additionally, though, there has been a concern that the SIPTAP process is too lengthy and time consuming for the benefits it provides. This attitude comes largely from the less-than-positive experiences the district's high school and one of the middle schools had with SIPTAP two years ago.

Aside from the cost associated with professional development and on-site coaching, the resources required to support comprehensive school improvement planning are significant. The release time required for leadership teams to attend SIPTAP training and meet together to plan for early release day activities impacts students in the short term. School leadership teams typically include some of a school's most capable teachers. Based on my experience, there is little question that removing them from their classrooms for up to 11 days compromises their instruction. More visible to the public are the district-wide early release days necessary to create time for school-wide involvement in the planning process. In districts with schools struggling to meet accountability benchmarks, encroaching on available teaching time can be a hard sell to the community and their elected representatives, the school board.

Are the financial, political, and other costs related to a district's involvement in an inquiry-based school improvement planning process outweighed by the benefits to the learning culture of participating schools? Put differently, by participating in the SIPTAP process, is there evidence staff actually learn how to establish the habits of collaborative inquiry? Specifically, do they learn how to effectively identify and commit to a common focus, collect and analyze data to determine needs, research proven strategies to address those needs, and design, implement, and monitor Action Plans, and are these learnings sustained after their involvement in the SIPTAP project is concluded? Although long term effects and impacts on student learning will not be known for some time, I need to have some insight into these questions before knowing how hard to push for my new district's involvement. Additionally, I believe my findings will contribute to a more

general understanding of these issues and so will have potential for informing others' professional practice.

Organization of this Report

Subsequent chapters are organized as follows:

Chapter 2 – Discussion of the theoretical foundations of the SIPTAP model together with a review of the literature pertaining to major concepts

Chapter 3 – Description of research methodology and procedures, a summary of analytical techniques and strategies employed, and a discussion of the study's limitations

Chapter 4 - Findings related to research questions #1 and #2

Chapter 5 - Findings related to research questions #3 and #4

Chapter 6 – Discussion of findings, conclusions, limitations of the study, and recommendations for future research

CHAPTER 2

Study Conceptualization and Framing Ideas

Theory of Action

Figure 1 displays the theory of change underlying the SIPTAP model.

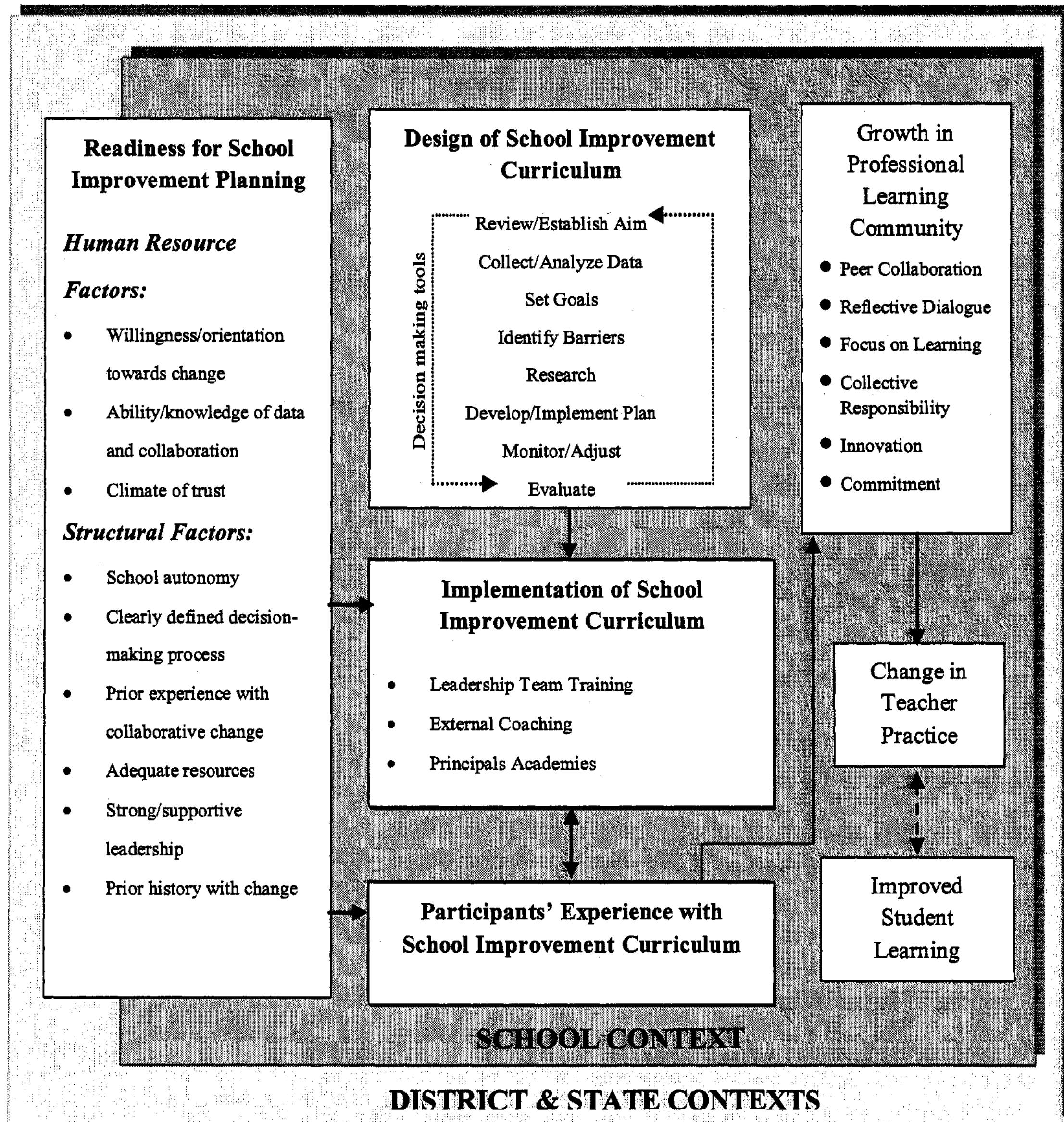


Figure 1: Theory of Action

This model is based on a substantial theoretical and inquiry-based literature relating to the concepts of continuous improvement, readiness for change, professional learning community, and external change agency or coaching, reviewed in detail below. The general notion is that, for those schools which exhibit the contextual characteristics or factors necessary to successfully engage in school improvement planning, staff involvement in a structured continuous improvement process curriculum, supported by the guidance and direction of an external coach, develops and strengthens the professional learning community within schools. The improvements in teacher practice which derive from ongoing and reflective professional collaboration lead to improvements in student learning, which further strengthen the school's professional community. School readiness for change has to do with factors specific to the school as well as district and state contextual factors and is strengthened as the school's professional learning community grows and develops. Evidence of the presence of a professional learning community rests, at least in part, on change in teacher practice and, ultimately, improved student learning. The idea, as Smylie and Wenzel (2003) put it, is that "before improvement in student outcomes can occur, schools need to develop in ways that promote it" (p. 99). While these connections are beyond the scope of this study, I have represented them in Figure 1 in order to show how the elements that comprise the focus of my inquiry fit into the broader picture of school improvement.

The following review of the literature related to the constructs underlying SIPTAP's theory of action is important to understanding both how the model works and its significance as a theory of educational change.

Continuous, Inquiry-Driven Improvement

Theoretical Foundations from Business and Industry

The notion of inquiry-driven improvement actually stems from the work of Walter Shewhart, a Bell Laboratories statistician during the 1920s (*The Voice of the Process*, 2000). Two of Shewhart's contributions are pertinent here. First, he argued that product variability is a function of the production process. Controlling unwanted variation in product quality, then, requires analysis of the production process, or the way in which "machines, operators, raw materials, working methods, and the surrounding environment interact with each other" (*The voice of the process*, 2000, p. 3). According to Shewhart, such analysis reveals the internal and external sources of variation, leading to a plan of corrective action.

Second, Shewhart proposed the plan-do-study-act (PDSA) cycle as a model of continuous problem solving intended, over time, to control unpredictable or "uncontrolled" variation in the manufacturing process to improve overall production quality (Shewhart, 1986). PDSA is an iterative process in which problems are identified and analyzed, solutions developed and implemented, and results evaluated. As a statistician, Shewhart was primarily interested in quantifying production processes so that variations from the desired standard could be analyzed and tracked, allowing for timely diagnosis and intervention to correct "special cause," or uncontrolled variation. He developed what became known as the Shewhart Control Chart, a statistical procedure for charting the products produced by a process in order to distinguish between those

instances of common cause and special cause variation (J. H. Little, 1992). Common cause variation occurs within the prescribed control limits and can be addressed by focusing on the system as a whole. Special cause variation occurs outside the control limits and calls for targeted intervention. Statisticians and engineers still commonly use this tool today. More relevant for purposes of my discussion, Shewart's statistical methods are currently being promoted by some educators, including the NW ESD SIPTAP project staff, as a tool for analyzing student achievement data.

In the 1940s, W. Edwards Deming, an early protégé of Shewhart's at Bell Laboratories, extended the PDSA model beyond the manufacturing realm, applying it to organizational management. While Deming, a statistician by training, was certainly interested in ensuring quality by managing the effects of random variation, his primary interest was in management of the human resources within organizations. In *Out of the Crisis* (Deming, 1986), he proposed his well known "14 points for management," several of which capture his philosophy of continuous organizational improvement:

- Create constancy of purpose
- Improve constantly
- Break down barriers between departments
- Institute a vigorous program of education and self improvement

Toward the end of his career, Deming (1986) argued that organizational transformation through application of these and the remaining management points requires those in the organization to first understand several core principles. These principles, referred to by Deming as a "system of profound knowledge", include (1) an

appreciation for systems, (2) knowledge of variation, (3) an understanding of the theory of knowledge, and (4) an understanding of psychology. In an address to the Deming Institute, Clare Crawford-Mason (1997) described Deming's system this way:

> In Profound Knowledge [Deming] integrated four disciplines: systems thinking, statistical thinking, epistemology, and psychology, into a revolutionary theory of management....Deming showed the way to a method where a group or team of people working together for a common purpose can be greater than the sum of its parts. Through Profound Knowledge, [he] helped Japanese and American industries eliminate cross-purposes between labor and management, which lead to the elimination of cross-purposes among divisions.

Deming's belief that knowledge is created when individuals work collaboratively to analyze information and solve problems is echoed by Argyris, Putnam, and Smith (1985). These authors agree that, in order to learn effectively, individuals and organizations need to value accurate information, informed decision making, and internal commitment – values which are best reinforced through shared decision making and control and participation in the creation and implementation of action strategies (Argyris et al., 1985; Argyris & Schön, 1996). Their model of Action Science holds that individuals and organizations learn to enhance their effectiveness through the process of "double-loop learning," where they continually and deliberately reflect on how outcomes of their actions are related to their own underlying norms, beliefs, and policies, taking steps to modify those contributing variables, and reflecting on the results (Argyris et al., 1985). In contrast to single-loop learning, where individuals and organizations ignore

underlying or "governing" variables, focusing their attention instead on finding and implementing alternative action strategies, double loop learning bears a close resemblance to what Watzlawick et al. (1974) refer to as second order change, a resemblance which Argyris et al. (1985) readily acknowledge.

While Argyris and his colleagues may agree with Deming's principles in some important ways, they are skeptical of his Total Quality Management (TQM) program and of other programs intended as "organizational enablers", or intervention packages designed to guide organizations through the learning and problem solving process. Citing the studies of Arthur Schneiderman and Michael Beer on the effects of improvement programs on organizational learning and improvement, Argyris and Schön (1996) conclude:

> Our analysis of case material...indicates that organizational enablers can induce productive organizational learning, leading even to temporary double-loop outcomes at the level of organizational theory-in-use, when the issues are neither embarrassing nor threatening. But under conditions of embarrassment or threat, we find that the O-I learning systems of the organization tend over time to subvert the enabling interventions. (p. 249)

For Argyris and Schön (1996), the term "O-I learning system" refers to the "theory in use" or world view individuals and organizations fall back on to avoid or reduce threats. Variables governing the O-I system are driven by the need to unilaterally "define goals and try to achieve them, maximize winning and minimize losing, minimize generating or expressing negative feelings, and be rational" (p. 93). According to Argyris

and Schön (1996), these variables lead to action strategies which may reduce the level of interpersonal conflict and discomfort in the organization but do little to enhance long-term effectiveness or double-loop learning. By contrast, action strategies generated within the "O-II learning system" are governed by a need for "valid information, free and informed choice, and internal commitment to the choice and constant monitoring of its implementation" (p. 118). Their point is that programs like TQM tend to be overly prescriptive and mechanistic, converting sound theories and insights into "a readily understandable package of procedures" which, as typically implemented, are rarely effective in disrupting "the prevailing organizational defensive routines" (Argyris & Schön, 1996, p. 123) Unless these defenses are disrupted, double-loop learning, or second-order change, cannot occur.

The caveats posed by Argyris and his colleagues relative to packaged inquiry programs are highly relevant to this study. The SIPTAP curriculum draws heavily from the TQM literature and is designed to teach leadership teams a prescribed set of processes or tools for use in facilitating collaborative data analysis and decision making with their staffs (*Tool Time: Choosing and Implementing Quality Improvement Tools*, 2001). However, by situating these procedures in a theoretical context that emphasizes careful attention to organizational context and second-order change, the curriculum strives to mitigate the criticisms directed at other continuous improvement programs. In part, this study is designed to look at how successful SIPTAP schools have been in using the procedures they have learned to create O-II learning systems within their schools to address threatening issues. If, as Muncey and McQuillan (1996) suggest, these issues

tend to revolve around political power, how effective are the SIPTAP process tools in creating a more inclusive, level playing field where all constituent groups within the school community are able to safely voice their opinions and influence the planning process? To the extent they are effective, the SIPTAP process is likely to have a positive impact on the nature of participating schools' culture of professional learning.

The Educational Literature

The concept of the learning organization continues to occupy a central role in the change literature in the field of business administration (Redding & Catalanello, 1994; Rowden, 2001), and it is equally pervasive in the literature on educational change (Conley, 1993; Elmore & McLaughlin, 1988; Fullan, 2001a, 2001b; Schmoker & Wilson, 1993; Sirotnik, 1999). Indeed, while business and educational enterprises differ in many fundamental ways, the similarities between the struggles faced by both industry and schools as they strive to achieve meaningful and lasting change are clear. For example, Pressman and Wildavsky's (as cited in McLaughlin, 1998) lament over what they found when they looked for links between the federal educational policies of the 1960s and tangible improvements for students at the local level reveals a frustration over the same uncontrolled variation in quality both Shewhart and Deming spent their careers trying to address:

> Implementers, they reported, did not always do as they were told...nor did they act to maximize policy objectives... Instead, those responsible for implementation at various levels of the policy system responded in what often seemed quite idiosyncratic, frustratingly unpredictable, if not downright resistant

> ways. The result was not only program outcomes that fell short of expectations but enormous variability in what constituted a program in diverse settings. (p. 70)

Over 30 years ago, Sarason (1971) argued that the failure of many schools to improve their performance was related to an emphasis on improving educational programs or products. He called, instead, for increased attention to the organizational change process within schools, arguing that without a culture of institutionalized reflection, schools would continue to be hampered in their improvement efforts: "…there are no vehicles of discussion, communications, or observation that allow for…variation to be raised and productively used for the purpose of help and change" (Sarason, 1971, p. 109). Lacking systems for organizational reflection, Fullan (2001b) argues that, rather than struggling "with new cultures and which new values and practices may be required" (p. 34), schools fall into a pattern of adopting "superficial, episodic reform that makes matters worse" (p. 36). Districts then, tend to engage in single-loop learning, responding to failed initiatives by looking for another strategy, rather than by examining underlying problems or governing variables for which the initial strategy was an intended solution.

SIPTAP and similar school improvement process models are founded on the principles of continuous improvement and organizational learning. Their curricula, or planning steps, closely follow the Shewhart PDSA cycle, placing a strong emphasis on establishing a shared vision, analyzing data, studying available research, and evaluating implementation results (Conley, 1993; Davis, 2005; Hall & Hord, 2001; *Planning for school improvement: A report on a comprehensive planning process*, 1998; Sievers, 2003; Woods, 2002). Their approach is designed to be systemic, reflective, collaborative,

and continuous. It is also what Youngs and Kings (2000) call "organic," or school-based, aiming to increase the capacity of local school communities to become, in Sirotnik's terms, "empowered agents in their own school improvement process" (Sirotnik, 1989). In their study of the National Education Association's KEYS initiative, Portin, Knapp, and Murphy (2003) indicate that self-reflective process strategies are predicated on a belief:

> ...that school improvement can be set in motion through a reflective tool...acting as a mirror, stimulating action, providing a source of important issues to attend to, and offering an organizing rubric for a variety of activities that schools might pursue. (p. 180)

As such, these models contrast "sharply with many popular school-based reform approaches that often prescribe renewal goals and content, along with models of school governance and programmatic organization." (Portin & Knapp, 2003, p. 93)

While the concept of continuous, self-reflective school renewal may be attractive to theorists, researchers, and practitioners alike, there is skepticism about how many schools actually have what it takes to engage successfully in such a process. Fullan (2003) argues that external programs, similar to those promoted by the U.S. Department of Education's Comprehensive School Reform Program (CSR), are doomed to fail because they impose a system of what Cohen and Hill (2001) call "imported coherence" between curriculum, assessment, and professional development rather than help schools build the capacity among staff to create their own system. Yet he also admits, "The vast majority of districts do not have the conception, capacity, or continuity to be anything

more than an episodic aggravation from the perspective of school effectiveness" (p. 54). Although less pessimistic, Portin et al. (2003) note, "Self-reflective strategies demand a lot of a school staff to move beyond their current way of doing business to one that represents, to them and others, an improvement, a renewal" (p. 91). Slavin (1997) concludes that, while many schools may be oriented toward change and possess the abilities and stability that would seem to predict positive outcomes, few are able to "create their own path to reform, even with external assistance" (p. 5). He argues these schools are best served by adopting a comprehensive school reform model (e.g., Success for All, Core Knowledge, and Accelerated Schools). Writing in favor of externally developed reform models, Borman, Hewes, Overman, and Brown (2002) note:

> …the complex educational changes demanded by current standards-based reform initiatives, combined with an increasingly heterogeneous student population largely comprised of students whom schools have traditionally failed, have pushed the technology of schooling toward unprecedented levels of complexity. In many ways, expecting local educators to reinvent the process of educational reform, school by school, is unrealistic and unfair. (p. 1)

Evaluation of the overall effects of the CSR approach to school improvement has been complicated by the wide variation in approach these programs represent. In their meta-analysis of 232 studies of 29 CSR programs, Borman et al. (2002) found strong evidence of effectiveness for three CSR models. Two of these programs, Success for All and Direct Instruction prescribe curriculum materials and instructional strategies. The third model, the Comer School Development Program, prescribes an improvement

process based on specific guiding principles and Comer's six developmental pathways (Joyner, Ben-Avie, & Comer, 2004). However, the effect size, though still significant, dropped considerably when looking only at third-party comparison studies, excluding those conducted by one or more of the program developers. In their five-year study of eight schools participating in another CSR program - the Coalition of Essential Schools - Muncey and McQuillan (1993) concluded:

> ...even when there seems to be a consensus that change is needed and even when dedicated and well-intentioned people are trying to bring it about, issues and problems-often unanticipated- arise that threaten and impede the change process, almost from its inception. (p. 489)

Among the schools in their sample, lasting, schoolwide change was the exception rather than the rule.

The dilemma begins to resemble a classic double bind. External programs fail to develop the long-term capacity for schools to engage in and sustain meaningful self-renewal. Further, as someone else's idea, they often lack the emotional and professional ownership needed to sustain collective effort, particularly during the difficult and labor-intensive phases of implementation. Yet most schools do not have the capacity to engage in a process that, at least conceptually, stands a better chance of long-term success. The research on organizational readiness for change, though, offers some glimmers of hope.

Readiness for Change

Keup, Walker, Astin, and Lindholm (2001) identified organizational readiness as one of the three primary aspects of the institutional transformation process. Hersey et al.

(2001) define readiness as the willingness, or confidence, and ability of individuals in the organization to implement change. Faced with change, the majority of staff will fall into one of four groups: able and willing, able and unwilling, willing and unable, or unable and unwilling. Leaders may choose to maximize staff readiness by tailoring the levels of direction and support they apply in each case. As an example, when working with a group of employees who are willing to change but lack the requisite skills and abilities, leaders should, according to the situational leadership model, adopt an approach which is high on both the task and relationship dimensions. When faced with groups that are able but unwilling or insecure, high levels of support with relatively low levels of task directive behaviors are appropriate.

Armenakis, Harris, and Mossholder (1993) describe readiness as "the cognitive *precursor* to the *behaviors* of either resistance to, or support for, a change effort" (p. 681). They propose a situational leadership model in which "the beliefs, attitudes, and intentions, and ultimately the behavior" of employees vis-à-vis a change initiative are positively influenced through approaches tailored to the level of employee readiness and the urgency of the change (p. 686). In the event the need for an organizational change is pressing, but employee readiness is low, leaders should, they argue, create a sense of crisis to motivate action. However, if the need for change is low but employee readiness is high, leaders should act to maintain readiness while not pressing for change, suggesting that, "The creation of readiness is not necessarily a pre-change concern only. Readiness must be maintained throughout the process of large-scale change since such change is comprised of smaller changes which are ongoing" (p. 688). The SIPTAP curriculum

emphasizes the principles of the situational leadership model and stresses the importance of conducting readiness assessments (included in the curriculum materials) with staff before beginning the process and before moving through each of the prescribed planning steps.

While the notion of readiness and its application to leadership for change may have originated in the fields of business and industry, a number of educational researchers have attempted to identify those factors which account for successful school improvement efforts. Portin et al. (2003), Slavin (1997) and Fashola and Slavin (1998) argue that not all schools possess the requisite characteristics to successfully engage in self-reflective, continuous improvement efforts. Several large-scale studies have revealed specific aspects of school context and culture, which seem to predict a school's success. For the purposes of this analysis, I will rely on Hall and Hord's (2001) notion that school context is defined by the interaction between the school's culture (people and human factors) and situational variables (physical or structural). Some of the variables identified in the literature relate to staff characteristics and can be located along Hersey and Blanchard's willingness and ability dimensions (Hersey et al., 2001), while others are located at the system, rather than at the employee level. In the following section, I will review a number of studies that inform our knowledge of which contextual variables are linked to schools' success with change efforts.

School Context and Readiness for Change

In their longitudinal study of 14 schools involved in reform efforts, Corbett, Dawson, and Firestone (1984) identified eight contextual variables which affected the

relationship between change strategies and outcomes: (1) availability of resources, (2) incentives and disincentives for innovative behavior, (3) the nature of teacher-to-teacher, teacher-to-administrator, teacher-to-parent, and teacher-to-student linkages, (4) existing school priorities and goals, (5) the nature and extent of staff conflicts within the school, (6) staff and administrative turnover, (7) staff knowledge and current administrative and teaching practices, and (8) the school's prior history with change projects.

Bodilly (1998) found that supportive leadership within the school and district systems which support school autonomy were two contextual factors which were key to successful implementation of reform efforts for those schools involved in the New American Schools project. Portin et al. (2003), in their discussion of research on the KEYS school improvement initiative, echo the importance of "concerted leadership, school-level discretion, and access to adequate resources", while adding the need for "a sense of precipitating issues and a sense of urgency, and familiarity with data (or ways to gain this familiarity)" (p. 197).

Bryk and Schneider (2002) provide clear evidence for the importance of a climate of trust to a school's successful reform efforts. In their study of 12 Chicago elementary schools engaged in improvement efforts related to the Chicago School Reform Act of 1988, they found that the level of relational trust across a school's community was predictive of higher levels of student achievement and conclude that, "trust fosters a set of organizational conditions…that make it more conducive for individuals to initiate and sustain the kinds of activities necessary to affect productive improvements" (p. 116). Of course trust, perhaps more than other contextual variables, is present in schools to

varying degrees and may be more accurately viewed as a developmental characteristic than a prerequisite of readiness. However, the evidence suggests schools that enter the improvement process with cultures toward the high end of the relational trust continuum are more likely to be successful in their efforts than those toward the lower end of the continuum. Certainly, practicing administrators recognize that, while schools with low levels of trust may be able to address superficial issues collaboratively, they quickly revert to what Argyris and Schön (1996) call O-I learning patterns. As discussed earlier, these patterns are governed by the need to reduce threat, and inhibit open, collaborative, and objective analysis of issues.

In their final report on the Chicago Annenberg Challenge, Smylie and Wenzel (2003) suggest that the lack of evidence for a significant overall "Annenberg effect" was, in part, attributable to wide variations in schools' capacity to benefit from the program. They point specifically to many schools' lack of adequate human, social, and financial resources, along with their lack of commitment to improvement. They found some evidence that the sample of Breakthrough Schools, identified as those schools that developed and sustained greater improvement in several areas of school organization and practice which promote student learning, differed from other Annenberg schools on important indicators of capacity for improvement.

The literature on school context and culture inevitably points to the importance of professional learning community in implementing and sustaining meaningful renewal. While in some sense, the presence of characteristics of a professional learning community could be considered a component of readiness, I am interested in examining

whether a school can learn to adopt the habits of a learning community through involvement in a structured improvement curriculum. For the purposes of this discussion, then, I have chosen to examine the concept of professional learning community separate from the concept of readiness.

Professional Learning Community

As an inquiry-based process reform model, SIPTAP is intended to build schools' capacity to improve learning for all students by teaching staffs the habits of collaborative reflection and planning for action. Put another way, the project aims to help schools develop the characteristics of a professional learning community. The SIPTAP curriculum is intended to provide the scaffolding necessary for staff to learn and apply these characteristics and is designed to model those best practices for professional learning that participating schools are intended to learn. To make this clear, let me discuss what we know about professional learning and then address the SIPTAP curriculum's design as a process for professional learning.

Professional Learning

The work of school improvement is fundamentally about enhancing the educators' knowledge, skills, and professional abilities of with the goal of improving learning for all students. The fact that many improvement initiatives have little impact on student learning is due, in part, to their lack of attention to the knowledge educators require to facilitate meaningful, systemic change and to the way in which adults acquire and manage this knowledge (Darling-Hammond & McLaughlin, 1995; Elmore & Burney, 1997; Neufeld & Roper, 2003). Efforts to enhance practitioners' knowledge and skills

through professional development workshops and use of external consultants have ignored what we know about learning. Brown and Duguid (2000) and Davenport and Prusak (1998) argue that information, which for years has been the focus of professional development activities, only becomes knowledge through the process of social interaction. Brown and Duguid (2000) describe this process as one of "collaboration, narration, and improvisation" (p. 104). Knowledge is created and transmitted throughout the organization as practitioners work together to share information and arrive at common understandings, tell stories about problems they have encountered and solved, and generate new ways to adapt organizational routines to accommodate new and unpredictable challenges. Professional learning is imbedded in practice and practice is situated within the social context of the organization. Nonaka, Takuechi, and Takuechi (1995) attribute the success of Japanese business through the latter part of the 20th century to Japan's collaborative culture, where social interaction leads to the transformation of implicit knowledge to collective knowledge. Wenger, McDermott, and Snyder (2002) draw on examples from successful multinational corporations to show how businesses have begun to organize in ways that encourage this type of collaboration in the form of "communities of practice," which come together to create and apply knowledge.

Greeno, Collins, and Resnick (1996) label this theory of learning as the "situative/pragmatist-sociohistoric perspective." In this view:

> …success in cognitive functions such as reasoning, remembering, and perceiving is understood as an achievement of a system, with contributions of the individuals

> who participate, along with tools and artifacts. This means that thinking is situated in a particular context of intentions, social partners, and tools. (p. 20)

Okada and Simon (1997) suggest that collaboration mediates learning, in part, by requiring participants to be "more explicit than in an individual learning situation, to make partners understand their ideas and to convince them...prompting subjects to entertain requests for explanations and construct deeper explanations" (p. 130). In their investigation of the effects of partner grouping on scientific discovery, they found that when pairs of learners combined data gathering activities with explanatory activities (i.e., generating alternative explanations, challenging each other's thinking, and asking one another for explanations) they achieved more successful learning outcomes than individual learners.

Evidence that learning is situated within social communities has important implications for the design of professional learning experiences for educators. If the concepts of an enterprise or community of practice are learned through collaborative discourse and inquiry, learning opportunities should be situated or embedded within the community (Bransford, Brown, & Cocking, 2000; Greeno et al., 1996). Bransford et al. (2000) argue that learning opportunities should take into account the needs of practicing teachers and that they should be community centered, focused on pedagogical and content-area knowledge, and provide opportunities for participants to test out and subsequently refine new ideas. Simply showing educators how to implement effective practices does not lead to the deep pedagogical understandings needed to effect

meaningful changes in practice over time (Wilson & Berne, 1999). Those understandings are a function of ongoing, collaborative conversations and inquiry.

Professional learning communities as a vehicle for professional development have been shown to play a key role in enhancing teachers' instructional knowledge and skills. Little (1982) found that more successful schools were characterized by norms of collegiality, where "collegial experimentation is a way of life" (p. 332). Teachers in these schools frequently talked in specific terms about their practice, engaged in peer observation and feedback, planned and developed instruction collaboratively, and coached one another in teaching strategies.

Louis and her colleagues at the Center on Organization and Restructuring of Schools (CORS) found that successful urban schools were characterized by ongoing reflective dialogue, deprivatization of practice, and frequent and ongoing collaboration (Louis & Kruse, 1995; Louis, Marks, & Kruse, 1996). Louis and Kruse (1995) conclude that "creating schools where all teachers are learners together with their colleagues" is more important to "finding a staff that has the energy and skill to teach today's...students" than improving the skills of individual teachers through traditional professional development programs (p. 5).

In their analysis of data from the CORS Longitudinal School Restructuring Study and the National Educational Longitudinal Study of 1988 (NELS: 88), Newmann and Wehlage (1995) identified a positive connection between the level of professional community in schools (defined as the extent to which teachers have a shared purpose about learning for all students, collaborate to improve instruction, and assume

responsibility as a community for student achievement) and student achievement. In addition to strong administrative support and a culture of respect, they found that principals and staff in more successful schools pursued a cycle of continuous improvement focused on teaching practice.

Elsewhere, secondary analysis of the NELS:88 data confirmed a link between professional collaboration in high schools and higher levels of student achievement (Lee & Smith, 1996; Lee, Smith, & Croninger, 1995). Similarly, in her report on a case study of six elementary and middle schools across five states, Lieberman (1995) found that those schools involved in successful reform efforts were focused on building a culture of professional inquiry, rather than on implementing programs.

The Consortium on Chicago Schools Research found that strong professional learning communities "characterized by a focus on student learning, peer collaboration, and reflective dialogue" were a key component supporting the link between high quality professional development and improved instruction (Smylie, Allensworth, Greenberg, Harris, & Luppescu, 2001, pp. 58-59). Additionally, Gallucci (2003) found that communities of teachers who collaborated on curriculum, lesson design, and student assessment helped teachers respond to policy-based reform mandates by reflecting on and changing their practice.

While there is strong evidence that schools in which teachers work collaboratively in professional communities tend to support higher levels of student success than those schools with norms of teacher privacy, it is clear that a culture of collaboration is not, in and of itself, effective or even desirable. J.W. Little (1990) notes:

> Teachers' collaborations sometimes serve the purposes of well-conceived change, but the assumed link between increased contact and improvement-oriented change does not seem to be warranted. Closely bound groups are instruments both for promoting change and preserving the present. (p. 509)

Making a point which, though obvious, is lost at times in the more sanguine discussions of professional learning communities, Little emphasizes that whether teacher collaboration is beneficial for students depends on "what values, orientations, and affiliations bind the [professional] group" (p. 524). Underscoring this point, McLaughlin and her colleagues from the Center for Research on the Context of Teaching identified three distinct patterns of teacher community in the high schools they investigated: (1) weak communities, (2) strong communities which reinforced traditional practices, and (3) strong communities that were focused on meeting the needs of all students (McLaughlin, 1998; McLaughlin & Talbert, 1993, 2001). Teacher communities focused on meeting the needs of all students worked together to reflect on their teaching strategies and create new, more effective practices while those that enforced traditional practices tended to attribute student failure to a lack of student effort and family support. In weak communities, teachers either tried to improve their practice in isolation or maintained the status quo, lowering standards for students. The qualitative distinctions between teacher communities in schools is further supported by Cohen and Hill (2001). In their analysis of the California mathematics reform initiative, they actually found that strong teacher collaboration was negatively associated with teacher willingness to adopt new practices. They conclude:

> Professional contexts are likely to bear on teachers' ideas and practices only when they create or actively support teachers' learning of matters closely related to instruction, and most professional collegiality and community in American schools is at present disconnected from such learning. (pp. 11-12)

Collegial relationships are not sufficient to support improvement in schools. To make a meaningful difference, those relationships must serve the interest of "serious discourse about learning, teaching styles, [and] organization of the curriculum" on behalf of all students (Lieberman, 1995, p. 11). As Wilson and Berne (1999) point out though, teachers have little experience engaging in deep, public discourse centered around their own practice and the practice of their colleagues. Simply providing the time and opportunity for teachers to talk together about their work without a supportive structure to guide them through the process of collaboration is unlikely to break through the norms of privacy that have for so long pervaded the culture of schools.

We know, then, that school contexts, which support ongoing professional learning, tend to support higher levels of student learning. High levels of teacher commitment and collaboration characterize these contexts. This collaboration goes well beyond collegial support. Rather, teachers engage in collective reflection and inquiry into ways to improve teaching and learning for all students. Teachers support each other's instructional innovations and meet together to examine evidence of the impact of classroom practice on student learning. Professional learning is situated within the context of practice. Willis (2002) and Stigler and Hiebert (1999) provide a picture of this type of collaboration in their descriptions of the lesson study model of professional

development, which originated in Japan. Here, teams of teachers meet to collaboratively plan, teach, observe, and analyze lessons targeting a specific concept or instructional strategy. After observing one of their team members teaching the lesson, the group meets to discuss what they observed and learned.

While more broadly focused around school-wide improvement, inquiry-based models like SIPTAP are intended to scaffold teachers and administrators' learning relative to collaborative reflection and inquiry. Simply put, these models provide a framework for teaching school staffs how to work together to evaluate their schools strengths and challenges and plan for improvement.

SIPTAP's Professional Learning Design

The SIPTAP model is designed to build schools' capacity for continuous improvement by teaching them a process for collaborative inquiry and planning. Put another way, the curriculum is intended to help schools develop habits of a professional learning community, where staff routinely collect and analyze data, draw conclusions about strengths and weaknesses, identify improvement targets and proven strategies for addressing those targets, implement these strategies, and monitor results. Like the model developed by the Center for Collaborative Education, SIPTAP's design includes multiple layers. These include:

- **Five days of training for school improvement teams**, focused on essential concepts underlying the process (i.e., continuous improvement, second-order change, and readiness) as well as on tools and strategies for facilitating the process with school staffs.

- **15 days of coaching for school improvement teams** to support implementation of the process at the building level.
- **Ongoing, collaborative training for coaches**, provided by NWESD, focused on strategies to improve coaches' knowledge and skills.
- **Discussion and problem-solving groups for principals** of schools participating in the project, focused on strategies to support school wide change.
- **Informational, discussion groups for district office leaders** from districts with participating schools to explore systems issues pertaining to continuous school improvement.

While each layer is central to the process, the role of coaches as supporters of school change deserves particular attention for purposes of this discussion.

Coaching Support for School Improvement

While not a central research question in this study, the role of external change agency in supporting school improvement is imbedded in SIPTAP's theory of action.

Coaches have long been a part of packaged, school-wide reform models. After realizing that only one-third of the school leadership teams were successful in launching the project after training, designers of the Accelerated Schools Project decided to implement a model using external coaches to support local implementation (Keller, 1994). However, the use of coaches has also gained popularity with many inquiry-based school improvement processes (Allen, Nichols, & Ancess, 2004).

Neufeld and Roper (2003) suggest that "change coaches" (as distinguished from content-area coaches) provide the "context-sensitive" support required for improvement

efforts to take root in local schools and address the need to deliver professional development that is "closely and explicitly tied to [schools'] ongoing work" (p. 3). From their observations of coaching programs in Boston, San Diego, and Louisville, they conclude that the primary benefit of change coaches lies in their ability to build capacity for shared decision-making directed towards solving problems of practice and to model leadership for principals. Researchers and theorists have also noted the value of coaches in helping schools coordinate and focus an otherwise fragmented array of improvement initiatives (Coggins et al., 2003; Neufeld & Roper, 2003; 2003). Pointing to the politically-charged nature of school change, Muncey and McQuillan (1996), in their longitudinal study of schools that were charter members of the Coalition of Essential Schools network, suggest it is "critical that schools seek informed and supportive outside perspectives while developing, implementing, and assessing change" to help "promote understanding and engender [the] trust" among members of the school community that is necessary to enhance learning for all students (pp. 283-284).

Coggins et al. (2003) examined the role of external and site-based reform coaches in the Bay Areas Schools Reform Collaborative (BASRC). They found that, in supporting the growth of a culture of inquiry across all levels of the school, coaches function as "knowledge managers" and "brokers," helping "coordinate teachers and administrators and ensure their work is focused on instructional issues," and to "[seek] out knowledge that will support instructional improvement and [coordinate] the dissemination of that knowledge" (p. 15). Particularly, they focused on knowledge

pertaining to data and assessment, equity, pedagogy, and the school's vision of reform and their reform history.

In three studies on the role of coaches in supporting approximately 80 New England schools involved in one of the Center for Collaborative Education's reform networks, Tung and Feldman (2001; 2002) and Tung, Ouimette, and Feldman (2004) explored how coaches direct their efforts in CCE schools, how teachers and administrators in these schools perceive their effectiveness, and how coaches balance CCE's reform agenda (i.e., improving teaching, learning, and assessment; building leadership capacity and a professional collaborative culture; data-based inquiry and decision making; and creating structures to support high achievement) with the local needs of their schools. Findings indicated that coaches served a variety of roles in their schools, including "professional developer, meeting facilitator, mirror, guide, and teacher of teachers", while facing the challenge of moving forward with structural, instructional, and cultural changes in the face of diverse local needs (Tung et al., 2004, p. 2). Their outside perspective allowed them to remain objective and push staff and administrators to extend their thinking. Teachers tended to perceive them as supportive of their efforts to change their classroom practices and reported that their work helped increase collaboration among teachers and strengthen facilitation skills among staff. Administrators reported relying on them as critical friends.

While coaches varied in regard to how hard they pushed the CCE reform agenda from the outset, many argued that initiatives could not proceed successfully without first building trust and commitment among staff and then ensuring that teachers have the time

and knowledge to collaborate. Tung et al. (2004) suggest the tension between building community and buy-in and pressing forward with change can only be resolved by providing support for staff to address their own needs for improvement while, at the same time, providing the knowledge and skills to keep them moving forward. Similarly, Lieberman (as cited in Tung et al., 2004 ,p. 20) argues that building community, without "providing some conceptual basis for [new] learning", will not build or sustain momentum for improvement.

The need for coaches to build trust and commitment for improvement while simultaneously furthering teachers' and administrators' learning is echoed by Coggins et al. (2003), who found that the success of BASRC coaches was a function not only of their social capital, defined as the strength of their relationships with those in the school community, but also the level of new knowledge and expertise they brought to their schools. Coaches low in social capital had minimal influence as they lacked sufficient access to their school's social network. Staff discounted those viewed as having nothing new to offer, even if they had successfully developed positive social relationships. Evaluations of Lucent Learning Community (LLC) schools, conducted by the National Center for Restructuring Education, Schools, and Teaching, tell a similar story (Lieberman, 2003; Whitford & Fisher, 2003; Wood, 2003; Yendol-Silva, 2003). Both internal and external coaches involved in the project varied widely in their success moving beyond trust-building activities and into the project's collaborative inquiry process with groups in their assigned schools. The researchers noted that while local school and district contexts were partially to blame in less successful sites, coaches'

understanding of the collaborative inquiry process and their facilitation skills also played a major role. Additionally, they found that some coaches tended to spend most of their energy on implementing the LLC protocols well, rather than on using them as a vehicle to further discussion about teaching and learning. Included in their recommendations was the suggestion that professional development for coaches "focus on the inquiry process, with protocols seen as one of many vehicles for promoting inquiry rather than [as] the central activity of [learning communities" (Whitford, 2003, p. 12).

The KEYS Process, developed by the National Education Association (NEA), has used external facilitators to assist school leadership teams to organize and administer the KEYS Survey, analyze the data, and design improvement plans to target needs. As a result of a steady increase in the number of schools requesting to participate in KEYS, the NEA has recently partnered with the University of Michigan to strengthen the coaching skills training available for these facilitators (C. Wallace, personal communication, January 5, 2005).

Studies of school change coaches have typically focused on staff and administrator perceptions of the effectiveness of coaching support in facilitating improvement in their schools. However, a relationship between external coaching and improved student achievement in failing schools was documented by David, Kannapel, and McDiarmid (2000) and David, Coe, and Kannapel (2003) in their investigations of Kentucky's school intervention program. Since 1990, Kentucky has used external coaches, now called "Highly Skilled Educators (HSE's)," to work directly with those schools failing to meet their improvement goals. These researchers found that, while

their focus varied based on school needs, HSE's were typically involved in helping their schools collect and analyze data, develop improvement plans, and implement professional development activities. Unlike other initiatives, where coaches were selected largely based on their willingness and availability (Kirby & Meza, 1997), Kentucky HSE's were identified through a rigorous selection process and provided extensive professional development both before and after being placed in their assigned schools. While initially given authority to evaluate and remove staff, since 1998, HSE's have not had any direct decision-making or evaluation authority. Schools receiving HSE support have continued to outperform other schools in the state (David et al., 2003).

Not surprisingly, the work on school improvement coaching points to variability among initiative models. However, some important similarities are clear. The effectiveness of coaching support is dependent on (1) the coach's ability to establish trust with administrators and staff and (2) their level of expertise (i.e., knowledge and skills) in helping schools successfully work through the collaborative inquiry process and subsequent Action Planning and implementation. How coaches are selected and the extent to which they are provided with ongoing professional development, then, seems critically important to the efficacy of a coaching initiative.

Beyond the requisite skills and knowledge, a coach's effectiveness appears to be tied to their ability to maintain a balance between a focus on the inquiry agenda and attention to diverse school needs. The ability to flexibly apply a variety of mentoring and teaching strategies across the school community in the interest of moving forward with an improvement planning process is critically important.

The SIPTAP Coaching Model

Schools involved in SIPTAP receive 15 days of support from an external coach, typically a retired school administrator. Coaches work with several schools in a given SIPTAP cohort and receive training prior to beginning their work. During the school year, they meet for one full day each month to learn about new strategies and discuss shared problems and concerns. Schools' SIPTAP leadership teams largely determine the extent of their involvement with their assigned schools. The more barriers to the inquiry process a school faces, the more coaching time is requested. Involvement beyond the leadership team is limited and the majority of their time is spent assisting the team with planning for and, less often, implementing the steps in the inquiry process.

While not a major research question, external coaches occupy a key role in the theory of action underlying the SIPTAP process. As a result, I designed my study, in part, to understand the role SIPTAP coaches play in their schools' improvement planning experience. Interviews with staff, principals and coaches included questions designed to discover how coaches spent their time, their perception of those contextual factors facilitating and inhibiting their success, and the extent to which teachers and administrators perceived coaching support as contributing to the success of their planning efforts.

Summary

The theoretical framework for this study draws on the substantial literature in inquiry-based continuous improvement, readiness for change, professional learning, and school improvement coaching. The theory of action which is investigated here is

founded on the belief that, if certain structural and human resource contextual factors are in place, schools can learn to develop habits of ongoing and collaborative self-reflection and improvement planning by participating in a guided improvement planning curriculum. Professional community is, in this view, a key in school contexts that support improved student learning.

The literature provides insights into (1) the relationship between professional community and professional learning, (2) the role of external change agents or coaches in a professional development model designed to promote a culture of learning, (3) the role a school's capacity, at the start of an improvement effort, plays in the outcome of that effort. Portin et al. (2003) suggest that a structured improvement process may provide the "scaffolding" needed to help school communities learn how to engage successfully in the on-going self reflection that is at the core of continuous improvement planning. This study is designed to provide an intentional look at the extent to which a structured improvement process, which incorporates the support of external change coaches, contributes to characteristics of professional community in a school. The relationship between a school's capacity for change at the time they became engaged in the process to outcomes is also examined.

CHAPTER 3

Methods

In this study, I have employed a mixed-methods approach, including surveys, interviews, and examination of schools' improvement planning and professional learning artifacts as means of discovering how participation in the SIPTAP project has impacted staffs' perceived experiences.

Greene and Caracelli (1997) suggest that mixed-method research designs bridge the philosophical gap between qualitative and quantitative paradigms:

> The underlying premise of mixed-method inquiry is that each paradigm offers a meaningful and legitimate way of knowing and understanding. The underlying rationale for mixed-method inquiry is to understand more fully, to generate deeper and broader insights, to develop important knowledge claims that respect a wider range of interests and perspectives. (p. 7)

These authors describe two positions vis-à-vis mixed-method approaches: the "pragmatic position" and the "dialectic position". Pragmatic approaches are typically concerned with maximizing the amount of information collected and are not concerned with "epistemology or scientific typologies" (Greene & Caracelli, 1997, pp. 9-10). On the other hand, dialectic approaches:

> ...use methods shaped by both interpretivist and postpositivist paradigms in an integrative manner which produces more insightful and logical results than either paradigm could create alone. The rationale for mixing methods in this stance is to understand more fully by generating new insights, in contrast to the pragmatic

> rational of understanding more fully by being situationally responsive and relevant. (p. 10)

The dialectic position is characterized, according to Phelan (1987) by "mov[ing] back and forth [between methodologies] in order to understand…human behavior" (as cited in Greene & Caracelli, 1997, p. 10). In this study, I have relied on the dialectic mixed-methods perspective in my analysis of my findings.

While based on a theory of action which proposes that a structured planning curriculum can successfully mediate the development of a professional learning culture in schools, this study is really about gaining an understanding of those factors which are central to shaping a school's experience with a continuous planning model, not about testing the soundness of a specific underlying theory. Schools are exceedingly complex and highly contextualized organizations, characterized by internal and external social, political, structural, and symbolic dynamics, which defy experimental control. Processes which involve the entire school community in planning for improvement can best be understood by investigating the nature of the community's experience in their own real-life setting. Although it could be argued that my goals could best be accomplished by focusing on a single case study (i.e., one involving a single school site), I chose to study multiple sites, in an effort to allow for the potential of generalizing my findings beyond a single context.

General impressions from teachers and principals were collected using a structured survey. As part of a mixed-methods design, surveys have several distinct advantages (Singleton & Straits, 1999). For the single researcher, they offer an efficient

means of collecting perception data from a large number of participants. Data can be analyzed using statistical procedures, without having to develop coding schemes. Web-based surveys are easy to deploy and responses can be quickly imported into a spreadsheet format for analysis. Online surveys are also more convenient for participants.

The use of surveys poses some problems as well (Fink & Kosecoff, 1998; Singleton & Straits, 1999). Poorly constructed or leading questions may lead to inaccurate or biased responses. Human perceptions, which are both complex and heavily influenced by context, are not easily quantified with forced-choice questions. As a result, even the best designed survey is limited in its ability, when considered alone, to provide much insight into causal relationships.

To probe more deeply into context and gain a deeper understanding of participants' attitudes, practices, and perceptions, I conducted follow-up interviews with teachers, principals, and NWESD coaches. As a central method in qualitative research, interviews have the ability to provide the researcher with insight into "*the meaning people have constructed*, that is, how they make sense of their world and the experiences they have in the world" (Merriam, 1998, p. 6). Semi-structured interviews, combining a "mix of more and less structured questions…allows the researcher to respond to the situation at hand and, to the emerging worldview of the respondent, and to new ideas on the topic" (Merriam, 1998, p. 74).

Perhaps even more than structured surveys, which do not involve face-to-face interaction with the participant, interviews can result in biased data if the interviewer is

not careful to avoid leading questions. Additionally, the credibility of interview results relies heavily on the coding process used to analyze results.

In an effort to gain insight into schools' experiences, independent of teacher and principal perceptions and reports, I analyzed relevant school documents from both schools in my interview sample. Merriam (1998) notes that documents, which are "usually produced for reasons other than the research at hand and therefore are not subject to the same limitations" (p. 112), can prove to be a valuable source of qualitative data. Yin (2003) emphasizes the value of documentary evidence in gaining "specific details to corroborate information from other sources" (p. 87). Absent information about the context in which and for whom documents were created, though, they are difficult to interpret.

While taken alone, data collected from surveys, interviews, and document analysis are subject to significant limitations, combining these methods in what Greene and Caracelli (1997) call a "synergistic approach", can provide rich insights into research questions.

In the sections below, I describe my research methods in detail, beginning with a description of the schools and individuals selected for the sample.

School Selection

Survey Sample

As of January 2005, a total of 64 schools have participated in the SIPTAP project. This study focuses on four elementary schools involved in SIPTAP Cohort III (September 2002 – January 2003). I chose to limit my investigation to elementary

schools to allow for a deeper analysis at one level, avoiding the complications of complex contextual factors common to secondary schools. SIPTAP Cohort III was targeted for sample school selection for two reasons. First, schools in this cohort group had the benefit of entering the project after NWESD had refined their process through their work with 10 schools in the first two cohorts. Second, these schools had completed their SIPTAP leadership training with NWESD almost two years prior to the beginning of my study, and so offered the opportunity to explore the sustainability of the process.

Ten of the 14 schools in Cohort III were elementary schools. Of these 10 schools, seven were determined to be Title I eligible. The decision to include only Title I schools in the sample was made in an effort to control for wide variations in schools' prior planning experience. This point requires some additional clarification.

Pursuant to the No Child Left Behind Act ("No Child Left Behind Act," 2001), schools receiving compensatory funding under Title I, Part A must complete an annual school plan which, in general, outlines those instructional, programmatic, and professional development strategies which will be used to enhance student achievement and parent involvement. Experience suggests that Title I schools tend to vary widely in their approach to developing school improvement plans. This is particularly true of schools operating "Targeted Assistance" programs under Section 1115 of the law as opposed to those operating "Schoolwide" programs under Section 1114. While Schoolwide programs allow schools with a free/reduced lunch rate of 40% or greater to combine federal, state, and local funds to enhance the school's entire educational program, Targeted Assistance schools may only use Title I funds to serve those eligible

students who are most in need of support. Despite this variability, restricting my sample to Title I schools, regardless of program status, ensured at least some basic level of experience with accountability for improvement planning. As Title I targeted assistance schools with relatively high rates of student poverty, this sampling strategy also narrowed the range of potential differences in poverty levels among schools.

Of the seven Title I schools in Cohort III, one was unusually small, with a student enrollment of less than 50, and so was excluded from consideration. One of the remaining six schools was excluded due to a recent change in principal leadership. Principals from each of the five remaining schools agreed to participate. One of these schools subsequently dropped out, leaving four schools in the sample.

Table 1 provides an overview of these schools' characteristics as of the 2003-4 school year.

Table 1: Demographics of Survey Schools

School*	Grade Span	Enrollment	# Teachers	% Poverty	% Sp. Ed.	% White
Fir	3-5	447	28	47.3%	13.4%	83%
Simon	K-3	420	29	42.8%	13.7%	79.1%
Pine Hills	K-6	595	42	75.5%	11.9%	89.2%
Foster	P-6	418	25	49.4%	14.5%	84.2%

* All names used in this study are pseudonyms.

Three of the four schools in my sample (i.e. Fir, Simon, and Foster) participated in both the Principal and Teacher Survey. Pine Hills participated in only the Teacher Survey, as the principal had not been at the school prior to the time it became involved in SIPTAP.

Recruitment process for survey schools.

Once schools were identified, I contacted superintendents of those four districts in which the sample schools resided to gain their permission to contact principals. Each principal was contacted by phone, to discuss my study and provide information about survey length, format, and time line. I explained to principals that I might be approaching them to ask for permission to conduct on site interviews once surveys were completed. Teacher and Principal Surveys were distributed after signed site agreements had been secured from each principal (see Appendix A).

Interview Sample

Once survey data were collected, descriptive statistics were calculated and arrayed for each school. (A presentation and discussion of these and other data appear in Chapter 4.) A review of these data showed differences between Foster and Simon in both pre-SIPTAP readiness levels and post-SIPTAP gains on indicators of professional community. Additionally, both schools are similar in regards to enrollment, student demographics, number of teachers, and principal longevity in the building (5 - 10 years). As a result, principals from both schools were contacted and agreed to have their schools participate in on site interviews. These schools provided specific cases which allowed for deeper inquiry into the effect of the SIPTAP process on schools' habits of professional learning.

In her treatment of case study methodology, Merriam (1998) defines a case as "a thing, a single entity, a unit around which there are boundaries. I can 'fence in' what I am going to study" (p. 27). In my research design, then, Foster and Simon provide the

opportunity for studying the phenomenon of a structured, inquiry-based school improvement within two specific school contexts.

Principals from Foster and Simon were asked to identify five to eight teachers who represented a cross section of their faculty, relative to experience, attitude towards SIPTAP, and gender, who would be willing to participate in the interview process. In addition to teachers, each principal was interviewed, as was the NWESD SIPTAP coach assigned to each school.

Research Methods and Procedures

Survey

Survey construction.

Structured surveys were developed and administered to all teachers and administrators in each of the four schools in the sample. My decision to survey these four schools using a structured format was driven by my interest in gaining the same information on teacher and administrator perceptions relative to readiness and changes in professional community from as many individuals as possible. Survey forms are included in Appendices B and C. The teacher and administrator survey included 37 and 36 closed items respectively, designed to gather information relative to respondent characteristics and to assess the following: (1) aspects of respondents' recall of their school's level of staff readiness before entering the SIPTAP project; (2) their experiences with the SIPTAP process; and (3) the degree to which their school has changed on several indicators linked to characteristics of professional learning communities following their involvement in SIPTAP. Specifically, the first eight

questions of both the principal and Teacher Survey were designed to assess perceptions of organizational capacity, or readiness for change at the time the school committed to the NWESD process. These eight questions were identical on both the principal and Teacher Surveys, with one exception. Question # 8 on the Principal Survey was designed to assess administrators' perceptions of district office support (The school had financial and technical support from the district office to support their involvement in the project). On the Teacher Survey, this question assessed perceptions of principal leadership (We had a strong principal leader.).

With the exception of several demographic questions, the remaining items asked participants to rate their school, before and after their involvement with SIPTAP, on a variety of indicators of professional community. The same questions in this section were used for both the principal and Teacher Surveys. In an effort to enhance these surveys criterion validity (i.e. the extent to which they correlate to a previously validated standard measure) these questions were drawn from the teacher professional community scales identified by Smylie and Wenzel (2003) in their survey of teachers from 23 schools involved in the Chicago Annenberg Challenge from 1997 - 2001. Due to the retrospective nature of the questions, participation was limited to those principals and teachers who had been assigned to their school before SIPTAP.

Survey pilot.

The surveys were piloted approximately three months before the study began by two principals and six teachers from SIPTAP schools in neighboring districts outside the

research sample. Their feedback focused on the need to modify survey instructions to enhance clarity, and was incorporated into the final forms.

Distributing the survey and enhancing response rate.

The survey was distributed during November and December 2004 using the University of Washington's *WebQ* system. This system provides a simple, user-friendly survey format easily accessible through the Internet. Responses, though linked to each of the four schools in the sample, were not traceable to individual respondents. Response rates for each school were monitored periodically. Attempts were made to increase response rates by sending periodic e-mail reminders to principals. One principal indicated that several of her teachers were not able to access the survey through the Web. Hard copies of the Teacher Survey form were sent to this principal and to other principals, in case they ran into similar problems. Approximately eight paper surveys were returned. I manually entered these data into the *WebQ* system.

Procedures for analyzing survey data.

Survey results were analyzed using those statistical procedures suggested by Fink and Kosecoff (1998). To evaluate internal consistency of survey items, Cronbach's alpha coefficients were computed for the readiness scale and each of the six teacher professional community scales identified by Smylie and Wenzel (2003) in their study of Chicago Annenberg Challenge schools. Descriptive statistics, including mean, standard deviation, and range were calculated for all items and scales. With the assistance of Joe Willhoft, Director of Assessment for the Office of the Superintendent of Public Instruction, I then performed several additional analyses of Teacher Survey data to look

more closely at how the data informed my research questions. (No additional analyses were performed on Principal Survey data, due to the small number of respondents.)

The Teacher Survey included 23 items that asked respondents to rate various aspects of their schools' professional learning culture both before and after participation in SIPTAP, using a four-point Likert scale. These questions were taken from items comprising the six Teacher Professional Community scales identified by Symlie et al. (2003) in their analysis of survey results from their large-scale study of Chicago Annenberg Schools. (Descriptions of each scale are included in Appendix G.) Each item required two responses – one indicating the extent to which the respondent believed the statement described their school at the time their involvement with SIPTAP began and another indicating the degree to which they felt the statement described their school at the present time. Perceptions were measured using a four-point Likert scale, ranging from Strongly Disagree to Strongly Agree. To facilitate quantitative analysis, numerical values were assigned to each of the four responses (1 = Strongly Disagree; 2 = Disagree; 3 = Agree; 4 = Strongly Agree). Total Pre, Total Post, and Total Gain Scores were calculated for all 23 items and for each of the six item scales. One-Sample T Tests were used to evaluate the statistical significance of aggregate Gain Scores and Gain Scores for each school.

The first eight items on both the Teacher and Principal Surveys were designed to measure perceptions relative to several aspects of organizational capacity or readiness. Response data were used to calculate a Total Readiness score. To examine the statistical

relationship between these scores and the aggregate and scale Gain Scores, I calculated Pearson correlation coefficients for the total sample and for each school.

In order to evaluate the statistical significance of the differences between the two schools in my interview sample in readiness and outcomes, I performed an Independent-Samples T Test on the Total Readiness and Total Gain Scores as well as on the Gain Scores from each of the six professional learning scales.

Interviews

Interview protocol.

Interviews were designed to gain a deeper understanding of each school's experience in the improvement process, particularly as it related to the presence or absence of characteristics of a professional learning community. Copies of the interview protocols used are included in Appendix D. I employed a semi-structured format in which respondents were asked to share their perceptions of their school's readiness when they entered the school improvement process, positive and negative aspects of their school's experience with the SIPTAP model, and any changes they felt had occurred in their school and their own classroom practice as a result of SIPTAP involvement. According to Merriam (1998), the semi-structured interview format "allows the researcher to respond to the situation at hand, to the emerging worldview of the respondent, and to new ideas on the topic" (p. 74). Principals and teachers who had been members of their school's SIPTAP Leadership Team were also asked to reflect on the role of their school's NWESD coach and the effectiveness of the coaching support they received. Coaches were asked to share their perceptions of their assigned school's

experience along with facilitating and inhibiting factors. They were also asked to reflect, more generally, on the SIPTAP process based on their involvement with multiple schools.

Interview logistics.

A total of 18 individual interviews were conducted during the first three weeks in February, involving 14 teachers, both principals, and the two NWESD coaches. Teacher and principal interviews were conducted in a private room in both schools and ranged from 40 – 70 minutes. Interviews with coaches lasted approximately 60 minutes. One of these interviews was conducted in my office. The other was conducted in the coach's office. Interviews for teachers and principals were conducted over the course of one day for each school. A "roving" substitute teacher was hired for both schools on the day of the interviews to provide release time for teachers during their contracted day. Interviews with coaches were scheduled apart from school interviews. All interviews were digitally recorded.

Interview analysis.

Interview data were analyzed for themes using the "constant comparative method of data analysis, developed by Glaser and Strauss (1967) as the means of developing grounded theory…[consisting] of categories, properties, and hypotheses that are the conceptual links between and among the categories and properties" (Merriam 1998, p. 159). Specific methods for analysis are described below.

Following each interview session, digital voice files were loaded onto my computer hard drive. My confidential login information ensured that no one else had

access to these data. I listened to each recording several times, noting and digitally book marking specific points that were related my research questions. These interview sections were then transcribed. A matrix was created for each participant which listed their demographic information (i.e. identification code, school code, role, and years of experience) and their comments under each broad interview category (i.e. Readiness, School's Experience With The Process, Coaching, School Change, Change in Practice, and Other Comments).

Interview matrices for each participant were then analyzed for each school. Summary statements were created in an attempt to capture the main points of participants' comments. These statements were listed by interview category for each participant group (i.e. Principal, Leadership Team Teachers, Other Teachers, and Coach). For both teacher groups, the number of times a summary comment recurred was noted. These data were further analyzed to arrive at common themes as well as notable discrepancies. A copy of the Structured Interview Analysis form for Simon, which displays the summary statements, themes, and discrepancies, appears in Appendix E. Themes emerging from both schools pertaining to Experience with the Process, School Change, and Change in Practice were compared to identify commonalities and discrepancies.

In their interviews, both coaches offered general comments on the SIPTAP process, based on their experiences with multiple schools. These comments were analyzed for common themes using the same process.

Documents

I collected several artifacts from the two schools in my interview sample. Completed Action Plans, detailing strategies for accomplishing school improvement goals, were collected from both schools. Simon's principal also provided a copy of their school's Title I Schoolwide Plan, while the principal from Foster provided two sets of minutes each from the school's math and writing Study Teams.

Document analysis.

Action Plans were evaluated using the Action Plan Rubric and the Evaluating Goals Rubric from the *School System Improvement Resource Guide* (Bergeson, Heuschel, and MacGregor, 2004). These rubrics were chosen because they constitute the standard recommended by the Washington State Office of the Superintendent of Public Instruction for school improvement goals and Action Plans. Review of other documents focused on gleaning what they had to say about evidence of the school's level of professional collaboration, either in relation to or apart from the school improvement planning process.

Quality of Inquiry

This study was based on the work of a number of organizational and educational theorists and practitioners who have explored the concepts of school improvement planning and professional learning communities. The theoretical basis of these and related concepts was discussed, at length, in Chapter 2. I have attempted to describe all concepts, methods, and procedures in sufficient detail to allow the reader to clearly trace the path of inquiry, ensuring objectivity. By striving for transparency in my specific

research methods and lines of reasoning, I hope to make clear to what extent the conclusions outlined in Chapter 5 may be generalized to other settings.

Validity

Validity or credibility of the study was addressed in several ways. Most importantly, I relied on information from multiple sources in forming conclusions, including Teacher and Administrator Surveys and interviews and an analysis of documents from those comparison schools chosen for site visits. Of course, the credibility of information gained through these sources, particularly surveys and interviews, is contingent on how well those tools measure the concepts they are designed to measure. Fink and Kosecoff (1998) suggest that one way to establish the validity of a new survey is to compare it to a previously validated instrument. This involves administering both the new and previously validated survey to the same respondent sample and calculating correlation coefficients for the results obtained by the two instruments. While I did not go through this process, I attempted to enhance the validity of my survey by basing it, in large part, on the survey used by Smylie and Wenzel (2003) in their large-scale longitudinal study. In their study of schools involved in the Chicago Annenberg Challenge from 1997 – 2001, these authors administered their structured survey several times to 8,572 elementary teachers and 278 elementary principals. Cronbach's alpha coefficients for the overall survey and for the teacher professional scales ranged from .89 to .95. To the extent their survey can be considered an expert criterion for measuring of professional learning community, then, my decision to incorporate their questions into my survey serves to enhance its validity.

The credibility of survey results is, of course, closely tied to response rate. However, the question, "How high is high enough?" is not straightforward. Fink and Kosecoff (1998) note that, while statistical procedures should be used to determine adequacy of response rate with large-scale surveys, with smaller projects, "the desired response rate tends to be entirely subjective" (p. 6). Johnson and Owens (2003) suggest that survey response rates are "one of the most controversial features of an otherwise established methodology" (p. 127). In their study of published response rates across a sample of nine social science journals, these authors found that none of the editors of these journals reported having a minimum response rate standard established for published articles, although one editor indicated that articles were generally expected to have "at least a 60% response rate with rare exceptions" (Johnson & Owens, 2003, p. 129). The National Center for Educational Statistics (*NCES Statistical Standards*, 2002) has identified an 85% response rate for cross-sectional studies designed to inform state and federal policy. However, a response rate of at least 60% is considered acceptable, as a general rule, for mixed methods educational research (B. Portin, personal communication, December 4, 2004).

Response rates, by school, for the Teacher Survey are summarized in Table 2. It is important to note that Simon's 100% response rate was a function of the principal's decision to devote an hour of one of the school's early release days to completion of the survey. Principals from the three other schools indicated they repeatedly encouraged eligible teachers to participate, but did not intentionally structure time for them to do so.

Table 2: Response Rate for Survey Schools

School	Total # Eligible Teachers	# Teachers Responding	% Response
Fir	21	11	52%
Foster	19	14	74%
Simon	37	37	100%
Pine Hills	35	21	60%
Total	112	83	74%

Though these rates are not adequate to allow for broad generalizations of my survey results, I consider them sufficient to provide an overall look at participants' perceptions of their experiences with a structured school improvement planning process.

The validity of my analysis of the school improvement Action Plans was addressed by using the rubrics established by the Office of the Superintendent of Public Instruction. While these tools have not been validated in the measurement sense, they clearly reflect those criteria for goals and Action Plans which have been established in the state of Washington. I have attempted to ensure the credibility of my analysis of other documents by comparing the information with my survey and interview data.

Reliability

In the traditional sense, reliability has to do with replicability – i.e., will another researcher get the same results if the investigation is repeated in the same way, or will the results of a measurement instrument be similar if administered to the same person a second time? While it was not feasible to evaluate my survey and interview procedures for inter-rater or test-retest reliability, I did calculate Cronbach's alpha for the Teacher

Survey. Coefficients for the administrator survey were not calculated, due to the small size of the principal sample (n = 3).

A measure of inter-item correlation, the Cronbach's coefficient provides an indication of whether the items in the surveys are measuring the same construct (Fink & Kosecoff, 1998). Results and scale descriptions are listed in Appendix G. Alpha coefficients for the three major scales (Readiness, Total PRE, and Total NOW) range from .83 to .95, indicating that items in these scales are highly interrelated. Coefficients for the six sub scales are more variable, ranging from a low of .52 (Reflective Dialogue NOW) to a high of .89 (Collective Responsibility PRE). Given these lower levels of reliability, I generally avoided relying on sub scale results in my analysis.

Merriam (1998) argues that, in qualitative research, the more appropriate question is "not whether findings will be found again but *whether the results are consistent with the data collected*" (p. 206). She suggests three strategies for addressing reliability in this sense: (1) explaining "the assumptions and theory behind the study" and the investigator's "position vis-à-vis the group being studied"; (2) triangulating the data; and (3) describing "in detail how data were collected, how categories were derived, and how decisions were made throughout the inquiry" (pp. 206-207). In this paper, I have attempted to incorporate each of these strategies in a manner that is sufficiently transparent to allow for others to trace my methods of data collection and analysis.

Table 3 shows displays those research methods on which relied to generate information for each of my research questions.

Table 3: Sources of Information for Research Questions

Question	Research Method(s)
1. How, if at all, is a school's participation in the SIPTAP project associated with participants' perceived changes in their professional learning culture?	• Teacher and Administrator Surveys • Teacher, Administrator, Coach Interviews
2. In cases where the SIPTAP process appears to be associated with participants' perceived changes in a school's professional learning culture, to what extent does this culture continue after involvement in the project has ended?	• Teacher and Administrator Surveys • Teacher and Administrator Interviews • Document Reviews
3. What evidence is there, if any, that perceived changes in professional learning culture associated with a school's involvement in the SIPTAP process have lead to changes in teachers' perceptions of their own classroom practice?	• Teacher Survey • Teacher Interviews
5. What contextual readiness factors, if any, are associated with perceived changes in an enhanced professional learning culture in participating schools?	• Teacher and Administrator Surveys • Teacher, Administrator, Coach Interviews

I will return to issues of reliability and validity in my discussion on limitations of my study in Chapter 6. I turn now to a presentation and discussion of my research findings.

CHAPTER 4

Findings: Part One

NWESD's SIPTAP curriculum is intended to train school staffs in a cycle of continuous inquiry, enhancing their capacity to monitor and adjust their school and classroom policies, procedures, and practices in order to improve student learning. The SIPTAP model is based on a social theory of learning, where individual and organizational knowledge is seen as generated and refined through the ongoing and focused interactions between members of the organization. Professional learning in schools results from ongoing peer collaboration, experimentation, and reflective dialogue focused on increasing learning for all students and leads to a greater sense of teacher commitment and collective responsibility for student success. However, despite the mounting evidence in support of professional learning communities is schools, administrators working to create these communities continue to face a long tradition of teaching as a very private practice. Teachers need support to learn how to engage in meaningful collaboration. By training school leadership teams how to facilitate an inquiry process with their colleagues and providing an external coach to support the application of their learning, the SIPTAP model aims to enhance schools' cultures of professional learning, creating the capacity for more powerful instruction and, ultimately, higher levels of student achievement.

In this chapter, I present findings for the first two of my four research questions. The first of these (i.e. How, if at all, is a school's participation in the SIPTAP project associated with changes in their professional learning culture?) is essentially the

overarching question of the study. Sections are organized by question. Survey results are presented first, followed by case findings.

Question #1: Changes in Professional Learning Culture

Survey Findings

Total Pre-SIPTAP, Total Now, and Total Gain Scores were calculated for all 23 items and for each of the six item scales measuring teacher professional community. Table 3 shows the mean score, by item, along with the Total Gain score for the Principal Survey.

Overall, principals reported the largest gains in teacher cross-grade collaboration, the frequency with which curriculum is talked about among staff, the creation of well-defined learning expectations for students, and teacher expectations for their own performance. No overall gains are evident in principals' perceptions of informational conversations among teachers about instruction, their schools' standards for academic performance, the way in which their school is organized to maximize teaching time, collective responsibility for their school's improvement, teachers' willingness to try new ideas, and their own personal commitment to their school.

Table 4 displays aggregated item and total mean Gain Scores for the Teacher Survey. Results indicate teachers perceived the largest gains in the frequency with which collegial conversations about curriculum and teaching assumptions occur in their school and the level of their school's expectation for academic achievement.

The data reflect few to no perceived gains relative to the frequency with which teachers discuss their school's goals, the frequency of informal teacher conversation

about instruction, teachers' sense of responsibility for all students and for one another's success, and teachers' willingness to try new ideas. A One-Sample T Test revealed that the Teacher Survey mean gain score was significantly different from zero ($p < .001$). Given the very small sample size ($n = 3$), a similar analysis was not run on the Principal Survey mean Gain score.

Table 5 shows Total Pre-SIPTAP, Now, and Gain Scores for the Principal Survey, disaggregated by school. Except in the areas of Collective Responsibility and Orientation Towards Innovation, where Gain Scores were noticeably higher for Foster than Fir, Foster and Fir's principals reported similar perceptions of their school's gains. Their perceptions differed substantially from those of Simon's principal, who reported virtually no change in any area. Again, given the small size of the principal sample, no additional statistical analyses were performed.

Table 6 summarizes Teacher Survey Gain Scores by school. Results of One-Sample T Tests on the aggregate and school Gain Scores on the Teacher Survey showed that, with the exception of Fir's Collective Responsibility Gain score, all gains were significantly different from zero at the 95% confidence level ($p < .05$) or above. Overall, teachers from Pine Hills and Simon reported the strongest gains across all components of professional learning community, while teachers from Foster reported the smallest gains.

Table 4: Principal Survey Results: Professional Community Items

	Item	Mean Scores (n = 3) Pre-SIPTAP	Now	Gain
Peer Collaboration	Teachers design instructional programs together.	2.33	3.00	0.67
	Teachers coordinate teaching with instruction at other grades.	1.33	2.33	1.00
	Principals and teachers collaborate to make the school run efficiently.	3.00	3.33	0.33
Reflective Dialogue	Conversations about school's goals occur more than twice a month.	2.33	3.00	0.67
	Conversations about curriculum occur more than twice a month.	2.33	3.33	1.00
	Teachers regularly discuss assumptions about teaching and learning.	3.00	3.33	0.33
	Teachers share and discuss student work with other teachers.	2.33	2.67	0.34
	Teacher talk about instruction in the teacher's lounge.	2.67	2.67	0.00
Focus on Learning	My school focuses on what's best for student learning.	2.67	3.00	0.33
	My school has well defined learning expectations for all students.	2.00	3.00	1.00
	My school sets high standards for academic performance.	3.00	3.00	0.00
	My school organizes the school day to maximize instructional time.	3.00	3.00	0.00
Collective Responsibility	Most teachers in my school feel responsible when students fail.	2.33	2.67	0.34
	Most teachers feel responsible to help each other do their best.	2.67	3.00	0.33
	Most teachers take responsibility for improving the school.	2.67	2.67	0.00
	Most teachers in my school set high standards for themselves.	2.00	3.33	1.33
	Most teachers feel responsible for the learning of all students.	1.67	2.33	0.66
Innovation	Most teachers in my school are eager to try new ideas.	3.00	3.00	0.00
	Most teachers in my school have a "can do" attitude.	2.33	3.00	0.67
	Most teachers are continually learning and seeking new ideas.	3.00	3.67	0.67
	Most teachers are really trying to improve their teaching.	3.00	3.67	0.67
Commit.	I wouldn't want to work in any other school.	2.67	2.67	0.00
	I would recommend this school to parents.	3.33	3.67	0.34
		TOTAL MEAN GAIN		10.68

Table 5: Teacher Survey Results: Professional Community Items

	Item	Mean Scores (n = 3) Pre-SIPTAP	Now	Gain
Peer Collaboration	Teachers design instructional programs together.	2.08	3.07	.99
	Teachers coordinate teaching with instruction at other grades.	1.74	2.63	.89
	Principals and teachers collaborate to make school run efficiently.	2.51	3.29	.78
Reflective Dialogue	Conversations about school's goals occur more than twice a month.	1.89	2.98	0
	Conversations about curriculum occur more than twice a month.	1.99	3.05	1.09
	Teachers regularly discuss assumptions about teaching and learning.	2.28	2.90	1.06
	Teachers share and discuss student work with other teachers.	2.46	2.90	.62
	Teacher talk about instruction in the teacher's lounge.	1.91	2.46	.44
Focus on Learning	My school focuses on what's best for student learning.	2.49	3.36	.55
	My school has well defined learning expectations for all students.	2.13	3.17	.87
	My school sets high standards for academic performance.	2.56	3.25	1.04
	My school organizes the school day to maximize instructional time.	2.46	2.92	.69
Collective Responsibility	Most teachers in my school feel responsible when students fail.	2.50	2.87	.46
	Most teachers feel responsible to help each other do their best.	2.51	3.06	.37
	Most teachers take responsibility for improving the school.	2.50	3.16	.55
	Most teachers in my school set high standards for themselves.	2.89	3.35	.66
	Most teachers feel responsible for the learning of all students.	2.66	3.13	.46
Innovation	Most teachers in my school are eager to try new ideas.	2.08	2.96	.47
	Most teachers in my school have a "can do" attitude.	2.46	3.19	.88
	Most teachers are continually learning and seeking new ideas.	2.48	3.21	.73
	Most teachers are really trying to improve their teaching.	2.54	3.29	.73
Commit.	I wouldn't want to work in any other school.	2.41	2.96	.75
	I would recommend this school to parents.	2.82	3.36	.55
			TOTAL MEAN GAIN	16.17***

*** $p < .001$

Table 6: Principal Survey Results: Total Scores by School

	Scores	Fir	Foster	Simon
	Total Pre-SIPTAP	58	58	66
	Total Now	69	72	67
	Total Gain	11	14	1
Peer Collaboration	Total PC Pre-SIPTAP	6	6	8
	Total PC Now	9	9	8
	Total PC Gain	3	3	0
Reflective Dialogue	Total RD Pre-SIPTAP	12	10	16
	Total RD Now	15	14	16
	Total RD Gain	3	4	0
Focus on Student Learning	Total SL Pre-SIPTAP	11	10	11
	Total SL Now	12	12	12
	Total SL Gain	1	2	1
Collective Responsibility	Total CR Pre-SIPTAP	10	10	14
	Total CR Now	12	16	14
	Total CR Gain	2	6	0
Orientation Towards Innovation	Total Innovation Pre-SIPTAP	13	10	11
	Total Innovation Now	15	14	11
	Total Innovation Gain	2	4	0
Commit. to School	Total Commitment Pre-SIPTAP	6	6	6
	Total Commitment Now	6	7	6
	Total Commitment Gain	0	1	0

Table 7: Teacher Survey Results: Total Scores by School

	Scores	Mean Scores: All	Fir	Foster	Pine Hills	Simon
	Total Pre-SIPTAP	54.07	55.00	58.00	44.76	56.97
	Total Now	70.13	66.20	67.71	72.47	71.19
	Total Gain	16.72***	10.90**	9.71*	28.00***	15.90***
Peer Collaboration	Total PC Pre-SIPTAP	6.37	6.55	6.86	5.63	6.51
	Total PC Now	9.01	8.91	8.50	9.50	8.97
	Total PC Gain	2.71***	2.36***	1.64*	3.83***	2.68***
Reflective Dialogue	Total RD Pre-SIPTAP	10.52	11.00	11.29	9.63	10.54
	Total RD Now	14.23	14.64	13.64	15.53	13.63
	Total RD Gain	3.84***	3.64**	2.36*	5.89***	3.44***
Focus on Student Learning	Total SL Pre-SIPTAP	9.61	10.55	10.86	7.22	10.03
	Total SL Now	12.68	11.82	12.50	12.57	13.08
	Total SL Gain	3.05***	1.27*	1.64*	5.22***	3.06***
Collective Responsibility	Total CR Pre-SIPTAP	13.06	11.64	13.36	11.11	14.40
	Total CR Now	15.54	13.27	15.36	15.95	16.08
	Total CR Gain	2.58***	1.64	2.00*	4.78***	1.97**
Orientation Towards Innovation	Total Innovation Pre-SIPTAP	9.54	9.64	10.43	8.06	9.86
	Total Innovation Now	12.57	11.91	11.93	13.58	12.49
	Total Innovation Gain	3.08***	2.27**	1.50*	5.44***	2.88***
Commitment to School	Total Commitment Pre-SIPTAP	5.22	5.64	5.21	3.59	5.86
	Total Commitment Now	6.33	6.30	5.79	6.20	6.65
	Total Commitment Gain	1.16***	.80*	.57	2.53***	.82**

*** p < .001; ** p < .01; * p < .05

My decision to target Foster and Simon for on-site interviews was based on several factors. I determined Pine Hills was not a viable choice due to the principal's short tenure at the school. During the survey process, I received several e-mail responses from Pine Hills teachers indicating that positive changes in their school were related largely to a change in building leadership. Teacher Survey results from Foster reflected the smallest perceived gains, while results from Simon reflected the largest perceived gains on those items designed to measure teacher professional community. This could, of course, be a function of the difference in response rates between schools. With 100% of Simon's eligible teachers responding, that school's results reflect the perceptions of all faculty who had worked at the school before and after their involvement with SIPTAP. On the other hand, over one fourth of Foster's eligible teachers chose not to respond to the survey. However, Foster's response rate is adequate to provide a general picture of teacher perceptions.

Results of Principal Surveys from Foster and Simon reflected an opposite pattern. Foster's principal perceived the largest gains while Simon's principal perceived the smallest. While an Independent-Samples T Test failed to show a significant difference between the mean Total Gain Scores for these two schools ($p > .05$), I decided to include them in the interview sample based on their apparent practical differences.

Case Findings: Teacher interviews

Interviews conducted with a total of 14 teachers (six from Foster and eight from Simon) revealed several common themes. Primary among these was the perception that

teachers were now committed to a narrower, focused set of efforts centered on their school's improvement goals. Again, they believed teachers had always worked hard to find better ways to improve student achievement, these teachers now felt their schools were headed in a common direction. One Foster teacher put it this way: "We're all on board, looking at data and working towards the goals and Action Plans the whole school created." A Simon teacher shared a similar perception:

> We used to have a lot of meetings where we just brainstormed and nothing ever came of it. The SIPTAP process helped us see what was important and where we should focus. Now we know what our focus is. Before we were all working hard but doing our own thing.

According to teachers, their schools' improvement efforts were clearly focused on improving student achievement. They noted a difference in their collective commitment as a staff, resulting from the improvement process. A Simon teacher noted:

> Now we have a joint, committed effort. We have a plan and are carrying it forward. There was an 80% – 100% level of commitment that came about as a result of the plan. Most teachers are excited. There's an attitude now of, "It's not for us, it's for the students."

Another Simon teacher observed: "There is a focus now. Everything we do is aimed towards improving instruction. By focusing on goals, it puts more focus on the student."

A related theme across both schools had to do with the way in which teachers collaborate to implement their schools' improvement plans. While most teachers indicated they were not necessarily collaborating more as a result of the process, 12 of the

14 teachers interviewed spoke of changes in the nature of their collaboration. Specifically, they noted their collaboration was now, in the words of one Foster teacher, "more focused and useful." In both schools, staffs were committed to meeting in grade level and other teams on a regularly scheduled basis and were asked to submit documentation of their discussions to their principal, at least periodically. They reported these meetings tended to focus on (1) coordinating curriculum, instruction, and assessment within and across grade levels and (2) looking at achievement data to determine what was working for students and what needed to be changed.

Eleven of the teachers interviewed perceived this collaboration time as mostly valuable. According to one Foster teacher:

> I'm learning a lot from the other teachers because we're talking about what we're doing in the classroom. We will sometimes score kids' papers. Other times it's more about instructional strategies or talking about how one of us is getting their students to do things the rest of us aren't. The fact that we're meeting and talking about how to get students' scores up is forcing me to look at things I haven't had to look at. What do students need? I'm an older teacher so this is good for me. It helps me make change.

A Simon teacher noted:

> We're able to talk as a group and look across grade levels at our curriculum. Before, it had been hit and miss and hadn't been focused. I feel good about our curriculum now.

Virtually all interviewees referenced the increased focus on assessment data in faculty-wide and grade-level team discussions. They believed this heightened awareness was helping their schools become better at targeting student needs and identifying areas for improvement at the classroom, grade level, and building levels. For the most part, they also believed it made them more accountable for student results. A Foster teacher explained:

> Staff are now very clear how kids are performing and where they're struggling and what the trends are. People are looking at the resources and saying, "This isn't working." The process has brought in using data more as an objective source that tells us what's helping kids.

One Simon teacher shared: "The data-driven approach has made us more accountable for all students. We're now looking closer at the students not making standard and trying to figure out what teachers can do to help. There is less blaming of the kids."

Equally clear, though, was the struggle some staff were having making sense of assessment data to inform classroom change. As one Foster teacher put it: "I'm still not sure what we're supposed to do with all the data." In general, more experienced teachers in both schools were more likely to question the value of time spent collecting and analyzing formal assessment data:

> We are inundated with assessment to the point of thinking we have to derive data from everything we do. It's disproportionate to the amount of time you teach and decreases instructional time. I'm coming from a different point in my career than

> a beginning teacher in my ability to assess learning, where to go, what comes next. Is all of it [data] relevant? (Simon teacher)

More experienced teachers were also more likely to voice concerns about the flexibility they had lost as a result of their school's involvement in SIPTAP. These concerns were related to what they perceived as an increase in focus on coordinating instruction with other teachers at their grade level. A Foster teacher indicated: "My [grade level] team is trying to find a way to collaborate while not losing our flexibility in the classroom." One Simon teacher explained: "I don't like to have to do the same thing at the same time everyone else [at my grade level] does. Keeping up with everyone when the kids aren't ready isn't good."

Overall, the seven interviewees who had been part of their school's SIPTAP Leadership Team were more positive about the changes in their school's habits of professional learning than teachers who had not been part of the Leadership Team. They each indicated the five days of training they had been provided by NWESD were extremely important in helping them understand how the process worked and how all the steps fit together. They noted the lag time between their sessions with their staffs, combined with their own learning curve, made it challenging to help their colleagues understand where the process was headed each step of the way. While they felt many of their colleagues had initially questioned how the process would benefit their school, most had eventually "bought in". Again, this tended to be a slower process for more experienced staff, which had been through several leadership changes and seen a number of initiatives come and go.

Teacher perceptions of process factors.

When asked to reflect on the SIPTAP process, teachers in the interview sample most often referred to the focus on (1) helping staff better understand and make sense of data related to student achievement and (2) creating school wide Action Plans based on a study of research-based best practices. Although many of these teachers had been through different iterations of school improvement planning over their careers, it was clear most had not participated in a comprehensive, multi-step planning process as an entire staff. While initially questioning the time commitment, most believed, in retrospect, the comprehensive nature of the process and the reliance on structured process tools, were powerful features:

- The techniques were appealing and captured people. The process is not quite as hierarchical and less top down so many teachers bought in better. (Simon teacher)
- The processes really equalized power among teachers because they're more objective than subjective (i.e., this is what our kids need versus this is what I want to do). (Foster teacher)
- Most people were okay with it because the activities were out in the open. (Foster teacher)

That said, many teachers still expressed frustration with the pace at which the process proceeded and the challenges it caused for the Leadership Team relative to maintaining momentum and buy-in. Several teachers indicated too much time was devoted to identifying goals, which they felt were largely predetermined by state and

federal accountability systems. A Foster teacher noted: "We already knew what our goals were – Reading, Writing, and Math. They've been the same three goals forever. We needed more time working with the research." Another Foster teacher noted:

> Sometimes doing the processes over and over again (like voting with sticky dots) has annoyed people. It gets tedious and, early on, when people are still trying to figure out what it's all about, you lose the information you're trying to get in the process.

Teachers who had been part of their school's SIPTAP Leadership Team pointed to the importance of the support provided by their NWESD coach. Specifically, they reported that the coach was instrumental in helping them learn the steps in the improvement planning process, clarify points of confusion, and plan for their work with their staffs. A Simon teacher put it this way: "He explained things and guided us as a Leadership Team. It was all a maze and he put things in a form we could understand. He made us feel like we were competent. We couldn't have done it without him."
A Foster teacher shared this perception:

> He helped us stay focused on what the goal of the process was within the overall goals of the school. The Leadership Team might have been able to provide the same direction, but having him as an outside voice was very helpful. He was seen by staff as an objective source so the power dynamics were minimized.

Teachers from both schools reported their coaches worked with the school's Leadership Team during the NWESD training and planning sessions. The amount of time coaches spent supporting teams in their work with staff was different for each

school. Their most consistent involvement was around helping teams plan, organize, and implement the Data Carousel activity. Adapted from Edie Holcomb's Carousel Data Analysis process (Holcomb, 1999), the Data Carousel is designed to engage the entire school staff in examining perceptual, achievement, and contextual data pertaining to each of the Nine Characteristics of High Performing Schools, identified in Washington State's *School Improvement Process Planning Guide* (Davis, 2005, p. iv). Data displays for each characteristic are posted around a large room. Staff, typically divided into teams of four to eight, rotate among each display, reviewing the data, writing narrative statements capturing what they see in the data, and listing additional information needed. Once each team has reviewed each display, summary statements are created and shared for each of the nine areas. Within the SIPTAP process, this activity is significant for several reasons: (1) it is labor intensive and requires the Leadership Team and SIPTAP coach to work closely together in planning and facilitating the process; (2) as the first and one of the most involved full staff SIPTAP activities, it signals to staff the collaborative nature of the school improvement process; (3) it introduces staff to the importance of starting with data when planning for school improvement; and (4) the narrative statements created form the foundation for subsequent goal development.

The coach for Simon became employed as the district's curriculum director during that school's involvement with SIPTAP and teachers who were interviewed were not readily able to differentiate between his involvement as NWESD coach and his involvement as district office administrator.

Differences in teacher perceptions between schools.

Teachers at Foster shared that, in addition to Grade Level Teams, which are expected to meet weekly during common planning time, they met bi-monthly with their assigned Study Team (math, reading, or writing). These meetings typically occurred after school and on late-arrival days scheduled in the district calendar. The school's Writing and Math Study Teams have been working to develop Action Plans in these content areas. While not connected to one of Foster's SIPTAP goals, teachers reported that the Reading Study Team, whose work began in the mid 1990's in response to the state's pre – NCLB accountability plan, was included as part of the school's SIPTAP work later because of its long history in the building.

While the majority of Foster's teachers believed the SIPTAP process had helped their school become more intentionally focused on common student learning goals, they expressed concerns over focusing on Reading, Writing, and Math simultaneously and worried about their ability to effectively implement Action Plans in each area. A concern over loss of individual planning time to group collaboration was voiced repeatedly. One teacher remarked: "All time is now devoted to collaboration. My classroom looks like a bomb went off!" Much of the anxiety around the work of the Study Teams related to concerns over the changes these groups' Action Plans would require once they were fully implemented. One teacher shared: "We haven't hit the wall on that yet because the committees are still figuring out what changes we need to make."

While teachers at Foster were generally positive about the work of their Study Teams, they were more mixed on the value of their grade level collaboration time.

Several admitted that grade level meetings are, at times, put on hold because of the need to address classroom commitments. Even so, they reported meeting with their Grade Level Teams as regularly as possible, discussing topics ranging from logistics to common assessments to instructional strategies.

Teachers at Simon reported their school had completed the Study team process during the summer of 2003 and had begun implementing Action Plans targeting their goals areas of Reading and Math in the fall of 2003. They shared that the year prior to SIPTAP, the school had implemented a new reading adoption, which involved significant collaborative work around vertical and horizontal alignment of curriculum and instruction. Teachers interviewed saw their school's Action Plan in reading as a continuation of this work, and felt that math was their primary area of focus at this point. They indicated the Math Study Team continues to meet to coordinate implementation of the math Action Plan. Grade Level Teams meet regularly to coordinate curriculum and instruction. Other collaborative teams include the Title I Schoolwide Team, and the building's Leadership and Site Council teams.

Two unique themes emerged from interviews with Simon teachers. The first had to do with a perceived increase in efforts to focus curriculum at each grade on essential content, a process they referred to as "weeding". At least one teacher indicated this effort had begun before the school's involvement with SIPTAP. However, it is now clearly linked, in the minds of the teachers interviewed, to the success of the school's improvement efforts, guided by their SIPTAP Action Plans:

> Teachers have been weeding more, asking, "Do I really need to do this project or activity or lesson?" The focus is on what's important. The question is, "Why are we doing this or that?

These teachers saw the weeding process as rooted in the belief that instructional decisions should be based on student needs, rather than on teacher preferences. One teacher noted:

> Pulling the weeds is about learning what to drop and what's important to the grade level. The message is that it's not about what you want to teach but about what students need to learn.

The second theme unique to Simon had to do with a perceived increase in the school's focus on using student-specific data to determine what classroom and/or building level interventions are needed to help students become more successful. According to one teacher: "We're targeting students…with the data we're given. We keep moving on and checking to see if we're helping students or need to target other groups". Another teacher pointed to more specific classroom uses of data, noting, "The assessments…help us see which kids need re-grouping or re-teaching and parent helper support".

Case Findings: Principal Interviews

Both principals indicated their schools were more data focused as a result of their involvement in the SIPTAP process. Foster's principal offered, "Before, we didn't really know what data to look at, what was important. Now, staff are looking at data all the time." Principals reported one way data was being used was to identify and target individual students for additional support. According to Simon's principal, that school's

Title I Schoolwide Team had begun considering student-specific data to make decisions about what supports were most needed. Foster's principal provided another example:

> Last year, the first grade team developed benchmark books with the help of a reading specialist. Teachers tested their students and if they didn't pass, got them into intervention right away. This year there aren't as many students qualifying for reading help as 2nd graders.

According to Simon's principal, their school's development of a standards-based report card had come out of their involvement with SIPTAP. This new format for reporting student progress has been accompanied by more reliance on data in conferencing with parents.

Both principals reported changes in the nature of their teachers' collaboration. They acknowledged that the consistency and productivity of grade level meetings varied, depending on the compatibility of the team and competing pressures at various times of the year. They both require documentation of grade levels meetings and topics discussed. They cited a number of examples of teachers working together to coordinate instruction and assessment. Simon's principal shared that 1st grade teachers had worked together to develop spelling lists from decodable texts to make them more manageable for students. Foster's principal indicated fifth grade teachers had decided, based on research they had read, to implement flexible grouping for reading instruction.

Foster's principal reported that the school improvement process had helped them learn to distribute leadership more effectively among teachers:

> They're going on without me at this point, because I can't make all the meetings. It's helped me to let go, to trust the leadership that's in the building, to encourage and nourish those leadership tendencies in people. I've learned that I have to be a listener and supporter instead of the one that's leading the team. When I go into those team meetings, they're moving so fast that I have to listen very carefully to keep up.

Principal perceptions of process factors.

Principals pointed to the quality of training provided for the Leadership Team, especially as it pertained to use of decision making/process tools, as critically important to the success of the process. They identified available time to do the work as their biggest challenge. Simon's principal shared, "We never really realized it was going to be as big as it was in such a short amount of time." Foster's principal noted the challenge of keeping the process moving while being sensitive to time pressures: "It's a delicate balance as a principal. You don't want to pressure staff too much but you don't want them to lose momentum either." This principal also noted that significant staff turnover in their school's SIPTAP Leadership Team, due to retirements and resignations, had added to the challenge of imbedding the process into the school's culture.

While both principals believed the coaching support they received was helpful, Foster's principal seemed to find it more so and recounted an instance where the coach assisted them in addressing a potentially delicate issue. All other principal comments suggested their coach's efforts were mainly directed towards helping the leadership team

understand, plan for, and facilitate the various steps in the SIPTAP process. Foster's principal noted the strong support their team had received from the NWESD and pointed to the direct involvement of the NWESD's superintendent in the training process as evidence of the organization's total commitment to the program. This principal also discussed the value of the SIPTAP Principals' Academy meetings in providing administrators with the opportunity to learn about the improvement process and discuss issues pertinent to leading schools through this process.

Case Findings: Coach Interviews

Nature of coaches' involvement.

Both coaches reported that school staffs, while not all equally enthusiastic about the process, were willing to "go along" without overt resistance. The coach for Foster described the faculty as initially "cautious". Both coaches indicated their schools had required the most support planning for and implementing the data carousel process. Foster's coach reported spending more time with his school than Simon's coach (i.e., an estimated 100 versus 75 hours). This difference had to do with the degree of support for on-site planning and facilitation requested by the two principals. Foster's coach spent more time planning with that school's Leadership Team and assisting them implement different steps in the process with all staff. He reported that, given the lack of time blocks available for that school during the 2002-03 school year, much of the whole-staff planning work took place during staff meetings after school. He would typically meet with the Leadership Team prior to those meetings to prepare and, at times, after the meetings to debrief and discuss next steps. He indicated he became aware early on that

use and control of time was a significant issue with the school's union leadership. He made efforts to build relationships with the union leaders and tried to be mindful of contractual parameters relative to after school meeting time.

While Simon's coach continued to be closely involved with the school in his role as district curriculum director, he indicated his formal involvement as a SIPTAP coach for the school ended once they had identified goals, targeted barriers, and entered the Study team process. Foster's coach reported that, while the majority of his involvement with the school had been during their first year in SIPTAP, he had been called on twice over the last 18 months by the principal to lend support to the Study team process. This support was primarily directed at bringing the school's Reading Team into the process due to their longstanding efforts in the school, even though reading had not been identified as a building goal. At the principal's request, the coach accompanied the Reading Team to a Study team work session at the NWESD. He reported he had been contacted again by the principal two days before my interview asking him to come back for some follow-up work with that group.

Neither coach had much, if any history with their assigned schools prior to their involvement with SIPTAP. As a result, they were unable to comment on any changes to these schools' professional learning culture.

Coaches' perceptions of process factors.

Both coaches had supported other schools through SIPTAP and offered their perceptions on important aspects of the process. They believed the primary role of the coach was to keep the school's Leadership Team "on track" by "guiding", "reminding",

and "pushing". They both indicated that, given the political dynamics of schools and the number of demands competing for staff's time and attention, external facilitators are in a unique position to provide a source of feedback and pressure towards improvement. One noted:

> I always try and put myself in the position of doing the hard stuff, of delivering the hard messages, like, "The King doesn't have any clothes on", or whatever needs to be said. That way the staff can be mad at me and not the principal or the staff.

They also pointed to the availability of time as critically important to schools' success. One referred to time as "the wild card in the whole SIPTAP process", suggesting that those schools able to devote adequate blocks of uninterrupted time to the work of improvement planning are able to sustain momentum and achieve results in ways that other schools are not.

Both coaches stated that the NWESD coaches meetings provided them with an opportunity to discuss issues and learn new techniques and were very important to their ongoing effectiveness.

Simon's coach emphasized the importance of the Leadership Team training and follow-up coaching as the most important aspects of the SIPTAP model:

> The training at the NWESD was in-depth and non-threatening. That piece and the coaching piece are key. Trying to get schools to go through the process without training and coaching doesn't result in the same level of commitment to success in moving forward.

Foster's coach agreed, adding that coaching through the Study team phase is very important, given teachers' lack of experience working with research. He noted the NWESD has recognized this and begun to build that coaching continuity into their model.

Case Findings: Artifact Review

Several documents were reviewed from each school in an effort to gain information beyond that learned from surveys and interviews. Unfortunately, no documents dating back before the fall of 2002 were provided. As a result, no change data were collected though my review of documents. However, the review did provide information relative to Foster and Simon's current practices.

Action Plans.

I evaluated Foster and Simon's school improvement goals using the Evaluating Goals Rubric from the *School System Improvement Resource Guide*, published by the Washington State Office of the Superintendent of Public Instruction (Bergeson, Heuschel, and MacGregor, 2004). Table 7 displays each school's ratings. Ratings obtained using the Action Plan Rubric from the same publication are shown in Table 8. Values reflect the percent of each school's goals and Action Plans scoring at each step on the rating continuum.

Foster's Action Plans for reading and writing reflected specific, time-bound, clear, and student –centered goals (e.g., "Increase student achievement in math as measured by the 4th grade WASL to at least 65% passing by spring 2005.") Each of the two goals was divided into more specific focus areas. For example, the Writing goal included two sub goals targeting student achievement in the traits of Organization and

Ideas. “Barriers to Goal Accomplishment” which the school had identified through the SIPTAP process, were listed as well. In general, Foster’s Action Plans clearly targeted these barriers. For example, a barrier from the writing plan, “Teachers have no dedicated writing block time”, is addressed through an action strategy, “Establish daily writing time in the classroom”. Similarly, a barrier from the math plan, “The need to complete Everyday Math Units”, is addressed through a series of action steps pertaining to vertical and horizontal curriculum alignment and pacing. This school’s Action Plan format includes a section for each strategy, documenting steps to be taken to address the needs of “Students not Making AYP”.

Table 8: Evaluating Goals Rubric

	4	**3**	**2**	**1**
The goals clearly state the direction for school improvement	Goals clearly state the direction for school Improvement	Goals state the direction for school improvement in a relatively clear manner	Goals state the direction for school improvement in an unclear manner	Goals do not state the direction for school improvement
SIMON		50%	50%	
FOSTER	100%			
The goals are linked to student learning	The goals are clearly linked to student learning	The goals are linked to student learning; however, the link can be improved	The link between the goals and student learning is unclear or weak	Goals are not linked to student learning
SIMON		50%	50%	
FOSTER	100%			
The goals accurately reflect the priorities specified in the needs assessment	All top priorities of the school are clearly addressed	Most top priorities are addressed	Few of the top priorities are addressed	The goals do not address the needs, or they follow unspecified needs
SIMON		50%		50%
FOSTER	100%			

Table 9: Action Plan Rubric

	4	3	2	1
A clear Action Plan is specified for implementing all strategies	There is a clear Action Plan for each strategy	There is a clear Action Plan for most strategies	There is a clear Action Plan for a few strategies	None of the strategies have a clear Action Plan
SIMON	22%	56%	22%	
FOSTER	100%			
The Action Plan has a logical sequence of events	The sequence of events in the timeline is completely logical	The sequence of most events in the timeline is logical	Many of the events in the timeline are without logical sequence	The events in the plan have no logical sequence, or no timeline is given
SIMON	11%	89%		
FOSTER	100%			
The Action Plan clearly identifies who will be responsible for each activity	All activities clearly state who will be responsible	Most activities clearly state who will be responsible	Few activities clearly state who will be responsible	None of the activities clearly state who will be responsible
SIMON	56%	22%	22%	
FOSTER	25%	75%		
The Action Plan clearly states how each activity will be performed	It is clear how each activity will be performed	It is clear how most activities will be performed	It is clear how a few of the activities will be performed	It is not clear how any of the activities will be performed
SIMON	22%	11%	67%	
FOSTER	100%			
A reasonable timeline is assigned to each activity	All activities include reasonable dates	Most activities include reasonable dates	Few activities include reasonable dates	No activities include reasonable dates
SIMON	56%	44%		
FOSTER	100%			

Simon's reading goal was not clearly reflected in the school's Reading Action Plan. Several math goals are stated, but do not include a timeline and more closely resemble action strategies than goals (e.g., "Increase student achievement due to a focus on WASL content" and "Increase student achievement by providing staff development on

math instruction with an emphasis on constructivism."). Overall, Simon's Action Plans for reading scored higher than their Action Plans for math.

The focus of strategies included in both schools' plans fell into several major categories, including professional development, curriculum alignment, assessment, and implementation of curriculum materials. Action steps involving staff collaboration were evident in all plans. For example, an activity from Foster's Writing Action Plan called for Grade Level Teams to identify common writing vocabulary and expectations, while Simon's Math Action Plan indicates that collaboration time will be provided "for teams to meet and share their progress towards changed teacher practice." Approximately 40% of the activities/strategies specified in both schools' plans are collaborative in nature.

Other artifacts.

Both principals provided documentation from various meetings occurring over the past two years. These documents are listed in Table 9. The Simon documents provide evidence of two aspects of the Study team process – i.e. review of the research on best practices and ongoing analysis of student achievement data.

Both Data Review Summaries reflect team members' attempts to make connections between the data and action strategies. The summary from the math team notes: "Our Communication scores are better than the state and district averages, yet our 'Communicates Understanding' math strand is one of our lowest. This is why we're focusing on this strand as well as some others."

Table 10: Meeting Artifacts

DOCUMENT	SCHOOL	DESCRIPTION
Writing Study Team: Effective Practice Resource Summary	**FOSTER**	Summarizes significant points gleaned from the book, *Writing Instruction: Current Practices in the Classroom*, read by a member of the Writing Study Team.
Writing Study Team Data Review Summary	**FOSTER**	Summarizes the writing team's conclusions from their review of their school's 2003 District Writing Assessment Results. Compares results to WASL results. Poses a reflective question to guide further research.
Math Study Team Data Review Summary	**FOSTER**	Summarizes the writing team's conclusions from their review of their school's 2003 WASL and ITBS results. Evidence of disaggregation by student longevity at the school. Poses a reflective question to guide further research.
Writing Study Team: Effective Practice Resource Summary	**FOSTER**	Summarizes significant points gleaned from the book, *Fostering Algebraic and Geometric Thinking*, read by a member of the Math Study Team.
First Grade Team Meeting Minutes	**SIMON**	Provides a summary of a recent grade level meeting.
Schoolwide Team Meeting Minutes (4)	**SIMON**	Summarizes four Schoolwide Team meetings.
Schoolwide Title Service Model	**SIMON**	Copy of a Power Point presentation summarizing the main characteristics of the school's Title I Schoolwide plan.

Similarly, the Writing Team summary includes:

> A question arises from the 2003 [district writing assessment] data: Because scores are consistent across the traits, we, as a district, are not able to draw any conclusions regarding which specific traits on which to focus. The 'digging deeper' would be to look into research which shows a trend in scores improving in one trait if you work specifically with another trait…e.g. if you work on word choice, would voice also improve?

The first grade meeting minutes from Simon indicate the majority of the conversation at this meeting related to instructional issues (e.g. "Are the decodable books effective? How do we manage them between school and home?"; "Look at new ways to teach and assess math facts. We need an assessment for 'Communicates Knowledge'").

Schoolwide Team meeting minutes from Simon suggest the majority of these meetings were spent discussing how best to coordinate services for individual students. However, the documents also reflect discussions around coordination of school assessments and support for teachers. Minutes from one meeting end with the following "Reflective Question": "How do we assist the small percentage of staff who continue to struggle implementing interventions/accommodations despite team recommendations?"

Simon's Schoolwide Title Service Model presentation summarizes the defining characteristics of a Title I Schoolwide program and recounts the school's year-long planning effort, which was conducted along side the SIPTAP process during the 2002-03 school year. The document includes several references to how the program will be implemented within the overall context of the school's SIPTAP Action Plans. Additionally, it provides evidence of parallels between the collaborative Schoolwide planning process and the SIPTAP process, namely data carousel reviews to determine needs and Study Teams focused on reviews of the research and site visits to schools with successful programs.

Summary

This study's overriding question is whether a school's involvement in SIPTAP appears to be associated with changes in staffs' perceptions of the school's culture of professional collaboration and learning. Survey results indicate that, overall, teachers and administrators perceived their schools' professional learning culture was stronger now than before their school entered SIPTAP. Taken together, results of the Teacher Survey showed significant perceived improvement overall and in each of the six Professional

Community Scales (i.e., Peer Collaboration, Reflective Dialogue, Focus On Student Learning, Collective Responsibility, Orientation Towards Innovation, Commitment Towards Innovation, and Commitment to School). Results varied across schools, however, as well as between principals and teachers within schools. Specifically, perceptions of change by teachers from Foster and Fir were weaker than perceptions of change by teachers from Simon and Pine Hills. Though no statistical analyses were performed on Principal Survey results due to the small sample size, it is clear that Foster's principal perceived a greater level of change than Foster's teachers, while Simon's principal perceived fewer changes than that school's teachers.

Interviews at Foster and Simon indicated that both teachers and principals perceived their schools were more focused on intentional collaboration targeted to improve achievement of all students. Specifically, they reported their collaborations were now focused on aligning their curriculum and lessons and reviewing student achievement data to determine areas in need of focus. Analysis of a sample of artifacts from each school provided confirmation of these perceptions.

Interviews further revealed insight into those components of the SIPTAP model that principals and teachers believed were most beneficial to their school's improvement efforts. Teachers and administrators from both schools believed the training for Leadership Teams provided by the NWESD was invaluable in teaching them a systematic process for change. Additionally, members of each school's Leadership Team and their SIPTAP coach believed the coaching support provided was important in keeping them focused and on track with the process. As reported, this support was mainly focused

specifically on helping Leadership Teams understand, prepare for, and conduct steps in the planning process, rather than on providing content or instructional coaching or leadership mentoring. Concerns with the process were largely related to the time commitment, particularly where time was not readily available. Additional concerns had to do with ongoing uncertainty as to how best to use data (as well as what data to use) to drive classroom instruction and program change.

Schools' perceptions of change in their professional learning culture have practical significance only if there is also evidence the changes are sustainable over time. The following section addresses this question.

Question #2: Sustainability

Foster

Limited time for collaboration and competing priorities resulted in a slower pace for Foster's SIPTAP process. As part of SIPTAP Cohort III, the school's formal involvement with the NWESD ended at the conclusion of the 2002 -03 school year. However, the school has accessed NWESD coaching and technical support for their Study Teams twice since then. The school has just recently completed Action Plans in math and writing. At the time of the study, then, they were continuing through the process, largely independently, over two years after they began.

Evidence of sustained effects.

To the extent their involvement in SIPTAP was associated with changes in their school's professional learning culture, Foster's perseverance through the improvement process approximately 18 months after their involvement in SIPTAP Cohort III ended

clearly provides evidence of sustainability. Tables 7 and 8 (pp. 85 and 86) indicate clear differences in the degree of positive change perceived by the principal and teachers as measured by the study's survey. While the principal perceived sizeable gains on measures of professional learning culture, the gains perceived by teachers, though significant ($p < .05$), were much more modest.

Consistent with survey results, interviews provided evidence of changes in the nature of teacher collaboration at Foster. Teachers in the interview sample tended to be more circumspect in their appraisal of the process, largely due to the high level of structure and control they believed the process had imposed on any and all collaboration and planning time. Nonetheless, they agreed with the principal that their collaboration was now more consistent and focused in a common direction around data, research, and best practices. The Data Review and Resource Summary documents from the Math and Writing Study Teams are consistent with their reports, showing evidence of teacher teams looking at district and state student achievement data in an effort to identify entry points for improvement planning, and reflecting on how research informs instructional practice. The Action Plans developed by these teams call for continued collaboration within and across grade levels to align and articulate curriculum, instruction, and assessment.

There is also evidence that what teachers have learned through the SIPTAP process about use of data is being used to more effectively identify and target students in need of extra support. An excerpt from the math Action Plan provides an example:

Activities for Students not Making AYP:	4th grade before-school program during winter trimester for those students who do not score a 3 or better on the fall problem solving assessment.

However, echoing the sentiment of some Simon teachers, one teacher admitted: "We're looking at a lot more data now but we're not entirely sure what we're looking at. In the classroom if you're trying to figure out what to do with a student some of it's not real helpful." Another teacher provided some clues as to the source of frustration: "We're still looking primarily at summative not formative data. Data is being used more, but there's still a lot of uncertainty about how it's supposed to be used to change instruction in the classroom."

Despite concerns, most teachers interviewed agreed that SIPTAP had resulted in several positive changes in the way teachers continue to work together. One teacher summarized the changes this way: "Now we have a great idea about how to improve test scores. The research process makes us think more. Now our collaboration is more focused and useful."

Simon

Simon progressed quickly through the SIPTAP process. By spring 2003, the school had established goals, identified barriers, and formed math and reading Study Teams. By October 2003, these teams had completed their review of the research and site visits to successful schools and had produced Action Plans. Although their SIPTAP

coach continues to work with the school in his capacity as district curriculum director, there is no evidence the school has had any formal support through the NWESD SIPTAP project since fall 2003.

Evidence of sustained effects.

Questions 9 – 31 on both the teacher and principals surveys were designed to assess how respondents perceived their school's professional learning culture, both before their involvement in SIPTAP and now. Total and scale Gain Scores then reflect how the present culture of the school is perceived in comparison with the school's past culture and can be seen as a measure of the extent to which any perceived changes have been sustained up to the point the survey was administered. As shown in Table 5 (p.67) the principal's perceptions suggest little change. However, results of the Teacher Survey, displayed in Table 6 (p. 68), indicate statistically significant, positive changes in teacher perceptions.

The interview protocol used asked teachers and their principal to reflect on how, if at all, their school is different now than before their involvement in SIPTAP. Their responses, discussed in detail above, suggest a perceived change in the nature and focus of their collaboration. While they report that professional collaboration is nothing new for Simon, their work together is now more tightly focused on their school improvement goals and is organized around data-driven inquiry and decision-making. The principal noted that the process "has brought a focus to what we're all about – educating kids." Teachers work together within and across grade levels to coordinate, and align their

curriculum, instruction, and assessment, within the context of their Action Plans. Release time is intentionally structured to support these efforts. As one teacher put it:

> Learning Improvement days and early release days now have a relationship to what we're teaching. Before it was someone coming in to teach you about something that might apply to you or not, but they had to fill in the space. Now we're doing this because it's part of our math or reading Action Plan. There's a purpose. It's more meaningful.

A review of the school's reading and math Action Plans lends support to the theme of focused collaboration. Action steps and strategies call for collaboration around alignment of curriculum, instruction, and assessment and for professional development focused on identified needs.

Interviews, anecdotal observations, and artifacts all indicate the important role data continues to play for teachers at Simon. The walls of the conference room in which I conducted on-site interviews were covered with displays of updated student achievement data. The principal and other teachers explained these charts were for a mini data carousel activity. All staff were expected to come in, in teams of two or more, to review the data and discuss and record their observations. These observations were to be reviewed at an all staff meeting, as a means of providing feedback on the effectiveness of their Action Plans and direction for future areas of focus.

Teachers in the interview sample repeatedly talked about how the school continues to use what they learned about data analysis from the SIPTAP process to focus on areas for improvement. Several pointed to the school's use of data to focus on

students needing additional support. This theme is supported by minutes of Schoolwide Team meetings, the Power Point presentation on Simon's Schoolwide model, and both the reading and math Action Plans. Each of these documents reflects ongoing efforts to coordinate identification of and support for struggling learners.

While most teachers interviewed talked about the importance of using data to drive decisions, there is some evidence that knowing how to make sense out of and effectively use all the data provided is a struggle, at least for some. The principal noted that while staff are clearly more aware of the importance of using data to inform decisions, there is still uncertainty around how to use data to guide classroom instruction. One of the more experienced teachers interviewed questioned the relevance of "all this data." Minutes from the first grade level meeting note: "We need to have someone explain test data instead of figuring it out on our own. [It's] too much to look at at one time."

Summary

The timing of my data collection allowed me to evaluate perceptions and evidence of short-term sustainability relative to perceived changes in schools' professional learning cultures. Each of the 23 questions comprising the Professional Community scale asked teachers and principals to rate the degree to which the item described their school before they became involved in SIPTAP and now. As the survey was completed approximately 18 months after these schools' participation in SIPTAP ended, gain scores provide a measure of perception of sustained change. In that these gain scores were practically and,

in the case of teachers, statistically significant, they provide evidence that staffs' perceptions of change in their schools' professional learning culture are continuing.

Results of site interviews and document reviews corroborate survey results. Teachers and principals alike indicated that they had learned, through SIPTAP, to collaborate in a different way. Specifically, they perceived that, compared to their previous practices, their current collaboration is now more focused on improving student achievement as an entire school using data. Evidence supporting their perceptions was found in a sample of documents from each school. These documents reflected collaborative efforts focused on research, curriculum alignment, student data analysis, and student intervention.

In this chapter, I have presented quantitative and qualitative findings relevant to my first and second research questions. Data presented from my survey, interviews, and document analysis provide insight into both questions, which pertain to perceptions of the degree, nature, and sustainability of changes in schools' professional learning culture associated with their participation in SIPTAP. My two remaining research questions have to do with the extent to which teachers and principals perceive these changes have lead to changes in teachers' classroom practice and the role of contextual readiness factors. Findings pertaining to these questions are discussed in the following chapter.

Chapter 5

Findings: Part Two

My first two research questions had to do with the extent and longevity of changes in schools' professional learning cultures associated with their involvement in the SIPTAP school improvement process. In this chapter, I present my findings relative to the final two research questions, which focus on (1) evidence that any changes in teacher practice have occurred and (2) the extent to which contextual readiness factors contributed to any changes a school has experienced. Following the format in the previous chapter, I have organized results by research question.

Question #3: Perceptions of change in teachers' classroom practice

An in-depth look at change in teacher practice was well beyond the scope of this study. However, my qualitative research methods allowed me to collect some information relative to changes in how teachers approached their classroom work. Specifically, my analysis of documents was, in part, focused on looking for evidence of a link between collaboration and teacher practice. Additionally, my interview protocol asked teachers and principals to reflect on how any changes they perceived in the school's professional learning culture stemming from their involvement in SIPTAP had lead to changes in teachers' classroom practice. Findings are presented below.

Document Analysis

While many of the strategies listed in Foster and Simon's Action Plans are focused on curriculum alignment and coordination, there is also evidence of an attempt to

directly influence classroom practice. Foster's Writing Action Plan calls for "daily writing in the classroom" and indicates teachers should, "Provide small focus groups concentrating on specific needs for those students not achieving a 3 or better on Organization or Ideas on teacher assessments." Under the area of "Problem Solving and Communication", the school's Math Action Plan includes the following strategy: "K-6 classrooms have students verbally and visually share with others HOW they solved their problems, QUESTIONS that they had, the STRATEGIES, etc. which will give students feedback from their peers." Simon's Reading Action Plan includes "Integration of writing into content areas" as a strategy to increase reading comprehension skills and, to address fluency, calls for staff to "share and agree to try 3-4 new strategies and interventions to improve fluency instruction."

The professional development activities listed in both schools' plans are targeted towards changing teachers' instructional knowledge and skills. For example, Simon's Reading Action Plan indicates training and coaching in differentiated instruction will be provided for teachers, along with professional development focused on "word learning strategies and how to provide direct exposure to agreed upon vocabulary." The school's math plan indicates the principal will arrange for: "…staff development on constructivist theory and practice including: scaffolding, guided discovery using manipulatives, building on strategies children already use, and other constructivist techniques."

Minutes from Simon's Schoolwide Team show evidence of this teacher team working with their colleagues to encourage application and monitoring of prescriptive

teaching strategies to address individual student needs. The following two excerpts are examples:

- Jennifer has difficulty with comprehension and benefits from oral discussion. Directions need to be reread several times, which helps somewhat. Highlighting direction words and focus information was suggested as an accommodation. One-on-one with Jennifer helps her process written directions.

- Ms. Tingley regularly reads questions to Hernando. He is becoming more confident in writing sentences. He is working on Edmark spelling and showing some growth. On a recent assignment, he worked on place value with some independence, but at the grade level of his peers.

Interviews

Of the fourteen teachers interviewed, 10 reported they had made some changes in their classroom practice as a result of their school improvement planning process. The changes they described fell into two categories: structural/organizational or related to teaching practice. Examples of structural/organizational changes include administration of common assessments and vertical and horizontal curriculum alignment. A Simon teacher explained, "There's more assessment now and showing student growth. There's more documentation and accountability to higher ups and my grade level team." Another reported, "Teachers are weeding more now, focusing on what's important and asking, 'Do I really need to do that project?'" A Foster teacher shared that her grade level has implemented "common vocabulary and common writing rubrics." One of her colleagues

suggested, "A lot more data is now being used in the classroom, but I think there's still uncertainty as to how it's supposed to change the day-to-day instruction."

Other reported changes had to do with more direct impacts on teaching practice. These changes often reflected an application of assessment data to better inform instruction. A Foster teacher explained:

> In my classroom, I'm more aware of tracking individual children's data to find those holes to plug either by re-teaching or getting extra help because they're not understanding. Before it was, "What can I do to change my teaching to cover this?" Now I look at every child and ask, "What is it that they don't have? What do they need?" Before, in first grade, our focus was on introducing each concept. Now I realize we hold every single child accountable.

Similarly, a teacher form Simon indicated, "Assessment helps us see which kids need regrouping and re-teaching and parent helper support." The theme of using data to better tailor student instruction was echoed by another Simon teacher:

> I differentiate instruction more now. I know which kids to focus on for remediation and for more challenging work. Before, I gave all kids the same work. My expectations in the classroom are higher too. Before, I didn't really realize where we had to get kids to. Now I do and the slack time isn't there.

Changes in how teachers grouped students for instruction were also apparent:

> In reading, intermediate teachers are now doing small grouping so each child is reading at their level. We adopted some of the ways primary teaches reading after we read the research. We don't notice a difference in our reading scores yet but

> it's helped enormously if you talk to a child. They have a much better understanding of what they're reading and how to learn from reading. (A Foster teacher)

However, teachers in both schools also reported how difficult it was to make changes in their classroom practice. A Simon teacher put it this way:

> We're trying to address the way we question and the way we teach math. It's overwhelming in the classroom. I'm not sure I've changed my practice yet but I'm more aware of and focused on those things we've pin pointed. It has changed what I do in the classroom but it's hard.

A Foster teacher suggested:

> Some of the things I'm being asked to do are a big change for me…and I'm not sure how useful it is but I think it has the potential to be useful. I'm just going to have to practice it a bunch before it makes sense to me. To make a change and buy into it you have to be really passionate about it. Even for easy changes, it takes a lot of time.

While survey results indicate principals differed from one another and from their teachers in the degree to which they believed the SIPTAP process had lead to changes in their school's professional learning culture, both were cautious in their appraisals of changes in classroom practice. Simon's principal noted beginning to see "some evidence of change in teacher practice coming from the Action Plans. For example, teachers are attempting to incorporate a more constructivist philosophy into their math instruction and are collecting more data on students." Foster's principal suggested, "Action Plans are

starting to have an effect on what teachers teach. Vertical alignment of instruction is beginning to happen." Both these principals talked about how difficult it was to facilitate school improvement that result in classroom changes, but expressed optimism that the foundation had been laid for this next level of change in their schools.

Summary

Perceptions of change in teachers' classroom practice as a result of SIPTAP were measured by teacher and principal interviews and corroborated through document reviews. While Foster and Simon's principals were circumspect in their conclusions related to changes their teachers had made as a result of their SIPTAP experience, most teachers believed they had, in fact, changed several aspects of their practice. Most of these changes had to do with what they taught and seemed to have resulted from their collaborative efforts to align curriculum within and across grade levels. However, some teachers also reported changes in the way they used student achievement data to identify and plan for those students not meetings standards. These teachers referred to changes in instructional grouping strategies. A smaller group of teachers reported perceived changes in their pedagogical practices. However, these teachers tended to emphasize how difficult it was to make those changes.

Though not an indicator of change, documents reviewed form Foster and Simon did corroborate teachers' reports that their collaboration was currently focused on analysis of individual and school wide student achievement data, research into best teaching practices, vertical and horizontal curriculum alignment, implementation of

common instructional strategies and assessments, and, in the case of Simon, use of student data to focus on the needs of individual high-risk students.

I now turn to my final research question, which related to the role of contextual readiness in school improvement outcomes.

Question #4: Contextual readiness factors

Schools within and certainly across districts tend to be highly unique environments, each with their own social, cultural, and political dynamics. The research base relating to the importance of school context in mediating school improvement outcomes was discussed at some length in Chapter 2. My final research question was designed to focus my inquiry on school context. Specifically, I hoped to gain insight into the relationship between context and school improvement outcomes.

Survey Findings

Both my principal and Teacher Surveys included eight items designed to measure respondents' perceptions of their school, relative to contextual factors which have, in other studies, been found to constitute capacity to engage in school improvement planning (e.g. Corbett et al., 1984 and Bodilly, 1998). Respondents were asked to rate the degree to which these eight statements described their school at the time they became involved in SIPTAP, on the following scale: Strongly Disagree (SD; score = 1), Disagree (D; score = 2), Agree (A; score = 3), Strongly Agree (SA; score = 4). A Total Readiness score was calculated for each teacher respondent. Figures 2 and 3 display the results for Principal and Teacher Surveys respectively.

Overall, teachers and principals agreed their schools lacked adequate time to engage in school improvement planning at the time they entered the process. They also agreed teachers' did not routinely rely on data in planning their instruction. Principals and teachers disagreed on the extent to which teachers entered the process believing that change was necessary to improve instruction. Most teachers agreed or strongly agreed that most teachers in their school saw the need for change when the process began.

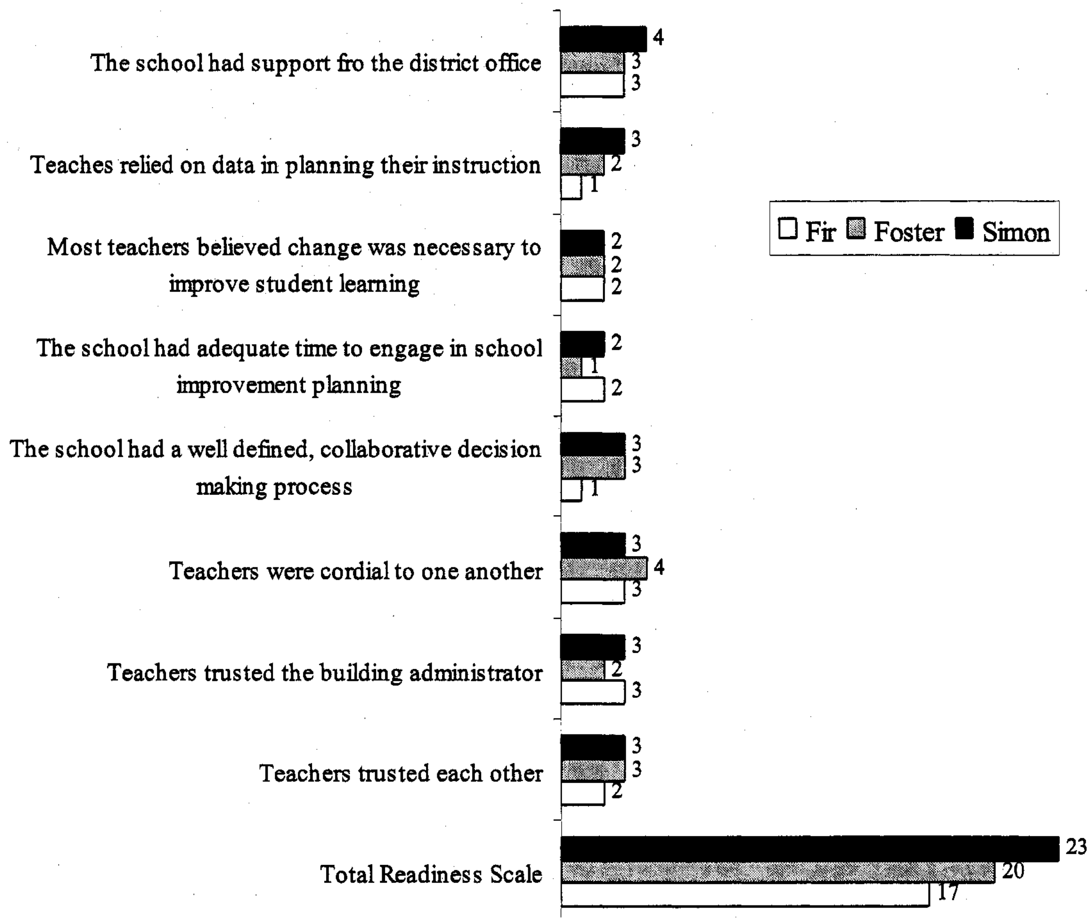


Figure 2: Principal Survey Readiness Score by Item and School

* The Pine Hills principal had not been at the school prior to SIPTAP so did not participate in the survey.

However, all three principals disagreed. Two of three principals agreed their school had a well-defined decision making process in place at the time they became involved in SIPTAP. However, over one-third of the teachers surveyed disagreed this was the case.

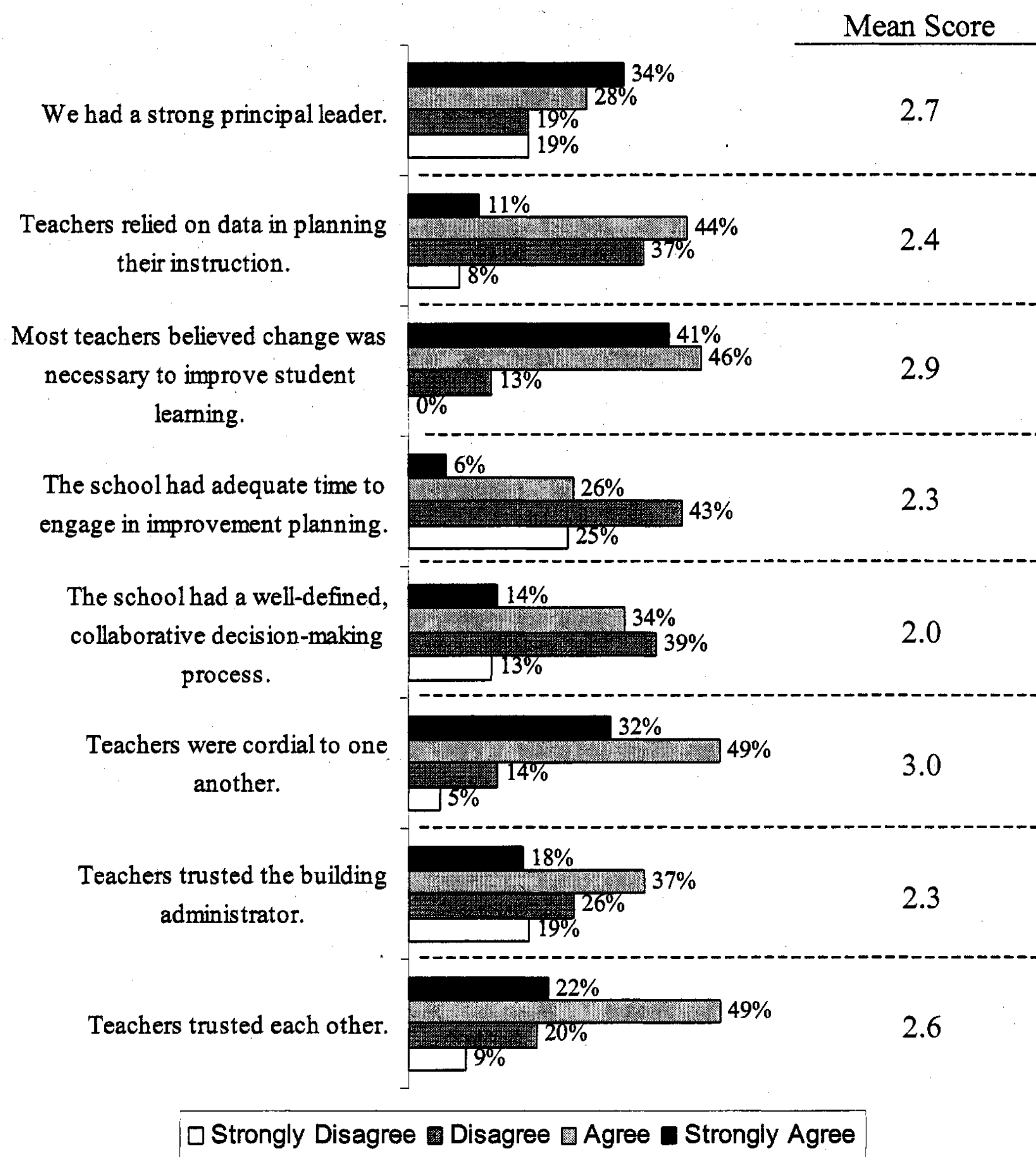


Figure 3: Teacher Survey - Frequency Distribution and Mean Scores for Readiness Scale

Teacher Survey Total Readiness scores by school are shown in Figure 4, while scores by Readiness item are shown in Figure 5.

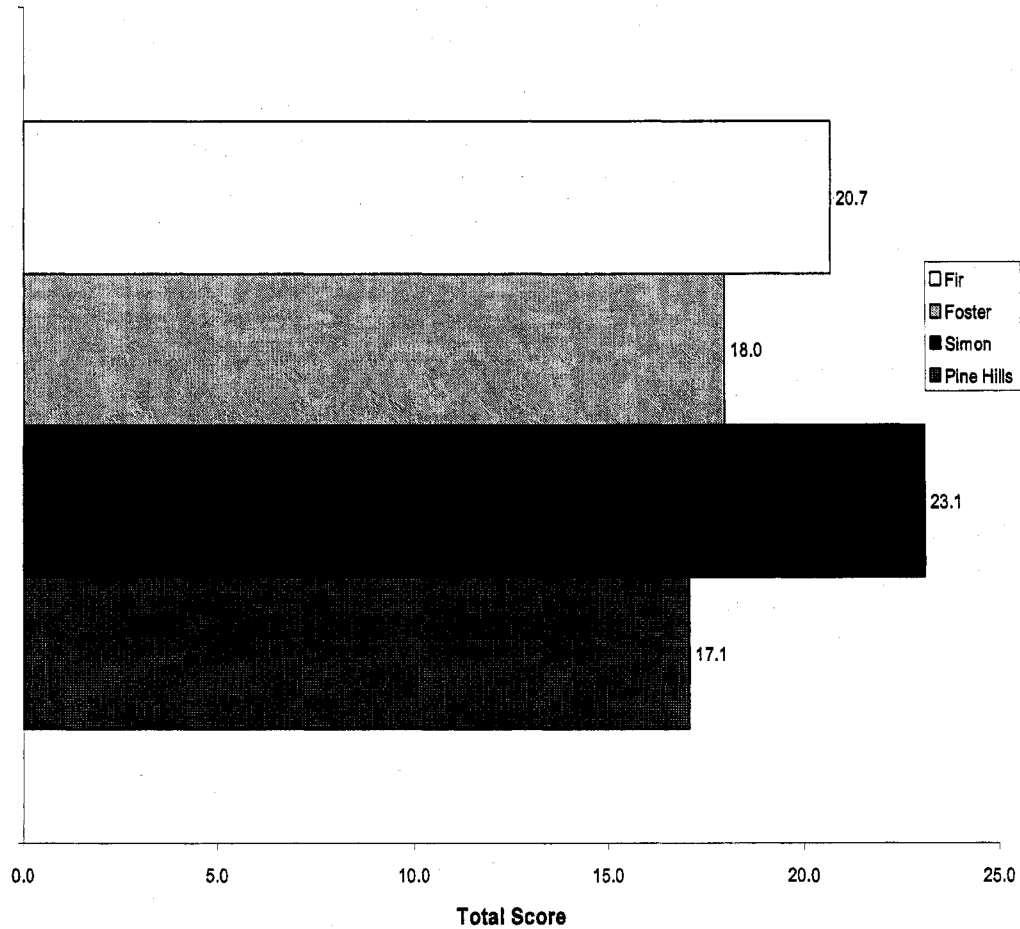


Figure 4: Teacher Survey - Mean Readiness Scores by School

Differences in perceptions of specific readiness factors between the schools are evident. Teachers from both Foster Pine and Hills rated trust in and strength of their building principal as low. Principal and teacher ratings were generally consistent for Foster and Simon with two exceptions. The majority of Foster's teachers indicated the school did not have a well-defined collaborative decision making process when they became involved in SIPTAP, while the principal believed they did. Simon's principal

disagreed with the majority of that school's teachers, who agreed or strongly agreed that most teachers believed change was necessary. The ratings between Fir's teachers and principal were less consistent. The principal agreed that teachers trusted the building principal, while disagreeing that they trusted each other. However, the majority of Fir's teachers believed teacher trust was high while trust in their principal was low.

To determine whether Total Readiness scores from Foster and Simon Teacher Surveys differed significantly, I performed an Independent-Samples T Test. Results indicated these scores differed significantly, at the 99% confidence level (p < 01).

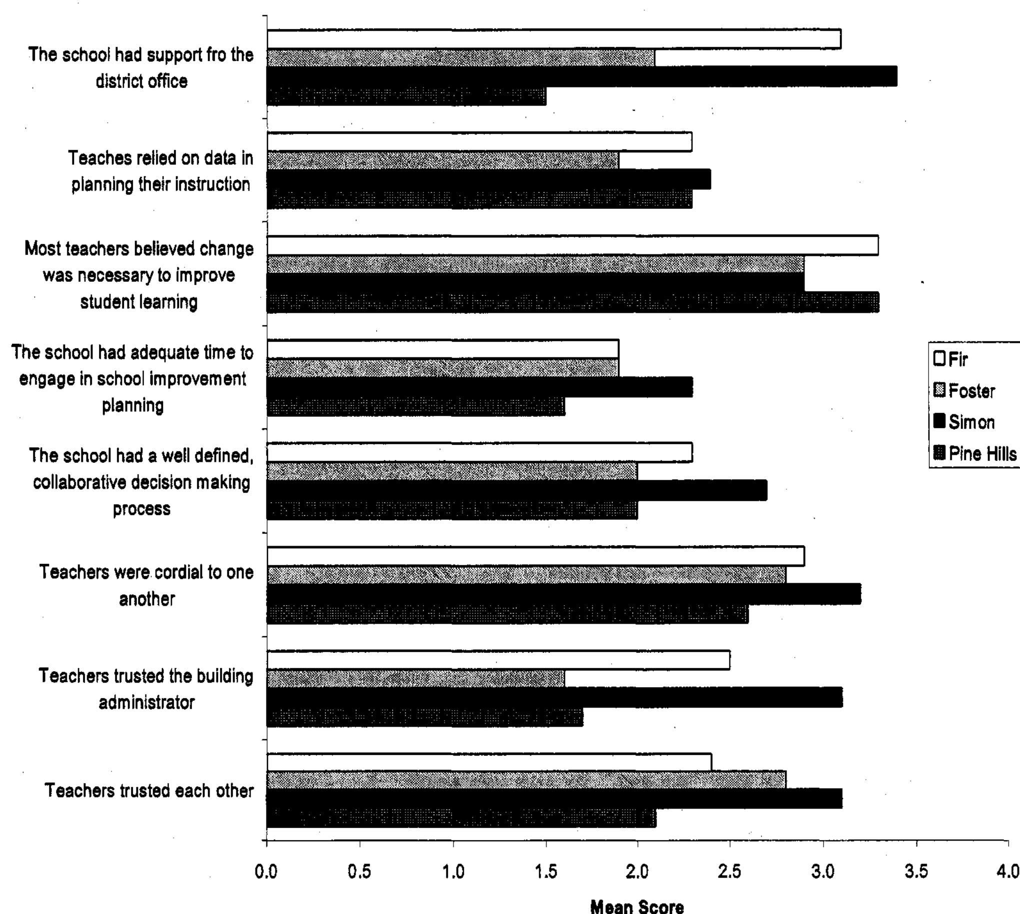


Figure 5: Teacher Survey – Mean Readiness Scores by Item

I then compared the Total Readiness score, aggregated for all schools, with the Total Gain Score (i.e. the difference between the Total Pre-SIPTAP and Total Now on those 15 items comprising the Professional Learning Community scale). The results indicated a significant, negative correlation ($r = -.508$, $p < .001$). While statistically significant, it is important to note that a correlation at this level indicates the variance in the Total Readiness score accounts for only about 26% of the variance in the Total Gain score.

Table 10 resents correlations between Total Readiness and Total Gain, along with Gain Scores for each of the six Professional Community scales.

Table 11: Pearson Correlations of Gain Scores with Total Readiness Score

	Gain Scores						
	Total	Collab.	Dialogue	Focus on Student Learn.	Collective Respon.	Innovation	Commit.
All	-.508**	-.397**	-.418**	-.397**	-.490**	-.397**	-.615**
Fir	-.107	-.295	-.219	.078	-.100	.118	-.236
Foster	-.696**	-.513	-.652*	-.702**	-.654*	-.598*	-.716**
Pine Hills	-.707**	-.755**	-.585*	-.494*	-.550*	-.698**	-.647**
Simon	-.424*	-.246	-.354	-.319	-.387*	-.232	-.608**

** p < .01 * p < .05

Combined Gain Scores for all schools correlated significantly with the combined Total Readiness score ($p < .01$). However, squaring each coefficient reveals that the Readiness score accounts for less than 25% of the Gain Scores on all the professional community scales, with the exception of Commitment to School. The Readiness score

accounts for approximately 38% of this scale's gain score. All correlations that reached significance were negative. The strongest correlations were obtained for Foster and Pine Hills. Specifically, Foster's Readiness score accounted for almost 50% of that school's Gain Scores on the Focus on student Learning and Commitment to School scales. The Readiness score for Pine Hills accounted for approximately 57% of the school's gain score on Peer Collaboration. Correlations between Readiness and Commitment to School Gain Scores were both stronger than -.600 and significant at the 99% confidence level for all school but Fir. The correlation between Readiness and Peer Collaboration Gain Scores were weak for all schools except Pine Hills. Overall, correlation coefficients for both Fir and Simon were quite weak. None of the coefficients for either school was significant, with the exception of the coefficients for Simon's Total Gain and Collective Responsibility Gain Scores. However, though statistically significant at the 95% confidence level, both these correlations were quite weak.

Case Findings

Teacher and Principal Interviews

From interviews with teachers and principals from Simon and Foster, it was clear both schools were experienced collaborating, in a general sense, on improvement efforts prior to their involvement with SIPTAP. Teachers from both schools reported that Grade Level Teams had collaborated in a variety of ways over the years, though the frequency of this work was largely dependent on the individuals involved. At Foster, the principal reported that teachers had lacked training in how to use common planning time and, as a result, tended to focus at the logistics level (e.g. schedules and filed trips). Teachers from

Foster talked about the collaborative efforts of their school's Reading Team and past efforts to focus as a school on improving math. The principal indicated the school had been working for the two years prior to their involvement in SIPTAP using the professional learning community work of Robert Eaker and Richard DuFour. The faculty met in a retreat format each year to review achievement results and set goals, which usually centered on improving the school's culture.

At Simon, teachers indicated their pre-SIPTAP collaboration efforts focused on alignment of curriculum with state standards and identifying essential content. They also noted that, entering the SIPTAP process, they had just undergone a reading materials adoption which involved a significant shift in how they taught reading. Teachers worked together extensively to implement the program, coordinating with their Grade Level Teams and with teachers in the grade levels above and below their own.

Teachers and principals from both schools reported a similar level of background experience with data. A Simon teacher noted: We always had and used data before but it wasn't as extensive or comprehensive. We didn't really ask questions to go along with it, like, "What does this tell you?" Their descriptions suggested that, while individual teachers focused to varying degrees on classroom and district assessment data, the focus at the school level was on using state level assessment results to identify areas of strength and weakness. However, annual reviews of state assessment results were not apparently linked to systematic and focused planning efforts involving all staff. Skepticism among some Foster teachers over the value of WASL results limited their utility in driving school improvement. According to one teacher: "We used data before but weren't

looking at the whole school. It was more individual, unit-by-unit. We didn't like the WASL or trust that it was measuring the right things."

Lack of trust at Foster was not limited to the WASL. Teachers and their principal indicated the school historically struggled with issues of trust and communication. Many, though not all, of these issues related to staffs' relationship with the building principal. Teachers' trust in the district office was also limited. One teacher explained that teachers, in general, felt "unsupported and misunderstood" and always suspected that principal and district office leadership had "some hidden agenda". This attitude affected the way a number of teachers initially viewed the SIPTAP process. As one teacher put it: "We weren't ready for the administration to tell us how to change in a very structured manner." Despite these attitudes, teachers indicated their principal was both a strong leader and supportive of the SIPTAP process.

To a lesser degree, trust at Foster was problematic between teachers, particularly those who had been at the school for many years and those who were relative newcomers. However, most teachers interviewed suggested that teachers, while outspoken, got along and worked well together.

In contrast, Simon teachers reported trust between teachers and between teachers and their administrator were high at the time they became involved in SIPTAP. A number of teachers had worked in the school for many years and were personal friends as well as colleagues. They reported feeling respected and supported by their current principal and by the district office. Teachers indicated that the staff avoided open conflict and that disagreements and that conflict tended to be dealt with privately.

Despite their trust in their principal and district office leadership, teachers at Simon indicated many on the faculty were initially skeptical of the SIPTAP process. This was particularly true of more experienced teachers who had been through a number of initiatives in their careers. Teachers reported that, on the whole, staff were confused about why they were the only school in their district involved in the process and worried about the time commitment involved. However, as one teacher put it, "We were willing to go along and eventually bought in."

Consistent with differences in teacher-administrator trust between the two schools, teachers held different perceptions relative to their school's decision-making process pre-SIPTAP. Simon's principal and teachers reported that decisions in their school were made by several different but overlapping teams, depending on the issue. These groups included the school's site council, leadership team, and whole staff. As indicated in Chapter 4, this school's leadership team became their SIPTAP Leadership Team once they entered the NWESD process. Teachers indicated that, while they did not always agree with decisions that were made, they felt their input was typically asked for and considered in making decisions directly affecting them. By contrast, teachers at Foster suggested that, while they had had a site council for many years, their input was not always solicited or valued in making major decisions.

While many were initially skeptical of the process, teachers at Simon reported most teachers at their school entered SIPTAP believing that change was needed to improve student learning. Individual reluctance seemed to have more to do with skepticism around "one more program that would come and go." One teacher noted:

"Most people grumbled in the beginning because of the extra time outside the classroom and because they'd 'been there before'. But they were willing to go along with it to see if something positive would happen."

There was some evidence that staff reticence had less to do with their acceptance that they needed to change their practice than with the notion that to do so required a sustained and intensive school wide planning effort. One teacher suggested, "We were somewhat shocked at the idea that we were all going to be looking at ways to improve together."

At Foster, teachers seemed to be divided on the need to change. While the teachers interviewed all suggested their colleagues and they had always been open to changing their practices to improve student learning, some also suggested the sense of urgency was lacking, due to the school's history of success. Prior to their involvement in SIPTAP, the school's scores on the fourth grade Washington Assessment of Student Learning were among the highest in the district. As with Simon, Foster teachers suggested that their cautious approach to the process was due, in part, to their past experience with improvement efforts that were ultimately abandoned. One teacher explained:

> Trust was low because we'd seen so many things come and go with no follow through. We didn't understand this new program. We knew we needed to look at ways to improve, but were mistrusting of one more program. We were skeptical it would make any difference.

While five of the eight teachers interviewed at Simon felt their school had sufficient time to engage in the planning process, only one of the six Foster teachers interviewed believed the time they were provided was sufficient. Beyond two state-funded Learning Improvement Days (LID), Simon's 2002-03 calendar included approximately one early release day each month for professional development. They devoted this time to SIPTAP activities involving all staff. By spring of 2003, the school had prioritized two goals, identified barriers to each goal, and formed Study Teams to research effective strategies to address those barriers. The principal shared that building and district resources were combined to provide these teams with release time to visit other schools and additional compensation for them to meet over that summer to develop Action Plans. Implementation of those plans began in October of the following school year.

By contrast, Foster's 2002-03 school calendar included minimal time for professional development beyond the two LID days. Most SIPTAP planning activities were conducted during staff meetings after school. The school did not reach the point of goal identification until August of 2003. Math and Writing Study Teams were formed in the fall of 2003. Reading was added in January 2004. These teams met (and continue to meet) during the seven late arrival days built into the district calendar beginning in 2003-04 and two afternoons each month after school. Draft Action Plans in reading and writing were completed in the fall of 2004 and revised in February 2005. According to one SIPTAP Leadership Team member: "It's taking longer than is good for the process. It's hurt the momentum and morale of the process. People are asking, 'When are we

going to start to see changes?'" Others echoed this concern. One teacher shared, "We spent too much time getting to the goals. The time really should have been spent on Study Teams. It's been two and a half years and we're just now getting to a plan." Foster's principal reported that no district resources have been available to provide additional release time or compensation for summer work.

Coach interviews.

Foster's coach indicated the school's leadership team was strong and worked well together. He was aware of staff's history of mistrust in administrators in general and their principal in particular. He experienced the staff as cautious but not openly resistant. He reported becoming aware of the union leadership's concern over time and compensation early on and making efforts to keep the meetings in which he was involved within contract parameters. In regard to leadership support, he indicated the principal was enthusiastic about the process and bought into the need to have the school's SIPTAP Leadership Team take the lead role in the effort. He noted the lack of time available to the school made it difficult to establish momentum.

Simon's coach spoke of a high level of trust between teachers and teachers and their principal at the time the school entered SIPTAP. He indicated the school had a history of shared leadership involving a site council and a building leadership team. He reported the school had been through a comprehensive reading adoption process the year or so before which, "required them to come together and agree to teach reading in a way that was a departure from the past." He believed this recent experience had laid a foundation for collaboration around instructional issues.

Aside from reflecting on readiness issues pertinent to these two schools' experiences, coaches were asked to talk about what they had learned from their experiences with multiple schools about the role of readiness in the SIPTAP school improvement process. Both pointed to the importance of principal leadership which not only supported the process, but also recognized the importance of sharing leadership with the school's SIPTAP Leadership Team. Foster's coach put it this way:

> The principal's willingness to encourage and allow the leadership team to stand up and direct the process is key. If the principal tries to control the process it really impedes things. The principal may be the one who has the readiness issue.

These coaches also suggested that a climate of trust between teachers and between teachers and administrators has a lot to do with the success of the SIPTAP process in a school. At the same time, they suggested the process itself can help build trust. According to the Simon coach:

> The trust level needs to be high for a school to be successful, but the process can help build trust because nothing is hidden. Everyone is seeing the same thing. If a school isn't ready, you still have to move forward. The process can help create a higher level of readiness. These schools make steps forward. Their steps just aren't as big.

Both coaches reiterated the importance of time. Foster's coach suggested, "In order for a staff to work as a collaborative unit, they must have targeted, uninterrupted time. If the time isn't available or targeted, the value of the process is limited."

Finally, Simon's coach reflected on the value of having readiness assessments built into the planning process at various steps along the way:

> The readiness format allows each school to look at where they are around a pretty clear set of questions – yes and no and, if no, what do they have to do to get ready? It really helps them think through the steps that are necessary to engage in each planning process.

Again, he emphasized the ability of this aspect of the process to build the capacity for schools to move their planning efforts forward.

Summary

Perceptions of school readiness, a central construct underlying the SIPTAP theory of action, were measured using Teacher and Principal Surveys and interviews with coaches, teachers, and principals from Foster and Simon. Interestingly, the level of perceived readiness for each school showed weak, negative correlations with that school's Professional Community Gain score. Simply put, not only did these schools' perceived levels of readiness not predict their levels of perceived gains in characteristics of Professional Community, higher levels of perceived readiness were actually associated with somewhat lower perceived gains.

Interview data revealed some specific information relative to the role of readiness in Foster and Simon's experiences with school improvement planning. Teachers and principals from both schools reported some positive history collaborating on improvement efforts before SIPTAP. Though these efforts were not always school wide or focused, teachers and principals saw them as providing a foundation for their

involvement in a more systemic, intensive process like SIPTAP. Teachers from both schools perceived their principals as fully in support of the SIPTAP process. Likewise, principals reported that they had full of support of their district office. While many teachers from both schools were skeptical of the process at the outset, neither teachers, principals, nor coaches perceived either staff as openly resistant.

Interview data suggests that time for planning plays an important role in school improvement in at least two ways. First, the amount of time available has a direct relationship to the pace of the planning process. The slower the process proceeds, the more impatient teachers become. Second, to the extent principals are forced to create time by encroaching on teachers' individual planning time, as was the case with Foster, teacher support for the process can be negatively affected. That said, Foster's experience provides evidence that the lack of time for planning does not have to result in failure of the process.

Foster's experience provides interesting insight into the role of trust as a contextual prerequisite to school improvement planning. Survey results along with teacher and principal interviews reflect that, heading into the SIPTAP process, there was a perceived lack of trust on the part of teachers in their principal, unlike Simon, where perceived trust was high. And while this may at least partially account for the fact that the gains in professional community perceived by Foster's teachers were somewhat lower than the gains perceived by Simon's teachers, Foster's principal, coach, and several of the school's teachers shared a belief that trust had actually been enhanced as a result of the school's participation in SIPTAP.

In this chapter I have presented findings related to my third and fourth research questions. These questions have to do with the nature of change in classroom practice associated with a school's SIPTAP participation and the role of contextual readiness in a school's experience with the SIPTAP process. In the following chapter, I present my analysis and discussion of the findings from this chapter and from Chapter 4, along with a discussion of my study's limitations and suggested recommendations for future paths of inquiry.

CHAPTER 6

DISCUSSION

The primary purpose of this study was to investigate the effects of participation in a structured continuous improvement planning process on a school's professional learning culture. The study sample included four elementary schools in Northwest Washington which had participated in Northwest Educational Service District's (NWESD) School Improvement Technical Assistance Planning Project (SIPTAP) during the 2002-03 school year. A mixed methods research designed was used, combining structured principal and teacher surveys with semi-structured interviews of teachers, principals, and NWESD coaches from two of the survey schools. The survey included a total of 37 items. Eight of these items were designed to assess the readiness to engage in improvement planning. Twenty-three items, taken from a survey used by Symlie et al. (2003) in their large-scale study of Chicago Annenberg Schools, were designed to measure perceived changes in six components of teacher professional learning community. These components included peer collaboration, reflective dialogue, focus on student learning, collective responsibility, orientation towards innovation, and commitment to school. The remaining six questions were used to gather demographic information. Survey results were analyzed using descriptive statistics and tests of significance.

Interview protocols asked teachers and principals to reflect on their school's level of readiness entering SIPTAP, their experience with the process, and changes within the school and classroom practice they believed had resulted from their school's

participation in SIPTAP. The interview protocol for coaches asked them to describe their role in supporting their assigned schools and to reflect on their school's readiness for and experience with the process. Coaches were also asked to share their perceptions of the SIPTAP process, based on their work with multiple schools. Themes were derived from interview data using Glaser and Strauss's "constant comparative method" described by Merriam (1998, p. 159).

School improvement goals, Action Plans, and a total of 11 other artifacts from schools in the interview sample were reviewed in an effort to corroborate teacher and principal perceptions. Specifically, my document review was meant to explore the extent to which these schools' goals, Action Plans, and ongoing collaborative efforts were consistent with those perceptions expressed through the Teacher and Principal Surveys and interviews.

This chapter is intended to (1) provide a discussion of those findings presented in Chapters 4 and 5 within the context of the study's theory of action and research questions and (2) address limitations of this study along with potential areas for future inquiry.

Discussion of Findings

Figure 1 on page 16 shows the theory of action on which this study is based. Put simply, the notion is that school staff which possess requisite contextual readiness factors can learn, through a structured improvement planning process, to enhance their culture of professional learning, leading to positive changes in classroom practice and, ultimately, improved student learning. As a school's culture of professional learning is

enhanced, so, too is their level of readiness for continued improvement. As discussed in Chapter 2, this theory of school change is in contrast to the theory of action underlying the U.S. Department of Education's Comprehensive School Reform Program (CSR). The CSR framework assumes that few schools have the capacity to create their own paths for improvement. Absent internal capacity, schools are better off adopting externally developed models or programs which provide a prescribed focus, structure or curriculum.

The SIPTAP curriculum is structured to teach school leadership teams how to facilitate a reflective process with their staffs, leading to specific improvement plans based on research-based strategies. The process itself is comprised of a series of six linear planning steps: (1) review/establish school aim, (2) collect/analyze data, (3) set goals, (4) identify barriers, (5) research strategies to address barriers, and (6) develop Action Plans. Teams are trained in specific techniques to gather input from and facilitate consensus with all staff in an open and transparent manner. Five workshops for leadership teams are scheduled to allow for teams to implement at their schools what they have learned at each session. Coaches hired by NWESD are provided to work with teams during their training sessions and support their work at the school level.

This study was driven by four research questions. I begin my analysis with a discussion of the findings related to the overarching question: How, if at all, is a school's participation in the SIPTAP project associated with changes in the school's professional learning culture?

Change in Professional Learning Community

Teacher Survey results for the four elementary schools in my sample indicate teachers believe their school's professional learning culture is stronger at present than it was at the time they became involved with SIPTAP. An analysis of results for each of the six professional learning scales provides information about the nature of the perceived changes. Teachers in all four schools reported statistically significant improvements in (1) peer collaboration focused on instructional improvement; (2) reflective dialogue pertaining to teaching and learning; (3) focus on student learning in school decisions; and (4) overall focus on improvement. Teachers in three of the schools also reported significant improvement in their staffs' sense of collective responsibility for the success of all students and their commitment to their current school. Results from two of the three principals surveyed indicate they also perceived positive changes, particularly in staff collaboration to improve instruction and frequency of staff dialogue around teaching and learning.

Both Teacher and Principal Survey results reflect differences in the extent to which gains in professional learning culture are perceived to have occurred. By far, teachers at Pine Hills reported the greatest gains, while teachers at Foster perceived the fewest gains. While Teacher and Principal Survey results were quite consistent at Fir, this was not the case at Simon and Foster. Simon's Principal Survey results reflect virtually no perceived change, while Teacher Survey results for that school show significant, positive changes. At Foster, Teacher Survey results, while significant for positive change, are lower than perceived changes as measure by the Principal Survey.

Though results of the Teacher and Principal Surveys are helpful in assessing participants' perceptions of change across each of the four schools, they are not able to provide much insight into how, if at all, participation in the SIPTAP process and other contextual dynamics actually mediated change in these schools' professional learning cultures. Nor are they able to provide any clues about the differences in perception between teachers and principals in two of the four schools. Unsolicited e-mail correspondence from several Pine Hills teachers who completed the survey indicated they believed their school's positive changes were primarily related to the school's change in principal leadership, which occurred in August 2003. On site interviews with teachers, principals, and coaches from Forest and Simon, combined with a review of several artifacts from both schools, provided much deeper insight into how the SIPTAP process works at the local school level to change the ways staffs talk, collaborate, and learn together.

Interviews indicated participants from both schools believed their involvement in SIPTAP had helped narrow and focus their school improvement efforts. While not necessarily agreeing the process lead to changes in the frequency of their collaboration, teachers and principals alike reported that the process did lead to changes in the nature, aims, and goals of this collaboration. Rather than being focused in multiple directions, the content of collaboration became driven by the Action Plans developed to address these schools' priority goals. A review of the Action Plans from both schools showed that, while Foster's plans tended to be more detailed and specific, plans from both schools called for grade level and cross grade level collaboration to align and coordinate

curriculum and instructional content in the school's priority goal areas. Simon teachers referred to "weeding out" those lessons and units that were not essential, either at their grade level or at all. Foster teachers referred to becoming more intentional about what they were teaching, to ensure that their lessons targeted state standards.

While both schools had prior experience collaborating, particularly at their grade level, around school wide goals and curriculum initiatives, it was clear they were now focused in a new way. Grade Level Teams at both schools were expected to meet regularly and to provide summaries of their meetings to their principal. While the frequency and focus of these meetings depended, in part, on the members of the team, principals and most teachers indicated they were more focused on instruction than they had been in the past. More experienced teachers, who were accustomed to a greater degree of autonomy, expressed some frustration in efforts to "get everyone in the school on the same page". Specifically, they saw these efforts as eroding their flexibility and their individual planning time. This was particularly true at Foster, where the availability and control of time was a significant issue. However, most teachers felt there was a benefit to narrowing their collective focus around a common set of goals and strategies.

Interviews and document reviews also indicated that the SIPTAP curriculum helped these schools become more accustomed to using data to drive decisions. All teachers and principals talked about their heightened awareness of data as a school and their greater intentionality around using data to identify areas for improvement. Specifically, teachers provided examples of their use of assessment results to identify

students in need of support, through targeted instructional grouping strategies and categorical programs, such as Title I. Teachers also reported that the focus on data had increased their accountability for student learning. While some more experienced teachers expressed concern that the emphasis on assessment was eroding instructional time, other teachers indicated they were still learning how to use assessment results to drive instruction on a continual basis.

Principals, teachers, and coaches provided some important insight into how the SIPTAP process lead to these changes. First, while some teachers initially questioned the value of the process, the fact that it was systematic, sustained, and involved all staff in a common effort proved powerful for both schools. Second, the training provided by the NWESD for leadership teams and the support of outside facilitation coaches, were seen as key to the success of the process. According to principals and other members of the schools' leadership teams, the training they received not only provided them with group consensus building skills, but, more importantly, enhanced their understanding of the change process, in general, along with their knowledge of how data driven decision making drives school improvement. The spacing of the leadership team workshops over several months provided these teams with the opportunity to deepen their understanding over time. At the same time, the model for training created difficulties when it came to facilitating staff buy-in for the process. In the early stages, while leadership team members were still coming to understand the process and how it would unfold, they had difficulty answering staffs' questions about, as one Simon teacher put it, "where it was all headed and how all the parts fits together". The willingness of

teachers in both schools to be patient with, or at least not actively resist their leadership teams while these teams learned the process was vitally important.

Leadership team members also reported their NWESD SIPTAP coaches were essential to helping them stay focused on the process, in the face of numerous distractions competing for their attention. Different from Neufeld and Roper's (2003) change coaches, who provide a broad range of guidance and technical assistance for principals and teacher leaders involved in school improvement processes, Foster and Simon's SIPTAP coaches focused primarily on assisting these schools' leadership teams learn, understand, and facilitate the process planning steps. Both attended leadership team workshops and helped teams process the information provided, assess their staffs' readiness to proceed to the next step or phase in the process, and develop plans to implement the planning steps in their schools. Beyond the data carousel, which is a labor-intensive activity, the extent to which they assisted their teams directly in working with staff was largely a function of the school's internal politics. So while Simon proceeded largely independently through process activities, Foster, as a school in which trust was lacking, relied more heavily on their coach in their work with their staff. As one teacher explained: "The leadership team could have given the same direction but having him as an outside voice was very helpful. He was seen by staff as an objective source so the power dynamics were minimized."

Foster's coach also proved to be a valuable support for the principal, who used him to plan strategies to address politically sensitive issues around the leadership of one

of the school's Study Teams and the addition of the school's reading team to the SIPTAP process.

While some teachers felt the consensus building strategies were, at times, repetitive and tedious, almost all participants felt they provided structured and public formats for gaining staff input and making decisions. This was particularly true at Foster, where trust between teachers and their administrator and between newer and more seasoned teachers was fragile.

By all accounts, SIPTAP's focus on data pertaining to student achievement had a sizeable impact on the focus of both schools. Interestingly, though many teachers were still uncertain how best to use data (and which data to use) to inform classroom instructional decisions, the emphasis on making student achievement data public and using it to guide collective inquiry to identify where school efforts needed to be targeted to improve learning, seemed to result in a greater focus on student needs and lead to a greater sense of accountability for the achievement of all students. Though both schools administered district level assessments, much of the focus at both schools was on results of the annual Washington Assessment of Student Learning (WASL). This is not surprising, given this assessment's direct link to state and federal accountability systems. However, while helpful in motivating schools to collaborate around aligning curriculum with state standards and attending to curriculum articulation both within and across grade levels (efforts which were alive and well at both Foster and Simon), the WASL is of limited value in informing ongoing instructional decisions. This may explain some of the confusion teachers expressed around the practical, classroom uses

of data. However, there was evidence that both schools had begun to focus more attention to formative, teacher-developed assessments, particularly in targeting students for additional assistance, either within or outside the classroom. Few teachers, though, talked about using ongoing assessment data to modify their instructional strategies, beyond flexible grouping.

In the SIPTAP model, once barriers to goal accomplishment have been identified and prioritized, one study team is formed for each goal area to research proven practices for addressing these barriers and develop Action Plans. These plans are subsequently vetted by the entire staff, whose feedback is incorporated into a final draft. Team membership generally included one or two members of the school's SIPTAP leadership team along with other teachers.

At both schools, Study Team efforts appeared to have focused staff on the importance of relying on research to focus change. Interestingly, there was little evidence of the skepticism towards research that is often expressed by educators. Instead, staff seemed to embrace the importance of becoming familiar with literature summarizing proven practices. At Simon, where staff were more confident with their efforts to address their goal for increasing reading achievement, the math study team was a focus, arranging for professional development and working with the district's math coach to provide encouragement, direction, and support for their colleagues to moving towards a constructivist teaching approach. While members of the math team described their group as cohesive and passionate about their efforts, they recognized the

challenges involved in motivating their colleagues, many of whom they felt were less confident in teaching math. One teacher explained:

> Part of the problem getting people to change their teaching is that people feel they have to keep up in existing areas and there's no time to try our new ideas. My passion is math, so of course I'm going to be excited. Others aren't as excited. I'm still trying to figure out how to teach math constructively, but being on the math team gave me more access to information and resources.

At the time of my site visit, Foster's math and writing Study Teams were in the process of revising their Action Plans, based on staff feedback from the previous fall. Neither plan had yet been implemented. The Reading Team, added in September 2004, was just beginning to identify goal barriers. All but two of the school's 25 classroom teachers were participating in one of these teams. Teachers in the interview sample spoke positively about the study team process and several suggested it would have been more appropriate to devote more time to this phase and less time to some of the earlier phases.

Interestingly, Foster's experience provided insight into how a collaborative school wide improvement process can inform leadership. The principal spoke of having learned to trust, rely on, and nurture teacher leadership through the process. One teacher agreed: "SIPTAP has changed our principal. [They've] gained so much in being able to discuss and listen to teachers through the SIPTAP process. It's helped [them] engage with the faculty in a different way."

Foster's coach, in reflecting on his experience with a number of schools, echoed the importance of the principal allowing teacher leaders to "stand up and direct" different phases of the process, noting, "If the principal is a control freak, it really impedes the process."

Sustainability of Changes

As an active member of a SIPTAP cohort, schools are supported through five days of leadership team training, 15 days of coaching support, and additional technical assistance from the NWESD project staff. My second research question focused on evidence that any changes had persisted beyond schools' direct SIPTAP involvement. As I was collecting data on all four schools one and one-half years after their active involvement in their SIPTAP cohort ended, this question is imbedded in the question I have just addressed. However, the issue of sustainability deserves some additional focus, given its key, practical importance for practicing educators.

Eighteen months is hardly sufficient time to judge the long-term staying power of a school improvement effort. According to Fullan (2001), "it takes 3, 6, 8, years of hard work to produce improvement" and, even at that, "the results are fragile" (p. 18). Still, most administrators have witnessed many efforts that have faded away in much less time. And if, as the human resource adage suggests, "the best indicator of future performance is past performance", it should be possible to make some predictions about a school's future efforts, based on current observations.

Due to differences between Foster and Simon in the time available for improvement planning, these two schools were in very different places in the planning

cycle. At Simon, reading and math Study Teams finalized their Action Plans by October 2003 and were in their second year of implementation. It was clear in talking with the principal and teachers at this school that they felt data was being used in ways it had not been used before, at the school level to monitor goal accomplishment and in the classroom, to identify student needs. It was also clear they believed Action Plans were driving a sizeable part of teachers' grade level and cross-grade level collaboration as well as their professional development. Teachers and their principal spoke in terms of how they were "continuing to learn" ways to improve as a school and as teachers, suggesting their involvement in SIPTAP had provided a starting point for ongoing professional learning. Of course, the scope of this study was not adequate to determine the extent to which the habits of continuous improvement planning were beginning to become imbedded in the school's culture. However, there was evidence that most teachers had accepted the routines of data collection and analysis and the focus on using results to drive decisions.

At Foster, Study Teams were still in the process of finalizing their Action Plans at the time of my site visit, almost two and one-half years after their involvement with SIPTAP began. Few original members of their SIPTAP leadership team remained and many teachers expressed concern over the amount of time it was taking to the point of implementing Action Plans. As one leadership team member put it: "It's taking longer than is good for the process." In spite of this frustration, and associated frustrations around the loss of individual planning time due to the focus on directed collaboration, the level of commitment to the Study Team process expressed by those teachers

interviewed was impressive. Though they were anxious about the nature and scope of changes the Action Plans would require, they recognized the importance of learning together about proven practices. Despite the fact that Action Plans had not yet been completed, it seemed these teachers had begun working, to varying degrees, with their grade level colleagues to develop common assessments and pilot different teaching approaches, particularly those related to instructional grouping.

Evidence of Change in Instructional Practices

Knapp et al. (2003) propose a theory of action which emphasizes the reciprocal connection between system, professional, and student learning. Similarly, Figure 1, while not addressing the systems level, assumes that growth in a school's professional learning culture leads to changes in teacher practice. These changes, then, further inform the school's professional learning culture. As one Foster teacher noted, though: "Even for easy changes, it takes a long time." But while it may be too early to determine the extent to which changes in Foster and Simon's professional learning cultures have lead to meaningful change in classroom practice, there is evidence that some changes have begun to occur, at least for some teachers.

Two themes were evident in teachers' comments on the impact of the SIPTAP process on their classroom practice. For some, changes were focused on implementing the curriculum and content identified through collaboration of their grade level and cross Grade Level Teams. For example, one Foster teacher reported, "We're starting to use common terminology and rubrics to teach writing, within and across our grade levels." Beyond common curriculum, some teachers were also working to implement

common strategies. The change to flexible grouping for reading instruction by one of Foster's intermediate Grade Level Teams is one example. Efforts of some of Simon's teachers to adopt a more standards-based approach to teaching math provide another example.

As expected, the more fundamental the change, the slower and more difficult it was to imbed in teacher practice. It is one thing to implement commonly agreed upon terminology and collaboratively developed rubrics. Common grouping strategies, while more logistically complicated to implement, are easier than making fundamental changes in instructional practices. As one Simon teacher put it:

> We're trying hard to change the way we question and the way we teach math – using a constructivist approach. But it's overwhelming in the classroom. I'm not sure I'm changing my practice but I'm more aware of and focused on those things we've pinpointed. It has changed what I do in the classroom but it's really hard.

This seems to point to a potential weakness in the SIPTAP model. While these schools were further along now in their ability to use student achievement data to focus their efforts both individually and collaboratively, the link to classroom practice was tentative. This seemed in large part due to the drop-off in structured support and coaching after schools had identified the barriers to their goals. While study teams did receive some training and support through the NWESD, this was typically limited to one day and did not involve the SIPTAP coach with whom they had been working up to that point. Rather, NWESD staff met with each study team to discuss the process of

reviewing research evidence and provided them with summaries, or meta-analyses of research findings in their goal areas, along with a bibliography of other resources. Simon's Math Study Team and Foster's Math and Writing Study Team spoke repeatedly about what they had learned from research and about the importance of this phase of the process. And while there was evidence that some staff were attempting to incorporate what they had learned into their teaching practice, they lacked the ongoing support and guidance needed to truly gain a deeper understanding of content and pedagogy. Even teachers on Simon's Math Study Team, who had the benefit of a district math coach, were struggling to implement constructivist strategies and to motivate their colleagues to learn more about standards-based math instruction.

Greater attention to the use of student performance data emerged as a second theme. A number of teachers from both schools in the interview sample reported feeling a greater sense of accountability for student learning, now that their school had begun reviewing data. This enhanced accountability was accompanied by more frequent reliance on data to identify student needs for additional support, both within and outside the classroom. And while both schools were continuing to gain clarity around how to use data and, more specifically, what data to use, to inform modifications in instructional techniques, the public focus on assessment as evidence of student achievement had clearly heightened the sense of urgency related to meeting the needs of all learners. This was particularly true at Simon, where the improvement planning process was further ahead:

> We're becoming more research and data driven as a school. There's more ownership for all children. It feels like students a re getting a better deal. We're always looking at what kids aren't making it and trying to figure out what we can do to make them more successful.

Another teacher referred to how student data helped her decide "which kids to focus on for remediation and which need more challenging work."

There was also some evidence that Simon teachers' work to familiarize them selves and align their classroom instruction with the state Grade Level Expectations, combined with the school's emphasis on monitoring student performance through ongoing assessment, had lead to more focused classroom instruction: "My expectations in the classroom are higher. I didn't realize where we had to get students. Now I do, and I know when they're there. The slack time isn't there."

Though my study stopped far short of exploring evidence of changes in student achievement resulting from changes in teachers' classroom practice, Foster's principal offered a glimpse of this connection, in recounting the success first grade teachers had experienced during the 2003-04 school year using common, formative classroom assessments to identify students for extra support: "This year, not as many students have qualified for extra help as second graders."

The Role of Contextual Readiness

Figure 1 suggests that a school's contextual readiness, defined as the degree to which a variety of human resource factors (willingness/orientation towards change, ability/knowledge of data and collaboration, climate of trust) and structural factors

(school autonomy, adequate resources, strong/supportive leadership, prior experience with collaborative change) are present, is directly related to the school's ability to benefit from a structured continuous improvement planning process. This notion is informed by a large body of educational change literature, reviewed in Chapter 2 (e.g.(Armenakis et al., 1993; Bryk & Schneider, 2002; Portin et al., 2003). The SIPTAP model is designed to (1) assess schools' readiness to benefit from the program through an initial application process and (2) teach leadership teams how to assess and build their school's readiness to engage in each step of the process. My final research question focused on the extent to which a school's initial readiness level contributed to their success in the project.

That a school's level of contextual readiness would predict success in a school improvement planning process hardly seems arguable. However, my results suggest the relationship is not as straightforward as it might seem. Teacher Survey results suggest Simon's level of readiness was significantly greater than Foster's, particularly in the areas of teachers' trust in their principal and teachers' perceptions of their principal's strength. However, perceived gains for the two schools in characteristics of professional community did not differ significantly. Though there were significant correlations for all four schools in the Teacher Survey sample between level of readiness and perceived gains in professional community characteristics, these correlations were negative, indicating that higher readiness scores were associated with lower gains. This is not surprising. We would expect greater gains to be made by those schools with further to go. However, though many reached the level of statistical

significance, these correlations were quite weak, accounting for, at most, far less than half of the variance in Gain Scores. The fact that differences in readiness levels between Foster and Simon were not accompanied by differences in perceived gains further calls into question whether there is, in fact, a meaningful connection between contextual readiness and school success in a continuous improvement process.

Beyond the survey results, though, the experiences of Foster and Simon provide some clues to the relationship between school context and their benefit from participation in a structured planning process. Clearly, the adequacy of resources, specifically those required to buy or provide time for staff to engage in planning, emerges as an important factor in predicting how efficiently a school can reach the point of finalizing and implementing Action Plans. The availability of monthly early release days in addition to the two state funded Learning Improvement Days, along with the principal's access to funds to support study team work during the summer of 2002, enabled Simon to establish momentum relatively quickly and complete their Action Plans within one year of their initial involvement with SIPTAP. Due to the lack of similar resources at Foster, the school did not reach the point of identifying goals until almost one year into the project. However, even when the district provided one late arrival day each month, beginning with the 2003-04 school year, it was not until the fall of 2004 that initial Action Plans in writing and math had been developed.

Foster's lag in the development of their Action Plans can be traced in large part to the depth of their planning efforts. While Simon's math goal was tied to significant instructional changes, their reading goal represented a continuation of efforts already

underway. By contrast, Foster's math and writing Action Plans both involved significant school wide effort. Additionally, the school added reading as a target area, further broadening their focus. A comparison of the Action Plans from both schools indicate that Foster's Study Teams went more in depth in their research and developed strategies which were more comprehensive. That said, teachers were clearly frustrated with the amount of time and effort it had taken to reach the point of plan implementation. They also were clearly worried about their capacity, as a school, to implement several plans simultaneously.

Though my research design did not allow for an in-depth look at how the collaborative work progressed at either school, it is not hard to imagine that the trust issues existing between the Foster staff and their principal, at the outset, impacted the pace of their process. Initially, it was the principal who was advocating for the school's involvement in SIPTAP. And while staff did not overtly resist, many were skeptical. As one teacher put it, "We were ready to change, we just weren't ready for the administration to tell us how to do it in such a structured way." Others referred to a suspicion of some underlying agenda. That underlying mistrust, combined with a lack of urgency, based on the school's history of strong achievement scores, could well have slowed down the process.

It is important to note that both Foster and Simon had some history of collaborating on school wide goals prior to their participation in SIPTAP, although their collaboration was not around the development of their Title I Plan, as originally

hypothesized. For some, this history was a source of cynicism. As one Foster teacher put it:

> There hasn't been much continuity with what's happened in the school. When SIPTAP came on board, a lot of teachers sat back and said, "Here we go again. It's the same thing we did 10 years ago. There was no follow through on that and won't be on this."

However, it was clear that prior experiences had provided both staffs with a baseline in collaborating around curriculum and standards and, to a lesser extent, student achievement data. So, while the notion of focused, directed, and school wide collaboration may have been new, meeting in Grade Level Teams to align and coordinate curriculum was not.

Perhaps the most interesting aspect of my findings relative to contextual readiness is the evidence that a structured, school wide improvement planning process can build capacity, or readiness for improvement, even in those schools that lack capacity initially. Foster's experience, together with the collective experiences of the two coaches I interviewed, suggests this works in several ways. First, the process requires principals to entrust leadership across a number of staff in their school. At both Foster and Simon, 20 – 30 teachers were involved at the leadership team and/or the study team level. Learning to "trust the leadership in the building and be a better listener and supporter", as Foster's principal put it, not only builds trust among those amongst whom leadership is distributed, but also enhances their active engagement in and ownership of the process. By taking lead roles at key stages of the process, teachers

and support staff learn how to collaborate for improvement. Several teachers at Foster referred to this as "learning how to do business in a different way".

Second, the group process tools which SIPTAP leadership teams are taught to use can enhance trust by bringing transparency to the process. Simon's coach noted, "It helps build trust because nothing is hidden. Everyone is seeing the same thing." While not everyone agreed, most teachers in both schools indicated that, while at times tedious and repetitive, the decision making or consensus building activities helped equalize input and "keep everything out in the open".

Foster and Simon's commitment to the SIPTAP process also seemed to have at least some effect on their ability to leverage additional resources from their districts to continue their work. At Simon, the district's decision to provide an elementary math coach was linked, in part, to the school's math improvement focus. At Foster, the district's decision to build in late starts beginning in the 2003-04 school year reflected their growing understanding of the need to provide time for schools to engage in ongoing improvement planning. These additional resources have proven a significant benefit for both schools in their continuing efforts.

Finally, data pointed to the importance of a firm, unyielding commitment on the part of the building principal for the ongoing implementation of the improvement process. Foster and Simon's principals seemed to walk a balance between respecting teachers' needs to achieve some distance from the hard, collaborative work from time to time and keeping the expectations for adults and students in focus. As the Foster principal put it, "It's a delicate balance as a principal. You don't want to pressure staff

but you don't want them to lose momentum." Since entering SIPTAP, the *No Child Left Behind Act* has been implemented, state Grade Level Expectations have been released, and state assessments have been expanded to include all grades, 3 – 8. Rather than pulling them off course, these principals have worked with their staffs to incorporate these changes into their continuous improvement framework.

Limitations

There are several important factors which limit the validity, or credibility, of this study's findings. Perhaps the most obvious limitation stems from my reliance on participants' perceptions in trying to understand how, if at all, their involvement in SIPTAP had changed their school's professional learning culture over the last two and one-half years. This is, of course, a problem with all studies that rely on surveys and interviews. It is particularly problematic when trying to measure changes in teacher practice. In his well-known case study of "Mrs. Oublier" (i.e., Mrs. O), Cohen (1991) highlights the disconnect between teachers' perceptions of changes in their own practice and conclusions based on objective observations. Relying on teacher perceptions to gain insight into changes in their practice associated with their school's involvement in SIPTAP is then tenuous, at best.

My reliance on participant perceptions is further complicated by the retrospective nature of my study. Individuals' tendency to reconstruct the past over time makes it difficult to gain an accurate understanding of attitudes, beliefs, and behaviors when relying on their retrospective accounts (Kennickell & Starr-McCluer, 1997). While I had originally intended to use artifacts created prior to and after these

schools' involvement in SIPTAP for independent confirmation, no pre-SIPTAP documents were made available. Obviously, a longitudinal design, incorporating reaped observations and interviews of staff as they went through their improvement planning process, would be preferable.

I took steps to enhance my neutrality by working with schools outside my own district. However, I have been involved in supporting multiple schools involved in the project in my previous district and, as a result, have some preconceived notions about those factors which are important to schools' success in improvement planning. Lacking the time and resources to involve research partners in data collection and analysis, these notions could very well have influenced my own interpretations.

My familiarity as a district office administrator within the region could have possibly influenced the information staff members choose to share. Regardless of the climate of the school, political dynamics are always at play in any major planning process. It is quite possible that, despite my best efforts at ensuring confidentiality, some staff may have mistrusted how I will use the information. It is also possible that one or both principals could have over or underemphasized aspects of their school's involvement in SIPTAP in an effort to leverage additional support from either their staff or district office.

Survey and interview sampling issues also limit the reliability of my findings. Even though the overall response rate for my Teacher Survey was 74%, the range extended from a low of 50% to a high of 100%. A larger sample size would have contributed to the both the reliability and the validity of my results. The interview

sample was perhaps more problematic. While the teacher interview samples were representative of both schools in terms of grade level, gender, and experience, Simon's sample included more teachers who had been part of their school's SIPTAP Leadership Team than Foster's sample, due to the high turnover on Foster's team. As teachers who had been part of the leadership team tended to be more positive than teachers who had not, interview data from Simon was likely skewed in a positive direction. Finally, the size of my interview sample (n = 18) limits both the stability and the credibility of the findings.

As indicated previously, most of the principal and Teacher Survey items were taken from a survey administered to 8,572 elementary teachers and 278 elementary principals in an evaluation of the Chicago Annenberg Challenge (Smylie & Wenzel, 2003). Cronbach Alpha coefficients for these items, in combination, range from .89 to .95, reflecting a high degree of internal consistency reliability. The alpha coefficient for the eight items comprising the Readiness scale was high as well (.83). However, these eight items were developed using themes from the research on contextual readiness. And while they seem to have face validity, they lack the criterion validity achieved by borrowing items from a proven instrument. It is possible that there are other, more important aspects of readiness that are not measured by these items.

My ability to gain insight into the role of external coaching in the SIPTAP model was compromised by the fact that the district had employ Simon's coach fairly early on after the school became involved in SIPTAP. While he continued to serve as the school's coach, it is quite possible that how he was utilized by the Simon Leadership

Team was influenced, at least in part, by his district role. While, on the one hand, he was more available to the principal and the school, it is possible that they were less willing to rely on him for guidance relative to his sensitive building issues. In addition, he may have been reticent to challenge their thinking, for fear of damaging relationships.

Given these limitations, it is important that my findings and conclusions be viewed cautiously.

Conclusions and Directions for Future Research

A Revised Theory of Action

The limitations inherent in my study prohibit me from making generalizations or drawing all but tentative conclusions. However, my experience with this project has caused me to rethink how school communities engage in reflecting together about their strengths and weaknesses and in developing plans to improve learning for all students. And while these thoughts go well beyond the data I have collected, they are, from the standpoint of my professional growth, more important.

Grossman and Thompson (2004) found that curriculum materials powerfully influence new teachers' "ideas about teaching [content] as well as their ideas about classroom practice" (p. 18). As they gain experience, teachers become more flexible in their use of curriculum materials, integrating what they have learned in ways that, in their judgment, best respond to student needs. The authors conclude that curriculum materials function as "scaffolds" for new teacher learning. Bransford et al. (2000)

explain that, "Like training wheels,...scaffolding enables learners to do more advanced activities and to engage in more advanced thinking and problem solving than they could without such help" (p. 214). Portin et al. (2003) make the connection to school improvement planning, suggesting that structured process strategies, designed to help schools reflect on their strengths and weaknesses, can fuel "action, providing a source of important issues to attend to, and offering an organizing rubric for a variety of activities that schools might pursue" (p. 180). Unlike externally developed, packaged reforms, inquiry-based school improvement models can enhance a school's awareness and understanding, increasing their capacity to continually self assess and design, evaluate, and modify strategies which target student needs, within their unique context.

But making the leap to meaningful change in instructional practice requires more than databased self-reflection. It is one thing to identify problems and needs, but quite another to know what to do as a result and how to do it. Without support for deepening their knowledge and understanding of content and pedagogy, schools will rely on what they already know. And while school study teams can help increase this knowledge and understanding through readings and discussions, getting beyond a superficial level requires sustained and in-depth professional development, focused on specific content and supported by external coaching (Elmore & Burney, 1998). Reform models that include external coaching support for both the inquiry process and content-based instructional improvement for teachers and administrators would seemingly be more powerful than those which focus on inquiry or instructional improvement alone.

The Bay Area Schools Reform Collaborative (Coggins et al., 2003) is an example of one such model.

Figure 2 presents a revised theory of change, which incorporates my and conclusions and current thinking. It is similar in many ways to the theory of action represented in Figure 1 on page 16, but there are some important differences.

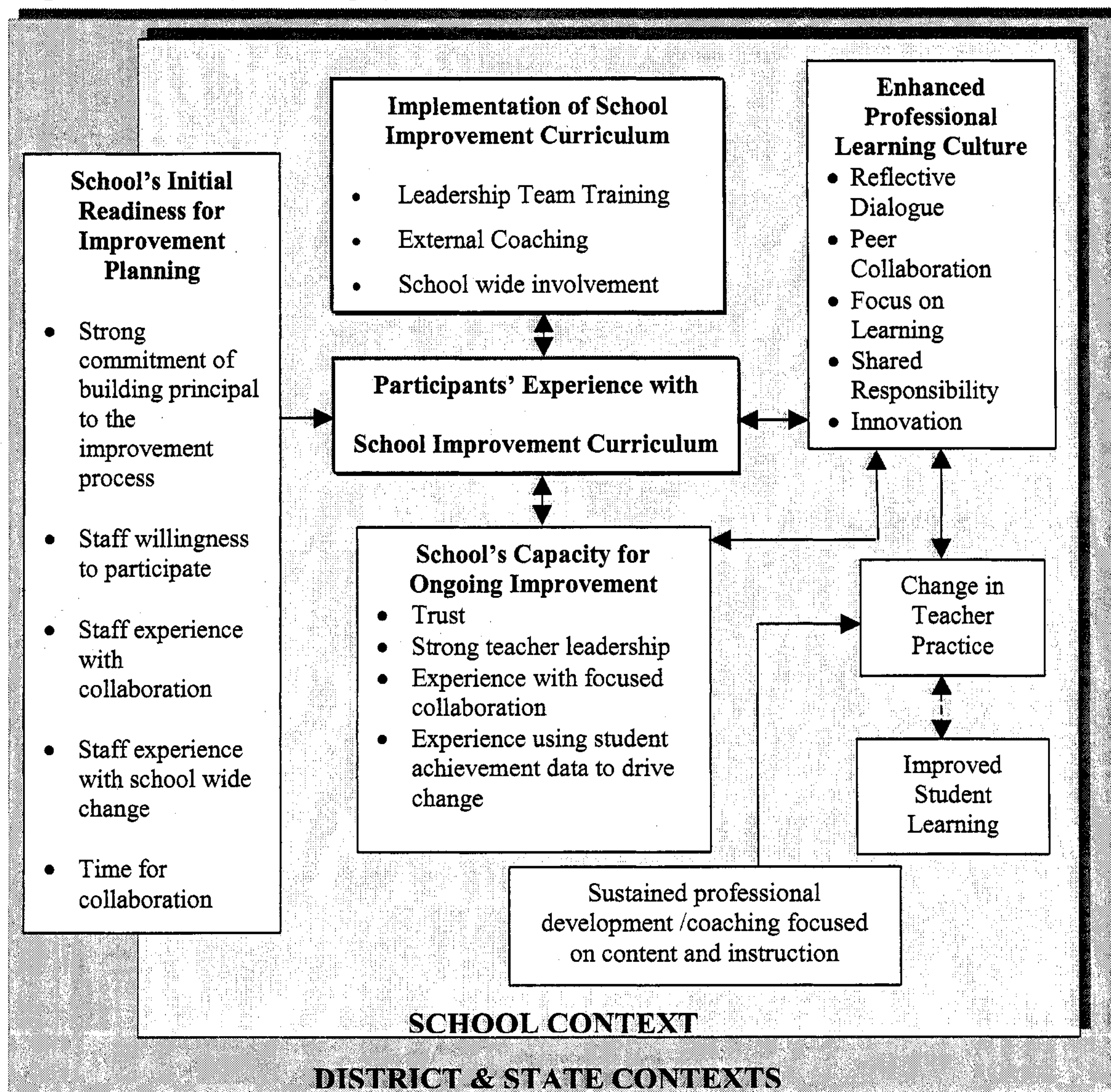


Figure 6: Revised Theory of Action

The revised model proposes a narrower range of contextual readiness factors, including a strong commitment on the part of the principal, some staff experience with school wide change and with peer collaboration, and time for the work to occur. This is not meant to suggest that those contextual factors identified by Corbett et al. (1984), Bodilly (1998), Portin et al. (2003) and others are unimportant. Certainly, schools that are further along the capacity continuum may progress more quickly and, perhaps, more effectively. However, in the current high stakes accountability environment, schools cannot wait to begin planning for improvement. They are under a statutory obligation to act now. That said, those that lack the entry-level capacity to engage in a change process are likely to fail. As Foster's experience suggests, those that possess entry-level readiness can, in fact, not only be successful but also develop trust, strong teacher leadership, experience with focused collaboration, and experience using student achievement data to drive instructional change through their experience in a structured planning process. These capacities lead to and are, in turn, strengthened by ongoing enhancements of the school's professional learning culture.

Unlike Figure 1, this revised model suggests that, beyond support for facilitating the planning process, schools require ongoing, school-based professional development and coaching focused on instructional improvement, to drive change in classroom practice. It was clear from my interviews that many teachers at both Foster and Simon were beginning to look for ways to improve their instructional practices. However, it was also clear that those who were looking to make fundamental changes, like the teacher from Simon's Math Study Team, found the challenge daunting. In his case

study of Mrs. O, Cohen (1991) points out that meaningful changes in pedagogical practices in mathematics require much more than adopting new strategies:

> ...students and teachers must not simply absorb a new body of knowledge. Rather, they must acquire a new way of thinking about knowledge and a new practice of acquiring it. They must cultivate strategies of problem solving that seem to be quite unusual among American adults. They must learn to treat knowledge as something that they construct. Test, and explore rather than as something they accumulate. Additionally, in order to do all the above, they must unlearn much of what they know...(p. 46)

As teacher move toward changes in practice, they "cannot simply shed their old ideas and practices like a shabby coat and slip on something new" (D. K. Cohen, 1991, p. 45). Like Mrs. O, without the ongoing support of an outside agent, or coach, teachers are likely to achieve, at best, new strategies rooted in a traditional mind set.

Directions for Future Research

In a recent study, Reeves (2005, April) examined the relationship between school improvement planning, implementations and monitoring of improvement plans, and student achievement. He found that, while the written quality of schools' improvement plans had little relationship to student achievement, student learning was significantly related to how well schools' implemented their plans and how frequently and carefully they monitored student progress. He also found that schools' inquiry into the causes of their students' achievement patterns and their identification and adoption of research-based strategies were strong predictors of school success.

So, while a school's written plan may provide some insight into the depth and focus of staff's inquiry, it does not predict the degree to which staffs change the nature of their collaboration and classroom practices. And while my study offered some glimpses into how collaborative school improvement planning can begin to shape classroom practice, it left many questions unanswered. These questions include:

- How, if at all, do changes in a school's professional learning culture mediate teachers' ability to continually monitor and adjust their teaching practices in response to formative evidence of student achievement?
- What, if any, evidence exists that changes in teacher practice, resulting from a school's enhanced professional culture, result in higher levels of student learning?
- How, over time, do schools successfully achieve a balance between teacher collaboration and individual teacher planning?
- What factors, if any, mediate the developing nature of teacher collaboration, from a focus on content and structure to a focus on lesson design and instructional strategies?
- What ongoing support, if any, is needed to sustain a school's cycle of continuous self-reflection and improvement?
- What differences, if any, exist between elementary schools' experience with continuous improvement planning and the experiences of middle and high schools and what are the leadership implications of these differences?

Meaningful insight into these questions will require longitudinal research designs, which include direct observations of teacher collaboration and classroom practice along

with measures of changing teacher, principal, and, perhaps student and parent perceptions.

Applications to Practice

In addition to informing my thinking, I take away from this study, and my related research, several important learnings that will inform my practice as a district leader. These include:

- **The value of a structured planning curriculum** – Ideally, schools would be places where teachers and administrators meet regularly and spontaneously to discuss issues of student learning and professional practice. Professional reading and meaningful discussions both within and outside of school would inform their knowledge. They would push each other to clarify their thinking and challenge themselves and one another to continually evaluate and fine-tune their lessons. Peer observation and coaching would be readily accepted and commonplace.

  While this may describe some schools, it does not, in my experience, describe most. Not that most teachers and principals would not like to work in this kind of professional environment. But the crush of daily demands and competing priorities makes it extremely difficult to develop and sustain this type of professional environment without structured support. In that they provide a systematic, scaffolded curriculum for teaching staffs the processes of self-reflection, inquiry, and collaboration focused on student learning, they seem quite valuable in providing a common focus. As school staffs become accustomed to the process of self-reflective improvement, the need for a structured curriculum

should be replaced by routines that support ongoing professional learning in the local context.

I would offer one note of caution here. School administrators, like teachers, are susceptible to processes that seem to simplify complex challenges. In that many school improvement planning curricula, including SIPTAP, teach participants specific strategies or activities for building consensus among school staffs, they are highly appealing. However, these strategies may lull principals and leadership teams into a false sense of agreement, if they are used as a proxy for meaningful discussion in an effort to gain efficiency. While leaders must avoid getting mired in endless arguments over non-negotiables, there is no short cut to deep, difficult discussion about issues at the heart of teaching and learning.

- **The role of district support** – It is hardly arguable that schools need district support in the form of planning time and funds to access outside resources to be successful in the work of ongoing improvement. However, I would argue that they also need a district context and culture that (1) provides an overall direction for school improvement goals and action plans, focused on student learning and (2) develops, supports, and models ongoing inquiry and professional collaboration and learning. District wide improvement is about all schools getting better, not about isolated pockets of excellence. The superintendent must play a central leadership role in developing and nurturing this context and culture district wide and establishing systems that provide both accountability and support for principals and other administrators.

- **The importance of external support** – District leaders need to ensure that two levels of coaching are available to all schools. First, skilled change or leadership coaches are essential for building principals who are scrambling to meet daily management demands while also learning to be instructional leaders. Ongoing coaching support is essential to help them develop both their management and leadership knowledge and skills. Sustained content coaching is also needed, both for teachers and principals, if meaningful changes in classroom practice are to be nurtured and supported. Without access to expert content knowledge and ongoing assistance to translate that knowledge into practice, teachers and principals will be left to do the best with what they know. Ideally, districts will be able to develop their own content coaches from their teacher leader ranks. However, all too often, districts move this direction too quickly. The result is coaches who, though they may have been excellent classroom teachers, have little experience coaching adult learners.

Closing Thoughts

When thinking about the sustainability of educational change, a quotation from the long time New York State Senator, George Washington Plunkitt, comes to mind:

> I can't tell you how many of these movements I've seen started in New York during my 40 years in politics, but I can tell you how many have lasted more than a few years—none … They were like mornin' glories—looked lovely in the mornin' and withered up in a short time, while the regular machines went on flourishin' forever, like fine old oaks. (as cited in Sexton, 2001, p. 17)

While educational reforms have often lacked sustainability, the current state and federal policy environments emphasizing accountability have heightened the search for the next best program, which will raise student achievement. At the district and school levels, providing the leadership to stay the course with systematic, continuous improvement efforts is more important now than ever before. Educators need time to, in the words of a Simon teacher, "learn to do business in a whole different way." Without that time, adult learning is likely to remain shallow, inflexible, and unable to drive ongoing improvement.

References

Allen, D., Nichols, P., & Ancess, J. (2004). *Coaching as inquiry: Interpreting culture and leveraging change.* Paper presented at the American Educational Research Association Meeting, San Diego, CA.

Argyris, C., Putnam, R., & Smith, D. M. (1985). *Action science.* San Francisco, CA: Jossey-Bass.

Argyris, C., & Schön, D. A. (1996). *Organizational learning ii.* Reading, Massachusetts: Addison-Wesley.

Armenakis, A. A., Harris, S. G., & Mossholder, K. W. (1993). Creating readiness for organizational change. *Human Relations, 46*(6), 681-703.

Barnes, F. D. (2004). *Inquiry and action: Making school improvement part of daily practice.* Providence, RI: Annenberg Institute for School Reform.

Bateson, G. (1979). *Mind and nature: A necessary unity.* New York: Bantam Books.

Bodilly, S. J. (1998). *Lessons from new American schools' scale-up phase: Prospects for brining designs to multiple schools.* Santa Monica, CA: Rand.

Borman, G. D., Hewes, G. M., Overman, L. T., & Brown, S. (2002). *Comprehensive school reform and student achievement: A meta-analysis* (No. 59). Baltimore, MD: Center for Research on the Education of Students Placed at Risk.

Bransford, J. D., Brown, A. L., & Cocking, R. R. (Eds.). (2000). *How people learn: Brain, mind, experience, and school.* Washington, D.C.: National Academy Press.

Brown, J., & Duguid, P. (2000). *The social life of information.* Boston, MA: Harvard Business School Press.

Bryk, A. S., & Schneider, B. (2002). *Trust in schools: A core resource for improvement.* New York: Russell Sage Foundation.

The catalog of school reform models. (2004). Portland, OR: Northwest Regional Educational Laboratory & National Clearinghouse for Comprehensive School Reform.

Christ, C. (2002). *A technical assistance document for evaluating your school improvement process.* Tallahassee, Florida: Florida Dept. of Ed.

Coggins, C. T., Stoddard, P., & Cutler, E. (2003). *Improving instructional capacity through field-based reform coaches.* Paper presented at the Annual Meeting of the American Educational Research Association, Chicago, Ill.

Cohen, D., & Hill, H. (2001). *Learning policy: When state education reform works.* New Haven, CT: Yale University Press.

Cohen, D. K. (1991). Revolution in one classroom (or, then again, was it?). *American Educator*(Fall).

Conley, D. T. (1993). *Managing change in restructuring schools: Culture, leadership, and readiness*. Eugene, OR: ERIC Clearinghouse on Educational Management.

Copland, M. A. (2002). *Leadership of inquiry: Building and sustaining capacity for school improvement*. Unpublished manuscript, Seattle, WA.

Corbett, H. D., Dawson, J. A., & Firestone, W. A. (1984). *School context and school change*. New York: Teachers College Press.

Crawford-Mason, C. (1997). *Profound knowledge: A new synthesis from a transcending perspective to personal involvement.* Paper presented at the Deming Institute, Alexandria, VA.

Darling-Hammond, L., & McLaughlin, M. W. (1995). Policies that support professional development in an era of reform. *Phi Delta Kappan, 76*(8), 597-604.

Davenport, T., & Prusak, L. (1998). *Working knowledge*. Boston: Harvard Business School Press.

David, J. L., Coe, P., & Kannapel, P. J. (2003). *Improving low-performing schools: A study of Kentucky's highly skilled educator program*. Lexington, Kentucky: Partnership for Kentucky Schools.

David, J. L., Kanappel, P. J., & McDiarmid, G. W. (2000). *The influence of distinguished educators on school improvement: A study of Kentucky's school intervention program*. Lexington, Kentucky: Partnership for Kentucky Schools.

Davis, D. (2005). *School improvement planning process guide*. Olympia, WA: Office of the Superintendent of Public Instruction.

Deming, W. E. (1986). *Out of the crisis*. Baltimore, MD: MIT Press.

Elmore, R. F., & Burney, D. (1997). *Investing in teacher learning: Staff development and instructional improvement in community school district #2, New York City.* New York, NY: National Commission on Teaching and America's Future & Consortium for Policy Research in Education.

Elmore, R. F., & Burney, D. (1998). *Continuous improvement in community district #2, New York City.* Pittsburgh, PA: University of Pittsburgh, HPLC Project, Learning Research and Development Center.

Elmore, R. F., & McLaughlin, M. W. (1988). *Steady work: Policy, practice, and the reform of American education.* Santa Monica, CA: RAND Corporation.

Fashola, O. S., & Slavin, R. E. (1998, January 1998). Schoolwide reform models: What works? *Phi Delta Kappan, 78,* 370-379.

Fink, A., & Kosecoff, J. (1998). *How to conduct surveys: A step-by-step guide* (2nd ed.). Thousand Oaks, CA: Sage Publications.

Fouts, J. T. (2003). *A decade of reform: A summary of research findings on classroom, school, and district effectiveness in Washington state.* Seattle, WA: Washington School Research Center.

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

Fullan, M. (2001b). *The new meaning of educational change* (Third ed.). New York: Teachers College Press.

Fullan, M. (2003). *Change forces with a vengeance.* New York: Routledge Falmer.

Gallucci, C. (2003). *Teacher theorizing about responses to reform: The role of communities of practice in teacher learning.* Seattle: Center for the Study of Teaching and Policy, University of Washington.

Greene, J. C., & Caracelli, V. J. (1997). Describing and defining the paradigm issue in mixed-methods evaluation. In J. C. Greene & V. J. Caracelli (Eds.), *Advances in mixed-methods evaluation: The challenges and benefits of integrating diverse paradigms* (74 ed.). San Francisco: Jossey-Bass.

Greeno, J. G., Collins, A. M., & Resnick, L. B. (1996). Cognition and learning. In D. C. Berliner & R. C. Calfee (Eds.), *Handbook of educational psychology.* New York, NY: Simon & Schuster Macmillan.

Grossman, P., & Thompson, C. (2004). *Curriculum materials: Scaffolds for new teacher learning?* Seattle: Center for the Study of Teaching and Policy.

Hale, S. v. H. (2000). *Comprehensive school reform: Research-based strategies to achieve high standards* (Guidebook). San Francisco, CA: WestEd.

Hall, G. E., & Hord, S. M. (2001). *Implementing change: Patterns, principles, and potholes*. Boston: Allyn and Bacon.

Hersey, P., Blanchard, K. H., & Johnson, D. E. (2001). *Management of organizational behavior: Leading human resources* (Eighth ed.). Upper Saddle River, NJ: Prentice Hall.

Hightower, A. H., Knapp, M. S., Marsh, J. A., & McLaughlin, M. W. (2002). *School districts and instructional renewal*. New York: Teachers College Press.

Holcomb, E. L. (1999). *Getting excited about data: How to combine people, passion, and proof*. Thousand Oaks, CA: Corwin Press.

Hull, M., & Petit, M. (1998). *Equity & excellence: Action planning guide*: Vermont Department of Education.

Johnson, T., & Owens, L. (2003). *Survey response rate reporting in the professional literature.* Paper presented at the 58th Annual Meeting of the American Association for Public Opinion Research, Nashville.

Joyner, E. T., Ben-Avie, M., & Comer, J. P. (Eds.). (2004). *Transforming school leadership and management to support student learning and development : The field guide to comer schools in action*. Thousand Oaks, CA: Corwin Press.

Keller, B. M. (1994). Training for expansion of accelerated schools: The coaching model. *Accelerated Schools, 3*(2).

Kennickell, A. B., & Starr-McCluer, M. (1997). Retrospective reporting of household wealth: Evidence from the 1983-89 survey of consumer finances. *Journal of Business and Economic Statistics*(15), 452-463.

Keup, J. R., Walker, A. A., Astin, H. S., & Lindholm, J. A. (2001). *Organizational culture and institutional transformation*. Washington D.C.: ERIC Clearinghouse on Higher Education.

Kirby, P. C., & Meza, J. (1997). Changing roles: Coaching models for restructuring schools. *The National Association of Secondary School Principals Bulletin, 81*(590), 80-90.

Lee, V. E., & Smith, J. B. (1996). Collective responsibility for learning and its effects on gains in achievement for early secondary school students. *American Journal of Education, 104*(2), 103-147.

Lee, V. E., Smith, J. B., & Croninger, R. G. (1995). Another look at high school restructuring. *Issues in Restructuring Schools, 9*(Fall), 1-10.

Lieberman, A. (1995). Restructuring schools: The dynamics of changing practice, structure, and culture. In A. Lieberman (Ed.), *The work of restructuring schools: Building from the ground up* (pp. 1-17). New York: Teachers College Press.

Lieberman, A. (2003). *Building learning communities in underperforming schools the tension between improvement and survival.* New York, NY: National Center for Restructuring Education, Schools and Teaching.

Little, J. H. (1992). *Variation, knowledge, and the quality movement.* Paper presented at the Academy of Management Annual Meeting.

Little, J. W. (1982). Norms of collegiality and experimentation: Workplace conditions of school success. *American Educational Research Journal, 19*(3), 325-340.

Little, J. W. (1990). The persistence of privacy: Autonomy and initiative in teachers' professional relations. *Teachers College Record, 91*(4), 509-536.

Louis, K. S., & Kruse, S. D. (1995). *Professionalism and community: Perspectives on reforming urban schools*. Thousand Oaks, CA: Corwin Press.

Louis, K. S., Marks, H. M., & Kruse, S. (1996). Teachers' professional community in restructuring schools. *American Education Research Journal, 33*(4), 757-798.

McLaughlin, M. W. (1998). Listening and learning from the field: Tales of policy implementation and situated practice. In A. Hargreaves, A. Lieberman, M. Fullan & D. Hopkins (Eds.), *International handbook of educational change* (pp. 70-84). Boston: Kluwer Academic Publishers.

McLaughlin, M. W., & Talbert, J. E. (1993). *Contexts that matter for teaching and learning*. Stanford, CA: Center for Research on the Context of Secondary School Teaching.

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

Merriam, S. B. (1998). *Qualitative research and case study applications in education.* San Francisco: Jossey-Bass.

Muncey, D. E., & McQuillan, P. J. (1996). *Reform and resistance in schools & classrooms: An ethnographic view of the coalition of essential schools*. New Haven, CT: Yale University Press.

NCES statistical standards. (2002). Washington, DC: National Center for Educational Statistics.

Neufeld, B., & Roper, D. (2003). *Coaching: A strategy for developing instructional capacity*. Providence, RI: The Aspen Institute Program on Education and The Annenberg Institute for School Reform.

Newmann, F. M., & Wehlage, G. G. (1995). *Successful school restructuring: A report to the public and educators*. Madison, WI: Center on Organization and Restructuring of Schools, University of Wisconsin.

No child left behind act of 2001, Pub. L. No. 107-110, 115 Stat. 4073.

Nonaka, I., Takeuchi, H., & Takeuchi, H. (1995). *The knowledge-creating company: How Japanese companies create the dynamics of innovation*. Oxford, UK: Oxford Press.

Okada, T., & Simon, H. A. (1997). Collaborative discovery in a scientific domain. *Cognitive Science, 21*(2), 109-146.

Paige, R. (2004). *Implementation and early outcomes of the comprehensive school reform demonstration (CSRD) program*. Washington, D.C.: U.S. Department of Education.

Planning for school improvement: A report on a comprehensive planning process. (1998). SouthEastern Regional Vision for Education.

Portin, B. S., Beck, L. G., Knapp, M. S., & Murphy, J. (2003). The school and self-renewal: Taking stock and moving on. In B. S. Portin, L. G. Beck, M. S. Knapp & J. Murphy (Eds.), *Self-reflective renewal in schools: Local lessons from a national initiative*. Greenwood, CT: Praeger Publishers.

Portin, B. S., & Knapp, M. S. (2003). Fining meaning in the mirror: Self-reflective improvement in two Washington state schools. In B. S. Portin, L. G. Beck, M. S. Knapp & J. Murphy (Eds.), *Self-reflective renewal in schools*. Greenwood, CT: Praeger.

Redding, J. C., & Catalanello, R. F. (1994). *Strategic readiness: The making of the learning organization*. San Francisco: Jossey-Bass.

Reeves, D. B. (2005, April). *Accountability for learning: How teachers and school leaders can take charge.* Paper presented at the Regional meeting of Northwest Washington educators, Mount Vernon, WA.

Rollie, D. L. (2002). The problem of school improvement. In W. D. Hawley (Ed.), *The keys to effective schools: Educational reform as continuous improvement.* Thousand Oaks, CA: Corwin Press, Inc.

Rowden, R. W. (2001). The learning organization and strategic change. *S.A.M. Advanced Management Journal, 66*(3), 11-16.

Sarason, S. B. (1971). *Revisiting "the culture of the school and the problem of change".* Boston: Allyn and Bacon.

Schmoker, M. J., & Wilson, R. B. (1993). *Total quality education: Profiles of schools that demonstrate the power of Deming's management principles*. Bloomington, Indiana: Phi Delta Kappa.

Schwartz, R. (2002). The status of standards. *Education Update, 44*(1), 1-2.

Sexton, R. F. (2001). Citizen and parent support for school reform. In R. S. Pankratz & J. M. Petrosko (Eds.), *All children can learn: Lessons from the Kentucky reform experience*. San Francisco: Jossey-Bass.

Shewhart, W. A. (1986). *Statistical method from the viewpoint of quality control.* New York, NY: Dover Publications.

Sievers, L. C. (2003). *The Tennessee school improvement plan reviewer guidelines*. Nashville, Tennessee: Tennessee Dept. of Ed.

Singleton, R., & Straits, B. C. (1999). *Approaches to social research* (3rd ed.). New York, NY: Oxford University Press.

Sirotnik, K. A. (1989). The school as the center of change. In T. J. Sergiovanni & J. H. Moore (Eds.), *Schooling for tomorrow: Directing reform to issues that count.* Boston: Allyn and Bacon.

Sirotnik, K. A. (1999). Making sense of educational renewal. *Phi Delta Kappan, 80*(8), 606-610.

Slavin, R. E. (1997). *Sand, bricks, and seeds: School change strategies and readiness for reform.* Baltimore: Center for Research on the Education of Students Placed at Risk, Johns Hopkins University.

Smylie, M. A., Allensworth, A., Greenberg, R. C., Harris, R., & Luppescu, S. (2001). *Teacher professional development in Chicago: Supporting effective practice*. Chicago, IL: Consortium on Chicago School Research.

Smylie, M. A., & Wenzel, S. A. (2003). *The Chicago Annenberg challenge: Successes, failures, and lessons for the future*. Chicago, IL: Consortium on Chicago School Research.

Stigler, J. W., & Heibert, J. (1999). *The teaching gap: Best ideas from the world's teachers for improving education in the classroom*. New York, New York: Free Press.

Tool time: Choosing and implementing quality improvement tools. (2001). Molt, MT: Langford International.

Tung, R., & Feldman, J. (2001). *Promoting whole school reform: A closer look at the role of external facilitators*. Paper presented at the International Congress for School Effectiveness and Improvement, Toronto.

Tung, R., & Feldman, J. (2002). *The role of external facilitators in whole school reform: Teacher's perceptions of how coaches influence change*. Boston, MA: Center for Collaborative Education.

Tung, R., Ouimette, M., & Feldman, J. (2004). *The challenge of coaching: Providing cohesion among multiple reform agendas*. Boston, MA: The Center for Collaborative Education.

The voice of the process. (2000). Retrieved 12/29, 2003, from http://www.thedecalogue.com/Papers/thevoice.htm.

Walton, M., & Deming, W. E. (1988). *The Deming management method*. New York: Perigee Books.

Watzlawick, P., Fisch, R., & Weakland, J. H. (1974). *Change: Principles of problem formation and problem resolution* (1st ed.): W.W. Norton & Company, Inc.

Wenger, E., McDermott, R., & Snyder, W. M. (2002). *Cultivating communities of practice: A guide to managing knowledge*. Boston: Harvard Business School Press.

Whitford, B. L. (2003). *Documentation of the lucent peer collaboration initiative: An overview*. New York, NY: National Center for Restructuring Education, Schools and Teaching.

Whitford, B. L., & Fisher, H. (2003). *Lucent learning communities in Albuquerque*. New York, NY: National Center for Restructuring Education, Schools and Teaching.

Willis, S. (2002). Creating a knowledge base for teaching: A conversation with James Stigler. *Educational Leadership, 59*(6), 6-11.

Wilson, S. M., & Berne, J. (1999). Teacher learning and the acquisition of professional knowledge: An explanation of research on contemporary professional development. In A. Iran-Nejad & C. D. Pearson (Eds.), *Review of research in education* (Vol. 24, pp. 173-209). Washington, D.C.: American Educational Research Association.

Wood, D. R. (2003). *Lancaster learning communities: The challenges of creating an authentic collegial context for change*. New York, NY: National Center for Restructuring Education, Schools and Teaching.

Woods, D. (2002). *Moving forward: From where you are to school improvement that lasts*. Portland: Northwest Regional Educational Laboratory.

Yendol-Silva, D. (2003). *In search of the perfect storm: Understanding how learning communities create power within an era of intense accountability*. New York, NY: National Center for Restructuring Education, Schools and Teaching.

Youngs, P., & Kings, B. M. (2000). *Professional development that addresses professional community in urban elementary schools*. Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans.

APPENDIX A

SITE AGREEMENT LETTER

Carl Bruner
1319 Eaglemont Place
Mount Vernon, WA 98274

Dear Carl:

The purpose of this letter is to indicate my approval for research associated with the project, "School Improvement Planning and the Development of Professional Community" to be conducted at my school.

I understand that the goal of this research is to gain a better understanding of how, if at all, involvement in a structured school improvement process affects a school's professional learning culture and that the data collected will be used as the foundation for your doctoral dissertation through the University of Washington. I give permission for the Teacher Survey form to be distributed to my faculty, with the understanding that:

1. their participation in the survey is not mandatory;
2. their survey responses will only be linked by numerical code; and
3. survey results will be reported in aggregate form, not by individual school.

I also give permission for interviews to be conducted with up to four teachers from my school's improvement planning team and up to four other teachers, with the understanding that:

1. Participation in the interview process is voluntary; and
2. Interview responses will kept strictly confidential to protect the identity of the participants.

The study's procedures have fully explained to me. I understand the term of this project to be for the 2004-2005 school year and the primary data collected to be activities associated with our regularly planned school improvement activities.

Sincerely,

[Principal]

APPENDIX B

PRINCIPAL SURVEY

Contact E-Mail

I'd like to ask your assistance in collecting information about principals' perceptions of their school's involvement in the Northwest ESD 189 School Improvement Planning Technical Assistance Project (SIPTAP). This survey is being distributed to the 13 schools from across northwest Washington that participated in the SIPTAP program during the period between September 1, 2002 and June 30, 2003. I'm interested in what you believe about your school's experience with planning for improvement and would appreciate your help by completing this questionnaire carefully and truthfully. Results will be used as part of my doctoral dissertation project through the University of Washington.

To access the survey, please go to the following web address:
https://catalyst.washington.edu/webtools/webq/survey.cgi?owner=crb3&id=2

If you were not in your current school during the period from September 1, 2002 and June 30, 2003, please disregard this survey.

Your survey responses are not linked to your name, but will be linked to your school by a numerical code. Results will be reported in summary or statistical form so that neither individuals nor their schools can be identified.

Thank you for contributing your time and thoughtful responses to this survey. Please do not reply to this message, as we cannot assure the confidentiality of any information sent by e-mail.

Carl Bruner
Educational Leadership and Policy Studies
University of Washington

Principal Survey

For questions 1 – 8, you are asked to think about the extent to which each statement describes your school **before** becoming involved in SIPTAP. If you really don't know, you can mark the "Don't know" box.

When my school became involved in SIPTAP:

Statement	Response
1. Teachers trusted each other.	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
2. Teachers trusted the building administrator(s).	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
3. Teachers were cordial to one another.	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
4. The school had a well defined, collaborative decision-making process.	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
5. The school had adequate time to engage in improvement planning.	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
6. Most teachers believed change was necessary to improve student learning.	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
7. Teachers relied on data in planning their instruction.	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
8. The school had financial and technical support from the district office to support involvement in the project.	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree

Principal Survey (continued)

For questions 15 – 39, you are asked to think about each statement from two different points in time. First rate the extent to which you agree the statement describes your school **before** becoming involved in SIPTAP. Second, rate the extent to which you agree the statement describes your school **after** involvement in SIPTAP ended. If you really don't know, you can mark the "Don't know" box.

	Before SIPTAP	After SIPTAP
9. Teachers design instructional programs together.	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
10. Teachers coordinate teaching with instruction at other grades.	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
11. Principals, teachers, and other staff collaborate to make the school run more effectively.	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
12. Conversations about my school's goals occur more than twice a month.	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
13. Conversations about curriculum development occur more than twice a month.	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
14. Teachers regularly discuss assumptions about teaching and learning.	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree

Principal Survey (Continued)		
	Before SIPTAP	After SIPTAP
15. Teachers share and discuss student work with other teachers.	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
16. Teachers talk about instruction in the teacher's lounge.	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
17. My school really focuses on what's best for student learning when making decisions.	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
18. *My school has well defined learning expectations for all students.*	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
19. *My school sets high standards for academic performance.*	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
20. *My school organizes the school day to maximize instructional time.*	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
21. *Most teachers in my school feel responsible when students fail.*	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree

Principal Survey (Continued)

	Before SIPTAP	After SIPTAP
22. *Most teachers in my school feel responsible to help each other do their best.*	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
23. *Most teachers in my school take responsibility for improving the school.*	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
24. *Most teachers in my school set high standards for themselves.*	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
25. *Most teachers in my school feel responsible for the learning of all students.*	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
26. *Most teachers in my school are eager to try new ideas.*	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
27. *Most teachers in my school have a "can do" attitude.*	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
28. *Most teachers in my school are continually learning and seeking new ideas.*	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree

Principal Survey (Continued)

	Before SIPTAP	After SIPTAP
29. *Most teachers in my school are really trying to improve their teaching.*	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
30. *I wouldn't want to work in any other school.*	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
31. *I would recommend this school to parents.*	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
32. *I often look forward to coming to work each day at this school.*	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
33. *I feel loyal to this school.*	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree

Principal Survey (Continued)

The final questions ask you to provide some information about yourself which will help us to analyze the data.

34. What grade level(s) does your school include? (Check all that apply)

☐ K ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6

35. How long have you been a building principal?

☐ 0 – 2 years
☐ 3-5 years
☐ 6-10 years
☐ More than 10 years

36. How long have you been a principal at your current school?

☐ 0 – 2 years
☐ 3-5 years
☐ 6-10 years
☐ More than 10 years

37. Please indicate the highest level of education you have attained.
☐ Masters ☐ Doctorate

38. Please indicate your gender.
☐ Male
☐ Female

APPENDIX C

TEACHER SURVEY

Contact E-Mail

I'd like to ask your assistance in collecting information about principals' perceptions of their school's involvement in the Northwest ESD 189 School Improvement Planning Technical Assistance Project (SIPTAP). This survey is being distributed to the 13 schools from across northwest Washington that participated in the SIPTAP program during the period between September 1, 2002 and June 30, 2003. I'm interested in what you believe about your school's experience with planning for improvement and would appreciate your help by completing this questionnaire carefully and truthfully. Results will be used as part of my doctoral dissertation project through the University of Washington.

To access the survey, please go to the following web address:
https://catalyst.washington.edu/webtools/webq/survey.cgi?owner=crb3&id=1

If you were not in your current school during the period from September 1, 2002 and June 30, 2003, please disregard this survey.

Your survey responses are not linked to your name, but will be linked to your school by a numerical code. Results will be reported in summary or statistical form so that neither individuals nor their schools can be identified.

Thank you for contributing your time and thoughtful responses to this survey. Please do not reply to this message, as we cannot assure the confidentiality of any information sent by e-mail.

Carl Bruner
Educational Leadership and Policy Studies
University of Washington

Teacher Survey

For questions 1 – 8, you are asked to think about the extent to which each statement describes your school **before** becoming involved in SIPTAP. If you really don't know, you can mark the "Don't know" box.

When my school became involved in SIPTAP:

Statement	Response
1. Teachers trusted each other.	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
2. Teachers trusted the building administrator(s).	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
3. Teachers were cordial to one another.	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
4. The school had a well defined, collaborative decision-making process.	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
5. The school had adequate time to engage in improvement planning.	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
6. Most teachers believed change was necessary to improve student learning.	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
7. Teachers relied on data in planning their instruction.	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
8. We had a strong principal leader.	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree

Teacher Survey (continued)

For questions 15 – 39, you are asked to think about each statement from two different points in time. First rate the extent to which you agree the statement describes your school **before** becoming involved in SIPTAP. Second, rate the extent to which you agree the statement describes your school **after** involvement in SIPTAP ended. If you really don't know, you can mark the "Don't know" box.

	Before SIPTAP	After SIPTAP
9. Teachers design instructional programs together.	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
10. Teachers coordinate teaching with instruction at other grades.	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
11. Principals, teachers, and other staff collaborate to make the school run more effectively.	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
12. Conversations about my school's goals occur more than twice a month.	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
13. Conversations about curriculum development occur more than twice a month.	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
14. Teachers regularly discuss assumptions about teaching and learning.	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree

Teacher Survey (Continued)		
	Before SIPTAP	After SIPTAP
15. Teachers share and discuss student work with other teachers.	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
16. Teachers talk about instruction in the teacher's lounge.	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
17. My school really focuses on what's best for student learning when making decisions.	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
18. My school has well defined learning expectations for all students.	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
19. My school sets high standards for academic performance.	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
20. My school organizes the school day to maximize instructional time.	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
21. Most teachers in my school feel responsible when students fail.	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree

Teacher Survey (Continued)

	Before SIPTAP	After SIPTAP
22. Most teachers in my school feel responsible to help each other do their best.	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
23. Most teachers in my school take responsibility for improving the school.	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
24. Most teachers in my school set high standards for themselves.	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
25. Most teachers in my school feel responsible for the learning of all students.	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
26. Most teachers in my school are eager to try new ideas.	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
27. Most teachers in my school have a "can do" attitude.	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
28. Most teachers in my school are continually learning and seeking new ideas.	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree

Teacher Survey (Continued)

	Before SIPTAP	After SIPTAP
29. Most teachers in my school are really trying to improve their teaching.	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
30. I wouldn't want to work in any other school.	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
31. I would recommend this school to parents.	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
32. I often look forward to coming to work each day at this school.	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree
33. I feel loyal to this school.	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree	☐ Strongly Agree ☐ Agree ☐ Disagree ☐ Strongly Disagree

Teacher Survey (Continued)

The final questions ask you to provide some information about yourself which will help us to analyze the data.

34. What grade level(s) do you currently teach? (Check all that apply)

☐ K ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6

35. What is your main teaching assignment (i.e., the field in which you teach the most classes)? If your teaching assignment is equally divided between two fields, record either as your main assignment.

☐ Multiple Subjects (teach in a self-contained classroom)

☐ Art

☐ English as a Second Language

☐ Special Education

☐ Music

☐ Physical Education

☐ Title I/LAP

☐ Other (please specify):__________

36. How long have you been teaching?

☐ 0 – 2 years
☐ 3-5 years
☐ 6-10 years
☐ More than 10 years

37. How long have you been teaching at your current school?

☐ 0 – 2 years
☐ 3-5 years
☐ 6-10 years
☐ More than 10 years

38. Please indicate the highest level of education you have attained.
☐ B.A. ☐ Masters ☐ Doctorate

39. Please indicate your gender.
☐ Male
☐ Female

APPENDIX D

INTERVIEW PROTOCOLS

The proposed study addresses three major research questions: 1) How, if at all, does a school's participation in the SIPTAP project help create a culture of professional learning? 2) If a school's participation in the SIPTAP process does, in fact, help create a professional learning culture, to what extent does this culture continue after involvement in the project has ended? 3) What contextual readiness factors, if any, are associated with the development of an enhanced professional learning culture in participating schools?

The following interview questions will guide interviews with teachers, principals from two elementary schools that have been involved in SIPTAP and with their NWESD 189 coaches.

Leadership Team Teachers – 50 minutes

Tell me about your school's Title I planning process before SIPTAP?

- Who was involved?
- What planning steps were taken?
- What data was used?

How would you describe the school's level of readiness when they entered SIPTAP?

- Orientation towards change?
- Collaborative/trusting climate?
- Familiarity with data?
- Time for planning and working through the process?
- Supportive leadership?

Tell me about your school's experience with the SIPTAP process.

- What were the most rewarding aspects?
- What challenges did you encounter?
- How did the team address those challenges

Knowing what you know now, were there things that could have been done up front to make staff better prepared to participate in the process? If so, what?

Do you believe your school has changed as a result of the staff's involvement in SIPTAP? If so, how?

- Changes in staff focus?
- Changes in frequency and nature of staff collaboration?
- Changes in use of data?
- Other?

Other Teachers – 45 minutes

How, if at all, were you involved in your school's Title I planning process before SIPTAP?

How would you describe the school's level of readiness when they entered SIPTAP?

- Orientation towards change?
- Collaborative/trusting climate?
- Familiarity with data?
- Time for planning and working through the process?
- Supportive leadership?

Tell me about your school's experience with the SIPTAP process.

- What were the most rewarding aspects?
- What challenges did you encounter?
- How did the staff address those challenges?

In hindsight, what, if anything, could have been differently to enhance the process?

Do you believe your school has changed as a result of the staff's involvement in SIPTAP? If so, how?

- Changes in staff focus?
- Changes in frequency and nature of staff collaboration?
- Changes in use of data?
- Other?

Have you and/or your colleagues changed your teaching practices as a result of the school improvement efforts. If so, how?

Administrators – 60 minutes

What was your involvement in your school's Title I planning process before SIPTAP?

How did your school end up being involved in SIPTAP?

How was the leadership team selected?

What time did you have for the work?

- Time for Leadership Team planning?
- Blocks of time for work with the entire staff?

How would you describe the school's level of readiness when they entered SIPTAP?

- Orientation towards change?
- Collaborative/trusting climate?
- Familiarity with data?
- Time for planning and working through the process?
- Supportive leadership?

Tell me about your school's experience with the SIPTAP process.

- What were the most rewarding aspects?
- What challenges did you encounter?
- How did the team address those challenges?

How did you use your NWESD 189 coach?

- Were they helpful?
- How?

Do you believe your school has changed as a result of the staff's involvement in SIPTAP? If so, how?

- Changes in staff focus?
- Changes in frequency and nature of staff collaboration?
- Changes in use of data?
- Other?

Have you noticed any changes in teachers' classroom practice? If so, what changes?

NWESD 189 SIPTAP Coaches – 60 minutes

How much time did you spend working with this school's SIPTAP leadership team?

How did you spend your time?

How responsive were they to your guidance?

How would you describe the school's level of readiness when they entered SIPTAP?

- Orientation towards change?
- Collaborative/trusting climate?
- Familiarity with data?
- Time for planning and working through the process?
- Supportive leadership?

Tell me about the school's experience with the process:

- What went well?
- What were the challenges?

Share your observations about the SIPTAP process, based on your experience with a variety of schools.

APPENDIX E

SEMI-STRUCTURED INTERVIEW ANALSYSIS

SCHOOL #1 - Simon

1. SCHOOL'S PREVIOUS PLANNING EXPERIENCE		
PRINCIPAL	**LEADERSHIP TEAM TEACHERS (#5)**	**OTHER TCHRS (#3)**
Not involved; process completed by Title I staff in isolation.	Not involved; process completed by Title I staff in isolation. **** Leadership team provided input, but plan developed by Title I staff. *	Not involved; process completed by Title I staff in isolation. ***
PRIMARY THEME FOR ALL/MOST SUBJECT GROUPS: • Plan was not developed collaboratively.		

2. SCHOOL'S READINESS FOR SIPTAP			
PRINCIPAL	**LEADERSHIP TEAM TEACHERS (#5)**	**OTHER TEACHERS (#3)**	**Coach**
Exp collaborating towards curr alignment w/ standards and filling gaps. Pre-existing leadership team. High teacher-teacher trust. Adequate time. Supportive district. Initial skepticism. Minimal experience with data.	Supportive principal. ***** Supportive district. ***** High teacher-teacher trust. **** Adequate time. **** Exp collaborating towards curr alignment w/ standards and filling gaps. *** Staff tired and somewhat skeptical because of the changes. *** Little experience working with data. *** Saw need for change. ** Exp w/ goals.* Inadequate time.*	Saw need for change. *** High teacher-teacher trust. ** Supportive principal. ** Exp collaborating towards curr alignment w/ standards. ** Inadequate time. ** Supportive district. ** Staff tired and somewhat skeptical because of the changes. ** Little experience working with data. ** Adequate time.*	Strong leadership History of shared decision-making. Existing Leadership team History of collaboration around curriculum. District support for participation.

SEMI-STRUCTURED INTERVIEW ANALSYSIS (Continued)

Simon (cont)

PRIMARY THEMES FOR ALL/MOST SUBJECT GROUPS:
• Supportive district and building leadership. • Prior experience collaborating around curriculum issues. • Initial skepticism on the part of teachers. • High trust.
DISCREPANCIES OR THEMES UNIQUE TO SPECIFIC SUBJECT GROUPS:
• Principal and Leadership Team members reported that the amount of time provided was adequate. Two of the three teachers not on the Leadership Team felt time provided was not adequate. • Principal believed pre-existing Leadership Team formed foundation. • All teachers not on Leadership Team and two of five teachers on the team reported staff perceived a need to change. • Coach believed history of shared decision making was key.

3. SCHOOL'S EXPERIENCE WITH THE PROCESS			
PRINCIPAL	**LEADERSHIP TEAM TEACHERS (#5)**	**OTHER TCHRS (#3)**	**COACH**
<u>Positives</u> ESD training for Leadership Team. Training in data analysis. <u>Challenges</u> Helping staff understand the importance of the process. Scope of the project and timeline was somewhat overwhelming for teachers.	<u>Positives</u> Training in data analysis. *** Collaborative approach to change helped engender buy-in. *** ESD training for Leadership Team. *** Techniques/processes pulled people in.* <u>Challenges</u> Making sure the staff understood where the process was headed – initial confusion around what and why. **** Staff overwhelmed by "one more thing". *** Getting acceptance that we're doing this forever and it's going to require more planning and work from everyone. ** Leading process while teaching.*	<u>Positives</u> Process helped everyone have a say. ** <u>Challenges</u> Staff overwhelmed by "one more thing". ** Gaining staff consensus on study team recommendations.*	<u>Positives</u> Staff willing to go along/coopera te with the process. <u>Challenges</u> Time commitment was a surprise to most teachers.

SEMI-STRUCTURED INTERVIEW ANALSYSIS (Continued)

Simon (cont)

PRIMARY THEMES FOR ALL/MOST SUBJECT GROUPS:

- The process and time required to complete it was overwhelming to teachers.

DISCREPANCIES OR THEMES UNIQUE TO SPECIFIC SUBJECT GROUPS:

Positives:

- Principal and Leadership Team Teachers believed NWESD training for Leadership Team was key, esp. in regards to data analysis.
- Leadership Team and other teachers reported collaborative nature of the process helped create commitment.

Challenges:

- Teachers on the Leadership Team pointed to the difficulty around clarifying the purpose of the process and how steps along the way fit into the big picture.
- Principal and two Leadership Team teachers pointed to the difficulty helping staff understanding the importance of them being involved in a continuous improvement process.

4. ROLE OF COACH.

PRINCIPAL	LEADERSHIP TEAM TEACHERS (#5)	COACH
Spent his time at the ESD WITH Leadership Team. Accessed him when had questions about process and for assistance in planning work with faculty. Valuable in helping clarify issues and helping team remain focused.	Attended whole staff meetings to assist with processes. **** Helpful to have someone outside of our principal and school, otherwise it could have been more difficult to understand the process and stay focused. *** Clarified information. *** Worked with Leadership team to plan for their work with staff. ***	Spent approximately 60 hours with staff, including NWESD trainings and building-based staff meetings. Met monthly with coaches group to work through their skills and run through the processes before they helped their schools. Gave Leadership Team and kept them on track.

PRIMARY THEMES FOR ALL/MOST SUBJECT GROUPS:

- Helped Leadership Team stay focused.
- Supported Leadership Team's work with faculty.
- Provided clarification for Leadership Team and faculty.

DISCREPANCIES OR THEMES UNIQUE TO SPECIFIC SUBJECT GROUPS:

- Coach: Met regularly with other NWESD coaches to improve skills.
- Coach: Devoted ~ 60 hours to school.

SEMI-STRUCTURED INTERVIEW ANALSYSIS (Continued)

Simon (cont)

5. CHANGE/EFFECTS.		
PRINCIPAL	**LEADERSHIP TEAM TEACHERS (5)**	**OTHER TCHRS (3)**
Narrowed/focused goals and professional development efforts. More collaboration around student achievement data and teaching strategies. Some evidence of change in practice.	Narrowed/focused goals and professional development efforts. ***** More collaboration around student achievement data and teaching strategies. **** Use of assessment to target students for regrouping/extra help. **** Focus on achievement has benefited students. *** More intentional about what is taught. ** Increased assessment has created increased accountability for teachers, both to their administrators and their grade level team.** Greater awareness of learning targets.* Validated direction school was already headed.*	Narrowed/focused goals. *** Use of assessment to target students for regrouping/extra help. ** More grade level collaboration. ** More intentional about what is taught. ** Validated direction school was already headed and teachers' hard work. ** Over-emphasis on all teachers at the same grade level "on the same page".* Over-emphasis on data.* Increased assessment has created increased accountability for teachers, both to their administrators and their grade level team.* Some evidence of efforts to change practices in math.*

SEMI-STRUCTURED INTERVIEW ANALSYSIS (Continued)

Simon (cont)

PRIMARY THEMES FOR ALL/MOST SUBJECT GROUPS: • Narrowed focus and goals. • More focused grade level collaboration. • Increased use of assessment data to address needs of students. • Some evidence that classroom practice has changed to benefit students.
DISCREPANCIES OR SECONDARY THEMES UNIQUE TO SPECIFIC SUBJECT GROUPS: • Some teachers from both groups felt there is greater intentionality around what is taught. • Some teachers from both groups felt the process validated the direction the school was already headed. • Some teachers from both groups reported greater accountability for teachers due to attention to student achievement.

SCHOOL #2 - Foster

1. SCHOOL'S PREVIOUS PLANNING EXPERIENCE		
PRINCIPAL	**LEADERSHIP TEAM TEACHERS (#2)**	**OTHER TEACHERS (#4)**
Title I planning done by Title I teacher and staff. Reading improvement plan developed by reading team with staff input. School had been looking at creating school and grade level goals.	Planning done by Title I teacher and staff. ** Had school goals related to reading and culture. **	Planning done by Title I teacher and staff. **** Had school goals related to reading and culture. **** Lack of follow-through with past efforts. *
PRIMARY THEME FOR ALL/MOST SUBJECT GROUPS: • Some previous experience with developing school goals related to reading and culture/climate.		

SEMI-STRUCTURED INTERVIEW ANALSYSIS (Continued)

Foster (cont)

2. SCHOOL'S READINESS FOR SIPTAP

PRINCIPAL	LEADERSHIP TEAM TEACHERS (#2)	OTHER TCHRS (#4)	COACH
Had been working on Eaker and DuFour's Professional Learning Communities for several years. Annual retreat to look at data historically resulted in climate goal. Lack of time provided by district for process. Some history of horizontal collaboration, but depended on individuals. Low trust at outset. No urgency to change due to past success.	Low trust at outset. ** Late arrivals and common collaboration time provided but not enough to engage in the work. ** Some history of horizontal collaboration, but depended on individuals. ** No urgency to change due to past success. ** Strong principal support. *	History of looking at data but not much done with it. **** No general sense of urgency to change. *** Trust between teachers fair. ** Low trust, teacher to admin. ** Supportive leadership. * Inadequate time to engage in process. * Some history of horizontal collaboration, but depended on individuals. *. Time provided was adequate. * A lot of initial skepticism, particularly by older teachers. * Willingness to change but resented having a structured approach imposed on them. *	Excellent readiness on part of Leadership Team. Some other teachers cautious and resistant. Issues around compensation and how time was directed. Problems with admin-teacher trust.

PRIMARY THEMES FOR ALL/MOST SUBJECT GROUPS:

- Problems with teacher-admin trust.
- Low sense of urgency due to past success
- Some history of grade-level collaboration but depended on the grade level team

DISCREPANCIES OR THEMES UNIQUE TO SPECIFIC SUBJECT GROUPS:

- The Leadership Team (which included the principal) reported the time to take staff through the process was inadequate.
- Teachers outside the leadership team reported that data had been looked at in the past but not used to drive change.
- The coach reported that use of time was a big issue for staff and the union.
- The Principal referred to past efforts to bring the staff together around Eaker and DuFour's work on Learning Communities.

SEMI-STRUCTURED INTERVIEW ANALSYSIS (Continued)

Foster (cont.)

3. SCHOOL'S EXPERIENCE WITH THE PROCESS			
PRINCIPAL	**LEADERSHIP TEAM TEACHERS (#2)**	**OTHER TEACHERS (#4)**	**COACH**
Slow progress due to lack of time (esp. in the first year) Leadership Team selection: broad base of staff invited; selected volunteers from that group; attempt to include new and more experienced teachers. High Leadership Team turnover (retirements, resignations, etc.) NWESD Principal Academy provided excellent support. Difficulty helping teachers not on Leadership Team understand/remember the big picture – i.e., where they were and were headed in the process. Members of existing Reading team felt their interests were not validated by the process.	Lack of time has made it take longer – more difficult to sustain momentum. ** Overall, process was positive. ** High Leadership Team turnover. ** Too many goals resulted. * Strong principal leadership support. ** Lack of compensation for work outside school day * Asking teachers to do what principals used to be responsible for * Most see value of looking at data to drive student achievement. * Quality tools/processes sometime tedious and overshadowed purpose. *	Spent too much time getting to goals. ** Having three Study Teams operating simultaneously has lead to competition for resources/focus (esp. related to reading team). ** Too many meetings/not enough time for individual planning. ** Has taken too long to get to Action Plans. ** Questionable value given the time involved. ** Leadership team included newer teachers – concern that they haven't acknowledged what other teachers in the school have done in the past. ** Data carousel was too superficial. * Too many goals generated. ** Not enough time spent on Study Teams. * Involving whole staff was positive. * Relationship of process to AYP has made many skeptical. * Leadership Team was well organized and knowledgeable.*	High turnover with Leadership Team. Struggled with lack of time (esp. during first year). Principal was strong supporter of the process. Staff "went along" even if they weren't necessarily all supportive.

SEMI-STRUCTURED INTERVIEW ANALSYSIS (Continued)

Foster (cont.)

PRIMARY THEMES FOR ALL/MOST SUBJECT GROUPS:

- Lack of available time made it difficult to maintain momentum and buy-in.
- Lots of turnover on Leadership Team.

DISCREPANCIES OR THEMES UNIQUE TO SPECIFIC SUBJECT GROUPS:

- Leadership Team and Coach perceived the experience as more positive and valuable than teachers not on the Leadership Team.
- Many teachers felt the number of goals generated exacerbated time issues and lead to competition with the school's existing reading goal.
- Some indication that effort to incorporate a cross section of staff was somewhat offensive to more experienced staff.
- Coach and Leadership Team teachers pointed to strong principal leadership.

4. ROLE OF COACH.

PRINCIPAL	LEADERSHIP TEAM TEACHERS (#2)	COACH
Vary helpful. Supported the Leadership Team during their training at the NWESD. Assisted planning for and facilitating whole staff activities. Helped her address glitches that arose.	Very helpful. ** Supported the Leadership Team during their training at the NWESD. ** Assisted planning for and facilitating whole staff activities. ** Helped Leadership Team stay focused. ** As outside resource, he helped minimize power dynamics. *	Spent a total of close to 80 hours. Supported the Leadership Team during their training at the NWESD. Assisted planning for and facilitating whole staff activities. Helped Leadership Team stay focused.

PRIMARY THEMES FOR ALL/MOST SUBJECT GROUPS:

- Leadership Team teachers and the principal felt the coach provided useful for the Leadership Team by participating with them throughout the NWESD trainings and providing follow-up assistance in planning and facilitating processes with their faculties and addressing challenges that arose.

SEMI-STRUCTURED INTERVIEW ANALSYSIS (Continued)

Foster (cont.)

5. CHANGE/EFFECTS.

PRINCIPAL	**LEADERSHIP TEAM TEACHERS (2)**	**OTHER TEACHERS (4)**
Have learned process tools for involving whole staff. More teacher collaboration focused on curriculum and instruction. More intentional about focus on data. Leadership distributed among teachers rather than centered on principal. Beginning to see changes in classroom practice.	More focus on data/more clear about trends in student performance. ** More schoolwide focus. ** Increased grade level and cross-grade level collaboration and alignment. * Involvement of all school staff, including paraeducators. * Process has equalized power among more and less experienced teachers because it is more egalitarian. * Still confusion around how to use data to inform/improve classroom instruction. *	Research has helped focus on current best practices. ** More teacher collaboration focused on instruction. ** More schoolwide focus. ** More focus on what students need. ** Have begun to change practice in response to work coming out of Study Teams. ** Still confusion around how to use data to inform/improve classroom instruction. ** No positive school changes. * Has helped the principal engage/involve the staff in a more positive way. *

PRIMARY THEMES FOR ALL/MOST SUBJECT GROUPS:

- More teacher collaboration around curriculum alignment and instruction.
- More focus on student performance data.
- Schools' efforts are more focused.
- Still figuring out how to use data to improve instruction.
- Evidence that classroom practice is beginning to change for some in response to work of Study Teams.

DISCREPANCIES OR SECONDARY THEMES UNIQUE TO SPECIFIC SUBJECT GROUPS:

- The principal and one teacher noted the effects of the process on the way the principal engaged/involved her staff.

SIMILARITIES AND DISCREPANCIES BETWEEN SCHOOLS #1 AND #2

1. READINESS

Factor	Simon	Foster
Experience with collaboration	Prior experience collaborating on curriculum issues.	Some prior experience with some teachers
Trust	High	Limited
Principal support	High	High
District Support	High	High
Experience with data	Always looked at data, but not used to drive change	Always looked at data, but not used to drive change.
Time	Adequate according to Leadership Team	Inadequate
History of shared decision making	Successful history	Contentious history
Perceived need to change.	Some evidence	Low

2. EXPERIENCE WITH THE PROCESS

Factor	Simon	Foster
Positives	• Collaborative nature of the process helped build buy-in for teachers. • Training for Leadership team was key.	Leadership Team and principal perceived process was positive.
Challenges	• Process was time consuming and overwhelming. • Clarifying the purpose of the process for staff.	• Process proceeded too slowly due to lack of time. • Loss of Leadership Team members over time. • Number of goals generated and subsequent amount of study team activity was overwhelming for teachers.

3. Role of the Coach

Simon	Foster
• Devoted ~ 60 hours to the school. • Perceived as helpful. • Participated with Leadership Team in NWESD trainings and helped plan and facilitate staff activities as needed. • Helped team and principal stay focused.	• Devoted ~ 80 hours to the school. • Perceived as helpful. • Participated with Leadership Team in NWESD trainings and helped plan and facilitate staff activities as needed. • Helped team and principal stay focused.

SEMI-STRUCTURED INTERVIEW ANALSYSIS (Continued)

Similarities and Differences (cont)

4. Change/Effects

Simon	Foster
• Narrowed focus and goals. • Lead to more focused collaboration. • Increased use of assessment data to address needs of students. • Some evidence of initial changes in classroom practice.	• Greater teacher collaboration around curriculum alignment and instruction. • More focus on student performance data. • School's efforts more focused (even if more overwhelming) • Evidence that classroom practice for some has begun to change in response to work of Study Teams. • Still figuring out how to use data to improve instruction. • Some evidence of change in way principal has distributed leadership among teachers.

COACHES' OBSERVATIONS OF SIPTAP PROCESS

Coach's role is to guide, remind, and push – esp. important for principal. **

The process can help create a higher level of readiness – process helps build trust because nothing is hidden. **

Ongoing professional learning for coaches is essential. **

Time is key for success. **

Important that principal is ready to delegate leadership to the team. *

Training for Leadership Team is essential to building and sustaining commitment to the process. *

Need more coach support at study team level. *

Evolution of focus in change efforts:
Curriculum materials ⟶ best practice ⟶ system of targets, assessments, and interventions. *

The process helps build the attitude that we're going to make decisions based on research and data. *

Readiness format allows schools to diagnose where there are and what they need to do to become ready for the next step – helped them think through the process. *

APPENDIX F

CRONBACH'S ALPHA COEFFICEINTS

AND SCALE DESCRIPTION FOR TEACHER SURVEY

Scale	# Items	Cronbach's Alpha
Readiness	8	.83
Total PRE	23	.95
Total NOW	23	.89
Peer Collaboration PRE	3	.60
Peer Collaboration NOW	3	.60
Reflective Dialogue PRE	5	.64
Reflective Dialogue NOW	5	.52
Focus on Student Learning PRE	4	.83
Focus on Student Learning NOW	4	.66
Collective Responsibility PRE	5	.89
Collective Responsibility NOW	5	.67
Orientation Towards Innovation PRE	4	.83
Orientation Towards Innovation NOW	4	.73
Teacher Commitment PRE	2	.81
Teacher Commitment NOW	2	.59

<u>Scale Definitions</u>

Readiness. Items 1 – 8. This a measure of a school's capacity to engage in a change process. Questions ask teachers and principals about the quality of trust, the quality of the school's decision-making process, the adequacy of time provided for collaboration at the time they embarked on the SIPTAP process, attitudes toward change, prior experience with data, and the strength of the school's leadership at the time they embarked on the SIPTAP process. High scores represent a high level of readiness for improvement planning.

Peer Collaboration. Items 9 – 11. These items measure the extent to which teachers and the principal work together to improve instruction and the school. High scores indicate high levels of peer collaboration.

Reflective Dialogue. Items 12 – 16. This is a measure of how often teachers discuss issues around teaching and learning with one another. Questions ask teacher to report how often they discuss the school's goals, talk about curriculum, discuss assumptions about teaching and learning, and review and discuss student work together. High scores indicate teachers frequently discuss teaching and student learning together.

Focus on Student Learning. Items 17 – 20. This is a measure of the extent to which teachers and principals report that their school focuses on student learning in their decisions. Questions ask teachers if their school focuses on what is best for students in their decisions, has well-defined learning expectations for all students, has high standards for academic performance, and organizes time to maximize student learning. High scores indicate that the school is intentionally focused on improving learning for all students.

Collective Responsibility. Items 21 – 25. This scale measures teachers' and principals' perceptions relative to their faculty's shared commitment to student learning. Questions ask teachers to rate the extent to which most teachers feel responsible for students who fail, feel responsible to help one another do their best, take responsibility for school improvement, set high standards for themselves, and feel responsible for the learning of all students. High scores reflect high levels of joint commitment to ensure high levels of student achievement.

Orientation Towards Innovation. Items 26 – 29. This scale measures teachers' and principals' perceptions of the level of their faculty's focus on improvement. Items ask teachers and principals to rate the extent to which teachers are eager to try new ideas, have a "can do" attitude, are continually seeking new ideas, and are focused on improving their practice. High scores reflect an orientation towards improvement.

Scale Definitions (cont)

Teacher Commitment. Items 30 – 31. These items measure teachers' and principals' to assess the extent to which they look forward to going to work and are committed to working in their current school. High scores indicate high degrees of loyalty and commitment.

Vita

Carl Bruner was born in San Antonio, Texas. He earned a Bachelor of Arts degree in English from the University of Texas and a Masters of Education from the University of Washington. Since moving to Washing State in 1978, he has worked as a school psychologist, special education administrators, building principal, assistant superintendent, and superintendent. In 2005 he earned a Doctor of Education at the University of Washington in Educational Leadership and Policy Studies. He currently lives in Mount Vernon, Washington and serves as superintendent for the Mount Vernon School District.