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ABSTRACT

EXPLORING TEACHER ATTITUDES, EXPERIENCES, AND BELIEFS ON THE DEVELOPMENT AND IMPLEMENTATION OF FACULTY DATA TEAMS™ IN A MIDWESTERN SCHOOL DISTRICT

by

Bradley William Sheppard

Chair: Larry Burton

ABSTRACT OF GRADUATE STUDENT RESEARCH

Dissertation

Andrews University

School of Education

Title: EXPLORING TEACHER ATTITUDES, EXPERIENCES, AND BELIEFS ON THE DEVELOPMENT AND IMPLEMENTATION OF FACULTY DATA TEAMS™ IN A MIDWESTERN SCHOOL DISTRICT

Name of researcher: Bradley William Sheppard

Name and degree of faculty chair: Larry Burton, Ph.D.

Date of completion: July 2011

Purpose

The purpose of this study was to describe the development and implementation of Data Teams[™] in a Midwestern school district and to explore what influenced teachers to become effective team members. It analyzed the product and process of creating Data Teams[™] who competently used data to make academic standards work by identifying power standards, analyzing data, setting goals, implementing research-based effective teaching strategies, and assessing student performance and adult behaviors that had a direct impact on student achievement.

Method

A qualitative case study design was used for this investigation as it explored the narratives of 10 elementary teachers on their life experiences, attitudes, and beliefs from serving on Data TeamsTM.

Results

In response to the first research question—What life experiences have helped to sculpt elementary teachers into effective Data Teams[™]?—the primary life experiences identified by the teachers were past experiences, collaboration, and relationships. In response to the second research question—What influenced individual members to become cooperative collaborators?—the primary themes in collaboration were a positive attitude, the perceived benefits of collaboration, and a collaborative mind-set. In response to the third research question—How did individual teacher experiences, attitudes, and beliefs impact the work of Data Teams[™]—the primary themes identified were roles and fidelity to the norms of collaboration, deep implementation of the model, and high standards.

Conclusion

Members of the Data Teams[™] agreed that their experiences in collaboration prior to their participation in Data Teams[™] allowed them to build relationships with teachers that are essential to effective collaboration. Additionally, they agreed that the development of a positive attitude towards collaboration, coupled with an understanding of the benefits associated with collaboration, helped to develop a collaborative mind-set. Furthermore, they agreed that developing and operating under norms of collaboration were essential to team success. Also, they agreed that deep implementation of the Data TeamTM process was essential for student improvement. Finally, they agreed that it was important to set high standards and goals that were both realistic and achievable.

Andrews University

School of Education

EXPLORING TEACHER ATTITUDES, EXPERIENCES, AND BELIEFS ON THE DEVELOPMENT AND IMPLEMENTATION OF FACULTY DATA TEAMS™ IN A MIDWESTERN SCHOOL DISTRICT

A Dissertation

Presented in Partial Fulfillment

of the Requirements for the Degree

Doctor of Philosophy

by

Bradley William Sheppard

July 2011

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A dissertation presented in partial fulfillment of the requirements for the degree Doctor of Philosophy

by

Bradley William Sheppard

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"hitch your wagon to a star" and live a balanced life while striving to reach a high goal. Above all, I give thanks to the 10 teachers from Midwestern School District who allowed me to interrupt their lives and retell their stories, because without them this project never would have been possible. Ultimately I give the highest amount of gratitude and praise to my Heavenly Father who not only gave me the ability to perform this task, but who surrounded me with the many people who made it possible to complete.

CHAPTER 1

COMING TO THE QUESTION

Introduction

Data TeamsTM was introduced in an Indiana school district for the purpose of guiding instruction, helping students reach proficiency on state standards, and improving overall student achievement. Teachers were assigned to a Data TeamTM with the expectation to collaborate in the collection and analysis of cause-and-effect data, the setting of curricular goals, the planning of instruction, and the administration of assessments. The district was confident that the Data TeamTM process would validate the importance of using data to plan instruction and assess student learning collaboratively and that these collaborations would become critical components of the school system's student achievement growth. For the purposes of this dissertation I sought to explore the experiences, attitudes, and beliefs teachers brought to their respective Data TeamsTM as they embarked upon this initiative. This was an important endeavor because of the impact each individual brought to the function and productivity of the team.

The adequate yearly progress (AYP) requirements of No Child Left Behind (NCLB) was signed into law in 2002. Yell and Drasgow (2005) reported that this new law caused an increased interest in improved student achievement. The goal of NCLB was for student achievement to increase so that by 2014, every student would be proficient at grade level in math and language arts, as measured by state assessments.

Additionally, all schools in Indiana were required to create, implement, and document school improvement plans based on data gathered from learner performance under State Public Law 221 (PL 221). This school corporation chose to address the issues it faced under NCLB and PL221 by creating Data TeamsTM. The district adopted the Data TeamTM model and sought the services of the Leadership and Learning Center (LLC), formerly the Center for Performance Assessment (CPA), to assist in training teachers and administrators, implementing the initiative, and sustaining its viability.

Composed of teachers within each building, Data Teams[™] were charged with the task of helping students become proficient in the content areas based on the state's academic standards. In order to accomplish this initiative Data Teams[™] were expected to create and administer common formative assessments to determine levels of proficiency, use the results of the student data to identify strengths and areas needing growth, set goals for improved student performance, implement research-based teaching strategies, assess student performance with commonly created post-assessments, analyze cause-and-effect data to determine appropriate interventions, and determine results indicators before another Data Team[™] cycle began.

Flowers, Mertens, and Mulhall (1999) found some positive effects from teacher teams. Green and Henriquez-Roark (1993) found that teachers who participated in faculty groups became more open with their colleagues, more effective as problem solvers, more caring with their colleagues, and more able to share new ideas. Murphy and Lick (1998) found that teacher teams enhanced student learning. Murphy (1999) reported that schools who practiced PLCs were beneficial to teachers in that it gave them a forum from which they could focus on their teaching, collaborate with their colleagues,

share their experiences, and develop a team spirit. In my work for this dissertation I wanted to learn about the experiences, attitudes, and beliefs individuals brought with them to the process of creating and implementing Data TeamsTM.

A substantial amount of research has been done on the identification and implementation of effective teaching strategies. Marzano, Pickering, and Pollock (2001) synthesized a wide body of work and condensed their findings to nine key research-based strategies for increasing student achievement. Joyce, Weil, and Calhoun (2004) created and tested effective instructional strategies for the classroom. What I sought to learn was how teacher experiences, beliefs, and attitudes impact the implementation of well-identified effective strategies chosen by the Data TeamTM as well as how teachers individually assess the manner in which they implement each strategy.

Data-driven decision-making has come of age in educational settings. How teachers use student data for increasing learning is a critical component in the teaching-learning process. As a result it was important for me to understand the perspectives teachers brought to Data Teams[™] in the area of using data meaningfully.

The structure of the first chapter introduces the major components that appear in the dissertation. I begin the study with a background to the inquiry of research, followed by a statement of the problem. Next, I discuss the purpose and essential research questions for the investigation. Assumptions are attended to in the rationale section. The theoretical framework of the study is then established. The chapter then focuses on the statement of the problem and the significance of the study. I also include a section of important terms with their definitions. This provides essential background information to the reader. Finally I conclude with an overview of the general methodology that is used,

including the delimitations of the study. A summary wraps up the chapter.

Background

NCLB gave an impetus to historic education reform based on four factors: (a) stronger accountability; (b) more freedom for States and communities; (c) encouraging proven education methods; and (d) more choices for parents (Yell & Drasgow, 2005). Although many aspects of the law have been characterized with varying amounts of support and criticism, the implications of accountability have reached the teacher who has the task of bringing all students to grade-level academic proficiency in the areas of reading and math. NCLB held teachers accountable for instruction and student performance.

The law and, to a certain degree, common sense dictate that teachers cannot be effective unless their students reach proficiency or higher, they understand why students succeed, and they employ tools to make sure success is a reality. Reeve's Leadership and Learning Matrix (L^2), as illustrated by White (2005), is displayed in Figure 1. The L^2 Matrix identified four quadrants where teachers may find themselves at any given time.

The top left quadrant included teachers Reeves labeled as "lucky." These teachers typically saw high results in student achievement, but had a low understanding of the antecedents for those results. Replication of success was most unlikely for these teachers. Teachers in the bottom left quadrant were labeled "losing." These teachers often saw low results. Moreover, they had little understanding of the antecedents. One would not expect much success from teachers placed in this quadrant. Teachers in the bottom right quadrant were tagged "learning." These teachers typically saw low student results; however, there was a clear understanding of the antecedents. These teachers

	LUCKY	LEADING	
lts	High results, low understanding of antecedents.	High results, high understanding of antecedents.	
f Resu	Replication of success unlikely.	Replication of success likely.	
ant of	LOSING	LEARNING	
ieveme	Low results, low understanding of antecedents.	Low results, high understanding of antecedents.	
Ach	Replication of mistakes likely.	Replication of mistakes unlikely.	
Understanding of the Antecedents of Excellence			

Figure 1: Leadership and learning matrix. The L^2 Matrix links the achievement of student results with an understanding of the antecedents of excellence and places teachers in one of four quadrants based on that relationship. From *Beyond the Numbers* (p. 45), by Stephen H. White, 2005, Englewood, CO: Advanced Learning Press. Reprinted with permission.

were not likely to make the same mistakes again because they fixed the errors and improved their practice. Teachers who made the necessary adjustments moved to the top right quadrant which was tagged "leading." Teachers in this quadrant not only experienced high student achievement, but they also had a high understanding of the antecedents. Replication of success was likely because they clearly understood what was necessary to solicit high results in student achievement. White (2005) suggested that the ideal was for teachers to work collaboratively where they would move back and forth between the third and fourth quadrants of the L² Matrix. Input from teachers who strived to function in this area of the matrix was a critical component in understanding how teacher collaborative teams could become productive.

Collaboration appeared to be a critical component for success if schools were to meet the mandates of NCLB. Eaker, DuFour, and Burnette (2002) concluded that schools had to be restructured in organization and practice if teachers were expected to see high student results and understand why the results occurred. They also purported that the implementation of Professional Learning Communities (PLCs) was the best way to restructure schools. Fullan (1993) agreed by suggesting that schools must have the ability to collaborate on both large- and small-scale levels.

Research indicated that effective teacher teams build a spirit of collaboration by having a shared vision. White (2005) offered several antecedent structures for meaningful collaboration including Data TeamsTM.

Data-driven decision-making uses results indicators to support instructional training. Rudy and Conrad (2004) reported that this has become an important area of focus for schools and identified four key elements to foster data-driven decision-making: leadership in curriculum and instruction; performance indicators; technology; and staff development.

Black and Wiliam (1998) demonstrated that improved formative assessments resulted in higher student achievement. Black, Harrison, Lee, Marshall, and Wiliam (2004) found that as teachers changed their practice and students changed their behavior, everybody shared responsibility in student learning.

Statement of the Problem

I sought to hear the voices from members of teacher Data Teams[™]. Exploring individual experiences, beliefs, and attitudes provided useful insight on the organization, structure, and dynamics of Data Teams[™]. The missing link was the voices from those

who make up membership in the Data TeamsTM. I listened to those voices and recorded how teachers felt they personally impacted student learning through Data TeamsTM.

I arrived at this problem during an interview with the Department of Curriculum and Instruction (C&I) which revealed the district's questions over team composition and member behavior. In structuring Data Teams[™] the C&I Department was concerned about: (a) establishing team-building activities; (b) developing Data Team[™] membership; (c) determining what types of Data Teams[™] work best; (d) assessing the impact of interventions; (e) choosing appropriate assessments; (f) defining the relationship between Data Teams[™] and individual teachers; (g) assigning roles in each Data Team[™]; (h) meeting individual student needs; and (i) using standards and instructional strategies appropriately.

Secondly, C&I expressed concern over member behavior, including: (a) how Data Teams[™] changed teacher practice; (b) expected behaviors of teachers; (c) teachers' positive feelings and fears; (d) teachers' attitudes about Data Teams[™]; (e) uncooperative members; (f) emergent data about PLCs; (g) differences between veterans and novices; and (h) the strengths individuals bring to PLCs. These concerns brought me to the problem. The voices of the teachers filled this link.

Purpose of the Study

The purpose of this work was to describe the professional experiences of elementary teachers that helped prepare them to become effective collaborators in Data Teams[™]. Furthermore, the goal was to describe the development and implementation of Data Teams[™] and to explore what influenced teachers to become cooperative collaborators. It analyzed how the experiences, attitudes, and beliefs of teachers

impacted the work of Data Teams[™] as these PLCs used the results of standards-based assessments to analyze student work and teacher actions, identify student strengths and areas needing growth, establish instructional goals, select effective teaching strategies and interventions, and determine results indicators (see Appendix 1).

Research Questions

The following questions provided the direction of this study:

1. What professional experiences have helped elementary teachers become effective collaborators in Data TeamsTM?

2. Once Data Teams[™] were developed and implemented, what influenced teachers to become cooperative collaborators?

3. How did individual teacher experiences, attitudes, and beliefs impact the work of Data Teams[™] as these PLCs used the results of standards-based assessments to analyze student work and teacher actions, identify student strengths and areas needing growth, establish instructional goals, select effective teaching strategies and interventions, and determine results indicators?

Rationale for the Study

One might assume that highly qualified teachers have an understanding of what standards are and why they are needed. In addition, it may be assumed that these teachers understand how to use data to make instructional decisions. Furthermore, it might be appropriate to assume that teachers know how to create and implement appropriate assessments. Above all, one might even assume that teachers have a natural tendency to collaborate effectively. A conclusion one could draw from these assumptions is that a significant number of teachers already possess the necessary tools to meet the accountability demands of NCLB and PL 221. For these educators, it might be an affront to their professional psyche to suggest they add another initiative to their over-filled plates. These teachers may even conclude that students do not improve either because they choose not to apply themselves or that the lack of student achievement lies beyond the scope of what schools can do. For example, Yell and Drasgow (2005) related that there have been some educators who have placed the blame for student failure on factors such as high poverty and minority environments. While these elements may play a role in determining student performance, some educators have not shared any part of the responsibility, believing there is little if anything they could do to increase student success. Consequently some educational leaders may find it a challenge or even a burden to implement collaborative teacher initiatives such as Data TeamsTM. Data gathered from a large number of schools, however, would indicate these assumptions are not necessarily completely accurate (Yell & Drasgow, 2005).

Gaining an understanding of the experiences, attitudes, and beliefs of teachers about Data TeamsTM provided insight into how to utilize the theoretical and practical model of Data TeamsTM. This understanding may have even contributed to a heightened sense of accountability on the part of some teachers.

Reeves (2004b) found that while utilizing Data Teams[™], performance for both teacher and learner increased. Three components of this model—Data Teams[™], Effective Teaching Strategies, and Making Standards Work—include assumptions which offer guidance to teachers, Data Teams[™], schools, and corporations. Furthermore the model offers a lens through which student achievement is likely to occur. Hearing the

voices of these teachers has yielded valuable insight into this model.

Theoretical Framework

The Data Team[™] model was proposed by Douglas Reeves, founder of the LLC. This framework initially builds the knowledge and skills of educators through fair and accurate academic performance assessments, the implementation of standards, and accountability, all within the context of PLCs (Besser, Anderson-Davis, & Peery, 2008). It also provides an effective approach to helping teachers reach the goal of improving student performance through PLCs.

Next, the theoretical framework presents teachers with research-based effective teaching strategies. The Data TeamTM model endorses Marzano's work when choosing and implementing these strategies. Marzano et al. (2001) synthesized a wide body of research in a meta-analysis on effective teaching strategies and put them into nine key categories including: (a) similarities and differences; (b) summarizing and note taking; (c) reinforcing effort and giving recognition; (d) homework; (e) nonlinguistic representations; (f) cooperative learning structures; (g) objectives and feedback; (h) generating and testing hypotheses; and (i) incorporating cues, questions, and advance organizers. Additionally a wide body of research-based strategies exist which can be utilized by Data TeamsTM.

Finally, this framework provides teachers with strategies in the effective use of standards (Reeves, 2004a). This strategy includes identifying and unwrapping power standards (Ainsworth, 2003) as well as creating lessons and assessments that reach those standards. Reeves (2004b) contended it would be impossible to teach all of the sheer volume of all written standards. Based on their calculations, Marzano and Kendell

(1998) found it could take as many 22 years of schooling for students to become proficient at all the content standards in any given state. Ainsworth (2003) argued that rather than attempting to teach all of the standards, teachers should focus on those indicators which provide: (a) endurance—those which give students the knowledge and skills that will be of value beyond a single test; (b) leverage—those which provide knowledge and skills across the curriculum and in multiple disciplines; and (c) readiness—those which provide students with the knowledge and skills most important for success at the next level of instruction. Typically, the remaining indicators are related to the indicators which meet these criteria. These indicators then become the power indicators from which to plan and implement instructional strategies.

This study focused on teacher experiences, attitudes, and beliefs around the components of this framework.

Significance of the Study

This study has added to the Data Teams[™] knowledge base an understanding of the life experiences, attitudes, and beliefs teachers bring when they join a Data Team[™]. As they participated in this process the teachers sought to produce results which positively impacted student achievement. What was needed in the knowledge base of effective teacher Data Teams[™] were the personal experiences of the teachers themselves. This study sought to hear the stories of Data Team[™] members as I gained an understanding of the attitudes and perceptions they brought with them to their Data Teams[™]. The goal was to share these stories with other educators who are engaged in PLCs. It was anticipated that these teachers would restory their own experiences and therefore become more effective team members and classroom teachers (Clandinin &

Connelly, 1991).

NCLB mandated that by 2014 all schools must make AYP and all students must score proficient or higher on the state assessments in math and reading. Additionally, PL 221 required schools to develop school improvement plans based on student data. It has become imperative for corporations to create a systematic approach which measures student academic performance based on multiple measurements over a period of time. A collaborative approach may give corporations a better chance of equipping individual teachers with the tools necessary in raising student performance. School corporations must improve their diagnostics and utilize effective interventions if they are going to meet the NCLB goals. At the time of this writing, it is unclear which direction the Congress will take in the reauthorization of NCLB. What is clear, however, is that even if NCLB was to disappear, teachers still have to create and develop a means to measure student performance and teacher actions. Hearing these teachers' stories is significant in that they can serve as a representation to other teachers on how to create high-quality PLCs, how to make AYP, how to help students pass state assessments, and how to provide a catalyst for students' academic success.

Definition of Terms

These conceptual definitions served as a guide during my focus on the study. *Adequate Yearly Progress (AYP)*: Under the requirement of NCLB this is the state's measurement of each school's yearly progress toward achieving state academic standards. AYP is the minimum level of improvement that schools are required to achieve each academic year ("ABCs of AYP," 2004).

Assessments: The tools teachers use to appraise student performance. Multiple

forms of assessment, taken at multiple occasions throughout a given time-frame, provide teachers with timely information to make adjustments in instruction and eventually evaluative judgments on overall student performance (Yell & Drasgow, 2005).

Leadership and Learning Center (LLC): Previously known as the Center for Performance Assessment. This is an international organization dedicated to helping increase student performance and educational equity through the implementation of research-based approaches to standards, assessment, and accountability. The LLC created and trained the educators in the Data Teams[™] model (Center for Performance Assessment, 2005).

Data-driven decision-making: Using student data to focus instruction. This usually refers to the process of implementing statistical methods to comprehend the factors which lead to variance in processes (White, 2005).

Data Teams[™]: Small number of teachers formed into PLCs who use data to make informed instructional decisions. These PLCs are collaborative and structured, have predetermined meeting times, and the focus is on improving teaching and learning (White, 2005).

Effective Teaching Strategies: Research-based effective instructional practices that have a high probability of enhancing student achievement (Marzano et al., 2001).

Indicators: Also referred to as benchmarks, proficiencies, or sub-skills. These are learning outcome statements at grade level (Ainsworth, 2003). They are designed to provide specific guidance about the meaning of the standard. They help establish goals for programs of instruction, determine specific content, guide curriculum development, and facilitate classroom planning.

Language Minority Student: A student whose native language or home environment is other than English. In Indiana these students are classified as either Limited English Proficient (LEP) or Fluent English Proficient (FEP) and move on a continuum from beginner to fluent English. These students are also commonly referred to as English as a Second Language (ESL) students (Indiana Department of Education, 2003).

No Child Left Behind (NCLB): The federal legislation which is actually the reauthorization of the Elementary and Secondary Education Act (1965). There are four basic principles to NCLB (Yell & Drasgow, 2005): (a) more accountability for results of student performance; (b) greater flexibility with the use of federal funds for states, districts, and schools; (c) more choices for parents of children from disadvantaged backgrounds; and (d) a strong emphasis on proven effective teaching strategies. The terms of NCLB also stress reading, highly qualified teachers, and English language learning.

Power Standards: Those standards or indicators that are deemed most important and critical for student success. The way standards are currently expressed it would be nearly impossible to reach all of the standards without year-round school. The key for teachers is to identify the essential key elements that are necessary for students to master in order to give them endurance, leverage, and readiness for the next level of learning. These become the power standards or indicators where teachers will focus most of their attention (Ainsworth, 2003).

Public Law 221 (PL221): An Indiana state law which mandates the strengthening of academic standards, creating effective assessments, establishing new requirements for

high-school graduation, and instituting continuous improvement processes in schools (Indiana Department of Education, 2008).

Standards: General statements of what students need to know and be able to do (Ainsworth, 2003). Usually they are expressed across a range of grade bands. Standards are created at either the national or the state level by representatives of content-area professional organizations and/or state departments of education. They are geared to help guide a wide variety of individuals including classroom teachers, district and state-level consultants, national leaders in content areas, politicians, and college professors. Standards are used to help establish the aims of programs of instruction, determine content of programs, guide curriculum development, guide classroom planning, and design assessments.

Title I: Previously referred to as Chapter One, this provides funding for schools to help students who are behind or who are at risk of falling behind academically. Title I funding is based on how many low-income students there are in a school. This is usually determined by the number of students who qualify for free or reduced-price lunch. The intent is to use Title I funds as a supplement to funds that are already provided by the state and the local district. Finally, parents are to be involved in deciding how these funds should be spent (United States Department of Education, 2011).

General Methodology

Teachers from three elementary-level Data Teams[™] in Midwestern School District were chosen for this study. The selection of the teacher Data Teams[™] was a purposeful process (Patton, 1990). Merriam (1998) stated that a purposeful design is based on the assumption that the researcher chooses a sample that will yield the most

information in order to gain the most insight and understanding possible. This was accomplished by asking the building administrators from the district's 14 elementary schools to rank the Data TeamsTM in their schools for effectiveness. Once the principals had determined which Data TeamTM in their respective buildings was ranked highest, they used a 5-point scale in each of five categories to rate the effectiveness of that Data TeamTM in terms of expected performance. The three Data TeamsTM in the district with the highest ratings were invited to participate in this study. One Data TeamTM declined the request, so the fourth highest rated Data TeamTM was selected.

Delimitations

This study confined itself to interviewing 10 teachers and observing the three Data Teams[™] on which these teachers served. Each Data Team[™] was located in a different elementary school, but all were part of the same Indiana school corporation. The study was based on a qualitative research design known as case study. While this tradition is ripe with descriptive possibilities, it proved to be rather time consuming in the area of data collection and analysis.

It was the purpose of this research to neither refute nor validate the requirements of NCLB or PL221. Rather, this dissertation dealt with the realities that teachers encounter because of these laws and the need to be accountable for student learning.

The determined sampling procedure necessary for this type of inquiry concentrated on a specific group of elementary teachers in an Indiana school district, thus limiting large numbers of participants involved. Since the goal of my research was to participate as much as possible in drawing out the stories of these educators, a level of trust had to be established with those involved in the study. Without such trust

participants may have repressed many of their feelings.

Summary

It is my aspiration that this study will enable educators to gain insights into the process and product of creating effective Data Teams[™] who can masterfully use causeand-effect data to focus on practices which will help improve instruction and increase student performance as it relates to the application of the Data Team[™] model. This investigation, within the milieu of elementary school teachers' personal experiences, attitudes, and beliefs, provides sundry possibilities for teachers. As such, teachers can learn how to create a PLC and make it an effective tool.

Organization of the Study

The dissertation is divided into seven chapters. Chapter 1 includes the introduction, a research background, a statement of the problem, the purpose of the study, the research questions, a rationale for the study (assumptions), the theoretical framework on which the study is based, the significance of the study, definitions for important terms, the general methodology which was used, delimitations of the study, a summary statement, and an organizational statement for the remainder of the dissertation.

Chapter 2 focuses on a review of the literature. The chapter begins with a brief introduction followed by the literature review. The review explores the history of PLCs, the structure and attributes of effective PLCs, the benefits of establishing PLCs, and how to successfully sustain PLCs. It then moves from this overview of PLCs to the Data Team[™] model. The chapter reviews data-driven decision-making, effective teaching strategies, and the creation and use of assessments. It was essential to understand these

issues in order to accurately explore them in relationship to the stories that came from the 10 teachers. The end of the chapter includes a summary statement.

Chapter 3 describes the methodology for the study, including an introduction, a description of the research design, the selection of the sample, the qualitative instrumentation, the research questions, the procedure for processing data, and a summary statement.

Chapters 4 through 6 present an analysis of the data. Each chapter focuses on the teachers from the Data Teams[™]. Each chapter contains an introduction, a description of the school, the classrooms and teachers, a description of the data, an analysis of the data, and a summary statement.

Chapter 7 makes up the final portion of the dissertation. The discourse uses a cross-case analysis to tie the whole study together by providing a synopsis of the study, including an introduction, a review of the conceptual framework, the research design, the research questions, a discussion of the results, an analysis of the Data Team[™] model, conclusions, recommendations, and final thoughts.
CHAPTER 2

REVIEW OF RELATED LITERATURE

Introduction

The chapter begins with an exploration of PLCs. Following this discourse is a section on the history of PLCs. The structure and attributes of PLCs are examined next, which is followed by a review of the benefits from implementing PLCs and a section on how to sustain PLCs. Collaborative teacher teams and data-driven decision-making are at the heart of this study, and a review of pertinent literature in these areas is included in the chapter. It was necessary to provide an historical perspective to the framework that was implemented, so a review of the model from the LLC, complete with sections on Data Teams[™], effective teaching strategies, and the creation and use of assessments, which are the essential components of the model, has been included in the literature review. A summary concludes this chapter.

What Are Professional Learning Communities?

Schmoker (2006) asserted that the surest, fastest path to instructional improvement was through the use of PLCs. But what is a PLC? Is it merely a group of teachers getting together to discuss what they do in their classrooms, or what exactly do they do? This section will explore answers to those questions.

Darling-Hammond and Richardson (2009) defined PLC as teachers working

together to engage in a continuous dialog to examine their practice and student performance and to develop and implement effective teaching practices. What they suggested was that in PLCs, teachers seek opportunities to collaborate on a continuous basis, they learn together in a collaborative fashion new teaching techniques, they put those new strategies to the test in classrooms, they reflect on what they learned when implementing these new techniques, and then they share their newly gained knowledge and expertise with others.

DuFour and Eaker (1998) found that members of successful PLCs are guided by shared goals and a sense of common purpose. Additionally these teachers have set high expectations for student achievement, they accept the responsibility for helping students meet those expectations, and they collaborate on a regular basis to work on curriculum issues, effective teaching strategies, needs of individual students, and school improvement initiatives. Moreover, teachers who are members of PLCs model the importance of lifelong learning by their commitment to their personal professional growth.

Morrissey (2000) found that PLCs are not a thing, but they are a way of operating. In other words he described PLCs as a process, a way of doing things. She found that when staff work and learn within the confines of a PLC, continuous improvement becomes an embedded value.

Mitchell and Sackney (2001) asserted that when it comes to PLCs, teachers facilitate the learning of all students, and are in perfect positions to address the fundamental issues and concerns in relation to student learning.

DuFour (2004) outlined what he called the "big ideas" that represent the core

principles of PLCs. First, was the assurance that students learn—not that children are merely taught, but that they actually learn. He argued that when PLCs take that statement literally, profound changes take place in the school. The second big idea he identified was the establishment of a culture of collaboration. DuFour (2004) stated that PLCs have come to the realization that as teams, each individual member must work together in order to achieve the collective purpose of learning for all students, so they create structures which promote a culture of collaboration. Finally DuFour (2004) suggested that PLCs focus on results. He argued that many schools and teachers suffer from what he called the DRIP syndrome, meaning these institutions and educators were data rich, but information poor. In other words, they had a lot of data, but those data were not used to improve student achievement. DuFour (2004) suggested that PLCs not only welcome data, but that they turn data into useful and relevant information as these educators form and reshape their goals and practices.

A Brief Historical Overview of Professional Learning Communities

Professional learning communities were not the standard mode of operation for teachers in the early years of American education. DuFour and Eaker (1998) described the organization of 19th- and early 20th-century American schools according to the concepts and principles of the factory model and that this was a purposeful design. They argued that educational leaders were enthusiastic about applying the principles of the industrial model. The leading educators saw schools as factories where children were the raw materials that were to be shaped and manufactured according to the various needs of society. DuFour and Eaker (1998) stated that the uniformity, standardization, and

bureaucracy of the model came to be the predominant features of school districts across the face of America, and that in the defense of these early educators, this model probably worked quite well, because it was not expected for all students to reach the highest levels of learning.

DuFour and Eaker (1998) argued that this factory model of educating children today is completely inadequate, especially in terms of the goals the nation has set forth in educating its youth. They argued,

If educators are to meet these challenges, they must abandon an outdated model that is contrary to the findings of educational research, the best practices of both schools and industry, and common sense. They must embrace a new conceptual model for schools. The issue then becomes identifying the model that offers the best hope for significant school improvement. (p. 23)

DuFour and Eaker (1998) referenced the works of researchers such as Covey, Drucker, Senge, Handy, Fullen, Darling-Hammond, Joyce and Showers, and Louis, Kruse, and Raywid and came to the conclusion that PLCs offered the best hope for significant school improvement.

Darling-Hammond and Richardson (2009) reported that early collaborative efforts in PLCs within an education context were more like group work where teams of teachers worked on projects such as curriculum development, problem solving around students and their learning, and peer observations. They went on to say that these groups created norms of collaboration that valued mutual help, accepted the responsibility for improved instructional techniques, and the members supported each other in their initiatives and leadership efforts.

One of the early voices in research promoting PLCs was Susan Rosenholtz. Rosenholtz (1989) described in her study of 78 schools, what she coined as "learning

enriched schools." These schools were characterized by collective groups of teachers who collaborated to promote student learning. She defined teacher improvement as a collaborative endeavor rather than a solo enterprise because it was under this type of collaborative structure that teachers could analyze, evaluate, and experiment, which would lead to teacher improvement.

Peter Senge, a voice outside of the educational arena, began to champion the notion of PLCs around the same time as Rosenholtz. He became a leading voice in learning organizations which revolved around the concept of the learning community. Senge (1990) purported there were five core disciplines that had to work together if an organization was going to learn. His first discipline was "personal mastery." Senge argued that organizations learn through the people who learn. Without people learning, organizations cannot learn. The second discipline was "mental models." By this Senge (1990) meant that mental models are assumptions and generalizations that influence how people understand the world and how they then take action. As such, people develop the ability to share their own thinking with others and then make that thinking open to the influence of others. The third discipline was "building shared vision." Senge (1990) contended that when individuals in an organization hold a shared vision, they excel and learn, not because they are told to do so, but rather because they want to do so. The fourth discipline was "team learning." Senge (1990) argued that people need to be able to learn together. When they can do this, not only will it produce good results for the organization, but the members of the group will grow at a faster rate than could have happened otherwise. Finally, the fifth discipline was "leading the learning organization." Senge (1990) argued that learning organizations need a new kind of leadership. They

need a style of leadership where leaders take on the characteristics of designers, stewards, and teachers. As a designer, Senge argued that the leader in a learning organization designs the purpose, vision, and core values by which the people in the organization will operate. As a steward, the leader is committed to and holds the responsibility for articulating and carrying out the vision. This does not mean the leader owns the vision, but he assumes the role as steward of the vision and manages it for the benefit of others. As teacher, Senge (1990) asserted that the leader in a learning organization not only focuses mainly on purpose and systemic structure, but actually teaches people in the organization to do the same.

Judith Warren Little and Milbrey McClaughlin then entered the discussion of PLCs, this time specifically within an educational context. Little and McClaughlin (1993) argued that the most effective schools were those that had strong PLCs. Their work found several characteristics in these settings, including shared norms and beliefs, collegial relations, collaborative cultures, reflective practice, inquiry about effective practice, professional growth, mutual support, and mutual obligation.

Other voices promoting PLC also emerged during the 1990s. Newman and Wehlage (1995) in their report of over 1,200 schools found that the most promising strategy for long-term sustained school improvement was the ability and capacity for schools to operate as PLC. In terms of PLCs, Newman and Wehlage meant teachers were engaged in a collaborative effort to improve student learning, leaders and teachers created a collaborative culture within the building, and teachers took the responsibility for student learning collectively rather than individually. Kruse, Louis, and Bryk (1994) also found that where PLCs were strong, teachers worked together more effectively and

put more effort into creating and sustaining opportunities for student learning. Louis and Marks (1998) studied 24 schools extensively and found that schools operating as PLCs not only had a positive impact on student achievement, but on classroom teacher practice as well.

Even with the reporting of the research above, it was not until DuFour and Eaker (1998) came out with *Professional Learning Communities at Work: Best Practices for Enhancing Student Achievement* that the concept of PLCs became a major feature of school reform. DuFour and Eaker (1998) provided a picture of PLCs that has now been used widely in school reform efforts. Components of this framework are discussed in the following sections.

Models of how to implement PLCs emerged during the early years of the 21st century. Reeves (2010) coined the term Data Teams[™] to describe his model of PLCs (discussed below). Davenport and Anderson (2002) designed a model called the Eight-Step Process. This model was created as a data-driven, cyclical continuous improvement approach to student achievement. First utilized in the Brazosport, TX school district and subsequently implemented in numerous districts across the nation, the Eight Step Process provided a structure for schools to use PLCs in addressing student needs, particularly when it came to the structure of interventions. The eight steps in Davenport and Anderson's (2002) model are:

1. First—Test Score Disaggregation. During this first step of the process, professional learning groups use test results to identify areas in which students are strong and weak in the established standards being used.

2. Second—Time Line Development. PLCs then create a year-long

instructional calendar specifying which standards the teachers and students will focus on in any given week.

3. Third—Instructional Focus. During this step each individual teacher delivers instruction in her/his classroom, based on the focus identified in the instructional calendar.

4. Fourth—Assessment. The members of the PLCs administer a common assessment to identify mastery and non-mastery students.

5. *Fifth and Sixth—Tutorials and Enrichment*. Based on the results of the assessments, PLCS group students according to proficiency on the standards assessed and provide extra time each school day for enrichment, maintenance, or remediation.

6. Seventh—Maintenance. Materials for the enrichment, maintenance, and remediation groups are created and maintained under the guidance of school leadership. *Eighth–Monitoring*. Building leaders become active participants in the PLCs by assuming the role of instructional leader and by ensuring the implementation of the model at every step in the process.

Interest in PLCs has continued to grow during the 21st century. Fullan (2008) argued that a PLC allows an individual within an organization to identify with a larger phenomenon, which, in turn, allows the individual to expand the self with powerful consequences. He said,

When teachers collaborate, they begin to think not just about 'my classroom' but also about 'our school.' When school leaders work in a cluster of schools, they become almost as concerned about the success of other schools in the network as they do about their own. The we-we commitment is fostered not because people fall in love with the hierarchy but because people fall in love with their peers. (pp. 49-50)

The Structure and Essential Attributes of PLCs

Research has identified some common structural characteristics and essential attributes of PLCs. DuFour and Eaker (1998) identified six characteristics on which PLCs are built: (a) shared mission, vision, and values; (b) collective inquiry; (c) collaborative teams; (d) an orientation towards action and a willingness to experiment; (e) a commitment to continuous improvement; and (f) a focus on results.

Louis, Marks, and Kruse (1994) found that smaller school size, common planning time, more of the building staff involved in teaching and learning, and the empowerment of teachers as decision-makers were essential components for a well-structured PLC program. They also found that in order to support the structure of PLCs, there needed to be supportive leadership, mutual respect, and an environment that allowed for risk-taking and creative ingenuity.

DuFour, DuFour, Eaker, and Many (2006) identified several characteristics of highly effective PLCs: (a) a focus on and commitment to the learning of every student; (b) a collaborative group of teachers working interdependently to achieve common goals that are linked to student achievement; (c) action oriented members who turn goals into action plans and reality; (d) a constant search for better ways to achieve goals and work towards the improvement of the entire school; and (e) a realization that all decisions and teacher actions are based on results data rather than intentions or mere thoughts.

Haberman (2004) identified seven attributes of PLCS at the higher education level that were applicable to both elementary and secondary schools: (a) modeling, where teachers applied the same principles to student learning that they used to guide their own professional learning; (b) continual sharing of ideas, where teachers shared instructional

techniques, curriculum, and the like with their colleagues; (c) collaboration, where teachers became involved with each other in teaching, program development, writing, and research; (d) egalitarianism, meaning everyone came to the table on the same playing field with no hierarchies; (e) high productivity, where teachers continued to increase their workloads; (f) community, where teachers valued the community of team; and (g) practical applications, in which teachers questioned how their practice helped students, teachers, and schools.

Haberman (2004), furthermore, identified characteristics of individual teachers that make up effective PLCs, including being nonjudgmental, acting professionally, listening to students and other teachers, recognizing and compensating for their own weaknesses, not working in isolation, viewing themselves as teachers of children as well as content, learners, non-power seekers, and recognizing the imperative of student success.

Hord and Sommers (2008) found the components of effective PLCs include: shared beliefs, values, and vision; collective learning and its application; structural and relational factors; and a shared personal practice among the members of the learning community. Hord and Sommers (2008) also found that the culture of PLCs includes a focus on a vision of change, expectations, decision-making, and conflict resolution.

DuFour and Eaker (1998) found that effective PLCs establish high standards of learning where the members of the team expect all students to achieve. Furthermore, they stated that in today's post-industrial society, educators have to operate from the premise that it is the purpose of schools to bring all students to their full potential. That means it is critical for members of PLCs to clarify their purpose and accept the

responsibility for achieving those goals.

Darling-Hammond and Richardson (2009) identified several types of collaborative professional learning activities that provided structure to the concept of PLCs. They found that peer observations of practice can enhance teacher practice. Additionally, they argued that assessing student work together in collaborative groups helped teachers define what good student work looks like. Furthermore, they found that study groups aided PLCs in making meaning of new strategies and concepts.

Chappuis, Chappuis, and Stiggins (2009) made several recommendations for implementing successful PLCs in a school including: creating a cultural shift in the direction of a learning team experience; creating an understanding of the process of sustained professional development in a team setting; developing and supporting the skills teachers need for self-directed learning; choosing the appropriate facilitators to lead the professional learning teams, including those who are capable of creating a team environment, establishing and enforcing the norms of the group, and modeling appropriate group behavior; providing appropriate support for the facilitators; and ensuring the active support of school leadership.

The Benefits of Implementing Professional Learning Communities

In addition to defining characteristics and essential attributes of PLCs, research also suggests several benefits of implementing PLCs within a school setting. Vescio, Ross, and Adams (2007) suggested that well-developed PLCs positively impact both teaching practices and student achievement. They summarized that an intense focus on student learning and achievement was the one aspect of PLCs that impacted student learning.

Hord and Sommers (2008) found that when teachers worked together in teams, the feelings of teacher isolation were dramatically reduced. Furthermore, they found that as teachers worked together in groups they began to engage in deep conversations about their own professional teaching practices and in student learning. Moreover, they found that these teachers demonstrated higher commitment to the goals, mission, and vision of their schools when they were able to collaborate with each other.

Grossman, Wineburg, and Woolworth (2001) found additional benefits of PLCs, including a sense of shared responsibility for professional growth among the members, the formation of a group identity, the establishment of norms for group interaction, and the ability to use differences and conflicts in a productive manner.

The Annenberg Institute (2004) found that PLCs have the potential to enhance the professional culture in a school in four key ways: (a) PLCs build the productive relationships that are required to collaborate and carry out a school improvement program; (b) PLCs bring all players, that is, instructors, together in collective, consistent, and context-specific learning; (c) PLCs address the inequities in teaching and learning by offering support to teachers in the community who are weak in certain areas and need professional help; and (d) PLCs promote efforts to improve teacher practice and student results.

PLCs may be especially beneficial to new teachers. Carver (2004) found that PLCs helped new teachers improve their instruction as they learned the ropes of the profession. Additionally, she found that in PLCs new teachers gained confidence through teachers helping each other and by solving their own problems. Furthermore, she found

that new teachers came to feel empowered professionally and responsible for their own professional growth when they worked collaboratively with veteran teachers in a PLC.

Sustaining Professional Learning Communities

Research suggests that professional development is an important ingredient in the success of sustaining PLCs. Wei, Andree, and Darling-Hammond (2009) examined the professional development opportunities provided for teachers in several high-achieving nations, including Finland, Sweden, Japan, South Korea, Singapore, the United Kingdom, and Australia, and found common features in the professional development of teachers, including time for professional learning and collaboration built into the teachers' work hours. Wei et al. (2009) concluded that one critical feature in teacher professional development was the allocation of time in the workday to participate in such activities. They found that 85% of the European countries they studied had such supports built in, whereas it was mostly absent in the United States. Additionally, they found that less than half of the teachers' working time in the European and Asian nations was spent instructing students. The rest of the time was used on tasks related to teaching such as preparing lessons, analyzing teacher practices, assessing student work, observing other teachers' classrooms, and meeting with students and parents. Furthermore, they found that most of the teachers in these other nations did most of their planning in collegial or collaborative settings, whether that was at grade level or in a specific subject area. Finally, Wei et al. (2009) found that, compared to these highly productive nations, teachers in the United States were teaching students about 80% of the school day, while their international colleagues spent about 60% of their school days in front of students. This gave the teachers from the United States much less time to work in collaborative

groups to plan and work together.

There appears to be a need for supporting the sustenance of PLCs. Darling-Hammond and Richardson (2009) argued that the United States needed to learn how to help schools create and sustain PLCs since collaboration means much more than simply bringing groups of teachers together. They contended that the focus of PLCS needed to be on improving instruction. Little (2003) found that positive change comes as a result of colleagues being able to discuss and modify their educational practices as they collaboratively establish standards of teaching quality.

Techniques to support PLCs have been identified. Smith, Wilson, and Corbett (2009) found six conditions that helped urban school districts launch and sustain strong PLCs:

1. Creating a supportive culture was where participants can view their colleagues as caring, cooperative, and intellectually curious

2. Setting up a structure where extended blocks of time during the school day are made available for the professional learning groups to meet

3. Establishing a sense of satisfying processes in the buildings where the PLCs can establish group norms for behavior, where a clear focus can be identified, and where participants have equal opportunities to share their ideas and concerns

4. Providing for the voluntary participation of teachers in PLCs where only those individuals who choose to be members of the PLCs actually participate in the initiatives

5. Demonstrating strong principal support for the PLCs where the building administrators use protocols regularly in meetings, where necessary materials are

purchased for the teacher groups, where principals give members of the groups personal handwritten notes thanking them for their efforts, and where principals preserve the sanctity of PLC meeting time even in the face of many flareups that occur in typical urban school environments

6. Using a cadre of facilitators, both internally and externally, to work with groups over a number of years which can help develop and preserve the knowledge of teachers about PLCs.

The research appears to suggest that if PLCs are to be created and implemented with positive results, then school leadership and teachers must work collaboratively to sustain the viability of the teams as they seek to utilize best practices in increasing student achievement.

The Data Team[™] Model

The model for Data Teams[™] was adopted by Midwestern School District and used in this study. It is appropriate to briefly describe the goals of this educational organization.

The Leadership and Learning Center (LLC), formally known as the Center for Performance Assessment, was founded by Dr. Douglas Reeves. The LLC (2011) provides professional development services for educators and school leaders from both public and private schools in all grades from Kindergarten through college. The LLC provides services for its clients in the area of standards, assessment, instruction, accountability, data analysis, and leadership. The LLC claims on the homepage of its website: "The Center distinguishes itself from other professional development and publishing organizations by bridging the critical gap from research to action by ensuring deep implementation that creates real change and sustainable student achievement learning" (LLC, 2011).

The LLC (2011) is known world-wide for its work with high poverty, high minority schools, the 90/90/90 schools, which are schools with 90% poverty, 90% minority, and 90% of students meeting proficiency or greater on state standards assessment measures.

The LLC developed a model which incorporated components of Data Teams[™], data-driven decision-making, effective teaching strategies, and making standards work to train school and classroom leaders to become better professionals and aid in student achievement.

The Data Teams[™] (Besser et al., 2008) concept initially involved data-driven decision-making by a team of peers who had regularly scheduled meetings. The design of the model called for highly structured meetings. In addition, the facilitator of the team created the agenda, kept track of real clock time, engaged in active listening, and helped the team move through the data process.

The LLC (Besser et al., 2008) used a 10-step approach in its model of PLCs, which included leading participants through the process of collecting data and providing them with the tools they need to make concrete decisions that lead to individual and school improvement.

The LLC training manual (Besser et al., 2008) for effective teaching strategies suggested that in order to maximize student learning, effective lessons must be prepared and delivered competently by teachers. Additionally the LLC (Besser et al., 2008) indicated that performance assessment was an effective way to improve the performance

of students, not only in the classroom, but also on high-stakes tests such as the state assessments. Reeves (Besser et al., 2008) created the Data Team[™] model which teacher professional learning groups could use to create standards-based performance assessments.

Data Teams^{тм}

The purpose of Data Teams[™] is to improve student learning and teacher practice. Allison et al. (2010) claimed that "Professional Learning Communities are what we are; Data Teams[™] are what we do" (p. 2).

Allison et al. (2010) argued that as a structure PLCs are composed of a group of teachers who teach at the same grade level or some other similar focus such as subject area. These groups with similar interests are able to focus on student learning because the teams use the same assessment measures to determine student growth. Additionally these teachers have an understanding of what proficiency looks like, and they have high expectations for all students in their classrooms. Allison et al. (2010) described Data Teams[™] as a systematic process of looking at student learning and evidence where members of the team are able to conduct evidence-based (data-driven) conversations on teaching and learning, including the five-step Data Team[™] meeting cycle: (a) collecting and charting data; (b) analyzing data and prioritizing needs; (c) establishing SMART goals (specific, measurable, achievable, relevant, and timely); (d) selecting instructional strategies; and (e) determining results indicators.

Data Teams[™] that are high functioning incorporate the essential principles of data-driven decision making. White (2005) referred to these principles as antecedents, accountability, and collaboration. Antecedents, according to White (2005), are those

adult actions or instructional strategies that precede student achievement outcomes. McNulty and Besser (2010) asserted that effective Data Teams[™] have deliberate, explicit conversations around those antecedents. As they measure the outcomes of these antecedents through common assessments, Data Teams[™] become capable of determining which antecedents are effective and which should be reworked or discontinued.

White (2005) used the word *accountability* in terms of what happens internally within the Data TeamTM, not what happens on the state test. McNulty and Besser (2010) stated that since Data TeamsTM are teacher driven and student centered, members can use the structure of the team to create their own action plans for instruction, leadership, and student learning, all driven by the formative data the team collects on student learning and adult practices.

White (2005) stated that collaboration was necessary to make sure all voices on the Data Team[™] are heard. McNulty and Besser (2010) argued that collaboration breaks down the barriers of isolation and is the thread of decision-making processes. They stated, "The beauty of Data Teams[™] is just that—data provide for a focused, collaborative dialogue. Conversations are not driven by excuses and complaints. Teams collaboratively and enthusiastically work toward a common goal, select common strategies, and celebrate results—together" (p. 8).

Collaboration is nothing new to educators. For many years, cooperative learning has been recognized as an important component in the teaching-learning process. White (2005) suggested that collaboration among teachers with student data appears to be equally important because looking at raw data alone does not provide the answers for improving instruction and student achievement.

DuFour and Eaker (1998) found that the most promising strategy for sustained substantive school improvement was through the ability to create PLCs with school personnel. By professional, DuFour and Eaker (1998) meant highly qualified trained individuals who are not only specialists in their fields, but who are expected to remain current in the body of knowledge of their chosen profession. They contended that by remaining current, professional educators can work in collaborative settings to better achieve the goals of student improvement.

Teachers who are fully engaged participants in Data Teams[™] operate within a structured PLC that focuses on what to do to improve student learning. Additionally, they are faithful in implementing a systematic process for achieving their goals. Finally, they incorporate the essential principles of data-driven decision making including adult actions, accountability, and collaboration.

Data-Driven Decision Making

Rudy and Conrad (2004) described data-driven decision making as the process of collecting, analyzing, and interpreting meaningful school improvement data to make a positive impact on curriculum, instruction, and student learning. They identified four key elements to foster data-driven decision making: (a) leadership in curriculum and instruction; (b) performance indicators; (c) technology; and (d) staff development/ continuous improvement.

Within the context of the leadership element, Rudy and Conrad (2004) stated the following:

Curriculum and instructional leadership that focuses on student progress, relies on student achievement data, and conceptualizes the data in a way that can be graphically portrayed is critical to continuous improvement efforts. This type of data

driven decision-making in schools increasingly is an integral part of district and school-level accountability plans. (p. 40)

Rudy and Conrad (2004) also found that performance indicators which are administered at multiple times; aligned with instructional standards; and collected, scored, recorded, and disaggregated all lead to student improvement. Rudy and Conrad (2004) also suggested that technology plays a key role in helping schools disaggregate student data in order to measure progress. Their contention was that well-organized staffdevelopment plans must be implemented if teachers are going to have the ability to do any of the above.

Richardson (2000) asserted that schools have to collect data to make sure they are moving in the right direction and that they are on target. Richardson (2000) identified a Process for using student data to improve student learning. First, he suggested that teachers collect basic information on student demographics and achievement.

Second, they should identify additional data such as standardized test scores, grades, and classroom assessments. Third, educators should disaggregate the data based on the characteristics of the first step. Fourth, they should perform an analysis of the data. This can be done by asking questions such as what are the highest or lowest performing groups. Fifth, they should summarize the data. Sixth, they should brainstorm causes to suggest possible explanations of the phenomenon. Seventh, they should collect more data to determine which possible explanations are correct. Eighth, they should analyze and summarize the data. Ninth, they should identify goals that will lead to student achievement. Finally, the teachers should repeat the process all over again with a new set of data.

Effective Teaching Strategies

It would not have been difficult for teachers a generation ago to decide that it did not matter what they did in terms of classroom instructional strategies because most of what influenced student success came from outside of the classroom anyway. This thought was supported by the conclusions reached by Coleman (1966) in what became known as the Coleman Report. He indicated that only about 10% of the variance in student achievement could be attributed to the quality of instruction in the schools. The other 90%, according to Coleman, probably came from factors such as the home, socioeconomic status, and natural ability. Jenks (as cited in Marzano et al., 2001) corroborated Coleman's findings by stating, "Most differences in test scores are due to factors that schools do not control" (p. 2).

Recent studies have concluded, however, that teachers do have more influence on student achievement than had been earlier thought. Wright, Horn, and Sanders (1997) found that teachers do have an effect on student learning. They stated:

The results of this study well document that the most important factor affecting student learning is the teacher. In addition, the results show wide variation in effectiveness among teachers. The immediate and clear implication of this finding is that seemingly more can be done to improve education by improving the effectiveness of teachers than by any other single factor. Effective teachers appear to be effective with students of all achievement levels, regardless of the level of heterogeneity in their classrooms. If the teacher is ineffective, students under that teacher's tutelage will achieve inadequate progress academically, regardless of how similar or different they are regarding their academic achievement. . . . Students in classrooms of very effective teachers, following relatively ineffective teachers, make excellent academic gains, but not enough to offset previous evidence of less than expected gains. (pp. 63, 64)

Current research on teacher actions suggests there are specific strategies that teachers can use to improve student achievement. Hattie (2009) concluded in his metaanalyses relating to school achievement that successful learning on the part of students was dependent on several factors: the worthwhileness and clarity of the instruction piece; the power of using multiple instructional strategies with a particular emphasis on feedback; seeing the teaching and learning dynamic through the lens of the student; and relying on strategies of learning (p. 199).

Marzano et al. (2001), in their meta-analysis of teaching practices, identified nine powerful categories of research-based instructional strategies that teachers can use to guide classroom practice and maximize the possibility of enhancing student achievement (p. 7).

The nine categories identified by Marzano et al. (2001) are:

1. Identifying similarities and differences, including comparing, classifying, metaphors, and analogies

2. Summarizing and note taking including a rule-based summary, summary frames, reciprocal teaching, and teacher-based and student-based note taking

3. Reinforcing effort and providing recognition including the use of effort and achievement rubrics, using pause/prompt/praise, and incorporating concrete symbols of recognition

4. Homework and practice, establishing and communicating a homework policy, giving homework assignments that provide the intended purpose and outcomes of the work students are asked to complete, and by varying the approaches in which feedback is given to students on the homework that was completed

5. Nonlinguistic representations such as graphic organizers, physical models, mental pictures, drawing pictures, and kinesthetic activities

6. Cooperative learning including a large variety of formal and informal

structures

7. Setting objectives and providing feedback including the use of goal setting, contracts, and corrective and timely feedback

8. Generating and testing hypotheses such as problem solving, historical investigations, inventions, experimental inquiry, and decision making

9. Cues, questions, and advance organizers such as explicit cues, questions that elicit inferences, analytic questions, and advance organizers.

Since 1972, Joyce et al. (2004) have identified teacher/researchercreated and tested models of teaching and learning that have been used extensively in improving student learning. These strategies included the categories of inquiry, inductive reasoning, concept attainment, memorization, synectics, advance organizers, and direct instruction.

Jones (2000) introduced the trimodal cycle of cognitive comprehension that is commonly referred to as the say-see-do cycle of teaching. This model is particularly effective as it connects the three modalities of learning (hearing, saying, and doing) almost simultaneously. In addition, it is done one step at a time with small amounts of information to curb the tendency towards cognitive overload.

The ability of the teacher to determine the appropriate instructional strategy, even if that means differentiating instruction, is a major key to student learning. Hattie (2009) argued:

The act of teaching requires deliberate interventions to ensure that there is cognitive change in the student: thus the key ingredients are awareness of the learning intentions, knowing when a student is successful in attaining those intentions, having sufficient understanding of the student's understanding as he or she comes to the task, and knowing enough about the content to provide meaningful and challenging experiences in some sort of progressive development. It involves an experienced

teacher who knows a range of learning strategies to provide the student when they seem not to understand, to provide direction and re-direction in terms of the content being understood and thus maximize the power of feedback, and having the skill to "get out the way" when learning is progressing towards the success criteria. (p. 23)

Assessment Practices in Schools

With the current practice of accountability through student performance, one could draw the conclusion that this is a relatively recent development in American society. But this is not the case. Assessment initiatives in schools are nothing new. Angelo (1995) described assessment as an ongoing process aimed at understanding and improving student learning. He went on to say that this would involve teachers making their expectations explicit and public, setting appropriate criteria and high standards for learning quality; systematically gathering; analyzing; and interpreting evidence to determine how well performance matches those expectations and standards; and using the resulting information to document, explain, and improve performance. Dietel, Herman, and Knuth (1991) defined assessment as any method used to better understand the current knowledge that a student possesses.

History of Assessments in Schools

Mazzeo (2001) divided the history of assessment in United States schools into three different timeframes. The first era commenced roughly around 1865 and continued through the 1930s. Mazzeo labeled this era the "examination" framework. During this time frame, states saw the testing of students as a legitimate means for promoting them from one level to the next. Mazzeo (2001) reported that at least 12 states used written examinations to decide if students were ready to matriculate from elementary school to high school. Mazzeo (2001) referred to the second phase of assessment history in the United States as the "guidance policy" era. Beginning roughly in the late 1920s and continuing through the late 1960s, this timeframe was marked by the theory that information about student abilities, desires, and successes would allow teachers to diagnose student learning problems and help them become more effective and efficient learners. During this era new standardized tests were developed which were intended to move students into appropriate academic programs.

Mazzeo's (2001) third era of assessment in American schools began in the early 70s and continues currently. He coined this era with the term "accountability." Mazzeo (2001) reported that the initial theory supporting this latest era in assessment suggested if schools were given the proper information concerning student achievement, local and state educators could identify educational problems and use this newfound knowledge to create interventions to improve the performance for all students. He stated that by the early 1980s states began to move from detecting problems to changing behavior of both individuals and schools. He went on to say that in the most recent endeavors, accountability is better defined as affecting the behavior of individuals and institutions. This trend was reflected in the most recent and sweeping federal legislation on school reform known as NCLB.

Popham (2008) attributed the current interest in assessment to the work of two British researchers, Paul Black and Dylan Wiliam (1998). These researchers argued that the incorporation of formative assessment helped students learn what was being taught to a substantially greater degree and that student gains in learning which were attributed to assessments had some of the largest student gains ever reported.

Guidelines for Assessment Measures

The NCLB law was actually the re-appropriation of the earlier Elementary and Secondary Education Act of 1965 (Yell & Drasgow, 2005). The requirements of NCLB included a requirement that all states had to create a state-wide assessment system which was aligned to the state standards in the areas of Math and English/Language Arts. According to Yell and Drasgow (2005), the purpose of state testing was to measure how successfully students were learning what was expected of them. Critics of NCLB, however, decried this approach to measuring student success, stating that much more was needed than state-wide assessments if students were going to be ready to perform at proficient levels.

Reeves (2000) proposed that an effective assessment or accountability system must adequately address four important questions. The first area dealt with individual student achievement. The second area surrounded the performance of a school as a whole, not just the individual student. The third question focused on effective ways to help students learn. The fourth and final area suggested ways of determining educational effectiveness. Reeves suggested that test scores were important in determining the answers to these questions; however, these quantitative data in and of themselves were insufficient. Other important qualitative variables also had to be considered, including how to interpret the numbers and the context in which the test scores arose. He purported that it was through a combination of these two methods that answers to questions on assessment and accountability could be fully understood.

Use of Standards in Assessment

Standards serve as the bases of the content teachers are expected to teach and the skills students are expected to master. Borich (2004) described standards in an educational setting as "general expressions of a community's values that give the people living there a sense of direction. They are written broadly enough to be acceptable to large numbers of individuals such as teachers, school administrators, parents, and even the American taxpayer.

O'Shea (2005) stated that schools would not be able to make adequate yearly progress as mandated under NCLB without a coherent system for addressing state standards. He created a Standards Achievement Planning Cycle (SAPC) as a thorough model for helping schools meet the standards, which then lead to adequate yearly progress. O'Shea's (2005) Five Step Approach included: (a) identifying which standards are to be addressed; (b) analyzing the selected standards and the narrative of the frameworks on which they are built; (c) describing student performance or products; (d) selecting and sequencing learning activities; and (e) evaluating student performances and products.

Summary

In summary, assessment has been a critical component of educational institutions for over 140 years. It has not been until recent history, however, that assessment has turned to the concept of accountability. The stakes for educators in the area of accountability have been heightened under NCLB. In order to meet the requirements of this federal legislation, schools have sought advice from expert organizations to help with school improvement initiatives. One such approach utilizes a team approach to use

student data to make timely decisions, create and implement effective teaching strategies, and use standards effectively to meet individual and institutional goals. Gaining an insight on the experiences, attitudes, and beliefs teachers bring with them to the team will provide valuable information to other educators and systems as they seek to improve student performance via Data TeamsTM.

CHAPTER 3

METHODOLOGY

Introduction

The overall purpose of this investigation was to explore the experiences, attitudes, and beliefs of 10 elementary teachers who were required to serve in PLCs known as Data Teams[™]. The members were required to participate in the creation of a viable team which, in turn, was expected to engage in data-driven decision making in order to produce results that would yield a positive impact on classroom practices and student academic achievement. The intention of this study was to utilize the qualitative methods of case study to gain insight into these experiences, attitudes, and beliefs of teachers as these 10 educators worked through the processes of creating and implementing their Data Teams[™]. The knowledge gained from this research data provided an avenue of professional insight for teachers who are in the beginning stages of participating in datadriven decision making as a part of a PLC.

The structure of chapter 3 outlines the methodological considerations related to the study. First, the research design is described. A description of the population and the sample selection is included. The chapter also focuses on the stated problem. This is followed by a section on qualitative instrumentation which covers validity and reliability. A listing of the research questions follows. The chapter covers the procedures for data

collection, data processing, and analysis. A summary concludes the chapter.

Research Design

I selected qualitative case study to explore the life experiences, attitudes, and beliefs of elementary teachers who began the process of serving on Data Teams[™]. I decided to use a qualitative case study design for this investigation because it was assumed the experiences of those who have gone through the process of developing effective PLCs which focus on student data would be gleaned from the data collected. Qualitative methods were invaluable to this study as it sought to explore the narratives of these educators.

Yin (2003) supported the use of case study as an appropriate research methodology and offered a model for developing case studies. Merriam (1998) referred to the end product of a case study as being rich and thick, which could lead to a new understanding of the phenomenon under study. Merriam (1998) identified several key characteristics of qualitative research, including: (a) an interest in understanding the meaning people have constructed; (b) the researcher as the primary instrument for data collection and analysis; (c) a fieldwork component; (d) it primarily employs an inductive research strategy; and (e) the product is richly descriptive. Teaching, at its very core, is grounded in human interaction and experiences. A qualitative design is appropriate at understanding the roots of the meaning teachers have constructed as the researcher collects and analyzes data, then produces a richly descriptive narrative from the voices of these teachers. I examined the case studies of 10 teachers serving on one of three Data TeamsTM. This helped create a guide for collecting data in tracing the process and implementation of PLCs.

Description of Population and Sample Selection

Teachers from three elementary-level Data Teams[™] in Midwestern School District were chosen for this study. The selection of the Data Teams[™] was a purposeful process (Patton, 1990). Taylor-Powell (1998) described purposeful sampling as carefully selecting the population for the study. Merriam (1998) stated that a purposeful design is based on the assumption that the researcher chooses a sample that will yield the greatest amount of information for him to gain the most insight and understanding possible. To begin purposive sampling, it was necessary for me to determine what selection criteria were essential in choosing the 10 teachers from the three Data Teams[™]. LeCompte and Preissle (1993) called this criterion-based selection in which the researcher creates a list of the attributes most essential to the study and then searches and selects those subjects that contain those attributes. I accomplished this by asking the building administrators from the district's 14 elementary schools to rank the effectiveness of the Data Teams[™] in their schools (Appendix 2). Once the principals had determined which Data Team[™] in their respective buildings was ranked highest, they used a 5-point scale in each of five categories to rate the expected performance of that Data TeamTM. The three Data Teams[™] with the highest ratings were invited to participate in the study. One Data TeamTM declined the request, so the fourth highest rated Data TeamTM was selected.

The 10 participants were self-contained classroom teachers who were members of a grade-level Data Team[™]. Midwestern School District had a wide spectrum of demographics, including affluent suburban-type communities, urban settings with a high percentage of under-represented minority and/or high-poverty students, and workingclass families. The district was also diverse ethnically. Information gleaned from

the 10 teachers and their three Data Teams[™] provided insight to the district as a whole.

Prior to the selection of the Data Teams[™], I sought permission to engage in qualitative research from the district superintendent (Appendix 2). He asked me to present the proposal to the Board of School Trustees as per district protocol for conducting research within Midwestern School District. Once permission was obtained from the school board, the superintendent asked me to present the proposed study before the district's Professional Relations Group (PRG), a district committee whose purpose is to settle affairs between administration and the teacher association. The leadership from the teacher association granted its endorsement to the research.

Once all of the permissions were granted, including approval from the Andrews University Institutional Review Board (Appendix 3), the superintendent, the Board of School Trustees, and the teacher association, I invited the teachers from the three Data TeamsTM ranking highest to participate in the study (Appendix 2).

Limitations

There was the chance that there could have been a hesitancy on the part of some teachers to openly express themselves, while others may have given only varying degrees of disclosure. This was particularly possible since I am a district-level administrator in the school corporation. As such, I attempted to step outside of my role as a district administrator, and carefully listened to the stories from the perspective of the teachers. I then related those stories as they were told.

There was also the possibility of bias in the analysis of the data. Conclusions had to be drawn directly from the stories generated from the respondents. I made every effort not to change the content or the context in which statements were given. The respondents

were given the opportunity to read the analysis of the data to check for accuracy and reduce any bias.

Statement of Problem

The opportunity to explore the attitudes, perceptions, and beliefs of the teachers in their natural environments was the ideal. Through observation and semi-structured interviews I was able to gain information which led to a richer understanding of the study during data analysis. The process of actively questioning data, seeking relationships, sorting, questioning thinking, and constructing conjectures added to the exquisiteness of this research.

According to Schmoker (2006), the surest, fastest path to instructional improvement is done through what he called PLCs. The problem I sought to address was an exploration of the voices from members of such PLCs. First, exploring individual teacher experiences, beliefs, and attitudes provided useful insight on the organization, structure, and group dynamics of Data TeamsTM. Furthermore, this exploration afforded insight on how to choose appropriate materials in terms of determining which data to analyze, which assessments to use or create, which interventions to employ, and which instructional strategies to use. The missing link was the voices from those who make up membership in the Data TeamsTM. I sought to listen to those voices and record how these teachers felt about switching to a new paradigm of professional instruction and student learning through the Data TeamTM process.

Qualitative Instrumentation

Merriam (1998) stated that internal validity has to do with how research findings

match reality. She asked, "How congruent are the findings with reality? Do the findings capture what is really there? Are investigators observing or measuring what they think they are measuring?" Merriam (1998) identified six basic strategies to enhance internal validity: (a) triangulation; (b) member checks; (c) long-term observation; (d) peer examination; (e) participatory or collaborative modes of research; and (f) researcher's biases. The procedures I followed in this study to validate the qualitative characteristics of trustworthiness, credibility, and authenticity were: (a) triangulation, where I used multiple sources of data to confirm the emerging findings; (b) member checks, where I took data and the initial interpretation back to the teachers for their feedback and input; (c) observation, where I observed Data Team[™] meetings and the teachers in their classrooms; (d) peer examination, where I asked my dissertation chair to comment on the findings as they emerged; and (e) researcher biases, where I clarified my own assumptions concerning the study.

The voices from the teachers were utilized as the catalyst in obtaining the information. Observational techniques for Data Team[™] meetings and individual classroom instruction, coupled with semi-structured interviews with the teachers, were employed to reach this goal. Lichtman (2006) identified several main components of qualitative observations, including: (a) identifying a specific aspect to study; (b) identifying three to five areas to look at, such as conversations and nonverbal communication; (c) deciding to take notes whether that be in written form or captured from some sort of electronic device; (d) determining the length of time for each observation; (e) settling in a location conducive to viewing and hearing; (f) capturing the physical surroundings; and (g) describing the main characters in the research since the

study is about human interactions. Observing the Data Team[™] and observing each individual teacher gave me the opportunity to study and understand the phenomenon that transpired.

One-on-one semi-structured interviews were conducted with the 10 participants in order to draw out their individual stories. According to Patton (1990) the main purpose of an interview is to obtain a special type of information. The researcher wants to find out what is on the mind of the participants in the research study. Merriam (1998) asserted that interviews are important when researchers want to find out how people interpret the world around them. A set of open-ended questions was used to illicit responses from the members of the Data Teams[™] during the interviews. Merriam (1998) stated that, for the most part, interviewing in qualitative research is far less structured and more on the open-ended side. Lichtman (2006) contended that in qualitative research semi-structured questions can open up new doors to learn what others think and feel; they can address ways to listen to participants speak in their own words. The interviews conducted in this study provided clarity, meaning, and multiple perspectives as each individual teacher shared her or his attitudes, experiences, and beliefs around collaboration in a Data Team[™] structure (see Appendix 1).

Participant Interview Questions

The following questions were used to help direct my discussion with each of the teachers during the interviews:

 Please describe your understanding of the definition and purpose of Data Teams[™].

2. Describe what your team looks for when you measure student achievement.

3. What variables that affect student achievement are within the control of the team?

4. In what ways do you explain results in students' achievement? Why?

5. How do you determine what data to use when determining student achievement?

6. Explain how membership to your Data Team[™] was determined.

7. How did your team determine the roles for each member? Why was it done in this way?

8. How do you determine which teaching strategies to implement?

9. How have your personal experiences, beliefs, attitudes, and actions impacted student achievement? Success of the Data TeamTM?

10. How does your team measure student success? Success as a team?

11. Describe how the team deals with conflict or disagreements within the team.

12. Describe the communication expectations of individual team members. How is information shared among team members?

13. How does the team share data internally? Publically?

14. What does collaboration look like in your Data Team[™]?

15. Explain how your team started collaborating?

16. What have individual members done to sustain a collaborative environment

in your Data Team[™]?

17. Explain how each of the following has impacted the effectiveness of your

Data TeamTM: (a) accountability to colleagues on the team; (b) promptness to meetings;

(c) attitude (positive, negative, or passive); (d) preparedness for team meetings; (e) belief
in the concept that all students can learn; (f) participation in meetings; (g) reliability of each member; (h) support of team decisions; (i) support of colleagues.

18. Describe a typical Data TeamTM meeting and how you prepare for one.

19. Prior to membership on this Data Team[™], what other experiences have you had in working on teacher teams? What is similar? What is different?

20. Describe your team's assessment procedures from creating, to administering, to scoring, to reporting.

In addition to the voices of the teachers, other sources possessed critical information and were, therefore, gathered. These sources included interviews with the building principals, the district's consultants, the Director of Curriculum and Instruction, minutes from Data Team[™] meetings, copies of interventions and assessments the Data Teams[™] created, results from the interventions, notes taken from observations, and oral and written communication from other informants.

Once the Institutional Review Board (IRB) gave its approval to the study, pseudonyms were used to identify each of the schools and each of the respondents. This anonymity allowed responses to be honest and forthright, thus contributing to the validity of the study.

Merriam (1998) declared that reliability in the traditional sense of the word is a misfit in qualitative research, so rather than demanding that outsiders get the same results, a qualitative researcher wishes outsiders to concur that the results make sense, that they are consistent, and that they are dependable. The chair of my dissertation committee was used for peer examination and he monitored and reviewed my work throughout the course of the study. The dissertation committee checked for consistent

patterns of theme development and examined the consistency of responses, thus ensuring the presence of the essential elements of qualitative reliability.

Research Questions

I formulated the interview questions with the three research questions in mind and in context with the theoretical framework concerning professional learning groups in educational settings. These inquiries centered on the main research questions for the study:

1. What professional experiences have helped elementary teachers become effective collaborators in Data Teams[™]?

2. Once Data Teams[™] were developed and implemented, what influenced teachers to become cooperative collaborators?

3. How did individual teacher experiences, attitudes, and beliefs impact the work of Data Teams[™] as these PLCS used the results of standards-based assessments to analyze student work and teacher actions, identify student strengths and areas needing growth, establish instructional goals, select effective teaching strategies and interventions, and determine results indicators?

Questions for the teachers explored: (a) their experiences of working in PLCs prior to and during their current appointment to a Data TeamTM; (b) their attitudes about being compelled to be a contributing member to a Data TeamTM; (c) their attitudes and beliefs about working in PLCs both before and during their Data TeamTM experiences; (d) their experiences and beliefs on the use of student data to enhance learning; (e) their experiences attitudes and beliefs about incorporating different teaching strategies as interventions designed to help students meet academic standards; (f) their experiences,

attitudes, and perceptions on the definition, purpose, and use of assessments, and (g) how they know when interventions are working and if assessments are appropriate.

Procedures for Data Collection/Processing and Analysis

Data were collected in several ways. Notes were taken during classroom visits throughout the duration of the school year. The Data Teams[™] met at least once a month for no less than 1 hour during this time frame. Notes and videotape were taken at Data Team[™] meetings for each group of teachers. Data Team[™] minutes that the teams had to submit to their building administrators were examined. Semi-structured interviews with the teachers were captured electronically. I interviewed the members of the Data Teams[™] individually during this period. Additional data were collected from the Data Teams[™] for analysis, including intervention pieces and assessments created or agreed upon by the Data Teams[™]. Furthermore, the administrators of the buildings were interviewed to obtain their perspectives on the Data Team[™] process.

The interviews and Data Team[™] meeting observations were electronically preserved through video and digital recording devices. The data were transcribed via word processor. All names and references to the individual schools and the district were replaced with pseudonyms. In managing the data, the teacher responses were initially coded by Data Team[™]. Merriam (1998) described coding simply as identifying themes. Joyce et al. (2004) described inductive reasoning techniques as using a data set to make meaning. This technique, attributed to the late Hilda Taba (Joyce et al., 2004) was used in the process of analyzing the data. The responses from the teachers were identified, placed on different colored card stock, and then enumerated. These items were then grouped into categories determined by common attributes. In other words, statements

from the different teachers on the Data TeamTM were grouped together because they seemed to fit with each other. Once all of the data were grouped, labels were given to each group of data, identifying a theme that emerged from the members of that Data TeamTM. This information was recorded on data sheets (Appendix 6). I was looking for relationships and major themes within the realm of the research focus because the assumption was that these themes could have implications for teachers who serve in PLCs.

The next step was to do what Joyce et al. (2004) called mental operations. Taba referred to this as interpreting, inferring, and generalizing. Essentially, I attempted to build hypotheses about relationships of the data, inferred causation, and explored the hypotheses to build generalizations. First, I attempted to identify the critical aspects of the data followed by an identification of cause-effect relationships. This is what Merriam (1998) called within-case analysis where each Data TeamTM was treated as a comprehensive case in and of itself. Chapters 4 through 6 of the dissertation cover each of the Data TeamTM individually.

After a within-case analysis of each Data Team[™] I conducted a cross-case analysis. Merriam (1998) described a cross-case analysis as a qualitative, inductive, multi-case study that seeks to build abstractions across cases. Chapter 7 of the dissertation contains the cross-case analysis which looked for broad reaching themes that expanded across the members of the three Data Teams[™].

Summary

The techniques of qualitative case study were utilized to increase the body of knowledge of teacher perspectives on PLCs. Purposeful and criterion-based sampling

was used in the selection of respondents. The study was conducted in field settings where Data Teams[™] meet and individual teachers operate on a day-to-day basis. The domain of inquiry, or the stated problem, was identified. Careful steps were taken to ensure validity and reliability. Interview questions centered on the research questions. Data were collected, processed, and analyzed using the Taba inductive model of reasoning. This chapter concluded with a description of the cross-case analysis used for the dissertation.

CHAPTER 4

HILLARY CLINTON ELEMENTARY SCHOOL

The Community Setting

According to the Chamber of Commerce, Midwestern City is a mid-size city that has been experiencing a growing population over the past several years. There are a variety of commercial and industrial businesses, a small assortment of educational venues, and several cultural opportunities, all in an attractive setting with trees, parks, and two rivers running through the center of town.

City Description

The city lies adjacent to both east-west and north-south highways, is an important crossroads for the railroad industry, and is close to an airport. The presence of these transportation systems makes it convenient for business and private citizens to gain easy access to major Midwestern cities such as Chicago, Detroit, Indianapolis, and Cleveland. While this is a significant convenience, the community still enjoys the benefits of a midsize town in a combination of urban, suburban, and country living.

Important changes in the economic development of the city have caused a shift in the city's population. The United States Census (2000) lists Whites as the largest racial group in the city at 70%. The other 30% were evenly divided between African American and Latino groups. A major population shift has taken place within the Latino population

which has grown tremendously since 1990. It is now slightly larger than the African American population. This rapid rise has had an impact on Midwestern School District as it has had to adapt to a growing school population of ESL students.

A major corporation has recently moved out of the city, which has had a rather negative effect on the community. Nonetheless, the area maintains a trained and willing workforce which is supported by a varied manufacturing industry. In fact, it is one of the nation's leaders in one specific area of manufacturing. In addition several other products provide employment opportunities. Industrial development continues to expand in the area.

The School Corporation

The school corporation included two high schools, three middle schools, 14 elementary schools, a secondary career center, and an alternative school program. The corporation employed nearly 1,000 teachers, 100 administrators, and scores of support personnel to serve the over 13,000 students in the district. Students came from not only the city, but from other areas of the county as well. There were several other small districts as well as one very large district adjacent to the school district.

School Context

Hillary Clinton Elementary School was located in Midwestern City, a mid-sized city of approximately 51,000 residents. There were almost 14,000 students in Midwestern School District. Hillary Clinton, one of 14 elementary schools in the district, was the only building with a K-2 structure. The school was located in an inner-city urban setting surrounded by mostly rental homes. Approximately 62% of the students rode the school busses while the other 38% walked or were driven. Hillary Clinton was located in a new structure which was designed to meet the needs of primary-grade children. The facility opened in August 2006 with 505 students. The staff included a principal, assistant principal, 33 certified teachers, one ESL, three Special Education teachers, two literacy facilitators, 11 paraprofessionals, two speech and language specialists, one social worker, one part-time behavior specialist, one school psychologist, two office staff, a translator of the Spanish language, and a parent resource individual.

Hillary Clinton Elementary School was reconfigured for the 2006-2007 school year. Prior to this the school had been a K-6 school and was housed in an older building. Due to sanctions under NCLB, Hillary Clinton was made into a K-2 building while another school in the district became a 3-6 building. K-2 students from both old schools now comprised the student body of Hillary Clinton Elementary. A school plan was developed which sought to implement an innovative instructional approach designed to meet the needs of students in the early primary grades. All teachers in the restructured school agreed to a 3-year commitment in their contracts in order to provide stability and consistency to the fledgling program. As part of the new structure, 50 minutes of daily classroom instruction were added to each school day. In addition, teachers were given 3 hours per week for collaboration and professional development.

Demographics

The state's Department of Education (DOE) School Profile in 2008-2009 indicated that Hillary Clinton Elementary School had approximately 588 students representing a diverse economic, cultural, and racial population (Figure 2).



Figure 2: Ethnic makeup of Hillary Clinton Elementary School.

The DOE's 2008-2009 School Profile, as seen in Figure 3, indicated that the majority of the student population fell under the federal government's category of free or reduced-price lunch.

According to DOE information Hillary Clinton's yearly attendance rate has been relatively consistent since 2001, ranging from 94.7% to 95.8%.

Mission

The mission of Hillary Clinton Elementary School was to be committed to the continual pursuit of excellence for all students by inspiring the belief that learning is a lifelong process where every student can become a literate, numerate, responsible, and productive member of society. Its vision was one of inspiring students with a lifelong commitment to the "love of learning in a safe and caring early childhood learning

community." Within the context of this vision, administration and faculty collaboratively utilized student data to drive planning and instruction.



Figure 3: Free or reduced-price lunch students at Hillary Clinton.

The personnel of Hillary Clinton believed that children learn best in an environment that fosters student-centered learning opportunities. In order to fulfill its mission, students were provided with active, developmentally appropriate experiences which were to create a positive learning environment; promote high expectations for all students to reach their fullest potential academically, socially, and behaviorally; and build partnerships between students, staff, families, and the community.

Needs Assessments

Hillary Clinton conducted a comprehensive needs assessment which suggested

the necessity of intensive reform strategies in the areas of Language Arts and Math. The application of newly learned best practices to ensure change and school improvement in these curricular areas became the top priority of the school. A modification of the daily schedule was included in this plan. Three hours of literacy instruction and 90 minutes of mathematics instruction were added to the daily schedule. The district literacy framework, a scientifically based research program, was implemented to focus on the needs of students who were performing poorly and at risk for failure. The scientifically based Everyday Mathematics program was adopted for the same purpose. Time was spent to align both these programs with the state's academic standards. Two other core areas of instruction—Science and Social Studies—were also aligned with the state standards. Teachers utilized the STC Carolina Science Kits (Science & Technology for Children, 2002) in science instruction. Teachers posted the standards and indicators that were being covered on a daily basis. In addition, samples of student work and data from pre- and post-assessments were displayed in each classroom. The literacy facilitators and professional development in ESL provided support to classroom teachers. In addition, students were assessed on a continual basis so staff could use the results to make appropriate decisions on the next steps to be taken. Finally the teachers completed training in three specific workshops: (a) Data TeamsTM—a workshop designed to introduce participants to the Data Team[™] model; (b) Effective Teaching Strategies—a workshop designed to introduce participants to scientifically research-based best practices in classroom instruction; and (c) Making Standards Work—a workshop designed to assist participants in effectively understanding and implementing a standardsbased curriculum.

Teachers at Hillary Clinton were divided into grade-level PLCs called Data Teams[™]. The purpose was for members to work collaboratively in order to establish and maintain the highest possible expectations for student performance.

Parental involvement was an important component of the school's restructuring plan. Activities and workshops for parents were planned and carried out along with the 3-6 sister school. Many parents had students in both buildings, and a coordinated effort at reaching the needs of these parents was deemed to be the best use of resources. The workshops covered a broad range of topics including lessons in ESL, family reading nights, and helping with children's academic success.

A school safety committee was created in the summer and early fall of 2006. Consisting of representatives from the teaching staff and administration, the committee developed a comprehensive school safety plan in order to provide students with a safe and orderly school and learning environment. Essential components of the plan focused on child abuse reporting procedures, disaster response procedures, entry into the facility, sexual harassment, suspension and expulsion, dress code, and a positive behavior plan. The building was equipped with the latest technological safety devices such as swipe cards for building entry, video cameras at entrances, intercom links to the office, classroom telephones, and hand-held radios.

The staff was trained in the fall of 2006 in a conflict resolution and peer mediation training program developed by the state's bar association, the Department of Education, and the State Attorney General's office. This program, which was a joint private/public venture, introduced dispute resolution techniques to elementary and middle schools throughout the state. The goal of the program was to reduce conflicts and violence in schools by teaching students how to discuss and mediate their disagreements rather than reverting to fighting or bullying. In this program, students themselves became active participants in their own behavior. The staff also created a School Climate Committee comprised of teachers, paraprofessionals, social workers, the parent coordinator, a behavior consultant, and administrators to help support this positive behavior program. Each member of the committee went through the training, and the remainder of the staff was in the process of completing it during my visits with the school.

The school safety program was reviewed annually. Recommendations were shared from staff, community, the School Improvement Committee, the Principal's Advisory Committee, and the parent organization. Based on these recommendations changes were made to the plan and presented to the staff the following fall. This collaborative approach was designed to offer the best possible learning environment for students.

School-Wide Plan

Personnel at Hillary Clinton compiled data from standardized examinations, local district assessments, and surveys to create a school-wide improvement plan, meaning teachers at all grade levels would work to reach the same goals by the year 2010. The use of effective data-driven decision-making techniques allowed the staff to eliminate personal bias and preferences and it was able to concentrate on verified areas of need for improvement. The staff's implementation of the curriculum and instructional practices was examined. Then student performance on the standardized and local assessments was

studied. These data were collected and disaggregated to determine the student strengths and needs. The results provided the foundation from which the school-wide improvement plan was created and whereby teachers were expected to provide standardsbased instruction using scientifically research-based effective teaching practices, all guided by the district's curriculum guide. That would, it was believed, result in continuous student improvement.

Three goals were selected for Hillary Clinton: (a) 66% of third-graders would reach proficiency on the state Mathematics assessment; (b) 66% of third-graders would reach proficiency English/Language Arts assessment; and (c) 66% of third-graders would score in the top half of a 6-point scale on the writing section of the state assessment.

The faculty agreed to implement eight main activities as a means of reaching the goals of the school-wide improvement plan.

1. Teachers would be assigned to grade-alike Data Teams[™]. These teams would meet on a weekly basis to set objectives, analyze student outcomes, and create targets on the standards to increase student achievement.

2. Data Teams[™] would monitor and review student progress based on the results of common formative assessments. It was expected that the Data Teams[™] would analyze assessment data as a means of identifying areas of strength, improving student academic achievement, and assessing teaching strategies. I focused on one of the first-grade Data Teams[™].

3. All teachers would participate in regularly scheduled school-wide discussions concerning the impact of adult behaviors on student achievement.

4. Staff would continue to disaggregate test and other data.

5. Teachers would review test results with parents and students during parentteacher conferences.

6. Teachers would use common scoring guides to rate student assessments.

7. Intervention opportunities for students who did not meet proficiency would be offered and shared with parents.

8. Assessment data would be shared with the School Improvement Committee and stakeholders would be briefed periodically on the success of the school-wide improvement plan.

The Case Study

It was within the context of this school setting and its school-wide improvement plan that I walked into the lives of one first-grade Data Team[™] at Hillary Clinton. There were eight first-grade classrooms at the school. The teachers were divided into two Data Teams[™] of equal size. The four teachers from the Data Team[™] in this case study had a diverse background in terms of experience and training; however, they were quite homogeneous when it came to ethnicity and socioeconomic background. The homogeneity of these two characteristics sharply contrasted with the ethnic and economic backgrounds with the vast majority of the students. The four teachers were middle-class Caucasians while 91% percent of the student population was free or reduced-price lunch and 87% percent were members of a minority group. This demographic discrepancy was not uncommon for the district as a whole. Let's meet these four teachers. The following names are used for these teachers: Heather, Nancy, Heidi, and Christina. Heather

Heather was one of eight first-grade teachers at Hillary Clinton. She was in her seventh year of teaching. Her career began at the old Hillary Clinton, where she served as one of the sixth-grade teachers. Three years later she moved to another state and taught second grade for 3 years and sixth grade for one half of a year. When I first met her she had just moved back to Midwestern School District where she was in her first year at the new building. Heather began her formal training at a local parochial college in 1992, spent two years studying, dropped out for a period of time, and eventually completed a Bachelor of Arts in Elementary Education. During her interview, Heather stated she wanted to teach Kindergarten, first, or second grade. Having had experience with second grade, that was her first choice. The openings in the district were made known shortly thereafter and Heather was selected for a first-grade position at Hillary Clinton, the school where she most desired to teach. She accepted the position and as she stated. "It has been a learning experience."

The Classroom

Heather occupied one of four classrooms in a pod located on the second floor of the building. The other three classrooms were occupied by other first-grade teachers. The four of them made up one of two first-grade Data TeamsTM. The foyer was bright, full of color, and a large amount of data and examples of student work were posted on the walls. There was a skylight in the foyer which added an extra amount of light to the area. A small worktable and four chairs sat in the middle of the foyer. This area was used for small group and/or individualized instruction by all four teachers in the pod. The foyer

had a raised ceiling and the four sides of the pod rose in such a way that they met at a single point at the top of the ceiling. Hidden fluorescent lights reflected off the white walls. Smoked glass at the top allowed limited lighting to seep through and illuminate the entire pod area. Student lockers were located on the walls in and around the pod area. Student names were written on paper doves and taped to the lockers. The architectural design created a feeling of openness and established a friendly environment.

The inviting spirit of the foyer area carried over into Heather's classroom. Immediately upon entering, I was greeted with an artificial palm tree decorated with Christmas tree lights. Next to the palm and on the left side of the room was a rug area, followed by a mini computer lab and the teacher's desk. Shelves underneath windows were located in the back of the room. Cabinets took up a third wall and a white board stretched across the fourth wall of the classroom. Five student tables were arranged in the middle of the classroom. The teacher's work desk was close by. Two tables for small-group work were located in two corners of the room.

Many student writing samples were posted around the room. Numbers, colors, months of the year, letters, and classroom rules were also posted and in plain view for students to see. A chart containing gold stars by the names of the students was also posted. Each student was encouraged to earn 30 stars throughout the month, thus reaching her or his personal goals.

There were 15 students in the classroom, nine Latino and six African American. Students sat in groups of four, two on one side of a table facing two on the opposite side. Name cards with letters and numbers identified where the students were assigned to sit. Students were provided a mini-trash basket which contained markers, crayons, colored pencils, and other necessary school supplies. Students also had their own dry-erase boards and markers. In addition the students had their own individual baskets where all of their materials were stored. Students tended to stay on task. Whenever a behavior issue arose Heather would stop, take care of the discipline matter, and then return to instruction.

It was rather obvious that data were an important ingredient to Heather. Pre- and post-test data were taped to the door. Standards being worked on were posted on the wall. A question of the day was prominently displayed for students and others to see. The bulletin boards and walls outside of her classroom were filled with student data and samples of proficient student work.

Early Collaboration Experiences

Heather's earliest recollection of collaboration was during her first years at the old Hillary Clinton building. The teachers were required to have grade-level meetings once a week. Heather's group met for half an hour, and the collaboration consisted basically of coordinating activities such as field trips. Heather's first experience of collaboration on instructional issues took place when she moved to another state. While there, she worked with other teachers in unpacking the standards, planning, and finding other ways to collaborate. She found, upon her return to Midwestern School District, that it was in the process of implementing the same collaborative efforts she had learned previously. She did say, however, that the level in intensity was much more prominent in Midwestern. It was her sincere belief that collaboration was going to become the norm across the nation because of NCLB.

The Data Team[™]

Initially, all eight first-grade teachers at Hillary Clinton Elementary were placed on one Data TeamTM. Outside consultants, however, convinced the building administration that the teams had too many members so each grade level was split into two separate Data Teams[™]. Heather was chosen to be the leader of the upstairs firstgrade team. This thrilled her. She said, "I feel so wonderful. Well, I remember getting the email, actually, from the Principal and it said so. I have down that the Data TeamTM leaders are going to be Heather and another first-grade teacher. And I was, like, really? So I called her, I was, like, oh, I'm a leader? She goes, oh, didn't you want to be? And I was, like, sure. I felt like ooh, that's extra work, but I felt like it was kind of an honor or privilege that somebody would value my—I don't know, respect me enough to think that I can handle that, which of course I can handle it. But I mean, you know, like, yes, an affirmation. I like leadership roles. I don't always choose to take them, but I like them. I like being offered them because I feel like I portray a leadership quality, and I like that, because that shows that I'm responsible and people see that." Heather felt it was pretty nice to receive a pat on the back every once in a while.

Team membership

Heather was quite excited about participating in the Data Team[™] process. For her it felt as if she and the other teachers on her team could be on the same page. She stated, "It would just be nice—it is nice. It has been nice, because, you know, Nancy will make a copy of something, or have an idea, and say hey, I have this idea, would you like to use it? Or Heidi or myself or Christina. And so it's been very nice, just because we can bounce ideas off each other." Heather was especially excited over the ability to seek advice from the other team members when she could not think of what instructional strategies to employ. Particularly, she saw this initiative as a great benefit when working with struggling students.

A positive benefit that Heather recognized in her Data Team[™] was that it caused her to stretch further into her instructional repertoire than she ever had to before. Heather claimed she was able to use interventions and meet the needs of even her lower-achieving students. Furthermore, she felt that she was not alone in the process. She believed her team could get ideas from each other, work on a common goal, compare successes and obstacles, and rejoice when they reached the goal. In fact, Heather indicated that up to that point they had reached their goal every single time.

The team at work

Setting realistic goals was especially important to Heather. The Data Team[™] decided it would be important to set reachable, attainable goals. In that way, it would be able to accentuate the positive aspects of learning. According to Heather this was a good thing to have done.

Heather's perspective of the team's work was that it first looked at the students' strengths because it wanted to know what the children could actually do. She believed it was important to look at student ability. The team would then look at what it wanted the students to be able to do at the end of instruction. From there, the team was able to know how to guide student learning and maneuver instruction so students could meet the instructional goal. Once the strengths had been identified, the team moved on to looking

at weaknesses. Heather believed it was important not to put too much stress on students. She believed children should be challenged, but not stressed out. She stated this was the message she constantly tried to deliver in the Data Team[™] meetings, and she believed the other members agreed with her on that point. As she stated, "We want the best for our children. We don't want them to fail."

Member relationships

Heather said that even with all of the excitement of collaboration she had experienced some periods of frustration with Data TeamsTM. On any given collaboration day, the entire faculty met as a whole before breaking into the respective Data TeamTM meetings. This school-wide collaboration meeting took place early in the morning, before students arrived. Not all teachers made it to the meetings on time, including Heather. There were several occasions in which she was tardy due to traffic issues and getting out of bed too late. Teachers who did arrive on time had sat around waiting for the others to show up so the meeting could begin. That was a major frustration for Heather. A second point of contention was the one or two times when she thought a meeting was not necessary and the business could have been handled differently. Other than that, Heather did not have any qualms with her Data TeamTM.

Having had few frustrations with the team did not mean that Heather did not have any conflicts with specific individuals. This was particularly true with one member of the Data Team[™]. Heather stated she and this teacher just knew right away that they did not care for one another. She thought, "Isn't that weird? But you know how you can . . ." Heather said that they got to the point where they were able to at least speak cordially and agree to disagree with each other. There was, in fact, one time when in front of the entire Data Team[™], she and this other teacher admitted they "did not agree on hardly anything, but that was okay." She said they were still able to smile at each other and greet one another in the hall and that was fine for her. Heather sensed that because of this openness there was no tension at all in the team meetings.

Heather expressed one other area of concern. She felt two members tended to dominate the discussion and take over the meetings. She would talk about it with the fourth member of the team and they would discuss how annoying that experience was. She finally decided that she was the kind of person who was quite outspoken and she needed to deal with it directly. As a result, there were several occasions in which Heather told the other team members that their discussion had nothing to do with the team's agenda for the day and everyone needed to get back on task. She said, "They've been pretty receptive to that, and I think it's just because I am the leader that I can say that without anybody pooh-poohing that, you know?" This really seemed to concern Heather because she indicated that it was rather frustrating when she was either cut off or not able to participate in the discussion in a way that was comfortable.

Student Success

Heather defined Data Teams[™] as a means of accountability. She appeared to love the number-crunching aspect of Data Team[™] work and thoroughly enjoyed seeing student growth. But she saw Data Team[™] work as the process of measuring how teachers were doing their jobs. She said, "Children are the ones achieving it, but they're not going to be able to achieve it without the right guidance. So I think it's

accountability. I think it's just to measure what we're doing, and measure our growth." Heather saw this being accomplished by setting realistic, attainable goals and helping students reach those goals.

Heather believed the information she and her teammates were teaching was firmly in their control. She thought the way in which they presented the goals to the children, the way they used manipulatives, the procedures they set in place with the children, the rubrics they created and used to assess student work, and how they established student grades were all under their control and this impacted learning one way or the other, depending on their own behavior as teachers.

Heather believed there were some obstacles she had no control over that had the potential of getting in the way of learning. She stated she could not control the mood students were in when they arrived at the beginning of the day, whether it be from a fight with a sibling or parent, whether it be the fact a student did not eat any breakfast, or whether or not a student had a place to sleep because the family was moving from house to house. All of these obstacles were out of her control.

The Data TeamTM had not addressed how to deal with the obstacles in any of its meetings. However, she attempted to be prepared for such scenarios. For example, there had been several instances where students came to her and indicated they had had nothing to eat that morning, so she kept extra snacks in the cupboard, gave them to these students, and had them go to the peace area in the classroom to eat.

Sharing Results

Heather thought the team was good at filling out the Data TeamTM forms and she

thought that they had promptly submitted their minutes to the Assistant Principal. She also attempted to share results of pre- and post-tests with her students, although recently she had fallen away from that practice due to the difficulty of the English/Language Arts goals which the team had set. She found it was much easier to share Math results with students than English/Language Arts results. She felt Math was clear cut. "This is where we were before, and this is where we are now . . . and I'll tell the students individually this is what you got, and this is how much you grew." Heather believed the difficulty in sharing Language Arts results with first graders was that they did not really understand the one, two, three, four rubric that the team used, while the students could easily understand that in Math if they had 10 right on the pre-test and then got 19 correct on the post-test, then they knew they were growing.

Since Heather was the Data TeamTM leader she was the one who filled out the forms at each meeting. She felt the other team members were prompt in turning their data into her so she could be ready for the meetings. Heather asked Nancy to fill in for her on days she was absent or late to the meeting due to her attendance at another meeting in the building. Basically, Heather filled in the data columns on the forms prior to the meetings and the team then walked through the rest of the forms as they proceeded through the meeting. There were some occasions when Heather was not ready for a meeting and she ended up having to complete the entire forms on her own.

Heather saw value in going through the forms. For her the completed forms provided concrete evidence of reaching their goals. They also showed where students were in the learning, what they had done as teachers, and they recorded exactly what teachers were going to do in instruction so they would not forget what they had agreed to do. Furthermore, Heather believed the forms were useful in helping them see growth. She said, "It's really nice to actually be able to look and see growth, because then you feel like you're doing something right, and you feel like you're really reaching your students."

The teachers found it was a little difficult to set their goals when they initially began with Data Teams[™], according to Heather. They began with Math. First, they attempted to set goals that might be of benefit to the students. Then the teachers would offer different suggestions. They found this did not work because some students were good at certain things and others were good at other things. Then there were times when one teacher would reject an idea that the others thought might work. So, they had to either persuade that teacher or start all over from the beginning. Overall, selecting a goal without data to back it up did not work for this Data Team[™].

Heather was not too thrilled when the building administration decided all Data TeamsTM would focus their work on the same content skill in English/Language Arts. She felt the team was not experienced enough to move into an area that was so abstract in terms of measuring success. Her belief was that teachers scored the rubrics based more on their personal feelings than by any objective measure. Heather believed that in order to have valid data the members had to be consistent in their grading, so they spent time listening to tapes which measured where each of them was in terms of their thought processes and why they would give a student a certain score on the rubric. She felt that if they could not be consistent in their scoring, then any data they collected would be invalid.

Heather believed that Data Team[™] goal setting in one subject area actually began

to influence her selection of teaching strategies in content areas not covered by the team. She came to realize that when she was planning or instructing another subject, a certain strategy discussed and agreed upon by the Data Team[™] could be useful in that context. Heather said she was not necessarily aware of this consciously, but she thought subconsciously that it all came together for her.

Heather said the team used the popcorn method for sharing possible instructional strategies they could implement in their instruction. While three members of the team would agree to use the same strategy, there was one member who Heather categorized as a very strong-willed individual who refused to participate. Heather said, "She just kind of wants to do her own thing." She realized that her team's data would not be totally valid because one member did not use the same strategies as the others. Heather said that at times, however, this uncooperative member of the team acquiesced to the rest of the members and agreed to implement the same instructional strategies.

Heather saw herself as a person who enjoyed the art of collaboration and working with other people. She liked to be around people and had a positive attitude towards Data TeamsTM when it was introduced to the faculty at Hillary Clinton Elementary. She felt at times that there was too much emphasis on the Data TeamTM process. She said, "Like every single week we have to do Data TeamTM stuff, and it's really good because it keeps me accountable, it really is, and it's good because not only am I accountable, but my kids are achieving better because of that, because I have to do it, and they depend on me, you know? But I don't always like having to do all that stuff. It's just a lot of extra work. But it's a good idea." Heather was quick to note that overall she had a very positive attitude towards Data TeamTM, the work her team was doing, the value of the process,

and the positive results that were being manifested in student achievement. Her concern was with what she considered to be the extra things the administration was asking from the Data TeamsTM.

Not only did Heather believe the work of her Data Team[™] was having a positive effect on student achievement, but she also thought this was something that all teachers needed to be doing. She felt that if teachers did not closely examine the areas where students were struggling, and plan how to meet their needs, then there really was no point to being a professional educator. Her reasoning was that if teachers did not go through some process, such as the Data Team[™] process, they could end up teaching things students didn't need to know and not teaching things they did need to know. She thought this was the most valuable piece to the Data Team[™] process.

The Data Team[™] made an agreement that 80% of the students would be proficient on any goal the team would set during its meetings. This included using the agreed-upon strategy or strategies coupled with more intense individualization for students who struggled. The team reasoned that if it could reach that mark, then it would be a successful team. Heather believed their success came not only because they reached all of their goals, but other factors influenced their success as well. She indicated that the group collaborated together on things other than the Data Team[™] work. She felt that, despite the differences and challenges they faced, including the issues with the one teacher who liked to be on her own, the team worked extremely well together. In fact, she said there were other teachers in the building who wanted to join their team because they observed how well they all got along. Additionally, Heather believed everyone on the team had the courage to be direct, bring problems to the team, and apologize when they did something they knew was wrong or hurtful. Heather said, "I love my team. I love my team. It's the best teaching team I've ever had."

Heather believed there were several factors that contributed to the spirit of camaraderie. She thought the diverse amount of experience between the members lent itself to collaboration because new ideas shared with old ideas lead to better planning and instruction. This was illustrated through the practice these teachers had of sharing new-found instructional practices by clipping notes on each other's classroom doors. Heather also sensed a level of excitement throughout the entire building. Since they were starting in a brand-new building, implementing a restructured program, and engaging in a week-long planning extravaganza prior to the start of the school year, the bonding process for the Data Team[™] was enhanced.

Heather did very little work to prepare for Data Team[™] meetings other than making copies of the data sheets. She expected the members to be ready, to stay on task, and to stay within the time parameters of the scheduled meetings. If the team did get off task, Heather was usually the one to remind everyone else to get refocused and back on task. There were times when Heather would assign job responsibilities to other team members such as the creation of the assessments for the next round of instruction.

Heather had a competitive spirit about her when it came to student achievement. For example, one time when the team analyzed its results she said, "I'm like dang, I didn't—my class, I only grew, you know, 10 percent where, you know, Nancy or Heidi or Christina might have grown 15, you know."

Assessments

Heather took assessment results quite personally and got upset if students did not perform to her expectations because she blamed herself for not teaching well. Heather saw her role as a first-grade teacher as the most important element in a child's success. She saw responsibility as a shared enterprise with parents and she felt students had to assume some of their own responsibility when they got older, but for first graders she could envision neither parents nor students themselves capable of having the same impact she could have on student growth.

The Data Team[™] created most of its own assessments. The teachers gathered information from their textbooks, searched the internet for appropriate assessment materials, and worked with each other to create both pre- and post-assessments. This helped them determine the instructional goal(s) and gave them the ability to see if the goals were met at the end of instruction. They also took measures to make sure they were graded the same way. This did not always happen, and one day the realization hit them that two of the teachers were grading an assignment one way while the other two were grading it using a different method. Heather said, "We were, like, oh, wait, we gotta be grading this the same way. I mean, really, I think they might have been coming close, percentage-wise. But it was just so far off that we had to say we have to be grading this the same way all around. Give it the same point value, and stuff like that, so, I think it's very useful."

Précis

Overall, Heather's observation was that "we are able to focus in on what our

classes need to focus in on. We're not wasting time on things that they don't need to know more about because they know enough. However, there are times when it's like oh, another Data Team[™] meeting. But it's very good. I mean, it's something . . . that needs to be done."

Nancy

Nancy was the second member of this first-grade Data Team[™]. She received her educator's license in 1990, but did not engage in the professional practice of teaching in an elementary classroom until many years later. Nancy engaged in several educationrelated experiences prior to classroom teaching. She worked with ESL students, helped out in a middle school, tutored children, worked in pre-school, and then approximately 6 years prior to my visit with her, Nancy began working in adult education, helping people prepare for the GED and learn English. Nancy believed her training in elementary education provided her with the necessary tools to work successfully with adult learners. Nancy was in her first year of full-time elementary classroom teaching when I met her.

These years of experience introduced her to the practice of teamwork. At the site where she worked, Nancy coordinated a team of four or five teachers as they planned and offered instruction to students. She learned the importance of open communication with team members and the necessity to be consistent in planning and practice.

Nancy arrived at Hillary Clinton Elementary full of excitement because she knew this school was embarking upon the journey of collaboration. She said, "I'm going to be where I can bounce ideas off people." In addition, the thought of going into a newly structured K-2 environment brought a certain amount of charm along with it. Nancy reflected, "I was excited about that, because I felt like I wasn't going to be on my own, and I felt that we would be stronger as a grade level, and it's worked out that way, too."

The Data Team

Nancy viewed the work of Data Teams[™] as a process of focusing on students' current strengths and weaknesses. She felt members had to be competent in applying the academic standards across the curriculum, had to have the vision for long-range planning and instruction, the capacity to accurately assess students, and the ability to make decisions on the next steps of instruction. Nancy saw much of the work of Data Teams[™] as goal setting and breaking the big picture into small manageable pieces. She said, "I think it's a lot about goal-setting and narrowing it down. You know, not a broad thing like oh, I want everybody to read, but, you know, like, focusing on what's the skill that, you know, this group is lacking. And sometimes, all of our classes don't even match in that, so we have to, you know, go down."

Team membership

The Data TeamTM was put together just before the start of the school year. The District hired Nancy for the position just a couple of weeks before school started and another member of the team came on board just 2 days before the start of school. The principal placed these teachers on this Data TeamTM. Nancy was not sure how that happened; however, she speculated that since two of the teachers were veterans and the two others were beginners it was a good mix. Nancy believed the working relationship of the team members was good and so it did not bother her that she had no say in the composition of the membership. She thought it was probably good that the members did

not know each other before becoming a team. Nancy stated, "I like my team so well, my request was not to be moved next year . . . so it worked out well for me, so I probably wouldn't have wanted to choose my own, because maybe it wouldn't have worked out so well, so. You know, and looking at it, the downstairs team is very cohesive, too. So I would assume that they looked at personalities and experience and tried to put a good mix together, and we all worked really—even upstairs and downstairs, when we had to work as a whole grade level, we worked really well together. We were a very cohesive grade level, so we just got really lucky." Nancy never felt like she was isolated and on her own. She sensed all members always had someone from the Data Team[™] to talk to, to share ideas with, to borrow things from, and to provide support—she was excited that the team worked together all year.

The team at work

Nancy explained that the Data Team[™] kept track of their instructional strategies and assessments in the minutes. The team usually kept a copy of the assessment so each member could administer it uniformly. Once they received the results, the team would graph the data and post it publicly. The graphs typically displayed where students were on both the pre- and post-assessments. The team would also assess themselves to examine the reasons for the results. Nancy said that since the Data Team[™] cycle focused on a short-term goal, the members were able to focus on the exact adult actions and behaviors that contributed to the student results. Nancy went on to say, "I think we probably do better because of that. I don't know that I would be as goal-oriented without the Data Teams[™]. I think it would be easy to say I'm going to do that, and I'm going to sit and I'm going to—and I think Data Teams[™] forces us to really look at where our kids are at each different point in the year, and really focus on that." She believed that without the pre- and post-tests, along with goal setting, there would have been little or any follow-through.

The Data Team[™], according to Nancy, focused all of their collaborative goal setting around Math or Language Arts. Her impression was that there were comparable goals in both of these subject areas and they were the two most important subjects for the grade level. The team used the district's pacing guides as a starting point in order to get the big picture of where students needed to be and how to plan for the rest of the year. Next, the Data Team[™] examined the teaching materials and reached consensus on what the students needed. The Data Team[™] focused on questions such as, "Is this a beginning skill that they're just being introduced to? Is this a skill that they should be securing by now, that they've had since kindergarten? What are the skills that they need right now? What are things that they should be secure?"

Nancy used unique names to describe the roles of the different team members. She referred to Heather as the "Keeper of the Information" in her role as Data Team[™] leader. Nancy's observation was that Heather provided stability and organization in what was sometimes a quite hectic environment. Nancy called Christina the "Answer Girl" because she had 10 years of teaching experience, while it was Heather's first year at that grade level and the first year of teaching for both Heidi and herself. Nancy found herself frequently going to Christina with questions such as, "Well, what do you think, you know? What has been your experience or we're seeing problems with this, and what do you think?" Nancy would use Christina as a sounding board from which to bounce ideas because she did not want to focus on learning material that did not matter in the end. Many times, these conversations took them into the realm of long-range planning, as they would discuss what they would do next year and what the students were going to need to be ready as second graders. Next, Nancy labeled all four team members, including herself, "Keeper to the Topic" because it was easy to lose focus and discuss other things, but the team concluded that if all the members took on the responsibility of staying on topic, then the team could complete its work. Therefore, the members would take turns reminding each other, "Okay, we have to get back to the goal at hand . . ." Overall, when it came to roles within the Data Team[™], Nancy viewed all members as co-equals who would jump to whatever role had to be fulfilled. In her opinion, the success to a great Data Team[™] is that all team members must be strong team members.

Nancy indicated there was a level of difficulty in choosing which strategies to use for instruction. First, there were the four different team members who had their unique ideas on how to teach the agreed-upon material, and then, there were the consultants who would challenge their decisions. Nancy did not think the team had difficulty in agreeing on what they needed to do, but the difficulty was in how the team made sure it was doing the right things. Nancy seemed to be more concerned that the Data TeamTM looked good on paper, than what the members actually did in their respective classrooms. She thought the latter was working just fine, but it was the recording of what they were doing, or the way it looked to others, that brought her the most difficulty.

Nancy categorized her Data Team[™] as successful when it was able to get more students who knew what they were doing. She thought the team was successful overall because they started to see the students improve over time. Not all students made it to proficient levels, but the individual successes indicated the team was moving in the right direction. For example, Nancy said, "I had one who really didn't even know what a penny and a nickel was, and if he can't do pennies, nickels, dimes, and quarters, but all of a sudden he can do two and he can switch from counting to fives to ones, to me I felt that was a big success and okay, he's got that part of it. He's got more of that skill than he had before." The members of the Data Team[™] made sure to take time to relate these individual stories with each other, but as a whole, the team continued to examine results based on the goals it set. They never lost sight of that.

Nancy saw another benefit in the sharing of individual stories with her teammates. She found that her group began sharing many ideas with each other. They had conversations such as, "You know what I did today? I did it this way instead, and it was amazing, it was like a light bulb went off. Oh, I never thought of that. Or guess what? I... added this into a center and I switched it from just words to sentences." After these meetings, the members would return to their classrooms, try these different ideas and report the experiences to the Data TeamTM. All of this professional exchange allowed each member of the Data TeamTM to build upon each other and on things that they could take back to their classrooms. This focus on adult actions had a positive impact on student learning.

Member relationships

Nancy believed the Data Team[™] worked extremely well together and that each member was comfortable with a similar teaching style. This resulted in all four teachers moving their students along at a similar pace. The school attempted to balance the four classrooms by spreading higher and lower ability students evenly among the teachers, but that balance was thrown off regularly due to the district's higher than normal mobility rate. Even with that, the Data Team[™] stayed on pace closely and still accomplished the majority of its goals. Nancy did not perceive a competitive nature at all in the team where one or more team members felt she had to keep up with the others. In fact, she described the working relationship of the Data Team[™] as one that was "very supportive of each other and very low-keyed about it, and happy with our successes." She went on to say, "And I think that helps, too, with the team, because you have three other people—if you were doing it just for yourself, it probably would be kind of like you'd keep putting it off and okay, I could do this. But you have your team that's counting on you to do this, so I think instead of competing, I think it's helped given us more support to do it." Nancy was thrilled with the opportunity to bounce ideas off her teammates.

Nancy indicated that the Data Team[™] did not always agree on everything. They all had their moments of conflict, but they were able to work through those uncomfortable settings and move on to issues that contributed to student achievement. She observed that in these situations, Heidi tended to remain quiet. Nancy thought this was because Heidi was shy and it was her first year of teaching. Heather and Christina, on the other hand, had no trouble telling the team when they did not agree. Even with that, Nancy thought there was no person on the team who was so stubborn that she created an environment where "it's the pouting and the fighting and I'm not going to talk." Nancy recognized that all four members of the team had been there at some point during the year, but all of them would eventually say, "You know what? Wait a minute. Back this up. I don't know that I agree with this, or I'm not so sure about this, and we'll
talk it out and it's fine." Nancy thought that everybody had been mature and used appropriate adult behaviors in these situations. She felt extremely appreciative of this spirit of cooperation, because her experiences reminded her how easy it is to get into petty disagreements. Nancy said, "But if we do disagree, everybody's been adult enough to hear everybody out, and then make a majority decision to move on."

Nancy appeared a little confused or unsure on how the team resolved conflicts. In exploring this topic, Nancy initially indicated that it had to be luck that brought the four members of the team together. In her reasoning, all four of them were new to the building that year. Christina had transferred from another building in the district, Heather had just returned from California, and this was the first year of teaching for Heidi and herself. Therefore, in her thinking, it had to be luck that brought this spirit of collaboration to the Data TeamTM. Nancy was not sure if it was personalities or if there was something else that led to collaboration. As she continued to reflect, Nancy thought it probably would have been easy to get petty, but at some point early on, they met as a team and shared ideas on where they saw themselves going, even before the team got started in the Data TeamTM work. Nancy began to think that perhaps this was the reason why they were able to successfully work through difficult times and collaborate effectively. Nancy said, "I think somewhere along the line in the beginning, we must have just all said you know what? We're not going to-there are too many things to worry about to let this kind of stuff.... So there has not been-if we have had a disagreement, it's you know, more or less I don't understand this, can you tell me what you're thinking? I'll tell you what I'm thinking, and then we just move on. But there haven't been grudges, there haven't been." Nancy explained that all the members used

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adult-like behaviors and if somebody said something the others did not particularly agree with, the team just moved on with its business. In fact, Nancy said the team was good at that. She also noticed some other Data TeamsTM in the building were struggling with petty issues. Nancy was pleased that her Data TeamTM did not experience this because she could not envision expending time and emotions and developing an attitude to worry about those things that detracted from the team's goals.

Similarly, Nancy was pleased that the team members set their minds to accomplish any new tasks they were handed. She said, "We were probably less apt, you know, if they'd say we have something to do, we'd go oh my gosh, one more thing. But then we go do it. We didn't spend a lot of time going, 'you cannot expect us to do this, this, and this and focusing on that,' because we all felt like you know what? This is for the good of the kids and the good of the school, and it's a three-year restructuring plan, and there are a lot of things that maybe we don't particularly agree with. But that doesn't mean we don't have to do it, so I think we all decided early on these are the things we have to do, we might as well grit our teeth and do it. Why sit around and complain about it?"

Another aspect of the team dynamics that pleased Nancy was how the members reminded each other of the current focus so everyone would have their data ready for discussion when the Data TeamTM meeting took place. Nancy lamented on how busy and tired everyone was, so when Monday mornings rolled around and another Data TeamTM meeting took place, each one had her data ready and the team had a successful meeting. Those reminders in the days prior to the meeting assured success for this Data TeamTM.

Nancy enjoyed the structure of her Data TeamTM meetings because the template

the team used provided a systematic procedure for it to follow. Additionally, she was pleased with the progress the Data Team[™] made in working together as a team. Together, they introduced several variables into the team's operations during the course of that first year, including experimenting with several types of recording forms, implementing different instructional strategies, adjusting the size of the team, working on multiple goals, and then focusing on just one goal. She saw all of this as part of the learning curve and Nancy was looking forward to the coming years.

Student Success

Nancy viewed student success in terms of proficiency. She felt that as first-grade teachers it was vital to get as many students as possible proficient on the learning skills. Nancy believed it was important to create assessments that were authentic and on the students' level of understanding. She employed a variety of alternatives including oral assessments, manipulatives, real-life scenarios, and writing. She reasoned that if she increased the number of students who were proficient on any given skill, then as the skills developed, they would become useful to the students in other settings. She could not conceive the thought of moving on to new material when a significant number of students were not proficient in their current work. For Nancy, she saw success when 80% of her students reached proficiency on a given skill. It was at this success rate when Nancy started to see achievement in the different parts of the curriculum. Nancy said, "And we did see that this year, it was pretty exciting. Because when you start—all of a sudden these kids that weren't doing so well, when you start focusing on a few skills, all of a sudden these light bulbs would go off, and you had kids that weren't doing math that are

all of a sudden just getting it and going because they got some more foundation work."

Nancy believed working on a Data Team[™] gave her the capacity to assess student achievement with a more critical eye. As the team set goals, it was able to measure all students. On any given task, there tended to be some students who were already proficient or close to it, others who were far from proficient, and yet others who would probably never reach proficiency. The Data Team[™] process gave Nancy the ability to monitor how students in each of these groups progressed.

Nancy recognized several variables in student achievement that she had the ability to control, which had a positive impact on student learning. She controlled the experiences students had with any given skill and with the opportunities to practice and apply the skill. She also controlled student grouping, including center groups, table groups, and other classroom configurations. Furthermore, Nancy controlled the different opportunities she gave students to practice. One thing Nancy learned was that when she put multi-level students together, they could teach each other to use the skills. She observed how relaxed students were and how lower achieving students began to pick up strategies that were effective for the higher achieving students. Once she realized she had the ability to create that environment, she did so frequently.

Nancy reported an inability to control all variables that affect student learning; however, she compensated for some of the negatives. She kept extra snacks for those students who had no breakfast. She also learned how to compensate for students who came to class too tired, high wired, and lacking discipline.

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Assessments

Nancy preferred the Data Team[™] to create its own assessments. She said the team was quite proficient at dividing and conquering different tasks so they would decide who would write which assessments or parts thereof. The team, according to Nancy, felt it was important to create its own assessments the majority of the time because as teachers they knew what worked best for their own individual students. Nancy was also convinced that it was important for the members to be consistent in the way the assessments were administered, whether that be one-on-one with students or in group settings. She was convinced it had to be done the same way because as teachers they knew what to look for, what weaknesses their students were still trying to overcome, and which students confused one concept with another. To Nancy, self-created assessments could check on all of these things better than pre-made assessments.

Précis

Nancy believed the Data Team[™] concept and practice was a worthwhile endeavor because it caused her to focus on a small-term goal in a collaborative environment. She said, "I don't know if it's just because I'm a first-year teacher and I want to know, but I think it's very helpful to get to the nitty gritty, because I do think that all of us at some point in the year had something that we found out with an assessment, going you know what? I didn't realize this is what they were doing, and it really helped you find out where the glitch in their thinking was, so that you could go back and remediate them a little bit. . . . So sometimes I think we have just little successes where we realize, okay, this is where the breakdown is going when you're trying to do this problem, and you could really try to figure out what that kid needed."

Heidi

Heidi was also a first-year teacher when I first met this Data TeamTM. She attended a private college in another part of the state, got married, and moved to this city. While spending 2 years looking for a teaching job she worked as a paraprofessional in kindergarten and in first-grade classrooms. The district then hired Heidi for one of the first-grade positions at Hillary Clinton. During her second year as a paraprofessional, she had the opportunity to work with a teacher who became the literacy facilitator for the building. This was an excellent experience for Heidi because during this time she learned how to work with data and create report graphs.

The Classroom

Heidi's classroom was very attractive and invited a spirit of learning. The teacher's desk was centrally located near the front of the room. Five student tables created a u-shape around the teacher's desk. Four students sat at each table, two on each side. A white board and two bulletin boards filled the wall behind the teacher's desk. Cabinets occupied a second wall. A computer lab, a work table, and the teacher's private area took up space on the third wall. The fourth wall had windows all the way across with bookshelves stocked full of first-grade reading material.

A word wall was located on the cabinets where students and teacher could be exposed continuously to the current vocabulary list. The front left bulletin board displayed student data. Each student was assigned a number and the data were placed in the box of the corresponding number (see Figure 4).

101	102	103	104	105
106	107	108	109	110
111	112	113	114	115
116	117	118	119	120

Figure 4: Teacher's data box. Students were assigned a number and each individual's data was placed in the corresponding box on the bulletin board.

The front right bulletin board contained the daily schedule, a class number grid, pictures of coins, a calendar, a clock, and photographs of paper currency.

The bulletin board to the left of the windows was dedicated to literacy. It served as a reminder to students of the expectations at different literacy centers that were located throughout the classroom, including the computer lab and other areas where audio- visual materials were located.

The wall in the back of the classroom was attractively decorated with samples of student work. This included exemplars from all students, not just anchor papers from students proficient on the standard. However, student expectations for proficiency on the different projects accompanied the work on display.

Two additional bulletin boards were located in the room as well. The bulletin board on the right end of the back wall contained a list of classroom rules written in the students' own handwriting, thus giving them ownership and responsibility for these rules and their personal behavior. The final bulletin board, located to the left of the cabinets, was dedicated to math vocabulary including frequently used symbols.

The walls on the outside of the room were lined with student data, including the district math assessment results, current reading levels, the spelling inventory, and preand post-test results. Anchor papers were also located here. The lockers had students' names taped to them and additional student work was displayed above the lockers.

Students were divided into five different teams, each one taking on a different color as its identifying mark—white green, blue, yellow, and red. There were four African American, nine Latino, and four White students in the classroom. Heidi was Caucasian.

Heidi utilized a combination of different instructional strategies. She frequently called on individual students to answer questions. She used praise to reward exemplary student performance and behavior. She had students work in groups on a regular basis. This was mingled with periods of individualized work. While students worked in groups and/or individually, Heidi would call them to her desk to work with them one-on-one.

Heidi faithfully implemented the school-wide behavior policy in her classroom. Part of the plan included acceptable noise levels ranging from a 0 (silent) to a 5 (cheering at a sporting event). Some teachers in the building displayed the appropriate level on the wall, other teachers told students what the current acceptable level was, and yet others held up their fingers to show the current appropriate noise level. The point was that everybody in the building knew the code, no matter if they were in the classroom, hall, restroom, cafeteria, gymnasium, library, or on the playground. When working in cooperative groups, Heidi's students tended to work at the stated sound level and they generally worked well together in accomplishing the assigned tasks. Heidi's classroom was the best managed classroom of the four teachers on the Data TeamTM.

Each student was assigned a seat at his/her table. Name cards indicated where the students were to sit. Students sat facing each other with two on each side of the table. A basket with reading materials was on top of each table. A second basket with an assortment of supplies, such as scissors, markers, etc., was also located on each table top.

Some students were pulled out of the classroom for specialized attention. This included Special Education category and ESL students.

Early Collaboration Experiences

Heidi had virtually no experience in collaborating with other teachers. She did her student teaching in a small school with a traditional supervising teacher. Heidi described her as a person who did the same thing year after year. Heidi did not feel that her student teaching experience was similar to what she was now doing in her classroom. Her supervising teacher simply taught the same material to all students, no matter their ability. Heidi, however, looked at each student's data to make curricular decisions. The closest experience Heidi had in collaboration during student teaching was when she observed two fourth-grade teachers talking about what they were going to do one day, but this was not really collaboration.

Things changed for Heidi when she started at Hillary Clinton. The administration thrust her into a group of other first-grade teachers and told them to collaborate. All of a sudden, Heidi found herself collecting data and participating in a collaborative writing project, working on math data, and focusing on reading goals. Heidi enjoyed this new approach to teaching. Since she had no experience in collaborating with others, she would simply listen to the other teachers, then go back to her classroom and do it.

The Data Team™

Heidi was quite excited when she was hired at Hillary Clinton and learned that she was going to be on a Data TeamTM. She had observed the teacher she worked with as a paraprofessional and saw how that teacher brought a student who was reading "really, really low at like, kindergarten level," up to third-, fourth-, and fifth-grade reading levels. Heidi was convinced she had the same skills and abilities to move students up the achievement ladder equally as well, if placed in a collaborative environment. She was excited about collecting her own data and using it to drive her instruction.

Heidi was a bit stressed with her new appointment, however. She was hired just 2 days prior to the start of the school year. She was not sure how to arrange her classroom and take care of other management issues. She had a feeling she might end up mirroring her room after the teacher's room with whom she had previously worked. This was not her largest fear, however. She was most anxious about the lack of classroom materials. She was moving into an empty classroom and the thought of finding materials to turn into an optimal learning environment was a bit overwhelming. This anxiety did not last long. As she began going through the boxes that were brought to her classroom, she began to find all kinds of "treasures" that she could use to create an appealing learning environment for the students. So Heidi spent her preparation time setting up her classroom as the contractors were putting the final touches on the new building itself. Overall, Heidi felt comfortable. She said, "I pretty much was glad to hear that that's what they were doing because last year I saw teachers that were't really collecting data

and you couldn't see how Student A got from January to the end of the year."

Team membership

Heidi's experience in becoming a member on her Data Team[™] was similar to her being hired at Hillary Clinton, very sudden and intimidating. The three other members approached her and told her she was on their Data Team[™]. She learned that one of her team members was a veteran who had taught in other locations and was quite proficient in Spanish, an extremely helpful asset for the clientele at Hillary Clinton. Heidi said, "And the other teacher, I didn't know very well, but just by those other two I was just was like, wow, this is my first year teaching. Please let me be good, at least look good." Heidi was not exactly sure how the membership of the team was determined, but she thought the principal made the assignment in order to spread the three new teachers to two different Data Teams[™]. However it was decided, Heidi felt pretty good about it.

Heidi did not appear to have a clear picture on the roles of the members other than the leader whom she stated went to the school's Data TeamTM Leaders' meetings on a monthly basis. She did, on the other hand, have a pretty clear perception on the personalities of certain members. She was a little hesitant on sharing her thoughts on one of them. She said, "There are teachers that have taught for a long time and they just assume that this is how to do it and this is how they're probably going to do it for their students because that's what they're comfortable with. And there are other teachers that are very headstrong and they like to talk. But sometimes it's a good thing because sometimes I don't talk because I don't think I should because I'm a first-year teacher." Even with these different personality types playing out in their Data TeamTM Heidi perceived that the team meshed fairly well. She said, "If I don't say some things, somebody else will and I'm thinking it, so I'm glad they say it. But usually I'm not afraid to talk and I will say it. But sometimes I don't get the chance to say it because other people are talking."

The team at work

To Heidi, a Data Team[™] was a group of teachers from the same grade level that met regularly to determine student improvement goals and seek ways to achieve those goals. Heidi believed the pre- and post-tests were the most effective methods in helping Data Teams[™] reach these objectives. She thought it was important for the Data Team[™] to use the same assessments so it could look at student results to determine the next steps. Heidi's Data Team[™] would normally use a 2-week window between pre- and post-tests to make this determination. In addition it would utilize the assistance of a paraprofessional so students who were in categories of much needed help could receive one-on-one instruction.

Heidi indicated that the Data TeamTM made instructional decisions based on the monthly goal it set, yet the ultimate decision was determined by the strengths and weaknesses students manifested on the pre-assessments. In many instances the Data TeamTM utilized the services of the paraprofessionals to provide tutoring students.

Précis

In all, having been a former paraprofessional herself, Heidi had observed that this individualized attention was a positive asset to students. She said, "Being a Para last year, I noticed the one-on-one helps a lot because there were students that were

struggling in reading and without getting that one-on-one help, the teacher in the classroom couldn't get the kid to read for her. But when I took him out, he would read for me, like, a lot better than he would for her. So I don't know if it's my wonderful personality or if it's just the one-on-one help was great. So we use the para a lot." In addition to the use of paraprofessionals the Data TeamTM also found work centers to be beneficial tools in its arsenal of effective teaching strategies.

Christina

Christina was the fourth member of the Data Team[™]. When I first met her, Christina was in her 10th year of teaching. She began her career in another school district and later moved to Midwestern School District. She had taught in several different schools. This was her first year at Clinton. She said she moved from school to school because she had a desire to continue teaching at the primary grade levels and had she stayed in any of the other buildings she would have had to move to an upper elementary grade level due to seniority.

Christina received a Bachelor's degree in Elementary Education in 1993 from a parochial university in the state. It actually took her several years to find a job before she embarked upon her teaching career. Christina had recently completed a Master's degree in Elementary Education from a local public university.

The Classroom

I was greeted with music playing quietly in the background when I entered Christina's classroom. Students were working independently on different projects. As in the other classrooms Christina had the students arranged in tables with four at a table. Two tables were joined together from end to end creating one large group of eight students. There was one group of five students at a table and another group of four. A large rug was in the middle of the room where students sat for reading and other whole-group experiences. Christina sat in a rocking chair when she read to the students.

Cabinets lined the wall where the door was located. A large white board covered most of another wall, while a computer lab and teacher desk took up the rest of the wall space. There was one small window in the classroom. The windowsill was lined with plants and a teddy bear. The walls were colorfully decorated with book titles. Letters, numbers, coins, the months of the year, the days of the week, a number grid, and a calendar draped the walls around the classroom.

Classroom rules and student work samples were posted. A daily agenda, in the form of a pictograph, was also present. A job board was located right inside the classroom door. It contained all of the students' names and the different chores assigned to each student. A word wall and television/monitor were utilized as well.

Christina used the working-the-crowd method for instruction and behavior management. This gave her the ability to provide individualized attention to students in their work and it helped to keep students on task. A low level of room noise was present in the classroom. This did not appear to detract students from continuing with their work in any way. Partner learning was a major component in Christina's teaching strategy.

Seventeen students made up the classroom membership. There were two Caucasian, one multi-racial, four African American, and 10 Latino students. Christina was Caucasian. Each student had a pencil box filled with crayons, pencils, and other supplies. Name cards were located at each student station.

Student data were located on the walls outside of the classroom. A list of the state standards that were currently being taught was also posted in the hall.

Early Collaboration Experiences

Christina had little experience in collaborative work. For several years she did a job-share experience with another teacher where each taught the same group of students part-time. This allowed Christina to work closely with another teacher, but it did not prepare her for the experiences she was to eventually encounter when placed on a Data Team[™]. She said, "Working with a larger group was different. I think working with three other people instead of one other person is more difficult than one person."

Christina indicated that she had talked with other teachers about instructional practice and that she had done some relatively small collaboration work. But, in terms of working with a team of teachers in a long-term setting, trying to plan what they were going to teach and how they were going to implement the plan was something entirely new for her. She said, "I mean I've worked with groups of teachers where you discussed stuff, but in the end, everybody goes back and does their own thing basically."

The Data Team™

When Christina first learned that the district was going to implement Data Teams[™] she did not have much of an opinion about it at all. She was sure that there needed to be a district-wide focus on instruction because schools were basically doing their own thing. When she heard that Data Teams[™] was coming, she thought that might be a positive thing, but she did not have strong feelings one way or another.

Team membership

The four first-grade teachers in the pod upstairs were assigned as a team. This did not bother Christina. It made sense to her that the teachers who were in close proximity to one another should be on the same team. She appeared to look forward to the following school year when the teachers in the building were going to have the ability to choose one other teacher to work closely with and the two of them would serve on the same Data TeamTM.

Christina did not know any of the three other teachers on her team. Two were brand-new teachers and the third had just moved back from California so none of the four had been in the system together. Since the other three were new to the district, Christina believed that they looked to her quite a bit at the beginning of the year to give them guidance in the Data Team[™] process. She felt this changed as the year progressed, however. She observed that the other three had developed a close relationship and supported each other quite extensively. She also felt that she was not a part of this support effort. As she stated, "I tend to be more of a loner. I don't feel excluded or left out when I'm not, just I'm more comfortable doing my own thing and I don't mind sharing what I'm doing, but I don't necessarily want someone else to hand me their packaged lessons plans, 'here's what we're doing for the week.' And then I just do that outside of my teaching style."

In terms of determining roles within the Data Team[™], Christiana stated that the team did choose a leader because every team was required to have one. She said Heather was chosen to be the team's leader, more by default than any other reason. It appeared

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that Christiana resented this selection by the the vibe she gave off in her body language. She stated, "Nobody really wanted it to be her. I don't really know exactly how she ended up being leader, but that just means she's the person who keeps the book and turns in the forms to the office."

Christina thought that personalities were a major contributing factor to a successful Data Team[™]. She said, "I think it's important when you're working in a team like that, that you have personalities that mesh in there. Myself and one other person on the team have trouble communicating. I mean, just the things I explain and the things I say makes sense to the other two people and the third person gets a little confused and then she gets frustrated and we're all trying to explain it to her and the same thing when she's trying to explain things. Often I don't understand." Christina said the best way the team found to deal with this situation was to simply talk things out and then let the majority rule. As she put it, "Within the four of us, if three people feel that we need to go the easier route in terms of what the assessment is going to be, or three people feel they should be a bit more challenging, then we'll go with whatever more people feel. I mean we've never had a major conflict. Usually it's just that we didn't understand what the other person's point was and when we finally get past the hump of understanding it, we're really talking about the same thing anyway. We just did not understand each other. Then after that, it's easy to compromise or easy to work that out."

The team at work

Christina's believed the team was still fairly weak in its approach to the implementation of collaborative planning. Her thought was that the teachers in her team

would meet, collaboratively decide what they needed to teach and how to teach it, but then when they went back to their individual classrooms, they had to figure out how they could actually implement what they decided upon and at the same time continue to teach the same curriculum that was already in place. Christina did not think the team had yet grasped the concept of team planning and implementation to replace what had always been done. She stated, "When I was doing my Master's degree, the professor that was also a teacher at another school district, sounded like they were doing something kind of similar, but they had a half hour block of the day set aside where they worked on whatever their goal was, and that was actually part of their schedule. We don't have anything like that. I mean if we're doing a math goal, we still fit it into our hour-and-ahalf math time and we're also supposed to be teaching the math curriculum, so I don't know quite how we're supposed to fit that together yet." Christina thought the Data TeamTM still had to work on that quite a bit.

Christina signed up early for the three Data Teams[™] training sessions. She participated in the first summer of training. She admitted that during the school year after being trained, she did very little to implement what she had learned, but when I visited with her, during the second year, Christina was actually implementing the plan with a certain degree of fidelity.

Christina believed that the purpose of Data Teams[™] was to make sure teachers were collaboratively looking at where students were in their learning and what they needed to do next in order to facilitate that learning. Beyond that, she said Data Teams[™] exist to "intentionally think about where it is we want them to be, to be proficient at that and then intentionally teach towards that and make sure that our assessments actually match up with what we're trained to assess." Christina believed it takes a large time commitment to collaborate. She said, "I mean what takes up time in the Data Team'sTM meeting is that you've got to talk about that together and sometimes it takes quite a while to come to a consensus with all four of you on what the actual expectation is, whether this question would be too hard or whether you're setting your goal too low. I guess in my mind it's just making sure that everybody's growing and making sure that when you set goals that the majority of the students get there, and then you go on to something else."

Christina thought that the thing she had most control over in terms of student learning was how focused her teaching was. She used small groups extensively. This gave her the ability to pull struggling students together and work with them on their problem areas. She felt there were some students who could never be successful in a large-group setting because they are either too easily distracted and tune out or they think they cannot be successful so they do not even try to participate in class.

Christina thought there were some variables in the lives of students that she had little or no control over. For her, one of the biggest issues was transiency. It seemed to upset her quite a bit that several of her high achieving students moved out of the building, only to be replaced by low achieving students. She stated, "I have kids that have come in since December. I have lost four, at least three, high kids and gotten three extremely low kids. So if that's the pattern, continually, I don't know how we can be successful on the state assessment when our high kids move out and are replaced by extremely, extremely low students." She illustrated her point by telling me about one new student in her classroom who came directly from Mexico who not only knew no English, but did not know how to read or write in Spanish either. When I asked her how she dealt with cases like this one she responded by saying, "Well, I took a lot of Spanish in school and so, the more—when I work with those kind of kids, it kind of comes back and then when I don't have a kid like that, it goes away."

Christina felt as if the team was hampered in its work when it came to choosing which instructional strategies it wanted to use to meet its goals. She said the team would go down the list of strategies identified by Marzano et al. (2001) and choose the ones they thought fit most appropriately to the learning goal. As time went on, however, Christina began to feel that the school administration was dictating which strategies they had to use in their instruction. Furthermore, she began to feel pressure that the administration was even dictating the goals the team had to reach. She stated, "Yeah, we were told we had to do fluency, fluency in reading which is way harder to define, harder to set up an assessment for." This made her feel extremely frustrated and she took on a negative attitude and did not care if the team made the goal or not. She stated, "We don't really care if we're successful or not, because we don't feel like we've done a real good job of, we don't feel like it was a real manageable task. So, it's better to prove that it doesn't work rather than to make it, because, I mean, there were things that we could have done that would have made it look like it worked, but we still wouldn't have felt like it had any effect in the classroom so what's the point of trying to look good?" For Christina, there was no point in looking good on paper or on reports submitted to the administration. Her reasoning was that if they went along with administration by doing exactly what was asked of them, then they would always be subject having to do just that.

Christina did think that Data Teams[™] could be worthwhile. She believed her team still had quite a ways to go before they could be classified as a strong functioning

team. In fact, at the beginning of its existence, she thought the Data Team[™] work was basically a waste of time. As the year progressed, however, Christina started to think the team was making a step in the right direction. Her feeling on this subject was based on the lack of time the school administration gave teams to collaborate. She felt that if the Data Team[™] members were given more time to collaborate, then they could be more successful. As she stated, "Some of the times we've struggled are when we really need that one hour. When that isn't there for some reason and we still have to be keeping up with this goal in turning stuff in and there isn't any time to talk about it or work on it, it doesn't work." In all, Christina did see merit in the process of Data Teams[™], but she felt the school-wide implementation of it was still rather weak.

Christina was not sure why the building administration considered her Data Team[™] to be highly effective in its work. She assumed that it had to do with the fact that her team selected realistic and measureable goals which resulted in positive outcomes in student performance. Christina said that the way the Data Team[™] was able to set those goals was by looking at student performances on pre-assessments and determining which ones were close to being proficient, which ones had a long way to go, but could probably become proficient by the end of the instructional timeframe, and which ones had a long way to go before becoming proficient and were yet unlikely to ever make it to proficiency. They would then calculate what their goal should be in terms of the number of students who could be added to the proficient list. She said that unlike other teams in the building, her Data Team[™] did not choose an arbitrary percentage rate of proficiency for their goal. She said, "We set our goals to be realistic and then we met our goals. And I don't know for sure how other people went about that, but it wouldn't surprise me if they would be more realistic when they set their goals, they would meet them. We were just realistic because we met our goals."

Christina said that after the Data Team[™] would set its goal for the next cycle, she would look at which category her own students were in and focused her instruction on those who were likely to make it by the time the post-assessment was administered. She did not neglect the needs of the other students and she did work with them; however, her main line of focus seemed to be on those who had a relatively good chance of becoming proficient. Christina was also never quite sure if she made her part of the goal until the post-assessment was scored and the results made known. She said, "I don't know really until we get the final assessment if I've gotten it. I mean there's not a point at which I said, 'Okay, these five kids have it. Those are four kids that are never going to get it so we'll just quit working on it, and waste the last week.' No, we work on it the whole time and then we get the test in and see that five or six of them became proficient and then we go on."

Christina did not spend much time talking to the other members of her Data Team[™] during the instructional phase of the cycle to determine if the selected strategies were having a positive impact or not. She claimed there was never any time for her to meet with any of them to share experiences of how the implementation of the plan was going. The only times she did share information with her teammates was at the scheduled Data Team[™] meetings. And even during these meetings Christina felt there was very little discussion about instructional practices. She said, "Well, Heather has the form and we fill out the form and she says, 'Okay, how many students did you test? How many students passed,' and then we figure out the percentages and so on. Sometimes there's discussion about why someone's class might be higher in one thing or have had more trouble. So yeah, there's some of that."

Christina wished the school had a better structure where it would be possible for the members of her Data TeamTM to regroup students so each teacher could work with students at a particular level of learning. She thought that if they had even half an hour a day when they were specifically working on Data Team[™] goals then they could actually regroup the students. She thought the reality was more of how they could come up with something that could last for 5 or 10 minutes, that they could do every day in their own classrooms, and where it fit into the schedule. She thought that a possible reason they could not come up with more common time was because of the personality clash that existed in the group. She thought it was either that or that others on the team were uncomfortable in sharing their students with other teachers. But once again, Christina was looking forward to the next school year. As she stated, "I think that's something they want us to do next year when we're just working mostly with one person, not with or in terms of Data Teams[™], but in terms of teaching together and playing together and stuff like that. I think they want us to do some of that switching kids around and pulling groups from our two classes."

Christina thought there was some collaboration that was taking place, albeit not as much as she would have liked. She felt there was a fair amount of collaboration that took place during the Data Team[™] meeting. She also thought the team did some collaboration on instruction during school-wide collaboration times that were set in place by the administration outside of the Data Team[™] meeting time. But she had hoped there would have been even more time to implement collaborative efforts during the course of the school year. She also wished that the team had the ability to find more time to collaborate; however, she felt the personal schedules of each team member did not allow for that to happen. She said, "I mean a lot of them leave quickly after school and come in early or come in on the weekends. And I stay late after school and stay real late on Fridays. I mean, so just different people's schedules kind of make this not work. And, we don't have preparer times where we could all meet together. So doing anything outside of those built-in collaboration hours is pretty much impossible."

Member relationships

Christina felt that one lacking ingredient in the Data Team[™] process was the failure to incorporate team-building activities. She said the school did some buildingwide team-building at the beginning of the year, then it was revealed to the teachers what the makeup of each Data Team[™] was going to be, and then they were told to start working as a team. She felt it would have been more valuable if the four members had been given an opportunity to do some team-building activities. She said the team had actually considered doing some types of activities to get to know each other a little better. Up to this point, however, that has not really happened. Christina also said the team really did nothing to sustain a collaborative environment. To her, the team seemed to hold meetings, just to meet a district-wide mandate, not to improve student learning.

Christina also felt the team did very little in establishing team norms and holding each member accountable to those norms. In addition she thought the school administration was quite disorganized in planning collaboration time, which sometimes included holding Data TeamTM meetings. She said, "Frequently we're not sure when we show up down there, what kind of a meeting we're having. We know on this one paper that it said it was supposed to be Data Teams[™] today, but sometimes it's not really. Like we showed up yesterday and all of a sudden, it looked like somebody was going to come talk to us. Well, it turned out she was just going to come watch us do a Data Team[™] meeting and so we could have gotten started, but we spent 15 minutes sitting there waiting to find out what was really going to happen. I mean a lot of our meetings have been like where everybody shows up and we're going, 'Okay, what are we supposed to be doing today?' And so we don't have the right stuff, and so we finally figure out what we're supposed to be doing and we go get our stuff. So it's not real organized."

Christina did think, however, that even though the team never established any agreed-upon norms, and even though they never really knew if they were going to have a Data Team[™] meeting that the team did have somewhat of an accountability measure in place. She thought this was more of an implied expectation rather than an agreed-upon one. She thought that no member of the team ever wanted to show up without her data. She said, "That would be embarrassing. That would prove that you hadn't really worked on anything." So she thought all members of the team bought into the notion of bringing in the data to the meetings, even if that only meant from being completely embarrassed. Christina felt that each member did a relatively good job of agreeing with the decisions of the Data Team[™]. She felt there were times when there was some disagreement, but on the most part they did agree on most things.

Sharing Results

Christina felt that her Data Team[™] did not do a very good job of sharing team

data. She said she posted data on the walls outside of her classroom but that was basically data on her classroom only, not for the team as a whole. She stated, "Once, at least, they posted that outside of the room where we meet, but I think that was only once for the whole year. May have been, I think, that was more recently, so, that may be something that they're working toward. I don't know." This was another indication that Christina did not communicate well with the other members of her team.

Christina was not sure if any single member of the team could actually pick out a specific intervention or instructional strategy that made a difference in student achievement. She told me, "I wouldn't say we're to the point where we actually design things together that we all do exactly the same thing in our classroom to get there. I wouldn't say it would be the same for each one of us. Each one of us could tell you what we did that worked with our kids in our room, but I don't think you'd get the same thing from all four of us."

Précis

Overall, Christina believed Data Teams[™] could be a useful tool in student achievement. She felt her team was not quite to the point of being a highly effective team. She also believed that the personalities of members within a team were a major determining factor in how well the team operated. Furthermore, she felt quite frustrated with the process. She felt irritated with at least one member of her Data Team[™]. She felt left out of the group, even though she indicated that did not bother her. She was annoyed with her team leader's leadership style. But more than anything else, she was aggravated about the administration's dictate on what the Data Team's[™] goals should be. It was no surprise that at the end of the school year Christina requested to be moved to another grade level and become a member of a different Data TeamTM.

Themes

Heather, Nancy, Heidi, and Christina brought their shared experiences and personal attitudes about PLCs with them to Hillary Clinton Elementary School. Heather and Christina had 7 and 10 years of teaching experience, respectively, while Nancy and Heidi were in their first year of teaching. All of them were in their first year at Hillary Clinton in its restructured form. As I spent time interacting with these four teachers, different themes emerged which I have classified as follows: (a) roles and norms; (b) collaborative mind-set; (c) conflict management; (d) high standards; (e) past experiences; (f) strategies and assessments; (g) data analysis; (h) task oriented; (i) actions from results; and (j) positive attitude (see Table 1).

Roles and Norms

The membership of this Data Team[™] was determined by the school administration as these four teachers began to work together. The team soon established the norms of collaboration under which it would operate and define the expected roles of the participants. Nancy saw the makeup of the team positively. She said, "It has worked out so well. I like my team so well. I probably wouldn't have wanted to choose on my own because maybe it wouldn't have worked out so well." Heather was like-minded. She said, "I feel so wonderful. I remember getting the e-mail from the principal." Heidi felt a little intimidated initially since she was hired just 2 days before school started, but she also thought it was best to arrange the grade-level teachers the way it was done. Christina also thought it made sense to have the four of them on a team especially since they were all assigned to classrooms on the upper level.

All members of the team acknowledged Heather's role as team leader. Nancy referred to Heather as "the keeper of all the information." Nancy gave Heather that title because, as Heather put it, "it was so hectic that you would show up and go 'I can't find my pre-test results,' so luckily we had a Data Team[™] leader that could say, 'This is how many you had according to our post-test results.' So she was our leader." Heidi described Heather as the person who "keeps the records and goes to all the building-level Data Team[™] meetings." Heidi further believed that roles for specific team members emerged as a result of each individual's personality. She said, "There are teachers who have taught for a long time and they just kind of assume that this is how they do it, that this is how they are probably going to do it in the future, and that's what they are comfortable with." Heather thought this was just fine since she was a first-year teacher and did not have very much to contribute to group conversations. She had more of a listen-and-learn role and the rest of the group did not seem to mind that arrangement one bit. Christina also referred to Heather's role as group leader as the "person who keeps the book and turns the forms in to the office." Heather, for her part, felt that it was an honor or a privilege to be the team leader. She said, "I like leadership roles. I don't always choose to take them, but I like them, I like being offered them because I feel like I portray a leadership quality, and I like that, because that shows that I'm responsible and people see that."

With Heather assuming the role of team leader and Heidi becoming the silent observer, the team came to recognize Christina, as Nancy called her, "the answer girl."

Table 1

Emergent themes	Common attributes		
Roles	Established specific roles for individual members Created norms of collaboration within the team setting		
Collaborative mind-set	Being realistic helped establish a collaborative mind-set Bonding time to get to know fellow members Enjoyed working with others Shared sense of accountability		
Managed conflicts	Agree to disagree but not be disagreeable Confront conflicts openly Compromise first but majority rule ultimately Work around external conflicts out of group's control		
High standards	Set realistic achievable goals Aimed high Student growth measured as success		
Past experiences	Professional background experiences fostered collaboration Limited yet useful prior experiences in collaboration		
Strategies and assessments	Collaborative decisions on use of teaching strategies Teacher-created assessments based on student need areas		
Data analysis	Understanding of what data to collect, disaggregate, and analyze Data provided a focus for the Data Team [™] Data determined the level of accountability		
Task oriented	Assignments completed prior to Data Team [™] meetings Followed a structured process Written and unwritten procedures to remind each other of tasks		
Actions from results	Graphed data and posted results on the walls Kept records of results for future reference Used results to provide focus for the Data Team TM Determined level of interventions for individual students		
Positive attitude	Overall genuine excitement about collaborative structure Provided a forum to share ideas Collaboration rather than soloist		

Themes That Emerged From the Data TeamTM at Hillary Clinton Elementary School

Christina explained that, "We would say, 'Well, what do you think, what has been your experience, or we are seeing problems with this,' so we bounce ideas off of her because we didn't want a goal that we weren't going to see any growth in." Christina felt more comfortable in an isolated shell, but she did acknowledge that, "I don't' mind sharing what I'm doing."

Each member recognized the unique and sometimes strong personalities of particular team members so the team had developed its norms with this fact in mind. As Nancy told me, "Because when you put especially women together, you know, I'm sure they know how to push each other's buttons just like that." Christina said that the differences in personalities made collaboration a little more challenging. Even with this difficulty, which ended with the breaking up of the group at the end of the school year, the team did establish proper norms for collaboration, which allowed it to be successful in its work.

Heather was the member who would regularly get the team back on task whenever it tended to waver. Heather once said to me, "I'm pretty outspoken and I feel like I'm just the kind of person that if you have a problem, come talk to me, and I'm going to do the same thing to you, and I'm very direct. And so there have been several times that I would say, okay, we need to get back on track. That has nothing to do with what we're doing, let's get back on track." As a whole, the team was pretty receptive to these directives from the leader. Christina thought that above all, "it is important when you're working on a team that you have personalities that mesh in there." On this point, Heather said, "We just kind of jump in. Everybody's there and we get it done. We only have a certain amount of time to get things done so I don't even care about what happened last night, let's go, you know?" From Nancy's perspective, she thought everybody got along. She said, "We all have each other's back. I don't know if it's personality-wise, or what. But we got to sit down and talk to each other and get some ideas on where we saw ourselves going, so that probably helped."

Collaborative Mind-set

The Data Team[™] at Hillary Clinton Elementary developed a collaborative mindset by setting realistic achievable goals, by spending time getting to know each other, by getting along with each other, and by developing a shared sense of accountability.

Being realistic about what the team could accomplish was important for the members. This approach facilitated its ability to work collaboratively. Heather said, "I think it's because we're really realistic when we make our goals. Like you saw the last time we were making our goal we said, how many do we think that we could pull up, because we don't want to give a goal and then not make it. We want it to be reachable; attainable. So, I mean, that's been a very, very positive aspect of our data team." Christina added, "I think a lot of what looks effective had to do with the goals we picked, meaning very measureable, and then let's be very realistic about what we set." Nancy thought that setting realistic goals was all about getting the right focus. She said, "We've tried a few different ways, had a few different things going, and we were bigger, and then broke into smaller teams, and then we were doing two goals, and then we decided to focus."

The members of the Data Team[™] took time to get to know each other, which developed their willingness to support each other and share ideas with one another. The

bonding-agent attribute was described by Heather when she said, "We had a whole week before school started where our staff had meetings and we had a chance to bond. I mean, Heidi didn't get hired until later on, but we really tried to help her, you know, get moved in and everything. I think that we just have good chemistry. I think just the fact that we all had different levels of experience and different areas of experience, and we were just very excited to be in the building, and like, morale was up, and to be here, I just think that we just bonded." Heidi was especially appreciative of how openly the team welcomed her. Nancy found the bonding time to be particularly helpful for her since it was also her first year of teaching. She said, "You never felt-even when it got hard and there were so many things with being a restructured school where it would be, like, okay, we need this, or now we need this, or okay we need this data, or we need this paperwork or I need you to complete this or I need this, you were never in it on your own. You always had somebody to talk to, and our Data Team[™] has worked as a team all year, whether it was data or whatever. And yeah, we work really well in supporting each other." Even Christina, with her skepticism towards the group, thought that probably the time spent bonding with the other members at the beginning of the year was a worthwhile endeavor.

The team, for the most part, truly enjoyed working together. Even though this was not always the case for Christina, she too gave enough to this attribute that the group was able to develop a collaborative mind-set. This could not have been more true for any other member than Nancy. She told me, "We work really well together, and you can ask one of us, we always know what we're doing. You can ask one of us. We work together enough that there isn't a spiteful, I don't know, I'm not in charge of that. Or ask, you know, whatever. We're not doing that. I told my husband, and we have said that to each

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other a lot this year, we are so lucky, because we've seen and we hear other people venting and things, and we just don't have that. So it has been—I don't know what we did to get there, but we did something right. Yeah, yeah, because it has been good. I mean, that—I don't know how you could do everything you need to do and have to have all that, because there's not enough time to have to worry about all that stuff, and have the emotions and the attitudes." This attitude was a strong measure of success in the eyes of Heather. She said, "I think since I like people, I like working with them. We've been told that our team works, not just in Data Team[™], but our team works together so well. Like, there are people that want to be on our team. And one thing that is really nice is if one of us has a problem with each other, we have been very direct and we've been very good at apologizing when we know we're in the wrong. I love my team. I love my team. It's the best teaching team I've ever had." Christina thought the team had a ways to go in developing a collaborative mind-set, but she did believe in the process. Heidi assumed a collaborative spirit was standard procedure so she operated in that paradigm.

A shared sense of accountability helped drive the team collaborative efforts. Nancy pointed out, "Sometimes I feel like it's just overkill. Like every single week we have to do Data Team[™] stuff, and it's really good because it keeps me accountable. It really is. And it's good because not only am I accountable, but my kids are achieving better because of that, because I have to do it, and they depend on me, you know? But I don't always like having to do all that stuff. It's just a lot of extra work. But it's a good idea." Christina thought the accountability factor helped push the group towards collaboration. She said the team had a sense of accountability in order to make sure it was working on what it was supposed to be working on and to get some positive results. She said, "You don't want to show up and have your results look the same as the pre-test results. That would be embarrassing. That would prove that you hadn't really worked on anything." Nancy believed this shared sense of accountability caused the team to work even closer at sharing successes with each other. She reflected on how team conversations went by saying, "Guess what I added into the center, and I switched it from just words to sentences. The rest would go hey, that's a really good idea. So our success stories bounce off each other, but just even the little things that we would notice, we say that's a good idea."

Conflict Resolution

The Data Team[™] faced its fair share of conflicts, both internally and externally. The team was able to handle these conflicts wherever they arose. The members did so by agreeing to disagree, but not be disagreeable; by confronting conflicts with each other openly; by developing a spirit of compromise, with the knowledge that majority rules in the end; and by working around external conflicts that were outside of their control.

This Data Team[™] appeared to have internal conflicts, but the team was able to work through those issues. Heather, for example, said, "We have been able to speak and agree to disagree and that's fine. We still smile at each other and say hi, and that's fine." Nancy felt the same way as Heather in dealing with conflicts. This was especially true when Heather and Christina did not always see eye to eye. Nancy said, "If Heather and Christina don't agree, they just say flat out they don't agree. But nobody has been so stubborn with any of us, even if I don't agree, nobody has been so stubborn where it's the pouting and the fighting and I'm not going to talk." She also said, "We have all been there at some point and everybody will say, you know what? Wait a minute. Back this up. I don't know that I agree with this, or I'm not sure about this, and we'll talk it out and it's fine. Everybody has been mature and very adult about that, and I have felt very lucky, because I think it's real easy to get into those petty disagreements." Christina demonstrated the same attitude. The members said that Heidi never had a disagreement with anyone, nor did I ever see that transpire in my associations with the Data Team[™].

The teachers felt comfortable enough in their relationships that they could confront each other openly. Heather knew from the moment she met Christina that there was going to be a personality issue. She told me, "I think we just knew right away that we didn't really care for each other, but you can have a clash. We actually said in front of our team that we don't agree on hardly anything, but it's okay. It's been okay and there's no tension at all." Christina felt the same and she said, "We've never had a major conflict. Usually it's just that we didn't understand what the other person's point was and when you finally get past the hump of understanding it; you're really talking about the same thing anyway. You just didn't understand each other." The two other members felt equally that it was good for the team to speak openly when conflicts arose because most of the time it was simply a misunderstanding.

The team worked hard at reaching compromise whenever there were internal conflicts; however, in the end they endorsed the practice of majority rule. For the most part, the members went along with the team decision, even though that was not always the case in practice when one or more members returned to her classroom. Nancy said, "If we do disagree, everybody's been adult enough to hear everybody out, and then make a majority decision and move on." Christina added, "We just talk about it and eventually majority rules. If three people feel that we need to go the easier route in terms of what the assessment is going to be, or three people feel they should be a bit more challenging, then we'll go with whatever more people feel. And then after that, it's easy to compromise or easy to work that out." Nancy firmly believed that every member worked well together because there was no level of competition. She said, "We've all been supportive of each other and very low-key about it, and happy with our successes. And I think that helps too, because you have three other people. You have your team that's counting on you to do this, so I think instead of competing, it's helped give us more support."

The Data Team[™] had a higher level of frustration with external conflicts than with internal ones. This was especially true when it came to the actions of the building administrators. On several occasions the Data Teams[™] were given mixed signals from administration about when to meet, the meeting agendas, whether Data Teams[™] or the whole faculty were meeting, and what goals each team was required to work on. Christina seemed to be especially bothered by this administrative practice. She said, "Frequently we're not sure when we show up down there, what kind of a meeting we're having. We know on this one paper that it said it was supposed to be Data Teams[™] today, but sometimes it's not really. The most frustrating thing has been when they started dictating what we set as our goals and which strategies we needed to use to go with those goals, which didn't really go together." Heather was also disturbed with administrative practice. She said, "As far as collaboration, I mean, I have been late a few times, but there have been several times where all the staff is just sitting there for 10, 15, 20 minutes, waiting for a meeting to start. And, you know, we call down to the office
and then they'll be on their way up. That's been a big frustration." In all, the members of the team felt that they could have used their time more beneficially had they been able to spend this perceived wasted time doing their Data TeamTM work.

There were other conflicts outside of the school building that each member of the team had to confront on a continuous basis. Heather said, "I do not have control over what mood they're in when I come in, or who might have been in a fight with a sibling or parent, who didn't get any lunch or breakfast, who didn't really have a good place to sleep because they're moving from house to house. These things, you know, are totally out of my control." Christina said, "I have one little girl that just moved from Mexico who can't read or write even in Spanish. She doesn't know any English. I mean she's working really hard. I think eventually she'll be okay." Nancy said, "Some kids come in wired, some kids come in really tired and you know they were up late." But even with these examples the teachers found ways to work around these external conflicts. Heidi said of children affected by these circumstances, "I just keep them close to me and I make sure I keep constant eye contact with them. Every one of my students are always looking at me because they know I am looking right at them." Nancy kept extra snacks for those students who came to school without having had breakfast. She said, "I can't control the things that they experience, you know, things that they're exposed to that aren't good. So some of the kids have different ideas. So what they come to class with, I think, I have a lot of discipline that I have to be structured and have to be in control, even if I can't be in control of what goes on outside. I think I can control the experiences they have in the classroom with skills and the opportunities to practice-multi-level grouping, grouping them with center groups, grouping them with table groups, grouping them with

different groups. The opportunities that I give them throughout the day to practice skills I can control." Heather also provided food for students who came to school hungry. She said, "My students know that I have extra snacks in the cupboard and I don't just hand them out just to hand them out. But I've had several students come to me and say, I didn't get to eat breakfast this morning and I'll just have him go sit in the peace area and then they eat. And everybody else knows what they're doing, but they don't—they're not like, oh, I want some, you know." Christina said she also works around these outside influences she cannot control. She said, "I control how focused the teaching is. Small groups, working with being able to have the time and the chance to pull the kids that are really struggling into a small group to work on something because those are often the kids who you could teach every day forever in a large group and they'd just—they tune out because they're not motivated; they don't think they know it so why should they try to participate in what you're doing."

High Standards

The Data Team[™] set high standards for itself by setting realistic goals that were achievable, setting a high mark for all students, and by making the determination that if students were growing then the team was being successful in its work.

Realistic and achievable goals were important for the members of this team. Nancy thought, "As far as focusing on a small-term goal and doing that, I think it is worth it, where the breakdown is going when you're trying to do this problem, and you could really figure out what that kid needed." Heather thought that setting realistic goals was something every teacher in the building should have been doing. She said, "I mean if you're not looking at what your students are struggling at and what they need to do, then there's really no point. Because you could be teaching the things that they don't need to know about, and not teaching the things that they need to know about." Christina thought it was important to make sure the team set goals that the majority of the students could reach.

The Data Team[™] acted under the premise that, given the right teaching and learning conditions, all students could learn. For Heidi, that meant getting as many students proficient as possible. Heather saw student achievement from a personal perspective. As she put it, "If I don't make the thing [goal] that I want personally, I get upset at myself, because I feel like they're not learning because I didn't teach it well. Because you know, a lot of people want to blame teachers nowadays, and teachers get upset, and they're like, oh, the students aren't doing it. But really, at this age, it's the teacher. I mean, when you have older kids, a lot of times it's the children who don't want to do their work. But at this stage of the game it's the teacher and parents too. But I mean, the teacher is the one who has to. I mean, because they don't know what they're supposed to learn on their own." Christina was not content just to reach the goal; she wanted to get as many students as possible across the bar. She said, "We don't just quit working and waste time. No, we continue to work on it." For Nancy, the quest for more students to make the mark outweighed any negatives to the heavy burden placed on teachers. She said, "I think we decided early on there are things that are going to be asked of us and need to be done. We were probably less apt, you know, if they'd say we have something to do, we'd go oh my gosh, one more thing. But then we go do it. We didn't spend a lot of time going, you cannot expect us to do this, this, and this and

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focusing on that, because we all felt like you know what? This is for the good of the kids and the good of the school. So I think we all decided early on these are the things we have to do, we might as well grit our teeth and do it. Why sit around and complain about it?"

Overall, the team believed that if students were growing, then they as a team were having success. Christina said, "I guess in my mind it's just making sure that everybody's growing." Heather believed it was imperative to get all students to grow academically, but not at the point of being over-burdensome. She told me, "We look at what we want them to do because then we can take what they know and help guide them, maneuver them into what we want them to know. And then we also look at their weaknesses, because we don't want to put too much stress on them. We want to challenge our children, but we don't want to stress them out." The thought of equating student growth with success was reached by consensus. Nancy said, "I mean, as a team, I think it probably came down to we were successful if we got more people that knew what they were doing. As individuals, I think we felt successful because we started to see kids improve. Whether they got to the proficient level or not, but if I had one who really didn't even know what a penny and a nickel was, and if he can't do pennies, nickels, dimes, and quarters, but all of a sudden he can do two and he can switch from counting to fives to ones, to me I felt that was a big success and okay, he's got that part of it. He's got more of that skill than he had before. So I think we saw individual successes in our rooms and talked about that, and talked about, you know, I noticed this and I noticed that-we shared a lot of success stories and stuff."

Past Experiences

The teachers were able to draw upon their collective past experiences to help develop a mind-set towards collaboration. Their limited past experiences in working with other teachers provided a foundation from which they were able to build their team.

All four members had some limited experience in working with other teachers or working on other teacher teams that proved to be useful when this Data Team[™] was formed. The time Nancy spent working with adults who were seeking their GEDs and her work as a Sunday School teacher provided experiences for her. She said, "For adult education we worked in a team. The site I was at was the biggest site. We had four, sometimes five teachers, because we had many students. And if we didn't work as a team, that would not have worked. So that experience is really good, because we were a really strong site, we worked together. If we had questions, we made sure we got them answered. And we were consistent with how we placed students and how we taught and how we moved them. So, my experience was that it is better to work in a team." Heidi did not have the same opportunities to collaborate or work on teacher teams, yet her experience as a paraprofessional provided her a desire to do just that. She said, "I saw teachers collaborating last year, but I wasn't a part of that." But, Heidi was thrilled to see her Data Team[™] collaborate and be part of the process. She said, "I liked it because this is my first year of teaching and I didn't know how to do any data collaboration, so I would just mostly sit and listen and do what they'd tell me to do." Heather's past experiences also played a role in her desire to work in a collaborative environment. She said, "It wasn't until I moved to California that I really had experience with lots of teacher collaboration. I think with the NCLB Act and everything that's been in place,

you know, everybody's moving towards that direction. But, even then, we had collaboration. We did unpacking the standards. All the stuff that we're doing here now, I've already done in California, but it wasn't even as intense there as it has become here." Prior to the establishment of Data Teams[™] Christina had rare opportunities to collaborate with other teachers. She said, "Seven of the 10 years that I've taught, I team taught with a teacher the first 2 years just as half time and in 5 years doing reading recovery in first grade. So I've worked with one person really close a lot. Working with a larger group was different."

Even with their limited scope of collaborative experiences, the members of the Data Team[™] found value in teacher collaboration. Heather thought these experiences gave this team the ability to share ideas. She said, "Every single time one of us has an idea or we do something, we put them on little clips on our doors. I can probably say every Monday I come in, there'll be something clipped to there. Something new that either Nancy or Heidi has come up with, or you know, if I ever come up with anything new, I'll give it to them. Like, I've actually had people say, 'Our team doesn't share anything.' I mean, my goodness, I wouldn't want to do this alone. It just makes it better."

Strategies and Assessments

The Data Team[™] relied on teaching strategies and assessments to guide its work. It did so by selecting which teaching strategies would be most effective, by creating their own assessments to determine student growth, and by collaboratively scoring student work to ensure each member was grading the same way.

The Data TeamTM made collaborative decisions on which teaching strategies would be most effective. Heidi found success in her classroom by employing the strategies the team decided to use. She said, "We determined that using a paraprofessional helps a lot because it provides one-on-one help. It helps a lot because there are students that struggle in reading and without getting that one-on-one help, the teacher in the classroom can't get the kid to read for her. So we use the para a lot." Heather thought it was important to utilize the same teaching strategies. As she put it, "We wanted to make sure that we were all on the same page. Besides language arts, it's been math. It's been pretty cut and dry." Heather liked the fact that the team would choose to implement teaching strategies that were appropriate across academic disciplines. She said, "This actually was really helpful, because I could use some of the same strategies. The same strategy that I use for one goal, I can use in another subject area, and vice versa." Heather also liked the way the team decided which strategies they were going to use. She said, "We just start off like popcorn sharing all the different things that we already use, and then we say—you know, we're supposed to all be doing the exact same thing. So we just kind of popcorn share and we try to choose a few of the strategies to use. It usually ends up pretty good."

The Data Team[™] collaboratively created assessments which were meant to determine student achievement. Nancy said, "The biggest thing that we do with our assessments is try to make sure we are consistent, so we all say, you know, we try to say things like, are you going to read it, or are you going to have them do it on their own? Are you going to do it one-on-one, are you going to do it—so we try to make sure that we're all giving it the same way. But we try to be consistent. We mostly make all of our

own because it's just easier that way. Because we know what we're looking for, and we know what the weaknesses in the skill are, so you've got to set up an assessment that you're finding out." Christina thought the process of making assessments took a lot of time. She said, "I mean it takes up time in the Data Team's[™] meetings. You have to talk about that together and sometimes it takes quite a while to come to a consensus with all four of you on what the actual expectation is, whether this question would be too hard or whether you're setting your goal too low." Heather was pleased when the team decided to use common assessments. She reflected on that day and said, "We had to decide how many points we were going to give and I am really glad that we talked about that, because we discovered in one of our Data Team[™] things that one of us, one of the people in our group was grading things different. The others were doing it exactly the same. And so we had to—we were, like, oh, wait, we gotta be grading this the same way. I mean, really, I think they might have been coming close, percentage-wise. But it was just so far off that we had to say we have to be grading this the same way all around." Nancy said, "The majority of what we assess, we made up ourselves, because it's probably going to be that way for first grade, because you're getting down into a skill. So you're going to have to figure out what is going to work best for your kids." Heidi even made sure to keep copies of all the assessments the team created. She said, "I just keep all the assessments and I keep them in the binder. I keep all of their writing at least once a week in their binder so I can look."

Data Analysis

The collection and use of data was important for the Data TeamTM. The team had

an understanding of what data to collect, disaggregate, and analyze. The analysis of the data provided a focus for the members of the team. Additionally, each member of the team was struck with a sense of accountability based on data results.

Their work as a Data TeamTM provided the members with an understanding of what data to collect, disaggregate, and analyze. Heidi believed the purpose of collecting data was to help PLCs reach their goals. Christina thought, "It's to make sure that we're looking at where students are and what the next thing is that they need to learn, and then intentionally thinking about where it is we want them to be, to be proficient at that and then intentionally teaching towards that and making sure that our assessments actually match up with what we're trained to assess." For Heather, data collection was important because it provided the vehicle to transport students to the place they needed to go. Nancy thought that the use of data "is mainly about focusing on your students at the time and what their strengths are and what their weaknesses are and also being really in tune with what the standards are and what the skills are and what your kids need for different points throughout the year and looking at that and assessing that and deciding, okay, where's the need?" For Heidi using data meant the team had the ability to not only know what students were supposed to learn, but to know if the students actually learned what they were supposed to know. She said, "We take a pre-test and a post-test. We use the same tests pretty much. So we pretty much—we look at the students who didn't pass and we look at the students and how well they did on the pre-test and whether they can-how we know the student and whether they will be able to take the test again. And then we take 2 weeks and we teach it pretty thoroughly."

The team thought that the use of data was also important because it provided a

level of accountability. Heather said, "I enjoy it. I don't mind, like, doing the number crunching and seeing growth. I think the main definition would be accountability. To see—it's kind of measuring how we're doing our job. I mean, because the children are the ones achieving it, but they're not going to be able to achieve it without the right guidance. So I think it is accountability. I think it is just to measure what we're doing, and measure our growth." Heather said, "I think it's very useful. It keeps teachers accountable. We are able to focus in on the things that our class needs to focus in on. We're not wasting time on things that they don't need to know more about because they know enough."

Task Oriented

The teachers appeared to be task oriented. All of them regularly had their assignments completed prior to Data Team[™] meetings, followed a structured process in meetings, and established protocols for reminding each other of the tasks that had to be completed. Heather said of the team, "They all get me their information as soon as I need it and I just plug it in. And you know, all the rest of the forms we do together. I just happen to be the one writing it out." Nancy liked the way the team members reminded each other about their tasks as well. She said, "We're always so busy and so tired, and it's usually Monday morning. So I think the first thing, we're sitting down and we're saying did I bring the right stuff, or are we on the right thing? You know, because we try to remind each other, and that's the other thing that's good about our team. 'Don't forget, we need to be assessing these next three days for Monday so we can see where we're at.' And so we remind each other of that, which is nice." Heather liked the fact that the team wrote down their plans. She said, "Well, we have everything—it's like there's concrete evidence right there in front of us. We can say we're going to do this and that, but if you don't write it down a lot of time you might forget. And so throughout the week, if I forget one of the strategies that we discussed, I can go back and look at the paper and think oh, yeah, I can do that." Nancy found this aspect of their team's work very useful. She said, "I think it is useful because you have to have some kind of structure if you're going to do this. For us, it's been learning and a work in progress, so we were using one form and then we switched to another form. If we're doing this, we just went okay, this is how we're going to do it now, and we just tried to roll with it. And it starts with Heather. She has the binder and the paperwork. This is what we set for our pre-test, this is what we wrote down, and going over it, this is what we were doing. How are we doing, what have we done, and doing that, and trying to follow the Data TeamTM structure."

Actions From Results

The Data Team[™] created and implemented action plans based on the results they received from the data. The team graphed student results, posted the data on the walls in their classrooms and hallways, kept records of the results for future reference, used the results to provide a focus for the team, and determined the level of interventions for each student based on those results. Heather took the lead in communicating the team results. She said, "As a team, we have certain forms to fill out, like our pre-test and post-test information, and then we have surveys that we have to complete, and we make copies and we give them to the Assistant Principal. And then I turn in my data notebook. I talk

about it with my students. I'll tell the students, like, right after we take the postassessment. I'll tell them individually this is what you got, and this is how much you grew." Nancy said, "We usually graph what our beginning goals are. Our data team minutes, we keep track of what our strategies were, what we did, how we assess. Usually we keep a copy of the assessment so we can do it uniformly. But I think the biggest thing that we probably do around here is posting our growth in our data." Christina explained how the team posted their graphed results. She said, "We post them over the hallway on a graph. That's what we do basically. Like the data out on the wall in front of my classroom is just for my class." She went on to say, "I also keep individual data on each child that are graphs that show their progress. I show parents that in conferences." Heidi had the most eye-appealing displays of student data just outside of her classroom door.

The team acted on student results as well, demonstrating their understanding of the importance of teacher actions. Nancy said, "I think we probably do better because of that. I don't know that I would be as goal-oriented. I think it would be easy to say I'm going to do that, and I'm going to sit and I'm going to—and I think these things force us to really look at where our kids are at each different point in the year and really focus on that. And without the pre-test and the post-test and the goal-setting, and the how are we doing, I don't know how much follow-through there'd be." Heather said that sometimes after they have received results, "We just have to do more extreme interventions, like more one on one and things like that." Heidi relied heavily on the paraprofessional to assist with interventions. Christina looked forward to the future when the team would be even more refined and then it would be equipped to use other effective interventions. She said she would like to be able to do switching kids around and pulling groups from each of the classes. In the meantime she was content with doing the small interventions.

Positive Attitude

Overall, the members of the team had a positive attitude towards the Data TeamTM process. There appeared to be a high level of excitement on the part of the members. They were excited that they now had a forum from which they could share ideas and they were happy that they had a cadre of colleagues they could collaborate with rather than having to make curricular and instructional decisions on their own. Heidi said, "I was excited. I pretty much was glad to hear that that's what they were doing. I saw how a student went from reading really, really low and then going all the way up really high. So I was excited about making my own data and data it." This excitement was obvious to see each time I visited Hillary Clinton Elementary. Nancy seemed to have an overabundance of optimistic enthusiasm. She told me, "I was excited about that, because being on the outside looking in, I have four kids and I've seen teachers who share and have seen my kids with teachers who do things that share, and then I've also seen where you have the fourth-grade level where every teacher does their own thing and they don't do a lot. And I just feel like I was excited because I felt like okay, I'm going to be where I can bounce ideas off people. So I was excited about that, because I felt like I wasn't going to be on my own, and I felt that we would be stronger as a grade level, and it's worked out that way, too." Christina was not as enthusiastic as these two new teachers; however, she did see the positive points of collaboration and put a stronger effort into the process as time went along. She said, "I do know that one thing we've needed for years is more focus and a district-wide focus rather than different schools doing different

things, so I guess in that way it was positive." Heather, on the other hand, seemed to be just as enthusiastic about the Data Team[™] process as Heidi and Heather. She told me, "I was excited about it, because I felt we'd be more on the same page, and it would be with four people on my team, and four heads are better than one. It would just be nice—it is nice. It has been nice, because, you know, Nancy will make a copy of something, or have an idea, and say hey, I have this idea, would you like to use it? Or Heidi or myself or Christina. And so it's been very nice, just because we can bounce ideas off each other. And if one of us doesn't think of something, somebody inevitably will have an idea to help you with a child who's struggling, maybe, or something like that, so it's been good. And most of the collaborations we've done have been pretty good."

Summary

These four teachers were thrust into a Data Team[™] by building administration. In the process of answering the research questions, they were able to establish norms that guided their work, operate with a collaborative mind-set, use strategies for conflict resolution, set high standards for themselves and their students, employ lessons learned from previous collaborative efforts, employ effective strategies, analyze data to make decisions, remain task oriented, take actions based on student results, and keep a positive attitude about the team.

CHAPTER 5

BARACK OBAMA ELEMENTARY SCHOOL

School Context

School Setting

Barack Obama Elementary School is located in Midwestern School District. Barack Obama is typical of most of the others in the district, having a Kindergarten through sixth-grade structure. The school is located in the northeast side of the city and is situated on a 20-acre piece of land that is very well groomed. The school is nestled in a suburban setting surrounded by mostly single-family dwellings. The school has nearly 600 students who come from a combination of upper-middle- and lower-middle-income families.

Barack Obama was renovated in 1994. The expansion doubled the size of the school, taking it from 15 to 30 classrooms. Technology was also updated during the renovation process. All classrooms have teacher workstations and student computers with internet access. Additionally, the school has a computer lab which can handle larger groups of students. There are five special-needs classrooms—two classrooms for those with learning disabilities, two classrooms for the severely handicapped, and one classroom for emotionally disabled students. There are separate classrooms for art and music instruction. A gymnasium is used for the physical education classes.

The Staff

The staff included 26 full-time and five part-time certified teachers. Additionally, there were 15 paraprofessional instructional aides. The school also had several other certified and classified personnel including: a band and orchestra teacher, a speech pathologist, a school psychologist, an ESL teacher, a school nurse, a librarian, and a social worker. Service workers included a school secretary, a part-time office assistant, two lunchroom aides, and two and a half full-time custodians. This team of educators and support staff were led by a principal who was charged with the responsibility of addressing curricular, instructional, and personnel responsibilities. He was given the task to develop and maintain student-parent-community relationships in addition to his building management and leadership responsibilities. An assistant principal was added to the leadership team in the fall of 2007.

Demographics

The DOE School Profile in 2008-2009 indicated that Barack Obama had approximately 597 students, representing a less diverse racial, cultural, and economic population than most of the other schools in the district (see Figure 5).

The DOE School Profile, as presented in Figure 6, indicated that 30% of Barack Obama's student population was on free or reduced-price lunch. There had been a steady increase in this number for the past several years. For example, 6 years ago, less than 14% of students participated in the government program. The number of students on free or reduced-price lunch for the entire district was significantly higher at 62%.

Barack Obama had special-needs students included in its population. There were



Figure 5: Ethnic makeup of Barack Obama Elementary School.

two programs in place for students with mild disabilities, two programs for students with severe disabilities, and one program for students with emotional disabilities. The philosophy of working with students with disabilities was one of inclusion, which sought to break down labels and include Special Education students into general education classrooms. It was thought that the growth of the Special Education population under this philosophy might have an effect on the needs of general education students in the future, in terms of differentiation of instruction, paraprofessional help, class size, and facilities to accommodate students with special needs.

There had been a marked increase in the number of ESL students in the district over the past 16 years. Figure 7 shows the significant rise in the number of ESL students. Barack Obama did not experience the same level of EDL student growth as had the rest



Figure 6: Free or reduced-price lunch students at Barack Obama.

of the district. The number of students in this category has inched up only slightly over the past 6 years. The total number of ESL students at Barack Obama steadily remained fewer than 15. The low ESL population at Barack Obama (3%) is in sharp contrast to the number of ESL students in the entire district (17%).

Mobility was just a little over 17%, the lowest of all elementary schools in the district. Nonetheless, there had been a slow, yet steady rise in student mobility. Attendance remains around 96% with very little fluctuation over the past 6 years.

Suspensions for 2001 constituted 04.2% of the student population, mostly males, mostly attributed to just three students. Reasons for suspensions included: fighting, injuring other students, insubordination, interfering with school purposes, physical aggression, and threatening staff.



Figure 7: ESL growth in Midwestern School District.

Safety

School safety was important at Barack Obama Elementary. As such, the building was secured by having only one point of entry. A visitor sign-in system occurred in the front office. People had to be "buzzed in" by office personnel. Parents and students were given an annual orientation on the school discipline policy which included the assurance of a safe and secure learning environment. Teachers were encouraged to provide an atmosphere that was open for students to discuss problems and concerns.

Mission

The Mission Statement of Barack Obama stated, "The Obama School Community is committed to using the philosophies established in our Eight Common Principles as a guiding force in developing Obama students into responsible citizens who are lifetime learners. These principles will evolve as the needs of our students change." The Obama vision of the Eight Common Principles was to:

1. Focus on helping students reach their fullest potential.

2. Focus not only on content knowledge, but life skills as well.

3. Focus on the individual needs of all students.

4. Personalize the curriculum, learning materials, and student assignments.

5. Foster an environment where students would be responsible for their own learning.

6. Assist students in reaching mastery of basic skills in all areas of the curriculum.

7. Foster an atmosphere of trust and respect on the part of all—staff, students, parents, and community members associated with the school.

8. Be generalists first, where the needs of all students were taken care of, and specialists second, where teachers became experts at a specific grade level or in a particular area of the curriculum.

Academics

Barack Obama's curriculum, modeled after the school district's curriculum, was aligned with the state standards. Parents were informed of the state standards and given updates yearly. Parents and teachers had access to the different district curriculum guides via the internet. In addition, teachers had copies of the state standards in their classrooms. These standards were also posted online at the DOE web site. The adoption of textbooks was dictated by a timetable established by the DOE and was administered through the school district's Department of C&I.

Students took a battery of tests designed to measure achievement in Grades 3 through 6. Each fall the students were administered the state-wide assessments in math and English/language arts. Each year these students also took the Northwest Evaluation Association (NWEA) level assessments. Results of the state assessments were used to determine if Barack Obama met the state achievement levels as well as the AYP requirements of NCLB. NWEA results were used to predict student performance on the state assessments.

Academics at Barack Obama included the core subject areas of math, English/language arts, social studies, and science. In addition, students participated in music, art, physical education, and library classes. Students who met the qualification guidelines were steered to participate in the Reading Recovery, Fast Forward, Interactive Writing, Junior Great Books, and/or Math Pentathlon programs. Additionally, students had the opportunity to participate in a wide variety of extracurricular activities such as Student Council, Peer Mediation, Science Fair, Chess Club, Chimes Class, Band, Orchestra, Choir, and a variety of competitive athletic events.

Several supplemental programs were offered to the students of Barack Obama and housed on site. The YMCA ran morning and after-school programs. Summer school, an enhancement program, a mentoring program, and an after-school program geared at reaching students who were subject to "falling between the cracks" were all established to help reinforce and increase student learning.

Honoring academic performance and improvement appeared to be a top priority at Barack Obama. Students in Grades 4 through 6 were recognized on a monthly basis. Each month the school named one child "Student of the Month" for outstanding performance and/or improvement in academics. In addition a fourth-grade student was honored with the title "Kiwanis Kid" once a year. Further illustrating the commitment to recognize student achievement, the school participated in an annual recognition program and activities award program for sixth graders.

Community Involvement

Family involvement in the school program was another important priority for Barack Obama Elementary. Membership in the Parent Teacher Association represented a significant number of families. Parents volunteered for classroom support, field trips, school programs, and other extracurricular activities. Attendance of parents at Parent-Teacher Conferences consistently reached nearly 100%.

The Case Study

It was within the context of this school setting that I walked into the back hallway of Barack Obama where the fourth-grade classrooms were housed. Four fourth-grade teachers originally comprised the membership of the Data Team[™]. One member was on maternity leave and did not participate. The three remaining teachers had a diverse background in terms of experience and training. They were all Caucasians; two were female and one was male. The homogeneity of ethnicity between teachers and students fit well in this school setting where the majority of students were themselves Caucasian. Let's meet these three teachers who are referred to as: Kimmy, Kelly, and Jack.

Kimmy

Kimmy was in her second year at Barack Obama Elementary School when I met her. It was her 4th year of teaching, 3 of which were with Midwestern School District and 1 with a parochial Lutheran school. During these years Kimmy took half a year off for maternity leave. Kimmy was also the building Data Coordinator.

The Classroom

Kimmy had the students in her classroom divided into five different groups with five students in each group. Individual student desks with detached chairs were joined together to create the different groups. The front wall had a chalkboard with bulletin boards on each side, cabinets were located on a second wall, and windows with bookshelves underneath made up a third wall. The fourth wall was a plain wall. The teacher area was located in the back right corner of the room. Next to that was a table for small-group work. A small computer station was located in the front right corner of the classroom.

The classroom was extremely well organized and very clean. It was brightly decorated with different colors strategically located, which created an attractive and inviting atmosphere. Vocabulary words for the year's math units, each in a different color, were posted on three of the four walls. The front left bulletin board was reserved for the monthly calendar which described the academic activities for the posted time period. The right front bulletin board was filled with samples of anchor papers. The wall space above the front chalkboard and bulletin boards was filled with multiplication and division tables, math facts, triangles, and other math symbols. A poster on this wall

read, "Respect begins with understanding."

The right side of the classroom was reserved for reading. The area next to the wall was set aside as a reading space. This section of the classroom had big soft pillows, an area rug, a set of rules for group work, a collection of reading mini-lessons, and a timeline of important events.

The back of the room and the left wall were dedicated mainly to writing. Kimmy posted guidelines for writing here. A banner stretched across the back wall which read, "Be Responsible: Actions Have Consequences." The left wall contained posters that reminded students about different aspects of writing. One was a rubric on the expected elements of good writing. Another poster talked about the writing process itself. A third poster stated, "Before you say what you think . . . THINK!" Other posters dealt with the parts of a narrative, parts of speech, the ABCs of learning, positive attitudes, respect, choices, and chores. A clothesline was strung across the length of the back wall where it held up laminated photocopies of recommended book titles for students.

The learning environment was a combination of direct instruction and cooperative learning. The noise level was louder than that of the other classrooms at Obama; however, students were engaged in their work and conversations tended to be on task.

There were two African American, one Latino, and 21 Caucasian students in this class. Kimmy was extremely enthusiastic and used colorful language in her instruction. She seemed to hold nothing back to make learning an enjoyable experience for the students. Kimmy monitored student learning by working the crowd and calling students at random to answer questions and/or give opinions. Kimmy regularly rotated students to operate the technology in the classroom, which freed her to move around the room during

direct instruction. She also displayed a great deal of "with-it-ness." She tended to go public with behavior management.

Overall, the classroom was neat, clean, inviting, friendly, and warm. Kimmy worked hard at making it a positive learning environment. As I observed and interacted with Kimmy, it was obvious that her attitude had a positive effect on the work of the entire team.

Early Collaboration Experiences

As she reflected on her professional career, Kimmy determined that her experience at Barack Obama was definitely the best by far. She felt the staff at Barack Obama was extremely friendly and welcoming and she truly enjoyed working with the other members of her Data TeamTM. She said, "My little fourth-grade unit here is pretty strong. It's pretty close-knit and we all get along really well, and they're very flexible, laidback people who I think just genuinely want what's best for their students."

In a teaching experience at another school in the district, Kimmy did a job-share where she taught third-grade in the morning and sixth grade in the afternoon. That was a challenging position, especially since it was her first full year of teaching. It was also a difficult time for Kimmy. She did not feel as warmly received by everyone. In addition, there was an exigent environment in terms of student needs. This setting was her introduction to collaboration, and it was not a very good experience to say the least.

It was actually during her first year at Midwestern School District when Kimmy first learned that the corporation was going to implement Data Teams[™]. She signed up early to be in the initial round of trainings for the three workshops. Her initial thoughts

on Data Teams[™] were overwhelmingly positive, particularly because she was relatively fresh out of school and eager to learn how to be a better instructor. Kimmy stated, "I'd only had a year of experience prior, and I was all for it, whereas a lot of the older teachers that I worked with just thought, I think I heard, 'Oh no. It's just one more hoop we have to jump through,' things like that. But I didn't feel that way."

The Data Team

Kimmy believed collaboration was what teachers should be doing in the first place. Collaboration, in Kimmy's mind, meant studying and using data that were already being collected to drive instruction. As she put it, "I don't really see it as something additional because a lot of people of course complained that it was one more thing added to their plate, so to speak, but I think that we're already collecting data, and so the purpose of Data Teams[™] really is to take a good hard look at that data, and use it to the best possible advantage of the students, and try and focus in on one specific area that you think you can improve, and just sort of go from there to do that."

Team membership

The Data Team[™] was created by the building principal. The members were all fourth-grade teachers. There were no specials teachers, Special Education teachers, or other professionals on this team. The members of the team agreed to make Kelly the team leader. Kelly was the person who facilitated each meeting and represented the Data Team[™] at the principal's Data Team[™] leader meetings. Additionally, Kimmy was appointed by the principal to be the building data coordinator. Her reaction to that was, "What a joyous occasion." She was not exactly sure how she obtained that job, but the

person who held it previously transferred to another school and Kimmy ended up with the assignment. Actually the principal and the former data coordinator approached Kimmy and asked if she would be willing to assume the role since she was about the only one in the building who had completed most of the workshops up to that point.

Kimmy perceived that her Data Team[™] was working well and probably at the high functioning end of the spectrum when compared to the other Data Teams[™]. She thought the team needed to work on several things. She thought the team was doing a pretty good job of using student data to drive instruction. One area Kimmy thought the team could improve in was organization. She said, "I'm feeling a little scattered, and I think everyone else is too, but we could work on our organization a little better. I think we do a good job with that collaborative piece and listening to one another, but we could be a little more organized. We could probably make things run a little more efficiently, get in and out a little quicker."

Kimmy attributed the success of her Data Team[™] to the positive outlook each member had. She believed that all members of her team had a vested interest in the Data Team[™] process and the way it worked. She stated, "We believe in the program. We think that it's important to do, and it's not just a bunch of garbage. We genuinely think that it's important, and once again, I hate to keep going back to it, but I just work with really nice people, and our personalities, we got really lucky. We all mesh really well, so it just worked out."

Reaction to the Data TeamTM initiative

Kimmy believed that without Data TeamsTM teachers would miss out on the entire

collaborative element. She said, "I think that what's great about it is that no matter, whether you've only taught like myself for 3 or 4 years, or whether you're a veteran teacher and you've been looking forward to your retirement any day now, there is always something more that you can learn from another teacher, just to get another teacher's perspective, just to learn from their experience. I think that's invaluable." Kimmy sincerely believed that if a teacher tried to do all that was required on her own, then the teaching experience would be much less meaningful. She also thought that up to that point in the district's experience many teachers were still trying to remain as isolationists and were resisting the new collaborative approach to PLCs, hoping that the initiative, like others in the past, would simply fade away.

Kimmy felt that the Data Team[™] model was much more structured than any other type of collaborative experiences during her young career. She thought it was good that the five-step process provided for a systematic agenda and kept the teachers on task. She said, "My personal feeling is that's what teachers want anyway. We have so much to do, just like with children, they act like they don't want discipline, but really, they not only need it, but they want it as well." She also believed that even with a system in place, her Data Team[™] still had the autonomy to make modifications in order to make it work. She thought if teachers were simply told to collaborate without a set it would be extremely difficult to stay on task. She stated, "I think that it can become very disorganized and topics could tend to change and drift off, and you end up, by the end of the meeting, thinking, 'Okay, did we come here to talk about this data or did we come here to talk about our field trip for next week?' So I think that it keeps things very organized." The team at work

The Data TeamTM set up its schedule so the members could meet twice a week. The schedule was determined well in advance so every member knew for certain when the meeting would take place. Kimmy believed firmly that this practice made it possible for all members to be present at every meeting. As she put it, "They're pretty flexible people and we understand that there are going to be times when emergency situations arise, and we take that into consideration. I don't think that anyone would be too upset. The expectation is still clear, however. We expect you to be there unless there is an emergency situation. And we really have been fortunate not to have any major issues with that. They're pretty responsible people. That's a good way to put it. They've definitely bought into Data TeamsTM." This actually became the expectation the group put upon itself. The team also found it best for everyone's schedules to meet immediately after school on those two days. In addition to the scheduled days, the team was highly organized with a set agenda. Kimmy thought that with the busy lives of all members it was critical to be organized so time would not be wasted on non-essential items.

Kimmy said her Data Team[™] began collaborating shortly after the building principal issued a directive to the fourth-grade teachers that they were going to be a team and that they had to meet at least once. She stated that the team was not into the process for very long when it realized that a meeting once a month was not going to be enough if it was going to make a difference in student achievement. So, the Data Team[™] decided to meet twice a month, in addition to any type of grade-level meetings or staff meetings that were already taking place. In all, the team would choose to meet either before school or after school in order to hold its bi-monthly Data Team[™] meeting.

Kimmy thought an important first step for the team to take when it held its meetings was to analyze student data so the members could decide what the students needed to work on most. For example, when the team was focusing on writing and using the Simple 6 rubric as a scoring guide, it looked at samples of student writing across the fourth-grade, identified areas of strength and weakness, and compared scoring practices with each other to reach consensus on writing proficiency. Once that was decided the team would determine which instructional strategies it was going to implement.

Kimmy stressed the importance of being prepared for each Data Team[™] meeting. She said each member had to have her or his assessments scored ahead of time and that each teacher needed to have looked at the results prior to the meeting. She stated, "You need to be ready to report your data, and I guess just coming with some suggestions is always good, and any questions, too."

Kimmy viewed data as a valuable asset to the teaching profession. She also thought there were several different types of data a teacher could use to influence her instructional decisions, even if that meant just walking around the room and observing what students were doing or listening to them read. This too fit Kimmy's definition of data and she viewed it as a vast part of her job.

Kimmy thought it was important for the Data Team[™] to create its own assessments. She stated that since the team was focusing on writing, it had to use the state standards and the district's Power Indicators to determine what to teach. She said, "So you want to focus on the ones that are going to be the most heavily tested, I guess. So, if it's something that we know the students are going to be tested over, then we want to make sure that they're proficient in that area." Kimmy stated that the pre-assessment gave the team a good indication of student weaknesses on the standards or indicators. This information provided focus for the next round of instruction. She also thought the results ensured that there was always an area where the team needed to focus.

Member relationships

Kimmy was quite pleased with the relationships that developed within her Data TeamTM. She felt that every member was willing to help everyone else on the team succeed. She said, "Whenever one person is in need of something, whether it's just something to reproduce or if it's just an idea, they're just really friendly and willing to go, I would say, even above and beyond what I would expect from another teacher. They give freely of their time when they can." One member of the team was heavily involved in extracurricular activities for the district so Kimmy was quite willing to let him off the hook to some degree by helping him accomplish his Data TeamTM goals in any way she could assist. With her assistance, this teacher was able to meet his obligations to the team and Kimmy thought he was doing an excellent job with the team and in his classroom. She said, "If there's anything he can do to help, he just rolls up his sleeves and dives right in."

Kimmy never had a negative experience with any other member of her Data Team[™]. She thought that perhaps if that were to ever happen she would attempt to be as amiable as possible, trying to see things from other peoples' perspectives. For her, this was a critical element to team relationships. She said, "I think that it is really important to listen more than I talk, and then when the time is right, offer my opinion. And if it's something that I feel really strongly about, then I'm not going to change my opinion." She felt it was important for the other members of the team to have their own opinions; however, it was even more critical to reach consensus as a team. She had worked with other teachers in different situations who did not want to operate under this paradigm, but she continued to hammer away at trying to reach consensus. With this Data TeamTM she felt that all members held the same view.

Student Success

Kimmy's expectation was for all of her students to be at least 80% proficient. She thought it was important to set high goals and expectations for student success. She believed this mind-set would raise the overall proficiency level so she strove to meet this goal in her own classroom. She was also quite successful in getting the Data Team[™] to set the same goals as it steered students through the fourth-grade curriculum.

In order to reach the team's desired level of success, Kimmy believed that specific and timely feedback to students was essential. She said, "I feel it's extremely important to explain everything, making sure that you are clear and concise with students, so that they know what to expect when you give them a grade, and so they know how to grade one another as well."

Kimmy acknowledged that there were barriers that made goal attainment more difficult. She knew that as a team, the teachers had little control over things that happened to students outside of the school day, such as their bedtime, what they had for breakfast, what their family situation was like, or whether they were able to complete their homework. She said, "I can assign it, but I can't make them do it." With this reality in place, the Data TeamTM spent time talking about its role in addressing these issues. Kimmy said, "I mean we realize that yes, they are children. They are only nine and 10 years old, and so it is to be expected that they are going to be forgetful at times, and kids will be kids, but we try to help. By the end of the year, we try to make sure that they are more accountable than they were when they came to us."

Sharing Results

The first thing that struck me when I entered Kimmy's classroom was the lack of data in plain view. I found that quite odd since she was the building data coordinator. My expectation was that she would have had a model classroom for other teachers in the building. But that was not the case.

The Data Team[™], on the other hand, did post data in the hallways. This provided a visual representation for students and the staff from other grade levels to see what the fourth-grade had been working on during a given period of time. It also allowed the viewer to see the progress that was or was not being made. Kimmy thought that it was important to post data. First, it showed that things did not always turn out the way that the team had hoped. Next, it provided evidence for why the team had to either re-work its strategy or why the teachers had to go back and work on the same skills with students for another month. Ultimately, in Kimmy's mind, posting the data allowed students to have a visual understanding of their own individual progress. Kimmy felt it was important to post data in such a way that it was anonymous, both in terms of individual students and individual fourth-grade classrooms.

Précis

Overall, Kimmy came into the Data Teams[™] initiative with no elaborate expectations. As she became engaged with her team, she fully embraced the concept. Kimmy believed her team was functioning well; however, she also realized it was not where it needed to be and that the members were still going through the process of ironing out the team's problems. In reflection, Kimmy stated, "I think if you really look at the program and you think about what it is that we are trying to do here, that this isn't just something else that they are trying to make us do, that they are trying to throw on our plate. I think when you really focus, this is really for the students. Where do I want to see them proficient and how can I get them there? When you really focus in on that, I think the whole thing makes sense."

Kelly

Kelly was a second member of this fourth-grade Data Team[™]. She was in her second year at Barack Obama Elementary when I met her for the first time. She graduated with elementary education from one of the state universities. Kelly actually had varying degrees of experience teaching Grades 1 through 4. She did her student teaching in second grade at another school in the district and was then hired with a temporary contract to teach first grade. When the school shifted to a new reading program, Kelly transferred to Hillary Clinton Elementary where she once again was given a temporary contract, this time to teach third-grade. Then, just 3 months into the school year, the principal offered her a fourth-grade position. Finally, Kelly was on a regular contract. Kelly claimed this was her favorite grade to teach. She said, "I like the age group of kids. I really love the curriculum. I like to teach the state's history. I like the reading level, being able to read the chapter books with them, and I think the building also makes a difference. It's a good environment for me."

Early Collaboration Experiences

Kelly's first recollection in working collaboratively with other teachers was during her freshman year in college. She was assigned to a classroom in the university lab school. It was in this setting that Kelly began working with the classroom teacher on creating assessments for a science class. This experience actually opened up an opportunity for her to do some teaching during the semester. This setting was just the beginning for Kelly's experiences in collaboration. As she continued with her studies she was assigned to other schools in the vicinity and she regularly worked with teachers in planning, instructing, and assessing student work, particularly in the areas of math and reading. She seemed pleased to have had such a rich experience working with teachers and students in all types of settings, including whole class, small group, and individual.

Another early recollection Kelly had in collaboration was in her math course while she was a student at the university. The professor teamed students up with a partner and together this team created lessons. Kelly did not think this happened in any other course she had ever taken. Then, during her student teaching experience, Kelly thought she and her supervising instructor established an excellent collaborative environment that made Kelly feel quite welcome and able to seek out advice whenever she needed it.

This same experience appeared to continue when she was hired as a part-time

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teacher. Kelly said, "When in my first year there actually teaching in first grade, I had an excellent and awesome mentor that would help me no matter what, so I had a lot of collaboration with her. As far as the time, we had a specific day that we would meet each week, but it wasn't always very long, and it wasn't always very helpful." Kelly elaborated by saying, "And so it was more like I would go after school or before school, and say, 'Hey, I need help with this,' and I kind of made the time to collaborate, so even though we were supposed to have that collaboration time, we usually had an agenda we had to follow, and we had to turn that in, but it wasn't always the most beneficial."

This did not surprise Kelly, nor did it dissuade her. She expected that her professional experience would be a mix of having to do things on her own and having the ability to work with veteran teachers who could share their experiences with her. She said, "I'm the kind of person that thinks, 'Don't reinvent the wheel.' If someone else has already done it, I'll use it because I don't have the time to do that, but I also like to be able to do my own thing when I want. So I kind of expected that there would be collaboration to an extent, and that I would be on my own to an extent, which is kind of how I feel like it is."

The Data TeamTM

Kelly viewed the purpose of Data Teams[™] in the school district as a means for teachers to collaborate among themselves in order to drive instruction. She thought it would be best if the team met two to three times per month. She emphasized the need to examine teacher practices in terms of the implementation of effective teaching strategies in order for the team to know exactly what it needed to do next. She also thought it
important for the Data TeamTM to graph the results so there would be a visual representation of where they had come from, where they were, and where they still needed to go with student achievement.

Team membership

Kelly was not exactly sure how the membership of her team was decided. She assumed that the principal made the decision to group teams by grade level and that was what was supposed to happen under the Data TeamTM model. She did mention that there were some teachers in the building who were on Data TeamsTM, but they were not grade-level teachers. In fact, on an infrequent basis, one of the Special Education teachers would show up to one of the fourth-grade team meetings. Kelly was never quite sure why that teacher attended because she never brought anything to the meeting and the team never entered into any discussions with this educator.

Kelly was the team leader. Another member led the team in their grade-level meetings previously, but she decided it was someone else's turn. Kelly thought that Jack was too busy with outside activities and that Kimmy was going to be too engaged with being the building data coordinator, so she felt compelled to take on the role.

Another member on the team would usually record the minutes, but sometimes Kelly did that herself. Other members readily volunteered to do other tasks such as making photocopies of rubrics, assessments, data sheets, and the like. As the leader, Kelly sent reminders to the other members about scheduled meetings. This memo also reminded members that they could not skip the meetings. Kelly actually created a yearlong schedule that she distributed to the Data TeamTM. This provided the team with a timeframe for the creation and administration of pre- and post-assessments. Kelly also sent out other "friendly" reminders, "Hey, we need to switch papers to grade them by Friday." Kelly also represented the fourth-grade Data TeamTM at the Data TeamTM Leaders' Meeting held monthly by the principal.

Reaction to the Data TeamTM initiative

Kelly felt quite exhilarated when she first heard about the district's plan to initiate the Data Team[™] model. She thought the engagement in the three workshops and the implementation of the plan into her building were going to be excellent opportunities for her to brush up on what she had learned in college. She thought the realities of the profession were different from the idealism of the college classroom and the training she would receive would actually help her better determine what she was actually going to need and use. So she thought, "Okay. I think this is going to be a positive thing."

Kelly mentioned that even though the team met on a regular basis during the previous year to work on math and social studies, they were not required to do this. So, when the message reached them that they were going to be a Data Team[™], and they had to meet at least once a month, Kelly was pleased. She said, "I wasn't last year. We weren't required to meet ever, but we did on a weekly basis because it helps us stay organized and stay on top of things, and know what everyone else is doing so we're all going the same direction. So far, the majority of the grade level thinks this is okay, great, let's do this because we already are."

It did not take long for Kelly to take notice the murmurings spreading around the building which caused her to second-guess her initial positive reaction. She said she began to hear things such as, "Are we gonna stick with this? Is this a waste of our time, a waste of our resources? So you kind of hear that negativity from other people, so it puts a little doubt in your mind." This doubt was completely erased, however, after she completed the workshops and began to work with her Data TeamTM. Once she became involved in the process she thought, "This is a great thing that we're doing."

The team at work

In a typical Data Team[™] meeting, Kelly would bring a binder filled with materials for the team. Other members would also bring items such as assessments, filled-out rubrics, and student results. Kelly would normally have a copy of the state standards with her as well so the team could refer to them as they held their meeting. Kelly would then lead the group through a review of the results and then through the fivestep Data Team[™] process. The team determined timelines or deadlines for work to be submitted. Finally, the team would end its meeting and then move on to other relevant issues of mutual interest among the members.

Kelly was happier with the Data Team's[™] work from the previous year because she felt the team had more freedom in deciding what data to collect and use to drive its instruction. The team focused on math when they had that freedom. They began by looking at the results of the district math assessments. Since this assessment was given quarterly, the team thought it was a constant measure they could use to track student achievement. In addition, the Data Team[™] also did some work in the social studies area because it was the only exposure the students would have to the state's history.

Things changed after that first year, however. The principal announced that the

school-wide goal was on writing and that Data Teams[™] had to focus on that subject area. The team had to make a decision on which approach to writing it would take, and it finally chose to focus on the "Simple 6" model. This model had been previously adopted by the school district so the team chose to use it. Kelly said, "Our students weren't all getting four, five, and six, so we thought, 'There we go.' So we got started with logical order, stick to the topic, and interesting words. And we just kind of have gone from there."

Kelly believed there were some specific variables she could absolutely control that would make a difference in student achievement. She thought that the amount of time each teacher on the team spent teaching a subject, combined with the way the subject was taught, had the largest impact on the fourth-grade students. In order to do this, the Data Team[™] would decide the content that needed to be taught and then created a list of strategies that would be appropriate for that content. Sometimes, Kelly would either add to the list of strategies or manipulate the ones the team agreed to use in order for it to fit best into her classroom. The time factor was a huge piece for Kelly. She said, "I think definitely taking the time is the biggest thing for me. If I take the time to really focus on it, and to teach it, and to teach it well using the strategies that we know. Hello, that makes a load of difference."

Kelly also thought there were obstacles that got in the way of student achievement. She thought students who had communication disorders and language barriers, and lacked motivation were the groups she struggled with most. She also thought that attendance was another issue that got in the way of learning. She was quite convinced that students could not learn if they were absent frequently.

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When comparing the fourth-grade Data Team[™] with the other teams in the building, Kelly placed her team towards the higher end. She said, "We are not all the way at the top because I think there are more things, I think there are some things we could do more effectively. I think that we could spend more time on some things, but that's hard to tell the other members who are coaching, who have to leave right after school to go pick up kids, so when half the team can and half the team has no desire . . . Yeah. I feel like we could be spending more time on things, and talking about things more in depth, which I think could be beneficial for everyone. But I feel like the time we do get when we meet together, we spend it well. I think we do what we need to do efficiently, which I can see some of the other teams not doing." Kelly thought that some teachers on other teams were making the entire Data Team[™] model was straightforward.

One of the steps this Data Team[™] took in each of its meetings was to choose which instructional strategies the teachers were going to use. Kelly did not think the team had a specific method in place that it followed, but when the team chose a writing prompt, the members would bounce ideas off of each other and then it made a collective decision about what sounded best.

Member relationships

Kelly had an extremely positive attitude towards the other members of her Data TeamTM. She said, "I love what I do. I want to be here, and I think that makes a difference." She also thought that her attitude had a positive effect on the other members. Kelly thought the team never had any major conflicts. She did acknowledge that there were some minor disagreements from time to time. She said, "It's usually, well, this is what I thought, and this was why. And the other person can understand, and I think it's just we're pretty agreeable that it's never usually a big deal. It's like oh, okay, I see where you were going, and then usually whoever the classroom teacher is for that paper gets the final say. You know what I mean?" Kelly could not think of a single occasion, however, where there was a deadlock in the Data Team[™] that could be resolved.

Kelly thought the communication channels worked fairly well in the group. She did worry that she and another member tended to dominate in the communication cycle and the other member was a person of very few words. She also thought that the same people on the team tended to always be the volunteers to do everything while one member tended not to do much more than what was absolutely required. Kelly hoped all of that would change in the future when the team could get a fresh start.

The members established some Data Team[™] protocols, like attendance, promptness, and being prepared with materials. Kelly tended to remind the other members at each meeting of the upcoming deadlines. For example, she said, "In our Data Team[™] meeting, we said, 'Okay. The assessments have to be graded by Wednesday,' and then as we had our staff meeting on Tuesday, we always sit as a grade level, and we were like well, some didn't have them graded, some were finishing, and we said, 'Okay. Let's just have them done by Friday,' or no, 'Let's give the post-assessment by Friday.' That way we have the weekend to grade them because we have until Tuesday then. And it was like yeah, that's fine. It's very flexible, I feel." Kelly thought attendance was the most difficult issue her Data Team[™] had to deal with. Even though it was difficult, the team managed to get all of the members to attend almost every meeting. On one occasion a teacher was gone to a conference and missed a meeting. Then there was one other occasion when one member did not show up for the meeting. Kelly reflected on that and said, "I've let them know when the meetings are, but there was a time when a member said, 'Oh, I'm not gonna be there today. I have to leave. I'll give you my numbers.' But they really didn't. They just assumed I'm gonna give you this, and I'm not gonna come, and that's that."

Student Success

Student success, in the mind of Kelly, was determined by how well students performed on an agreed-upon assessment rubric. When I first met the Data Team[™] it was focusing on the writing process. The fourth-grade team was using the "Simple 6" rubric to determine if students were proficient at a specific level of writing. Kelly thought it was important to help students reach a 4, 5, or 6 on the rubric because that was the best way the team found to determine if students could reach proficiency.

Kelly had the mind-set to set the standard high when it came to student achievement. Her desire was for all students to be successful on the rubric; hence, all fourth-grade students at Barack Obama would have a reasonably good chance of passing the state assessment. Even with this desire, she was pretty confident that it would never be possible to get all students to that ideal. She lamented, "What we usually shoot for is we always kind of think we are going to have those two or three that no matter how many times we do it, aren't going to get it, so we kind of accept that and we move on to what the majority, 80 or 90%, of the class can get and we just keep rolling off of that."

Kelly was a little distraught that the Data TeamTM could not make a more concerted effort to help those few students who did not reach the bar. She remembered how her fellow fourth-grade teachers had done some student grouping for math the previous year. During math time, all fourth-grade students were clustered into high, medium, and low performing groups. Each teacher worked with one of the groups on specific needs. Kelly thought that was an excellent model and hoped the team would be able to mirror that plan with the writing initiative by utilizing the results garnered from the Data Team[™] work. She indicated, however, that the principal was being more prescriptive on what teachers could and could not do so the team was unable to implement this prior strategy. That was unfortunate for Kelly. She said, "I really enjoyed it. I thought it was great because each teacher could say, 'Okay. I'm doing enrichment on this standard,' and another teacher could say, 'Okay. I'm doing reteaching from the beginning,' and you could see the students either taking it farther, expanding their knowledge, or getting it for the first time, the light bulb going on. So I thought that was really beneficial and I really enjoyed that." One of the things the Data Team[™] work did for Kelly was that it allowed her to see that the team did an inadequate job of following up with those students in the bottom group. As she put it, "The team just let those students shuffle through."

Kelly partially attributed the success of her students to her training in classroom management. She thought that what she gleaned from her mentor during her first year of teaching prepared her well for the fourth-grade classroom. Kelly struggled during her first year of teaching, but her mentor assisted Kelly in developing the necessary classroom management skills that made the difference for that struggling young teacher. Kelly said, "I think that whole experience really taught me about classroom management. That part of college was kind of a blur. I didn't know. It was kind of just fuzzy, until I really got into it. I was like, 'Oh, okay. This is what they mean, and this is what I need to do?' And I feel like from that first year with first graders, I have such a good handle on it now."

Kelly did not have any classroom management problems. The skills she developed from interacting with her mentor, the principal, and other resources gave her the ability to have a well-managed classroom. Kelly said, "If I don't have those behavior problems, it increases student achievement because we have time to teach. That was my biggest complaint the first year. I was like, how do I teach them? I'm just dealing with behaviors all day. How can I teach them to read and do this, but I guess that's another reason I like fourth-grade. They know how to read, well, to an extent, but I feel like I'm making a difference. I feel like I can teach them because they know how to be in school, and I don't have to deal with all those behavior problems."

Sharing Results

Kelly thought the Data Team[™] process was superior in determining student results than any other method she had been exposed to during her teaching career. She said, "I'm focusing on one thing, and I'm really pulling the bottom students, so I have a really specific focus. Whereas usually in class, when you're not doing Data Teams[™] beforehand, it was like this person is struggling in general and it's harder to get down to the specifics every time, every single time. So I feel like Data Teams[™] is more helpful in identifying those students."

The Data Team[™] usually decided what proficient meant before the postassessment was administered. Then, after the students wrote the assessment, the team would switch papers so no teacher would have his or her own students. Kelly thought this practice gave a more accurate picture of how students were performing. She thought there would be a lot of problems if teachers graded their own papers. She said, "With writing, it's so hard to grade, so we switch papers, and then when we get them back we can talk about what we agreed with, or if we didn't disagree; and then they're all graded, so when we meet, we can talk about those questionable things."

After the team scored the assessments, Kelly would chart the data and share it with the other members. The Data TeamTM would then determine if it met its goals. The group would talk about the successes and obstacles for specific students, determine what the next steps should be, whether it meant moving on to new material or revisiting what had just been taught, and evaluate its own teaching behaviors in terms of the effectiveness of the strategies chosen and used in the individual classrooms. On one occasion, to check for inter-rater reliability, the team went through an exercise where all members scored the student papers and compared their grading with each other.

Précis

All in all, Kelly thought very highly of the Data Team[™] process. She said, "I think it's effective. It helps me focus in on some weaknesses in my teaching. It allows me to get ideas of what other teachers are doing, and it allows me to try some new strategies and to get new materials from them. I really think it's beneficial for me, even

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for the students. When they do a nice job, that's a good feeling for me. It motivates me, and it motivates them too, because they can see it. I keep their pre- and post-assessments together. So they can see their growth, I can see their growth, and their parents can see their growth when I send them home together. So it's really a great situation. I think it's worth it. It's beneficial."

Jack

Jack was the third member of the fourth-grade Data Team[™] at Barack Obama Elementary School. He was not merely the sole male on this Data Team[™], but he was the only male out of the 10 teachers with whom I worked. He earned a degree in secondary science education and began his teaching career as a middle-school and highschool science teacher. He taught at a high school in a neighboring district and at the local Catholic school before joining the faculty at Obama. After having spent 2 years at the secondary level, Jack went back to school to obtain his elementary teaching license. He did his student teaching at Barack Obama and has been teaching there since. He said, "I really like this age group."

The Classroom

Jack's classroom was a bustling learning environment and it was centered on a baseball motif. The outside of the classroom door was filled with "stars," that is, student photographs. In addition there was a list known as "Jack's line-up." This list was reserved for students who "made the mark." There was no visible indication on how to make it on that list.

The classroom itself was located in a wing at the back of the school building. It

was directly across from the media center and the computer laboratory. The other fourthgrade classrooms were located along the same hall. This put all members of the Data Team[™] in close proximity to one another.

Samples of student work were displayed on the wall just outside of the classroom. There was no sign of student data results either outside or inside of the classroom. I had to visit the area near Kelly's classroom in order to find student data. This is where the entire fourth-grade data were posted.

Student desks were arranged into five different learning groups. Four groups had five members and one group consisted of three students. Each student had his or her own desk. The desks had more than adequate storage space for student materials and personal items. Each desk had its own separate chair, which made it easy for Jack to arrange students into cooperative groups. Name tags were on top of each student desk.

The teacher area was located in the back left corner of the room. A group work table took up the rest of the space in the back of the room. Computers and book cases lined one side wall while student boxes and cabinets lined the other side wall. Shelves and windows were located in the back of the room. The front of the room had a chalk board with two bulletin boards on each side. The door was located in the front right corner of the room. Various models of aircraft, from space ships to airplanes, hung from the ceiling.

Jack posted classroom rules on the left front chalkboard. Student chores were listed on the right front bulletin board. The chores were arranged like a baseball field with a student's name at each position with a given chore. For example, at the pitcher's position there was a name of a student listed and that student's job was to take out the trash. Another student's name was listed in the left field position and this person was assigned to clean the boards. Reminders of what students needed to do in their class work in order for it to be considered "best work" were posted around the room.

Posters of the planets in the solar system were hung on the right side of the room. Illustrations of the human body systems were also displayed in this area. In addition, a chart on the different types of adjectives was located on this wall. Examples of the different types of adjectives were also found on this chart. Finally, samples of student work were taped to the cabinets. A state flag, posters, and student work in the Social Studies, and rules for computer use were posted on the left wall. "All Star" student work was on display on the back wall. Boxes and bins for student work, shelves stocked with books and supplies, and live plants were along the back wall.

The ethnic makeup of the students was very similar to that of the other fourthgrade classrooms. There were 13 Caucasian, one Latino, and three African American students. Students were assigned to cooperative groups. Much of the work in Jack's classroom was done in student pairs. Jack was a very mobile teacher who continuously worked the crowd as students worked. An appropriate sound level for cooperative learning was maintained throughout the classroom and students tended to stay on task. During independent work the classroom was extremely quiet and students were fully engaged overall. Jack used the "buddy check" system, where student partners assessed each other's work, to determine if it had been done correctly.

Jack instituted a reward system for positive behavior and on-task performance. He regularly provided praise for correct responses and good behavior. He also found it possible to add points to the reward system in a quiet way that did not distract from the learning environment. In fact, many students did not see when he added these points because they were too engaged in their work.

Overall the classroom was a tad bit cluttered. With that being said, it was well organized and managed. Students were productive and they appeared to enjoy learning.

Early Collaboration Experiences

The only practice Jack had in collaboration with other teachers prior to his joining the Obama faculty was during his high-school student-teaching semester. He was teamed up with a special educator and together they planned, instructed, and assessed student work. Jack considered this to be an extremely valuable experience and he was able to draw on some of the things he did in that setting when he arrived at Barack Obama.

The Data Team™

Jack thought the purpose of Data Teams[™] was for a whole group of like-minded teachers to examine student data in order to determine which instructional skills they needed to improve on and then to supply the support each another needed in order to implement those skills. He thought the Data Team[™] process was an excellent vehicle for getting teachers "on the same page." Jack thought it was important for teachers at the same grade level to teach the same material, use the same strategies, and follow the same general time frame.

Team membership

Jack learned that the Data Team[™] was formed when the principal told the fourthgrade teachers they were already a team and therefore they were now going to become a Data TeamTM. Jack said the team decided it would rotate the role of group leader and that he was waiting for his turn to be leader in a future year. He said other than that, the team would decide on other roles during the team meetings. Jack would typically volunteer to create a rubric when one was needed for a specific assessment. In terms of volunteering for tasks, Jack said, "In our group, usually there is someone that just says right away, 'I'll do it,' and then okay. You know? And then we always recognize the next person. As for me, I'm fortunate to have the other people in my group. I mean I do a lot of coaching and my time is very limited, so a lot of times, they'll pick up the slack if that happens, but then when I'm out of season I pick up that slack, so it evens out." It was not apparent that the other members of the Data TeamTM held that same view.

Reaction to the Data TeamTM initiative

Jack was a bit concerned about the Data Team[™] initiative when he first heard about it. He thought, "I'm busy in the summer. I coach a lot. Boy, how am I gonna find time?" But he did manage to attend the workshops and upon completion of them he said, "I took the Effective Teaching Strategies model and that was neat, and the Data Team[™] workshop. It's just neat too. It was a good training. I really liked the Data Team[™], just the aspect of it forces you to get together, but it just helps us be on the same page as a whole group, and that's my main thing with it. I like that a lot."

Jack went on to say what in his mind was the value of Data Teams[™]. As Jack put it, "I think all four of us on that team have that focus, so it's one of those things that the system says this is what we're gonna go for, and okay, let's try it because there's always new things that are out there, and as a group we're trying to help kids, so let's try that and see how it works." Jack speculated that every member of the team was so committed to the success of their students that they would continue to meet as a Data TeamTM, even if the district discontinued the initiative.

The team at work

Jack thought that the initial step for the Data Team[™] to take at the beginning of any given school year should be to examine student results on several different assessment tools, including the state assessment, the NWEA, and the district math assessments. He said that as a Data Team[™], "We look at all that information and basically a lot of the time just as a group, we say, 'and your students, what are they struggling with?' And we compare and contrast and try to get on the same page with that, and then we just pick skills, and that helps us decide what we want to focus on."

The teachers would bring student work to the Data Team[™] meeting. Part of the meeting time was spent scoring student work. On these occasions, rather than scoring their own students' work, the members of the team traded papers, scored them, compared their grading practices, reconciled differences, and then went on with the process of analyzing the outcomes. Jack thought this was a useful practice. He said, "I think we got a better feel for, or just a better way to assess the students, as not to be as biased. Sometimes that can happen, unfortunately. So a lot of times we just trade papers. This helped in the long run." Jack also believed this practice helped motivate his own teaching because he would see how students in the other classrooms were progressing and this caused him to think, "Boy, their class is pretty good. I better pick it up." To that end Jack did a very good job of completing assignments the team gave out prior to the

deadlines the teachers imposed upon each other.

Jack thought it was important for each individual member on the Data Team[™] to have the ability to spend quality time in the instructional process. He argued that there were too many disruptions that took away from classroom instruction and a continuation in that practice could actually impede the work of the Data Team[™].

Jack was confident that the team tried to do its best when it came to working with students who came to them with diverse learning abilities and/or socioeconomic backgrounds. In working with certain groups of students, Jack said, "As a group, as a team, we do our best to touch upon the weakest skills, and do our best to try to improve those."

Jack found the interaction among the group members extremely useful when it came to brainstorming ideas for different teaching strategies to use in the classroom. He also thought the interaction that took place during the discussions on student results was important to engage in as well. He said, "We'll talk about the results. We'll say we felt this worked, but maybe next time we shouldn't do it this way, we shouldn't use this strategy, or it didn't work as well because you learn as you go which one works the best." He also realized that even though the team may have agreed upon the same strategies, many times each teacher introduced or reinforced those strategies with their students with their own unique nuances. This broadened Jack's horizons on how to effectively employ the teaching strategies.

Member relationships

Jack enjoyed working with the other teachers on his Data Team[™]. He thought

they all got along very well as individuals and that they had the ability and desire to work together for the success of the fourth-grade students at Barack Obama. He said, "I think everyone on our team just enjoys teaching and we're there for the kids mainly, so I think that main focus says it all. It helps us just get along and do what we need to do which is to focus on helping kids. That's the main thing I feel at least."

This is not to say that the Data Team[™] never had a disagreement. Jack remembered one such incident. As he reflected, he said, "We were trying to think of what writing prompt to do. I think a few of us had one idea, and we couldn't really come to an agreement because you have to think of what type of writing do we need, what type of genre, and everyone has their own ideas." So the team eventually decided to switch gears by focusing on a different content area and then it interweaved the writing process into that subject. This compromise was agreed upon by all members of the Data Team[™] and each member learned a valuable lesson about the power of compromise. Jack believed that this trait the group developed was one of the main reasons why the team never had any major disagreements.

Jack attributed the team's cohesive spirit to the willingness of members to go beyond the call of duty for the benefit of the entire team. For example, Jack was most appreciative of the work one of the members put into the high quality of the team's bulletin board displays. About that he said, "She really did put in lunch time, she had the idea of how to do it, and it was neat to see that extra time that she put in because there's a lot to teaching and on top of having to do Data TeamsTM, it takes a lot of time, and just seeing people on our team find time to do that is neat."

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Student Success

Jack personally saw a tremendous increase in his students' writing which he attributed to his interaction with the other members of the Data TeamTM. Using a holistic approach to the Simple 6 rubric, Jack tested his students at the beginning of the school year and then again near the end of the year and the increase was about the best he had ever had with a group of students. He was quite confident that would not have happened had he not had the ability to work in a Data TeamTM setting. He thought that by working on specific writing skills at different times throughout the year, the team could focus on the most important student needs. Jack was quite excited about the results.

As the Data Team[™] used the Simple 6 rubric throughout the course of the year to guide their grading practice, Jack was grateful that this scoring tool was available. His thought was that if the team could develop the monthly writing prompts, then the rubric would effectively guide his fellow teachers and himself through the scoring of those writing samples.

During the course of the school year as the team analyzed results on assessments, Jack saw improvements overall. At times there were huge gains from the pre-test to the post-test and at other times there were only modest gains, but in general the trend was one of improvement for the fourth-grade.

Sharing Results

Although this was not visible in his own classroom, Jack thought it was important for the group to post the results of the assessments the Data Team[™] gave. These results were posted on the team bulletin board. To this point he said, "We actually communicate

with each other obviously with the results, look at the data, and decide did we improve as a group. Or do we need to maintain this, do we need to do it again, should we switch skills, or should we present it to our principal and the data leaders group?" On those occasions when the Data Team[™] decided to re-teach a concept or a skill, the members would enter into a discussion on what other strategies they might employ to ensure a greater gain in student achievement.

Jack knew the team was not always able to clearly identify the causes why the team did or did not reach the goal. Sometimes when that happened, Jack would begin to rationalize rather than focus on causal data. Once he said, "Like any kind of test, sometimes it depends on the day that we have a certain writing prompt. Say a couple of students weren't feeling that well, I don't want to say that they had to be in the mood for it, but really, for a day the creativenesses can kind of flow when they're feeling better."

Précis

Jack was pleased with the direction the Data Team[™] was moving. That is not to say, however, that he was complacent. In fact, he actually was considering what the team needed to do differently in the following year. He was pretty sure that simply switching roles, such as Data Team[™] leader, was not going to be enough to help the team grow as it continued its collaborative journey. One of the most prominent things on his mind was instruction. Jack thought the group could do a better job at coordinating when they were going to teach to a specific part of the Simple 6 scoring rubric. Overall, though, Jack said, "As far as the whole thing, I personally think it's gone well enough that I think we'll probably keep a lot of the same things."

Themes

Kimmy, Kelly, and Jack had similar backgrounds in that each of them had taught at a different school in the district prior to their appointments at Barack Obama. Kimmy and Jack had also taught in parochial schools in their early careers. As I spent time with these three teachers different themes emerged which I have categorized as: (a) attitudes and experiences; (b) roles and norms; (c) collaboration; (d) personal responsibility; (e) high standards; (f) teaching strategies and common assessments; and (g) strengths and weaknesses (see Table 2).

Personal Attitudes and Experiences

Personal attitudes, coupled with past and current experiences in collaboration, created a positive mind-set for Kimmy, Kelly, and Jack as they embarked upon the district initiative of Data TeamsTM.

Past Experiences

The members of this Data Team[™] had positive and/or negative past experiences in collaborative efforts. These combined experiences helped the team develop an optimistic outlook to the Data Team[™] process. Kimmy stated, "I think that coming from the environment that I previously taught in before I came to Barack Obama, it was a totally different environment both as far as the staff were considered, and as well as the students. Statistically, I was teaching in an inner-city school, and so that brings along with it a whole host of other problems, those variables that you can't control. And so I think that that definitely teaches you patience and understanding for a wide variety of

Table 2

Themes That Emerged From the Data Team™ at Barack Obama Elementary School

Emergent themes	Common attributes
Attitudes and perceptions	Past experiences in collaboration provided a hopeful outlook to the Data Teams [™] initiative Approached initiative with an optimistic point of view Positive interaction among Data Team [™] members
Roles and norms	Membership roles were understood and carried out Established group norms and followed them as a team Used proper tools for effective communication Worked successfully through conflicts to reach common resolutions
Collaboration	Reason for team's existence went beyond compliance An eagerness to collaborate Recognized the benefits of working together
Responsibility	Completed tasks on time Prepared to participate in Data Team TM discussions Acknowledged need to score student work collaboratively
High standards	Agreed on the definition of proficiency in student work Used multiple data sources to determine proficiency Set high goals for all students Willingness to re-teach if students were not proficient Analyzed cause data (teacher actions) in addition to effect data (student results)
Strategies and assessments	Collaboratively selected teaching strategies Collaboratively created and used common assessments Reviewed the effectiveness of the instructional piece
Strengths and weaknesses	 Strengths: Manipulated variables within their control Sought ways to deal with variables outside of their control Effective use of time Provided precise and timely feedback Strong belief in team's effectiveness Weaknesses: Needed more organization Data Team[™] process needed more refinement

people. So I think having come from what I would consider a more difficult environment to work in to this environment, I'm more appreciative of what I have here. The other teachers were less willing to participate. They were less willing to offer up ideas. They had more negative attitudes and viewpoints, so I think having worked with them, and then coming here to work on this team that I've just felt such a warm welcome and everyone really seems to just be in it for the good of students and they leave their other issues and problems behind. I'm just really appreciative of that, and I think it helps me to mediate better because whatever negative situation we get into here, I think, 'This is fine. We can deal with this.'''

Kelly had a similar experience before she joined the faculty at Barack Obama. She said, "I would go after or before school and say, 'Hey, I need help with this,' and I kind of made the time to collaborate even though we were supposed to have time set aside for collaboration. For those meetings we usually had an agenda we had to follow, and we had to turn that in, but it wasn't always the most beneficial." Before she experienced Data TeamTM work, Kelly said, "It was like this student was struggling in general and it was harder to get down to the specifics every time, every single time. So now I feel like the Data TeamTM is more helpful in identifying those students."

As she reflected on her career, Kelly thought, "I feel like from that first year with the first graders, I have such a good handle on it now. I don't have the problems that I did that first year because the first year I didn't know what to do, and I learned from it, and I used my mentors, and I used my principal, and every resource I had. So I think that it's made a good impact on my teaching."

Jack's only experience in collaboration prior to the Data TeamTM initiative came

during his student teaching for his high-school license. He said, "It was the first year they had collaborated and so it was a neat time to do that. It was a good experience, so that kinda helped me."

Kimmy pretty much summed up the thoughts of the team about past experiences when she said, "I would not give it up. I don't think that I would want to do that for the rest of my life. I happily applied for and accepted a transfer to a different school, but it was like I said, invaluable. I think that it made me much, much more appreciative."

Personal Attitudes

The teachers approached the Data Team[™] initiative with positive attitudes. Kimmy said, "My thoughts to Data Teams[™] were overwhelmingly positive, especially being fairly fresh out of school. I'd only had a year of experience prior, and I was all for it, whereas a lot of the older teachers that I worked with just thought, 'Oh no, it's just one more hoop we have to jump through.' But I didn't feel that way."

Kelly's reaction echoed Kimmy's thoughts. She said, "This sounds good. It sounds like it'll be helpful. Effective teaching strategies, I want that. We can review that and brush up on that from college. I think this is gonna be a positive thing." She too was taken a little back with the negative reaction by some of her colleagues, but Kelly thought, "This is going to be beneficial and I think it's a great thing that we're doing." At another point Kelly said, "I was glad we were going to do Data TeamsTM. I think for the majority of the grade level, it was great. Let's do this because we already are."

Likewise, Jack reacted positively, albeit not initially, to Data Teams[™]. He said, "I really like Data Teams[™]. It helps us be on the same page as a whole group. I like that a lot."

Current Experiences

Kimmy could not have been more excited than she was about the composition of her Data Team[™]. She said, "This has definitely been the most positive experience for me. The staff here is pretty friendly and welcoming and I really, really enjoy working with the other fourth-grade teachers, so my little fourth-grade unit here is pretty strong. It's pretty close-knit and we all get along really well, and they're very flexible, laidback people who I think just genuinely want what's best for their students."

Kelly also believed the current environment was perfect for her. She said, "Personally, I think I have a very good attitude towards my team. I love what I do. I want to be here, and I think that makes a difference."

Jack had a similar outlook. He said, "I think all four of us on that team have focus, so it's one of those things that the system says this is what we're gonna go for, and okay, let's try it because there's always new things that are out there, and as a group we're trying to help kids, so let's try that and see how it works."

Roles and Norms

Established roles and norms helped the group to be a more productive Data TeamTM. Each member knew her or his role on the team and in the building, followed the established norms regularly, used the proper channels of communication, and worked through conflicts successfully.

Member Roles

Kimmy was chosen to serve as data leader for the entire building. She had been trained in all of the workshops, one of the few in the building, and as she said, "I think I probably fit nicely into that role for them." Kelly served as the Data Team[™] leader. Other than that, the team did not officially assign specific roles to any member. This did not mean, however, that team members did not assume different roles. Kelly emphasized how willing members were to assume whatever responsibility had to be met. She said, "Sometimes I'll do it. Whoever jumps up to say, 'I'll do the copies, or I'll do this.' We just kind of play it by ear." Jack reiterated this when he said the members, "just kind of assume the roles. We always decide who needs to make copies of this, or who need to do whatever, so we kinda just pick and choose each meeting. As for me, I do a lot of coaching and my time is very limited, so a lot of times they'll pick up the slack if that happens, but when I'm out of season I pick up that slack, so it evens out."

Established Norms

The team had a clear yet unspoken expectation. The members would be present for all meetings. Kimmy said, "They're flexible people and we understand that there are going to be times when emergency situations arise, and we take that into consideration. I don't think that anyone would be too upset. The expectation is still clear, however. We expect you to be there unless there is an emergency situation." Jack spoke of this expectation when he said, "I mean there's always times when, you know how it is, 'Oh, I'm not going to Data Team[™] meeting today because I could do this and this instead.' So there are times you're thinking, 'Oh boy,' but we just do it because we know it's for the focus of the kids." Kelly added that not only were members present at all of the meetings, but that "everyone is usually prompt."

Communication

Communication between members was important to this Data Team[™]. Jack said, "We actually communicate with each other obviously with the results, and look at the data, and decide did we improve as a group or do we need to maintain this, do it again or should we switch skills?" Kimmy thought it was equally important to communicate beyond group membership so students, parents, and others in the building could see the work of the team. She said, "We post our data in the hallway so that students as well as the staff can see what we've been working on and how we're progressing." Kelly also thought communication was important, to the point that she wished there was more of it. She said, "Sometimes I feel like two of us are doing all the communicating and the others are there, communicating a little bit, but I think more could be done."

Conflict Resolution

Each member of the Data TeamTM was quite adamant that the team rarely had to deal with conflicts, but when such occasions did occur they found ways to work through them. Once, when the team was stuck deciding on writing prompts, it decided to take a break and switch gears for a while and then came back to the problem a little later. About this incident, Jack said, "I think a few of us had one idea, and we couldn't really come to an agreement because you have to think of what type of writing do we need, what type of genre, and everyone has their own ideas. We've done this for a while. Let's switch gears. Let's do more of a social studies-type theme, so then we kinda integrate." Kelly also said conflicts were minuscule. She stated, "It's usually, well, this is what I thought, and this was why. We're pretty agreeable that it's never usually a big deal. It's like, oh, okay, I see where you were going." Kimmy said, "Well, I think that I try to be as amiable as possible, and I try to see things from other peoples' perspectives. I think that that's really important, so I just try to listen more than I talk, and then when the time is right, offer up my opinion. And if it's something that I feel really strongly about, then I'm not going to change my opinion. They are welcome to keep theirs as well, but we would just definitely need to come to some type of compromise. And I've worked with people who don't want to do that, but you just need to keep hammering at it and say, 'That's fine. I understand your point, but we need to decide something else then.'"

Collaborative Mind-set

The teachers understood the raison d'être of the Data Team[™] initiative and determined in their minds that they would contribute to creating a collaborative spirit. When talking about the rationale of Data Teams[™] all three members were articulate in terms of compliance to the district mandate. Kelly said, "My understanding is that we are to meet two to three times a month with our grade level to come up with a focus of what standards we're going to be teaching, that we need to improve as a grade level, and come up with strategies to teach those things by seeing what works and what doesn't work." The Data Team's[™] thinking, however, went beyond compliance. The members saw a greater purpose for their existence. Jack said, "How I see it, I look at students' data as a whole group to help us see what certain skills we need to improve on, and then go from that, and then help us teach that. It kinda helps us get on the same page. That's how I see it." Kimmy put it in even more simple terms. She said, "I guess my understanding is just that, I think it's just what teachers do anyway, or what I would hope that most teachers do anyway, and that's just to study the data that you're already collecting."

Kimmy was impressed with her team's eagerness to collaborate. She said, "I think they're all just really willing to help. Whenever a person is in need of something, whether if it's something reproducible, or if it's just an idea, they're just really friendly and willing to go, I would say, even above and beyond what I would expect from another teacher. They give freely of their time when they can."

Jack echoed that sentiment when he referred to a specific piece of work Kimmy had done for the team. He said, "She [Kimmy] really did put in lunch time and it was neat to see that, just the extra time that she put in because there's a lot to teaching, and on top of having to do Data TeamsTM, it takes a lot of time. Just seeing people on our team find time to do that is neat." Jack thought every member of the team did this because of the commitment each had for the success of students. He said, "I think everyone on our team just enjoys teaching and we're there for the kids mainly, so I think that main focus says it all. It helps us just get along."

Kelly contributed to the collaborative environment by creating a comfortable structure for the Data Team[™]. She set a specific meeting place and time and that appeared to make a huge difference in the attitudes of the team. Kelly said, "They had been doing whatever they had been doing and I said, 'We're gonna meet in my room every time and it's going to be right after school at 2:30. Okay. The meeting is here, and at this time." Even with this, Kelly thought she should probably think of other things to do to contribute to a collaborative mind-set.

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Kimmy summed up the collaborative nature of the Data Team[™]. "Without collaboration," she said, "Well, you would miss that entire element. I think that's what's great about it is that no matter, whether you've only taught like myself for 3 or 4 years or whether you're a veteran teacher and you're looking forward to your retirement any day now, there's always something more that you can learn from another teacher. I think that's invaluable. And if you were just trying to do it on your own, it's just not as meaningful, I don't think."

Personal Responsibility

Each member of the Data TeamTM considered it important to come to the monthly meetings with all tasks completed. There were several Data TeamsTM in the building and throughout the corporation that used Data TeamTM meeting time to complete tasks that should have been done by individual teachers before the meetings started. This included grading papers, registering results, and analyzing individual student data.

Kimmy thought having the work done was extremely important. She said, "If you've given an assessment, a pre-assessment or a post-assessment, you need to make sure that you have all of those scored and that you've already taken the time to look over them. You need to be ready to report your data, and I guess just coming with some suggestions is always good."

Jack supported this viewpoint. He said, "Well, scoring papers, you've just gotta make sure those are done before we meet." He also thought it was essential to have the proper thought processes in place prior to a meeting. When it came to brainstorming ideas for assessments, teaching strategies, and the like he stated, "You don't wanna just

go into the meeting blind and sit there. It's always good to have an idea of what you wanna do before you go in."

Having tasks completed before the meeting allowed the team precious time to spend on the most important steps. For Jack one of the benefits of this was that it allowed time for collaborative scoring. He said, "We just sit around a table, and a lot of times it would involve scoring because instead of scoring our own kids, we would trade papers and score, and compare and contrast that. So a lot of times we would just trade papers and I would grade each student, a student I wouldn't really know. Having it helped in the long run. I think we got a better feel for the way to assess the students."

Kimmy was pleased that by being prepared ahead of time, the Data Team[™] was able to spend significant time analyzing student work, which gave the team guidance in determining its next steps. She said, "When we first meet, we like to take a look at what it is that we think the students need to improve upon. We look at some of the students' writing and we collaborate as a grade level, and see what areas they're scoring most poorly in, and then we see what areas they're scoring poorly in, but we feel like we could move them on to the next level. So that's where we begin our focus. Then we just try and come up with a few different ways to teach that specific writing principle, and we come up with a date for a pre-assessment and a post-assessment."

Kelly was also pleased that the Data Team[™] was able to complete the first step of the process rather quickly and move on to the other steps. She was particularly appreciative of the time the team was able to spend discussing the teaching strategies that were going to be utilized in the next round of teaching. She said, "We talk about our strategies and then the last thing we usually do is our timeline. When are we going to do

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these things by? I usually have the standards with me so we can refer to them. Then, if there's time we're discussing their scores and we usually end a Data Team[™] meeting with, 'Okay. Is there anything we need to do for the grade level?'"

High Expectations

The Data Team[™] established high expectations when it determined what student success looked like for fourth-graders at Barack Obama Elementary. Even before it created any assessments, the Data Team[™] determined what proficiency meant. The team usually did this by examining any available data. Kimmy stated, "I think this is very valuable. There are different types of data. Even just walking around and observing what the students are doing in class, depending on the subject, just going around and listening to them read. I don't know how else you would know." Jack also picked up on this concept. He said, "To help us first decide, we look at a lot of different information: the state assessment, the NWA, and our math quarterly scores. We look at all that information." Kelly also stated, "We decide before we give the post-assessment what proficient is and then we switch papers. Then when we get them back we can talk about what we agreed with and then we talk about those questionable things."

The Data Team[™] was not merely content with getting most students to score at a proficient level, but it sought to get 100% of the students to score at least 80% on any given assessment. Although the target was frequently missed, the Data Team[™] continued to strive towards that goal. Kimmy said, "Yeah. I'd like that 100% get 80%. That's my dream goal. That's what I shoot for personally." And Kelly said, "We always have those two or three that no matter how many times we do it, aren't gonna get it, so

we kind of accept that, and we move on to what the majority—80, 90% of the class—can get, and we just keep rolling off of that." In their writing goal, which was the schoolwide focus, the Data Team[™] attempted to get all students to score 4 or higher on the Simple 6 Writing Rubric, which was the proficient level on the state assessment.

The Data Team[™] revisted earlier material if it determined students needed to spend more time on a specific concept or skill. Jack said, "There were times when there weren't huge improvements. There were times when it may have gone down one or two kids when you would compare pre-assessment to the post-assessment, so we would say, 'Well, we need to stay on this skill again,' and we would get back to how can we re-teach it. What different things can we do? And then once we did do that, it did improve. I saw improvements."

High expectations were not only the expectation for students, but for the members of the group as well. Kelly said, "We use the Data Team[™] form to chart our data, and then looking at that we can see how successful we were, or where the students were, and what we did, and if not, where was it wrong with the strategies. What happened? Did we not do something right? Did one teacher do something differently?"

Collaborative Teaching Strategies and Assessments

Selecting teaching strategies and creating common assessments was a collaborative endeavor for the Data Team[™]. The school-wide goal for Barack Obama was improved writing. Each Data Team[™] in the building was given leeway in determining how to approach this goal. The fourth-grade Data Team[™] worked collaboratively on making this decision before it began selecting teaching strategies and

creating common assessments. Kelly said, "You can go a million different ways with writing, so we chose to focus on the Simple 6. Our students weren't getting 4, 5, and 6, so we thought, 'There we go.' And we just kind of have gone from there."

Once the team focused and set its monthly goals, the Data Team[™] collaboratively determined which teaching strategies each teacher would utilize in the classroom. By doing this, they were able to agree on what specific strategies had the largest impact on student achievement. Kelly said that in order for the team to do this, "We come up with a list of strategies that we're going to do." Kimmy said, "We'll have a whole list of different ways that we could teach a concept or an issue, and then it's just a matter of narrowing it down to what we think is feasible." Jack said, "In a group, we brainstorm. We make a list. We can do this, and this, and as a group, we decide the best strategies to use from that list. Then we use that, and implement it."

The Data Team[™] did not have a specific method it followed in deciding which teaching strategies to employ. Instead the team shared ideas of what could be done and then made a collective decision. As Kelly put it, "Well, I don't know if we've had a method we follow, but if it's a writing prompt, we kind of just bounce ideas off of each other, and do what sounds best for each of our classes, and say, 'Okay. Here's what we'll do.' It's kind of just conversational. It's just what we agree on."

Choosing the appropriate assessment was one of the most difficult tasks of the Data Team[™]. They struggled in the early days of the work together and eventually settled on creating their own common assessments as a team. As Kelly thought about assessments, she said, "It's hard for us. That's usually what we spend the majority of our time on because a lot of the times before we all did different things at different times. So

we had a conversation about what we're supposed to do. That usually takes our time, our discussion, because that's a hard thing for us to come up with.

Jack believed it became easier to create the common assessments once the team made the decision to follow the Simple 6 rubric. He said, "Early on, when we first started doing this before we were kind of told that we needed to focus on writing, we would make our own assessments, and sometimes we would make our own rubrics. But when we started the writing goal, we used our Simple 6 rubric. So the assessment was pretty much that we would make up a prompt, and the kids would write and go from there."

Kimmy added, "We usually come up with it ourselves. Since we're focusing on writing, we'll use the standards, and we try to focus in on what we call the power standards, obviously. So you want to focus on the ones that are going to be the most heavily tested. So if it's something that we know the students are going to be tested over, then we want to make sure that they're proficient in that area. So we look and see which of those standards they are not meeting, and then choose one. There's usually plenty to choose from."

Another important step the Data Team[™] takes is to review the effectiveness in the instructional piece. As Jack said, "We'll talk about the results. We'll say we felt this worked, but maybe next time we shouldn't do it this way, we shouldn't use this strategy, or it didn't work as well because you learn as you go which one works best. With the different teachers we've had on our team, everyone does it a little differently, so we can all bring to the table certain ideas."

Strengths and Weaknesses

The teachers were cognizant of their own strengths and were aware of certain areas where they needed further professional growth. They identified several areas they had control over that affected student achievement. They also recognized other phenomena that were out of their control which also had an impact on student data. They had a sense of what they were good at and where they needed more work. Overall everyone on the team believed the fourth-grade Data Team[™] was one of the higher functioning teams at Barack Obama.

Two variables that teachers had control over seemed to emerge from this group. First, the team believed it had the ability to use time to the advantage of learning. Jack said, "I really feel that just the amount of instruction time in the classroom is sometimes taken away from us for different reasons. Because there's so much to do, and so many different things that are thrown at us, that sometimes I feel that that's taken away, and that can affect achievement a little bit." Time was the biggest variable for Kelly. She said, "If I take the time to really focus on it [the goal], and to teach it, and to teach it well using the strategies that we know, hello, that makes a load of difference." She thought students would make the greatest achievement if teachers would pay better attention to "the time we spend teaching that subject, the way we teach that subject, what we present to students, and the activities that we have them do."

The second variable was feedback. Feedback that was precise and timely made a difference in the eyes of this team. Kimmy said, "I feel feedback is extremely important, especially with what we're doing. In fact we took the Simple 6 rubric, the writing rubric that we use, and we met extensively to talk about what we need to do because while it's a
good rubric, there's no place for feedback. So we went ahead and added extra lines on the sheets. The students are very familiar with it. I think what's really good, too, is explaining everything, making sure that you're clear and concise with the students, so they know what to expect when you give them a grade, and so they know how to grade one another as well."

The team also recognized it had limitations. There were some variables that were outside of their control. Jack said, "Yeah, there are things and we have to do our best. There is a diverse group of kids in ability and socioeconomic background. That plays a big factor. As a team we do our best to touch upon the weakest skills and do our best to try to improve those." Kelly mentioned how "communication disorders, the language barriers, to an extent motivation, and attendance" could have a negative impact on student learning. Kimmy summed it up when she said, "Obviously, pretty much anything that happens before they arrive in the morning and after they leave at the end of the day, I have no control over. When they go to bed, whether or not they've had a good breakfast, what their family situation is like, whether or not they're going to complete their homework, I can assign it, but I can't make them do it."

In order to deal with these variables the teachers tried to instill a higher level of accountability in the students. Kimmy said, "We need to make the students accountable for themselves as much as is humanly possible. I mean we realize that yes, they are children. They're only nine and 10 years old, and so it's to be expected that they're going to be forgetful at times, and kids will be kids, but we try to help. By the end of the year, we try to make sure that they are more accountable than they were when they came to us."

The Data TeamTM recognized some weaknesses in their work. Kimmy thought the team could be a bit more organized. She stated, "I'm feeling a little scattered and I think everyone else is too, but we could work on our organization a little better. I think we do a good job with that collaborative piece and listening to one another, but we could be a little more organized. We could probably make things run a little more efficiently, get in and out a little quicker." Kelly also referred to this issue as an efficiency deficit. She said, "I think we could spend more time on some things, but that's hard to tell the other members who are coaching here, have to leave here, who have to go pick up kids here, so when half the team can and half the team has no desire, but I feel like we could be spending more time on things and talking about things more in depth, which I think could be beneficial for everyone." Jack also thought that by switching roles the team could become a little more efficient, but he added to this his need to pay better attention to the instruction piece in his own classroom. Above all, the team thought its greatest weakness was the fact that everyone was new to the Data TeamTM concept and they still had to refine the process. As Kimmy put it, "We're trying to sort of iron out any of the problems along the way."

Each member believed the Data Team[™] was at the upper end of the spectrum in terms of effectiveness at Barack Obama. Kelly said, "I think our team would be towards the higher end, not all the way at the top because there are some things we could do more effectively." Kimmy said she would put her team in the upper quartile. She said, "I think that we're functioning well. I don't know that I'd put us at the very end of the spectrum. I don't know that any of us are overly confident. This is still a new process for us, too. We definitely have some things that we still need to work on. We all have a very positive outlook a far as Data TeamsTM is concerned. I think it's something that we all feel that we have an invested interest in. We believe in the program. We think that it's important to do, and it's not just a bunch of garbage. We genuinely think that it's important and I just work with really nice people, and we got really lucky. We all mesh really well, so it just worked out."

Summary

In all the Data Team[™] believed it was quite effective. In terms of the research question on past experiences the teachers believed their past experiences in other schools and working with other teachers provided a framework for Data Team[™] work. On the research question on becoming cooperative collaborators, the teachers indicated they developed positive attitudes about collaboration and incorporated them in their current work. They all seemed to operate with a collaborative mind-set, felt a strong sense of personal responsibility and high expectations, and were aware of their own strengths and weaknesses. For the third research question on how personal attitudes, beliefs, and experiences impacted their work, the teachers established and practiced rules and norms that guided their work, including proper communication and conflict-resolution skills. Kelly summed up the work of the Data Team[™] by saying, "I really think it's beneficial, even for the students. They can see their growth, and I can see their growth, their parents can see their growth. So it's really a great situation."

CHAPTER 6

JOSEPH BIDEN ELEMENTARY SCHOOL

School Context

Joseph Biden Elementary School is also located in Midwestern City. Joseph Biden, yet another one of the 14 elementary schools, is the smallest elementary school in the district with only two or three classrooms per grade level. Like most elementary schools in the district, Joseph Biden has a K-6 configuration. The school originated in 1952 as two self-contained classrooms. Another structure was added to the property in 1953 that mirrored the original building. A third was added in 1955. Two of these three structures were connected in 1957 which provided six additional classrooms and made it possible to house a K-6 configuration. In 1962 a gymnasium and kitchen were added. In 1984 a total renovation project was completed. By 2000 the structure could no longer house the student population so a portable classroom was added in an effort to reduce class size and meet the state's new initiative on classroom structure. By 2004 three additional portable classrooms were added to meet the continuing growth of student population. Finally, by 2008 a new renovation was completed which replaced the portable units, added additional classrooms, and created specialty areas.

Joseph Biden Elementary is nestled in a residential neighborhood on the east

side of the city. It is bordered by two rivers to the north and west and by another school district to its south and east. A small subdivision from a neighboring town is included in the attendance area.

The residences within the school's boundaries include large stone and brick riverfront homes, older multi-story framed houses, post-World War II-era residences built on concrete slabs, and other brick-style homes. Yards and houses are maintained very nicely. In contrast to many of the other schools in the district, where as many as 50% of the properties are rental units, only 5% of the homes within Biden's boundaries are rental properties. This translates into a low mobility rate for the school, even though it has had its fair share of residents moving in and out.

Joseph Biden Elementary has a stable workforce. Staff members typically choose to remain at this school rather than seek transfers to other buildings. On the contrary, teachers from other schools request to be transferred to Joseph Biden when openings occur. Currently, there are three teachers at each of the Kindergarten through third-grade levels and two teachers at each of the fourth- through six-grade levels. Additional staff includes art, music, physical education, Special Education, and ESL. The building has one administrator, several paraprofessionals, office staff, cafeteria workers, and a custodial crew. It was the only school in the district without an Assistant Principal.

Staff development opportunities were numerous. All teachers were trained in the Data Teams[™], Effective Teaching Strategies, and Making Standards Work workshops. An outside consultant worked with grade-level teams and the building as a whole on school-improvement initiatives. Teachers were trained in "Everyday Math" and the

district literacy framework. The building data coordinator worked in partnership with the principal and technology coordinator to provide staff development and support to teachers. School-wide book studies focused on the characteristics of students of poverty, classroom instruction that works, and building academic background knowledge. In addition, teachers were engaged in a new district initiative of curriculum mapping.

Teachers felt genuinely positive about their instructional practices. The school conducted a survey of staff (2001) and it indicated that most teachers felt they worked effectively with Special Education students, including those with mild to severe disabilities and ESL. A large majority stated they worked effectively with students of various ability levels. Most believed they treated students with respect and more than half believed the converse was also true. The staff believed that parents were well informed of academic standards and that parental involvement supported student achievement. An overwhelming number responded that they used a wide variety of teaching strategies, which allowed students to express themselves in diverse ways. Hands-on learning experiences and cooperative learning strategies received high representation on classroom practices used. Most teachers believed student achievement could be increased through the use of student data, even though only slightly more than half said they actually used data to guide their instruction. Negatively, approximately half of the staff felt they were constrained in their teaching due to expectations and reactions from students, parents, school administrators, and central office administration.

Joseph Biden Elementary typically enrolled between 325 and 350 children each year. The DOE School Profile in 2008-2009 slated school enrollment at 376,

representing a mix of racial, cultural, and economic backgrounds. Three-fourths of the students rode the school bus, while the other one-fourth walked. Figure 8 shows the ethnic makeup of the student body at Joseph Biden Elementary School.



Figure 8: Ethnic makeup of Joseph Biden Elementary School.

The DOE School Profile, as represented in Figure 9, reported that 64% of Joseph Biden's student population was on free or reduced-price lunch. There has been a steady increase in this number since the 2000-2001 school year when only 25% of students were identified as such. The number of students on free or reduced-price lunch was slightly higher than that for the entire district which was identified at 62% by the DOE.

The city's reliance on the musical instrument, sports, travel, recreational vehicle, and light manufacturing industries had attracted an increased labor force over the past few years, even though this trend began to reverse due to economic conditions. This



Figure 9: Free or reduced-price lunch students at Joseph Biden.

influx of new labor included a remarkably high number of Latino families moving into the community. Hence, Joseph Biden Elementary has seen the number of Latino children increase significantly since the 2001-2002 school year (see Figure 10).

A 2001 student survey suggested a general positive feeling for the school. Students indicated that teachers had high student expectations, that their parents knew how to initiate contact with their teachers, that the teachers listened to their ideas, that the office staff cared about them as individuals, and that they felt safe at school. There were several negative responses towards school in general, but the administration chose not to focus on them in its design for school improvement.

Joseph Biden operated under what it described as "Guidelines for Good School Order" and attempted to apply discipline and safety policies consistently throughout the school in order to provide a safe and orderly environment. Teachers were responsible for



Figure 10: Growth of Latino student population at Joseph Biden.

student behavior in their own classrooms and all were expected to submit classroom management plans to the administration. If and when a student was sent to the office a "Disciplinary Referral Sheet" or "Time-out Request" was completed, and parents were notified of the misbehavior. Every month a character-development life skill was promoted during the daily morning announcements. The school social worker provided a variety of self-help groups to students. The school's safety plan was filed at the district office and a building crisis committee was formed. Fire, tornado, and lock-down drills were practiced at regular intervals. The building was equipped with a card reader security system at the entrance points.

According to DOE information, Joseph Biden's yearly attendance rate was consistently over 96%. Office personnel contacted parents who do not inform the school of a child's absence. Letters were sent to parents when a student reached an undue number of absences. An excessive number of absences resulted in a Legal Notice. Preexcused absences for vacations and such had to be approved by the principal 2 weeks in advance of the absence. Recognition was given to students annually who had perfect attendance and had not been tardy.

There was evidence of strong community and parent involvement at Joseph Biden. The neighborhood has experienced a turnover in home ownership over the past 30 years. With that being said, however, there were a number of second- and thirdgeneration families in attendance at the school. School programs, athletic events, parentteacher conferences, and Grandparents/VIP Day were very well attended. A School Improvement Committee comprised of parents, business people, and staff members met throughout the year to promote community, home, and school relations.

The most recent parent survey indicated that more than 90% of parents felt the school was safe and secure, that clearly defined academic goals which focused on student learning and achievement were in place, and that homework and discipline policies were supportive of the home.

The Parent Teacher Organization (PTO) was quite active at Joseph Biden. It supplied monetary and physical assistance to the school. Many PTO members could be found assisting teachers and students in classrooms, chaperoning field trips, sponsoring school-wide events, assisting with the creation of the yearbook, and providing refreshments. In addition it sponsored other school-wide events such as Grandparents/VIP Day, the Holiday Dessert program, and Staff Appreciation Week. The PTO also made monies available for classroom supplies, and as a result each classroom teacher could request up to \$250 annually from these funds. DOE data revealed that while the percentage of students passing the state assessment in English/Language Arts and Mathematics had been increasing state-wide, this was not the case for the district or Joseph Biden Elementary. Joseph Biden had a higher percentage of students passing these assessments than both the state average and the district average in the years 2001 through 2003. Since that time, however, the average state passage rate has been higher than Joseph Biden. Biden's passage rate had consistently been higher than the district rate with the exception of 2006. Several initiatives were established to help focus instruction, provide data, and increase student performance, including full-day Kindergarten, Reading Recovery, Remediation Tuesdays, August Jump Start, Math Quarterly Assessments, DIBELS, standardized tests, classroom assessments, standards-based report cards, Everyday Math, the district literacy framework, and the Data Teams[™] process.

The state's standards were used as the framework for teaching in each area of the curriculum. In addition, district-wide Power Indicators were identified in math and English/language arts. High Ability and Special Education students were given differentiated assignments, and students within the High Ability group had the option of participating in the district's gifted program housed at another campus.

Technology was an essential feature in the school program. The curriculum included a component to develop computer skills through keyboarding and word processing classes. In addition, internet access was available in every classroom, the media center, and the computer laboratory. Two student-use computers were located at each teacher station and were upgraded according to the district timetable. In addition to computers, other forms of technology were available throughout the building for student

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and teacher use. Daily morning announcements were delivered to each classroom by a student news crew via closed circuit television. Teachers used Accelerated Reader (AR) and STAR programs to help determine and assess student reading levels and growth.

The Case Study

Benchmarks were established for student achievement in reading comprehension and writing. The expectation was for all teachers and support staff to implement the school's plan so students would show a positive growth at all grade levels as determined by the NWEA. The anticipation of the school administration was that the implementation of the different initiatives would result in positive student growth. Joseph Biden was in the process of beginning the Data TeamTM initiative when I arrived and met with members of the fifth-grade Data TeamTM. Three teachers comprised the membership of the team. Two of them were fifth-grade teachers who shared adjoining rooms. The third member was a Special Education teacher and the data coordinator for the building. All three teachers were female and Caucasian. For purposes of identification they are referred to as Barbara, Amy, and Porsche.

Barbara

Barbara was a fifth-grade teacher at Joseph Biden Elementary School. Teaching was her career goal ever since she was in the sixth grade. She obtained a bachelor's degree from a small Midwestern Christian college and a master's degree from a nearby public university. Barbara had 20 years of teaching experience. Fourteen of those years were at two other schools in the district and the last 6 were at Joseph Biden. She has taught second, third, fourth, fifth, sixth, and multi-age grades over the course of her professional career.

The Classroom

Barbara's classroom was located in the older section of the building, but she was moved to the newly constructed section when it opened. The learning environment was quite attractive. It was well-lit with two large windows, bulletin boards were colorful and related to the current content, and the room was quite clean. One of the walls opened up into the other fifth-grade classroom where Amy taught. Important class information was posted on the walls around the room, including a list of almost 100 books that had been read by the students during the year, math vocabulary words, the Simple 6 rubric for writing, and classroom rules. Each student had his or her own individual desks, but the desks were arranged in pods of six where students were able to work in small groups. Students who were not involved in small-group situations worked independently on their tasks.

Barbara and Amy utilized the physical proximity of their classrooms to their advantage by sharing students with each other during English/language arts, depending on the learning needs of the children. An analysis of common formative assessments, through the Data Team[™] process, allowed these teachers to identify student needs, regroup them, and plan instruction.

Early Collaboration Experiences

Working with Amy and Porsche on the Data Team[™] was not the first experience Barbara had with teacher collaboration. She and two other teachers actually developed a multi-age program for the district several years prior to this initiative. She was teaching fourth-grade and became very frustrated about the classroom experience. She came across a book on multi-age opportunities in the classroom, got the two other teachers to buy into the idea, and initiated the program. Once they got it up and running, the three of them spent numerous hours working together. All in all they had approximately 75 students together most of the time. As Barbara stated, "That was huge. . . . That was probably the biggest collaboration." Then, at another school, Barbara participated in fifth- and sixth-grade team meetings every week. Barbara indicated that she worked best when collaborating with other teachers.

The Data Team™

Barbara and her Data Team[™] talked a lot about student progress, and these conversations were not necessarily isolated to Data Team[™] meetings. They compared what they were doing in class, they discussed what types of assessments would be appropriate to use for the next block of learning, and they shared joys and frustrations as they tried to figure out what to do. More often than not, the Data Team[™] would have these conversations after school. During these conversations they would find themselves saying things such as, "I am frustrated that I see this is not happening" and "Yeah, me too. Yeah, me too type of thing." And these little discussions seemed to be a way they got the Data Team[™] process working for them.

Team membership

Barbara believed distinct roles for each member emerged as the Data Team[™] began to meet regularly and function as a unit. She labeled Porsche as the Data Team[™] leader. Porsche was a certified trainer in the Data Teams[™] process and served as the building data coordinator. This naturally led to her being the Data Team[™] leader for the fifth-grade team. As leader, Porsche kept all of the data, minutes, and other paperwork. She made sure the team followed the prescribed agenda and led the others through the five steps of the Data Team[™] process. Barbara called Amy the task master who would tell the others to get off any tangent they may have diverted to and get back on task. She saw herself as an initiator; meaning she would be the one who wanted to group process the team's actions, suggest new teaching interventions, and the like.

Reaction to the Data TeamTM initiative

Barbara had a couple of different thoughts go through her mind when faced with the new directive that the Data TeamTM initiative was going to be implemented. Her first reaction was, "Well, I do it anyway." Then as she thought about it more she began to wonder how her participation on a Data TeamTM was going to change her teaching. Was everything going to be okay? As she stated, "There was a little bit of—when something is mandated, it's not quite as fun and there's a little bit of a—hmm, I don't like that." In addition she just did not have a clear picture on what was going to be required in terms of personal commitment. The teachers had been hearing all kinds of rumors on implementation such as a requirement to submit five pages of minutes from the Data TeamTM meetings and meetings having to last for an hour at a time. So, Barbara had mixed feelings about the whole Data TeamsTM idea.

As she received the Data Team[™] training and began the actual work as a participant on a Data Team[™], Barbara's understanding of Data Teams[™] began to develop. She stated that in her estimation, "Data Teams[™] exist so teachers can really

know without a shadow of a doubt how each individual child is doing something." So to her, Data TeamsTM was a multi-faceted approach: (a) it used data to look where students were at the beginning of learning; (b) it prescribed a process for fixing a problem area in student learning; (c) and then it looked to see if students reached proficiency or not. In addition, Barbara thought that the collaboration element with other professionals allowed teachers to break out of isolation and work together in an area that gave a snapshot of student achievement.

Barbara was very disappointed with the professional development day that trained her in the Data Team[™] process. She found it was not worth her time. She stated, "I have to tell you too that this Data Team[™] that I went to, the presentation was absolutely painful to sit through, and so it was very discouraging when I went to this. It was a very difficult day to sit through because it was read through by screens and it was not, in my mind, it would've just handed me a book and I read it, and I would've been a lot better off, and so I think if you want people to do this in the future it has to be presented in a totally different way or people are not going to buy in. I think it was just the—it was one of the worse professional development days I have ever been to." In addition to this poor experience in her training, Barbara had a concern about the amount of time required to dedicate to the Data Team[™] process. She was not quite comfortable with the hours required without additional compensation. She was looking forward to the new school year when the district was going to build Data Team[™] time, with compensation, into the teacher contract. The team at work

Barbara was pleased that the team members came prepared ahead of time for their Data Team[™] meetings. The agenda was already set beforehand and the members typically would have their materials prepared. The team found it was easier to bring data to the meeting and fill the forms out there rather than trying to do them individually. Barbara liked the frequent times when the team talked its way through the forms out loud so each member knew what the other was doing. Barbara was also the literacy facilitator for the building so she would often bring resource material to the meeting in order to look for strategies and other ideas for classroom instruction.

Barbara's Data Team[™] usually used and/or created a rubric that clearly defined proficiency on the given assessment piece. As the team assessed student learning, it determined where the students should be at the end of instruction, how many students were proficient, how many were beyond proficient, how many were not quite proficient but close to it, how many had a long way to go in order to become proficient, and how many would probably never become proficient with the new knowledge or skill. Finally, the team determined what the next instructional steps must be. Barbara thought that rather than focusing on the results of student performance, the Data Team[™] needed to discuss what it had to do to change instruction for students who did not reach proficiency, whether that meant changing a process, using a different teaching technique, or changing the frequency and/or duration of an intervention. The point Barbara was driving home to her team was that the Data Team[™] had to realize it could change the way it did business with students. For example, when the teachers did multiplication facts, they changed how much time they were spending on this concept in the classroom. First, they were spending very little time, but when they lengthened the duration it made a big difference for students. Here is how it happened. When the Data Team[™] conducted a 3-minute test, they found that only 25% of the students were proficient with 80% accuracy. The teachers were shocked with the results, realizing that only about 10 students were proficient. They were doubly surprised to find that it was not even the students they expected who were the proficient ones. The team then set out to make a goal of reaching 85% proficiency, meaning practically every student in the classes had to move up. By lengthening the amount of time spent on facts they were actually able to reach 75% proficiency. They were ecstatic about moving this many students into the proficient or higher categories. So they decided to celebrate by throwing a little party for the students.

Determining which data to use was a difficult undertaking for Barbara and her Data Team[™]. She contended that teachers needed to know what they were really looking for because that was one of the things that worried her most with data-driven decision-making. She feared she could be "data teaming" all the time, and then having to decide what to pick. She illustrated her point with this experience: "We were in the process of trying to learn fractions in fifth-grade and all of a sudden the three of us were talking one day about how our kids did not know how to find common denominators, and so that's what kind of led to the discussion of we better do something about multiplication facts. And so that's what we did and it was because we realized a weakness in our kids that they needed. If they didn't get it they were in trouble all the way down the road. And so that's why we chose that one."

The Data Team[™] took a unique approach to which teaching strategies they used in math. The data clearly showed that students fit easily into one of three groups. The first group found the material easy and the students mastered it right away. A second group had some struggles with the content material and the third group did not appear to get it at all. The three teachers met together, assigned each other one of the groups, and created a list of teaching strategies they thought would work. Then they each went their separate ways and used the strategies they thought were best for the group they had. Barbara was given the group that was struggling. At the conclusion of the intervention the team met again and had a discussion about what strategies worked and which ones did not. In the end, Barbara came to the conclusion that differentiation was the key to student success. More importantly, Barbara also came to a realization that the team must be able to collaborate to compare the different strategies, see the results, and understand the role of teacher behaviors. For her, this was the key to leading and learning.

Member relationships

Barbara perceived that the willingness of the three teachers to be honest with one another was all they had to do to create a spirit of collaboration. She insisted that what really mattered was not her as a teacher or her teaching effectiveness, but about what her thoughts and the thoughts of the other team members were, where they had the right to say whatever they thought. So, she believed that trust and honesty created a sense of camaraderie and that allowed the team to meet their students' learning needs.

The spirit of collaboration did not mean Barbara was exempt from any conflict within the group. On the contrary, she believed that conflict was inevitable because divergent ideas or philosophies would be introduced into the group dynamic. For her, the way to deal with conflict came down to attitude. By that, Barbara meant it was a matter of reminding herself that she and the others were collaborating for the right reason and therefore they would be able to work through any difficulty. In practice, Barbara said it usually just took one team member to say "this isn't that big of a deal" to get them back on focus. She said, however, that it was important that they liked each other. She thought it might be something totally different if she had to be on a team with someone she did not respect, mesh with, or who had an opposing philosophy. She thought that would be an enormous issue to deal with, so she felt grateful for her Data Team[™].

Barbara described her Data Team[™] meetings as being full of laughter, jokes, and high spirits with lots of food, but highly focused. She believed that by following the prescribed steps in the Data Team[™] process the team was able to zero in on which data to analyze. Without that structure she saw data analysis as a never-ending sea of data. She also perceived that the Data Team[™] process allowed the members of the team to focus on what they did well and what they did not do so well as instructors.

Barbara attributed much of the team's spirit of collaboration on the notion that there was the expectation from the school and district administration that teachers would be involved in the initiative. She concluded that even if teachers didn't like it, Data Teams[™] forced them to focus. She believed that the more teachers worked together, however, the more they talked about kids individually and the better it got. She also thought that intrinsic motivation eventually set in and the team actually became excited with the anticipation of student scores. As Barbara stated, "Really, at first, you might drag your feet, but there's this value when you start seeing success and when you see the kids being successful and when you see something's changing. . . . It just keeps you kind of motivated to keep going. That doesn't mean we come 'yippee yaw, here we are,' but

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there is value. We know that it's a valuable—it's not a waste of my time."

Student Success

Throwing a party for students was one way the Data Team[™] celebrated student successes. Barbara also used a lot of high-fives to acknowledge student achievement. In addition, she stated that seeing students succeed generated such a good feeling and that working together as a Data Team[™] provided a benefit that would not have been possible otherwise. As she put it, "You see, [as] educators, we don't get pats on the back, we don't often get 'good jobs,' so it was good for us to see the outcome of our efforts. We were funny. We, on the day of the test, all graded those immediately and the kids were even watching us, you know, 'did I make it,' so there was real excitement. They were proud of themselves too and so were we."

Barbara believed the Data Team[™] process led to better student achievement. She perceived that the opportunity to share her students with the other teachers on the Data Team[™] was beneficial to students. This was because each teacher viewed the students through her own unique lens and that gave the learners a much better opportunity to respond than if there was only one teacher working with them. So for Barbara, it was a win-win situation. She said she would never want it any other way. She stated, "In the situation, I see kids' growth, they feel good about it. . . . I could never go back. If you put me in a room by myself, where I couldn't talk to anybody but my kids, I would just go—I would seek out somebody, you know. Have a class pet or something. I don't know."

Barbara saw the Data TeamTM process being beneficial not only to students, but to

the teachers as well. As the teachers worked with students by incorporating effective instructional strategies, Barbara saw growth in her students. This realization made her want to work even more with her Data Team[™]. She thought this put her into a "vicious circle which was a good place to be." At one meeting as the team was setting achievement goals, Barbara suggested they make the goal for 85% student proficiency. The other members thought she was crazy, but she insisted they reach together for high goals. Even though they did not quite make the goal, they were surprised and pleased to see how close they came.

A point of frustration for Barbara was that she felt really bad for the students who were put in the last category of probably never going to make it. As a teacher she hated that and it had been the most difficult part of collaboration for her, realizing that there were students in that category whom she did not want to cheat, but she did not know exactly how to help them. She stated that even though her Data TeamTM was able to be much more focused on what they had to do in their individual classrooms, it was still frustrating when a student was having a rough experience just on the day the assessment was being given, or when a child threw a temper tantrum, or if something the teacher had no control over disrupted the learning environment.

Sharing Results

Barbara's Data Team[™] had a slow start in communicating results of student learning to students, parents, and administration. One early experience with making results public was when the Data Team[™] put up posters in the classrooms, had a motivational experience inviting students to be a part of the number who made it, sent

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weekly progress reports home to the parents, posted the results, and reported the experience to the principal. The reaction on the part of the students was tremendous. They were all excited about being part of it and it was a big deal for them.

Barbara viewed the practice of sharing data within the Data Team[™] as a collaborative effort rather than a competition. Often, the first opportunity she had to look at all of the data for a particular content area was when the group met at a Data Team[™] meeting. The team attempted to assess where students were in their learning and what they needed to do. She attributed this to the openness that the group had with each other. She genuinely enjoyed how they teased each other occasionally with comments such as "my class scored a little bit higher than yours," but it was always in the spirit of fun.

Barbara was cognizant of the fact that the members of her group had done very little in terms of sharing data publically. There were times when they had posted data on the walls such as the time when students charted their own progress in the accelerated reading program, and they did keep the parents informed on how well students were performing, but not much more was done in reporting data. Barbara did not see much use in posting student data for public display because she did not think it meant anything to anybody else. She believed data were for her students and the Data Team[™] to determine how they were doing, but other than that they did not mean a whole lot to her.

Assessments

Choosing the appropriate assessments to measure student achievement was a difficult task for Barbara. She could not find pre-made assessments that adequately measured the goals set forth by the Data TeamTM. Additionally, she was not sure the

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right things would be measured if the Data Team[™] created its own assessments. In addition, Barbara questioned whether or not the Data Team[™] was making the right decisions in terms of what to teach, how long to spend on a concept or topic, and how much depth should be given to the material. These were all legitimate concerns for this novice Data Team[™].

Précis

All in all, Barbara saw Data Teams[™] as a positive benefit. She believed if teachers were engaged in Data Teams[™], collaborated for the right reasons, and exhibited drive, then Data Teams[™] would be a positive initiative. Personal ownership in Data Teams[™] was essential to Barbara. She said, "If teachers had personal ownership of their Data Teams[™] then the large amount of time required to dedicate to it would be of significant value." Barbara also believed that if Data Teams[™] did not exist her teaching would not be altered significantly because she consistently used data and relied on other colleagues for suggestions and support. She believed Data Teams[™] had a positive effect on the learning needs of students who might have otherwise slipped through the cracks.

Amy

Amy was the other fifth-grade teacher at Joseph Biden Elementary School. She was in her fifth year at this school. Amy obtained training at a state university and was a member of the advanced teacher program. She earned a bachelor's degree and took numerous other courses during her career at a local college. She was trained in reading recovery which became an asset to her teaching. Prior to her tenure at Joseph Biden, Amy taught for 12 years at Hillary Clinton Elementary, all of it being in the primary

grades, mostly first. She also taught multi-age classes and looped during these years. Amy felt she was able to stay on top of new trends more readily when she was at Hillary Clinton because with it being an inner-city school, there were more demands and requirements. She decided to make the transfer to Biden when an opening became available because of the frequent turnover rate of administrators at Clinton. Between principals and assistant principals, she had approximately 9 in her 12 years at that school. At the time of her transfer to Biden, there were no primary grade openings so Amy accepted the fifth-grade position. She fell in love with this grade level and vowed never to go back to the lower grades ever again.

The Classroom

Amy's classroom had been located in the older section of the building, just like Barbara's, and when the new section was opened she moved next door to Barbara. The wall between the two rooms opened up, increasing the opportunities for collaboration. The students' work stations in the classroom were divided into six small groups with four students in each group. A small-group work table and a mini-computer lab were located on the outside wall. A row of cabinets was located on the wall that opened into Barbara's classroom. The two other walls in the classroom had white boards where Amy and the students could work. The appearance in the room gave the impression that a lot of activity transpired during the school day. A list of books read to the students was on display. A math board, vocabulary word wall, the Simple 6 chart, and daily activities were in plain view to aid students in their daily tasks. Samples of student work were posted on the wall in the hallway above student lockers.

Instructional Practices

Classroom instruction was structured at several levels. There was a blend of Individual student work, small-group work, large-group work, whole-class work, and combined-classrooms work. Amy and Barbara joined forces most often during English/language arts, particularly during the writing process. A large variety of teaching strategies was employed in these various teaching scenarios.

Amy did not believe her teaching would be much different if Data Teams[™] had not been introduced into her school district. She stated that collaboration was something she saw value in throughout her teaching career and it was something she always did. Amy did believe, however, that each individual teacher had to "come into your own eventually as a teacher because there are so many specific skills individual teachers have to use."

Early Collaboration Experiences

Similar to Barbara, the introduction of Data Teams[™] was not the first experience Amy had with teacher collaboration. Her early memories of collaborating with other teachers went back to her years at Hillary Clinton Elementary where the teachers were expected to work together to enhance student achievement. Even when she transferred to Joseph Biden where collaboration was not practiced, Amy found herself working together with her colleagues really well. She found these collaborative experiences to be of great benefit to her, especially in her early years of teaching where she felt the guidance of more experienced professionals.

There was a period of time when Amy broke away from this collegial

environment. She said she wanted to be "who she was." But the opportunity arose at Clinton for her to travel with a group of four other teachers to another state to learn about multi-age learning. This reinvigorated her earlier desire to collaborate. This group of five teachers engaged in some action research for a couple of years where they practiced looping with the students before actually starting multi-age classrooms. Amy felt that this team of teachers worked very well together, in every aspect. The teachers examined different types of data and spoke extensively to students about their feelings on multi-age classrooms.

Amy counted herself lucky never to have been placed in a position where she had to work with another teacher who did not like to collaborate. After she left Clinton for Biden Elementary, Amy not only taught fifth-grade, but she also worked with reading recovery. This gave her fewer opportunities for collaboration. However, once she joined the fifth-grade and Data Teams[™] were established, she perceived her team to be an excellent one. She characterized her teammates as good friends. She saw herself as a little more laid back than the other two members who were a little bit stronger-headed than she was, but she did not allow herself to be walked over by her colleagues. She stated, "I have my opinion too. I don't let them stronghold me."

The Data Team™

Amy recognized a difference in her work with the team at Clinton and her Data Team[™] at Biden. The action research piece at Clinton had its similarities to the work of Data Teams[™] so it was not difficult for her to adjust to this new initiative. She saw the Data Team's[™] work being a little more specific than her other experiences because she felt that this model was looking at scores and trends as teachers attempted to teach particular strategies. Furthermore she felt the frequency of assessments made Data Team[™] work a little more specific than the other experiences of collaboration. Her thought was that teachers received deeper professional experiences through the Data Team[™] experience than what she had encountered with other collaboration experiences. She thought that with Data Teams[™] there was frequent feedback which, in turn, gave teachers an inclination of whether they were doing in the classroom was working or not.

Team membership

Amy assumed the composition of her team came as a result of her being matched up with Barbara who was the other fifth-grade teacher and then the two of them recruited Porsche, who was one of the building Special Education teachers. Amy did not think Porsche had done much collaboration inside of the classroom before the initiative, but this experience not only gave her a lot of time in classrooms, but Amy sensed it was something Porsche enjoyed immensely. She said Porsche "loved coming in and watching us teach and helping us teach and working with kids while we were teaching . . . and with the math, she'd be like, 'Oh, that's how you do it.' With the new math, we were all kinda crazy anyway. She'd be like, 'Oh, yeah. I get it.''

Amy viewed Porsche as a great asset to the team because she coordinated all of the data work and took the initiative to lead the team through the five-step Data Team[™] process with fidelity. Amy stated that they made Porsche the team leader because she had received the advanced Data Team[™] training in which she actually became a trainer herself. Amy viewed this positively because Porsche would tell the other two to get busy and would assign roles for everyone to fulfill. Amy felt this was a real advantage for the team. She stated that without Porsche, she and Barbara would "be looking at each other going, 'What do we do now? What's next?'"

Reaction to the Data TeamTM initiative

Amy's initial reaction to the implementation of Data Teams[™] was, "Oh, another thing." This was not immediately on her high-priority list. She admitted, though, that a personal family matter had consumed much of her time for parts of the past two school years which caused her to miss a lot of school and kept her from being able to complete one of the three trainings. She felt that during this time the school district had been good to her because it allowed her to take a leave of absence and care for this personal matter. So, Amy's initial reaction was to take this new initiative with a grain of salt just like all of the other "schemes" that had come and gone over the years. She said, "Okay, we're going to learn something. It might be something great. It might be something we have to do, or it might be something like, well, we're going to learn it, and it'll go in a couple years. You know how trends go, so, I don't know. I guess I was just kind of in the middle."

As time went on and the team started to meet on a regular basis, Amy's attitude towards Data Team[™] work turned more positive. She began to consider how beneficial it was for her to go through all five steps of the model and see how the students were actually making progress. Amy stated, "So it was really great to see the progress, and I think that I want to go back to the guided reading because I know that when I did guided reading, when I started a long time ago . . . I tracked kids, and I knew I had a skill—a

first-grade skill that went from reading level A to reading level J, which is the end of first grade jumping into second grade. And I tracked my kids every other month, and I kept them on the chart, and I knew whether they were under, on, or above. And, until that time in my teaching career, I was like—I really didn't know. It was all a guessing game. You know? It's a guessing game. I think this kid's here, and I think this kid's here. They're high. They're low. They're kind of in the middle, but this is when I started doing that, I'm like—I know where every kid is, and when those parents come in, I can say exactly. There's not a guess. I'm not guessing anymore. I'm saying, 'Look at this. This is where they are. This is where they need to be; this is where they are.' Then I was, like, this is the right way to teach. We need to know where these kids are, and with data—that's just adding another way for us to show parents, or, even for ourselves to say, 'This percent of kids are not doing okay, and we need to put them above.' And then we work hard toward the goal, and then wow! Look at that great thing. But we know exactly where they are, and I think that's the way we should teach." Amy stressed that when using data to make decisions, teaching was no longer a guessing game.

The team at work

To begin its use with data, the Data Team[™] looked at a lot of student data collected from several different assessments. Amy liked the fact that as the members analyzed the data they began to consider how their students performed in comparison to students in other district buildings. They recognized that writing was one area needing improvement, so that became the focus of their first Data Team[™] meeting. The team chose to use three elements from Simple 6 rubric as its target. Afterwards the team

decided to reassess the students to see what progress was made. The team experienced a significant improvement in student performance on the use of descriptive words.

The team then decided it would use math as a second attempt at the Data TeamTM process. They chose to work on multiplication facts because that would be simple to measure. After the pre-assessment the Data TeamTM divided the students into three different groups. Amy worked with the students who scored on the upper end of the assessment, Barbara took the middle group, and Porsche worked with the slower group. Amy made sure to stress that all three groups were still held accountable for the same curriculum; however, the instructional approach was differentiated to help meet the needs of the students in each specific group. The post-assessments indicated it would be a good idea to continue with this model. This conclusion was verified by the state math assessment. More students in the higher end group passed the assessment in the "beyond proficient" category than in previous years, and half of the students who were in the slower group also passed, which was something that had not happened for these teachers before. Even with that, Barbara's student group in the middle had the largest increase. These results placed that grade level in the passing category on the state assessment. Amy was convinced that the differentiated instruction for the three groups made the difference. She said, "Since they're in different levels, we just decided on our own. We all had a common thing above—the big umbrella. It was the same idea, but then, for each group, it was a little bit different how we did it. We shared ideas. We shared games that we used, but again, just at a different level. That's how we did it."

Amy believed that with the complexity of the profession and the innumerable things to do, it was important to have data organized in one location so it could be readily available when needed. Initially, Amy became a different person when it was time for a Data Team[™] meeting. On those days she moved into scramble mode. She would ask herself, "What do I bring? What are we bringing? I yell to Barbara, 'What are we supposed to bring?' Oh, I think we're bringing. . . . But I made my folder, so I can just grab that now, which is better. I even brought that to the meeting this morning, and I didn't need it because I was like, 'When are we meeting? What do I need?' So I made that little data folder, and I wrote data folder on it—on the outside of it, so it has papers in it, and it has what we've already done. And I have it in little categories, so I have that. But other than that, I think we've been bringing—we have to bring scores. We have to bring other data to find new data. Yeah, we bring the old data and then we decide we need to strengthen to go onto our next piece and get new data." Time and practice helped Amy become more focused and less scrambled on Data Team[™] meeting days.

Member relationships

Amy was sure that an important part of the success of her Data Team[™] was the fact that the members got along extremely well. She said, "We like each other. That helps. I think that also we respect each other, as teachers and as human beings—and I think mostly as human beings. We really aren't all alike. All of us—like I said, the other two, they're really more leaders and headstrong. I'm pretty laid back. But we respect each other well. Barbara and I are best friends anyway, so, that's to boot all this. I mean, we go to church together, and we do a lot of stuff outside of school together. We can look at each other and say, 'No. I don't think that's right.' And we can do that, and we had one data meeting where we had this student teacher sitting there, and Barbara said,

'Yeah, we did that." I looked at her and said, 'We did not teach that.' We were doing a checklist of what we'd taught this semester and she said, 'Well, when we did it, art was in there.' I said, 'It was in there, but we didn't teach it. You cannot check it,' and we were going back and forth like this, and she [student teacher] was—her eyes got real big. And I looked at her, and I said, 'It's okay. We love each other. It's okay.' But we respect each other enough to know that we're not always right, and that everybody is important, and that we need to listen to each other." Amy stated that when the Data Team[™] disagreed on how to approach solutions to issues relating to student data, the three of them engaged in a healthy discussion and then simply voted on it.

Student Success

Amy described student success as "kids learning." She stated, "If students are learning then the Data Team[™] is excited." To illustrate this point, Amy shared the story of one of her learning-disabled students when she said, "I have an LD kid who made more growth in reading and language than any kid in my class. And he struggled during the last couple of years. And so, for me, success is moving forward."

Amy was extremely pleased to see students succeed as a result of the Data Team[™] work. She stated that the hard work was worth the effort because so many students succeeded. This gave the teachers an opportunity to be more flexible in the schedule, including extra recesses for the students. It provided a good feeling for Amy when she was able to tell her students, "You guys worked really hard. Look what you did. We had this many, now look how many we have." As she reflected on this thought, Amy said, "And then they [students] can see the success, too, so it's like, 'Yeah. Awesome. Let's party." Amy shared the story of what happened when the district math assessment results arrived. The students' scores were the highest in the entire district, with the exception of the students in the gifted and talented program. Amy said this called for a special celebration, so in addition to extra recess, they included food.

Sharing Results

Amy felt that it was important to not only keep the data and to have it organized in a way that made it easily accessible, but it was equally important to share the data. She helped the Data Team[™] prepare reports for the building principal. Beyond that, the team also posted the data on the wall so students could see it as well. For example, they posted the results of a math pre-assessment on the wall and challenged the students to move the passing rate from 26% to 85%. Amy told her students, "Our goal is going to be 85% of fifth-graders. Will you be one? Yeah, that was our big thing. And we kept looking at that, and we'd read it, or we'd say to the kids, 'this is why we're practicing. That's what we want to do.' We really made it more like a game, too—a race against yourself or a race against the clock or a race against—It was always a race. So, of course, they're like, 'Oh, can we do it again? I can do better. We can beat that time!''' Amy was sure that posting student data helped to serve as a motivator for students to improve and it made everyone in the room fully aware of what they were doing and where they needed to go.

Assessments

Choosing appropriate assessments was not easy for this fifth-grade Data Team[™]. Amy said they struggled to find the right assessments. They had to make sure the length of the assessments was appropriate and that they were designed to assess the right things. Amy talked about several sources for possible assessments, but the team had not come to the point of creating its own common formative assessments.

Précis

All in all, Amy expressed how important it was for her to know where all of her students were at any given time. Before Data Teams[™] entered her professional life she was not sure if she was focused enough to get students from one point to the next. Her biggest concern was for the team to keep improving. She saw Data Teams[™] has a valuable strategy or approach because it helped her know where each student was. As she put it, "That's when the light bulb came on for me, and I'm like, 'Yeah. Right on.' That's good. That's a good thing, and as we've gone to where we are now and where we have to take these data pieces, and we're trying to move kids to something, it makes sense. I mean, it makes sense to know where they are and to know where you're going and how you're going to get there. It makes a lot of sense. It's so good to me. It's just common sense. It's like, 'Yeah. This is a good piece.'''

Porsche

Porsche was the third teacher on the Data Team[™]. She was the mild disabilities teacher for the school and worked with both fifth- and sixth-grade students. Porsche was in her 23rd year of teaching. She had been at Joseph Biden Elementary for 21 years. The first 2 years of her teaching experience were at another school in the district.

Training and Background

Porsche began her professional training at one of the state universities. She

started as a Speech and Hearing Therapy major but did not find much satisfaction in that program. Later she transferred to a local university, switched majors, graduated, and eventually went back and completed a master's degree in general education. Porsche explained that for her advanced degree she wanted a more curriculum-based set of courses as opposed to Special Education. It was with this background and training that Porsche began and continued with her teaching career with the school district.

Porsche's early years in Special Education were in self-contained classrooms. She thought the Special Education program was doing very well in the district and then along came inclusion. She felt she was not ready for this new experience and could not envision any other alternative to self-contained classrooms for her Special Education students. But as times changed, so did Porsche's attitude. She came to feel that there was no other way of doing Special Education than the current practice of going into inclusive grade-level classrooms and working with the Special Education students.

Professional Responsibilities

Porsche's responsibilities for her students differed from Barbara's and Amy's in that first there was the expectation for her to complete an Individual Education Plan (IEP) for all of her students, and second she would be compelled to monitor the goals and objectives that were agreed upon in the IEPs. Porsche thought she had an ideal situation at Joseph Biden in order to fulfill these instructional responsibilities. She was assigned to team-teach with the fifth- and sixth-grade teachers. Her role was to either take a group of students out of the classroom to provide instruction for them or to remain in the classroom with students and modify the assignments. To begin this work, Porsche would
look for the standards that were being taught. She would then attempt to pick out the core items that the lower-functioning students needed to learn. She would address these student skills and expectations with study guides, extra homework, and/or pre-teaching before regular classroom instruction. This instructional strategy required a healthy amount of collaboration between Porsche and the classroom teachers.

Porsche worked with a large number of students, many of whom did not have IEPs, including ESL students and others who simply might otherwise have fallen through the cracks. It was a common occurrence for Porsche to take a group of students to reteach or to give some other type of special attention. Porsche perceived she had a wonderful rapport with the classroom teachers and she loved this part of her job. She viewed this arrangement as one of the benefits of using an inclusive model because students viewed her as another teacher, not just the Special Education teacher. She reached the conclusion that inclusion did not bring an absolute end to name calling, but she and the other teachers did make strides for students to see her as "just a teacher."

Early Collaboration Experiences

Porsche realized that collaborating with the other teachers made it necessary for her to brush up on curriculum. She believed, however, that this was a good thing for her and that she truly appreciated what general education students were required to learn. Her view was that since all students, including Special Education students, had to pass the state assessment, it put a new emphasis on what Special Education teachers do. She maintained that Special Education teachers used to work for mastery with their students and they worked hard on that goal, but they never got there and were never really exposed to everything in the general education classrooms.

Another one of Porsche's goals was to make a connection with the unique personality types of the different teachers with whom she worked. She was the type of person that would readily stop another teacher in the hall, ask something and say, "Oh, okay, that's fine." She realized, however, that there were teachers who were more reflective in nature and so she would e-mail them a couple of days in advance so they could have time to think about the new idea for instruction. She believed that understanding the different personality types of her colleagues was a good thing.

Over the years Porsche worked with teachers with whom she was uncomfortable. But once again, she said that was okay with her. She was able to work through any differences with another teacher and, in the end, they were able to at least honor each other's personalities and teaching styles. She believed that when she first started going into classrooms there were some teachers who felt a little threatened that she was coming in to "watch them teach." But she tried to convey the message that, "No, I'm actually here to learn and figure out how to teach a large group."

Porsche thought she and the other teachers collaborated well; this was especially true with the fifth-grade teachers. The collaborative efforts were ongoing daily and this created a good team spirit. Porsche knew they would not always agree with one another. In fact she enjoyed relaying the story of how she "barked" at one of the fifth-grade teachers, but later brought a Diet Coke as a peace treaty, knowing that this was what the teacher liked.

Porsche stated that with three different people on the Data Team[™] there was bound to be disagreements and/or conflicts, but the three members of this team made a concerted effort to collaborate. All of them took on the attitude that they had to do whatever was in the best interest of the students. So, when it came to literacy, Porsche would try to go along with Barbara's point of view because she was the English/language arts trainer on the team. Porsche and Amy had some resentment for some instructional strategies Barbara introduced, but they tried them even if they did not like them. She said, "We've grumbled but we usually can solve it within two or three meetings, I would say. It's nothing horrible that we can't solve, but I guess as professionals if you're asked to do something the bottom line is we do need to try. Although we have mutiny I also appreciate Barbara's trying to get us on board with literacy and I think she pushed the review to get the training early. So all said and done we're ahead of the game now. So we do appreciate her."

To further illustrate the point, Porsche also looked to Amy, too, for a lot of Math expertise. Amy was mathematically minded so Porsche went to her on numerous occasions to get input on different lessons. Porsche said, "I have the lowest students, the 12 lowest fifth-graders and I try and pick out the things that are most important to secure goals. So she's my expert math person." She also appreciated how Barbara and Amy also looked to her for help with the students who were not making it, those who needed some instructional modifications.

Porsche believed the diverse makeup of the teachers that would eventually become her Data TeamTM, where each member had a unique area of expertise, was good for the entire group. Even though they might have gotten together and griped a lot, it ended up being a positive thing because the result was better success for the students. In addition, she felt the relationship with her eventual Data TeamTM was better than that

with her sixth-grade teachers.

Porsche thought the team began collaborating about the time she went to the other two teachers to review and start working with special-needs students. From there collaborative planning, instruction, and assessment evolved. The team got to the point where Porsche could go into the other's classrooms and co-teach a lesson with them. As they became more comfortable with each other Porsche began to take students from Amy's and Barbara's classrooms to work with them in small groups or individually. From there, the three teachers began moving kids into a flexible grouping pattern. All of this would eventually evolve into the creation of their Data TeamTM.

The Data Team

With these collaborative experiences melded into her professional career, the Data Teams[™] approach was introduced to Porsche and the other teachers. Porsche was not too sure about this approach when it was initially presented. She said, "My first thought was a good one. I'm married to an engineer and I know that the business world has been data driven for years. And we've had conversations at home that he can't believe sometimes. We go by our heart and I was uncomfortable with that fact. I looked at it as, oh, we have to make huge gains. How are we gonna do this? And it became a little stressful. But I really like data and looked forward to it. I thought oh, good, maybe I'll learn how to interpret data. Because I know with the state assessment, I think teachers want to know but we just don't know how to interpret that. And maybe we're a little scared to ask. It was nervousness, and a little bit of good."

Team membership

Becoming a member of the fifth-grade Data Team[™] was an interesting event for Porsche. She originally started on the sixth-grade team because it was having different instructional problems. She thought her membership could help mediate some of the unfortunate circumstances. As time went along, however, the team began to function somewhat normally and it was about this time that the fifth-grade teachers wanted to work on math. They knew Porsche had a group of their students so they decided to approach Porsche and invite her to join their team. Porsche considered it and at the end of the first semester she joined the fifth-grade team.

Porsche became the Data Team[™] leader for the fifth-grade and the data coordinator for the entire school. She was already sharing the technology coordinator's position with another teacher and by default they were already working on some data for the principal. When the position of data coordinator became available Porsche asked the other teacher if she wanted it. When this teacher turned down the opportunity Porsche decided it was something she would like to try, not because she was good at data, but because she liked working with numbers and enjoyed using technology. She thought this position would blend these two things together. Since nobody else in the building seemed to want the position, it fell in Porsche's hand. While all of this was transpiring she was selected to be the leader for the fifth-grade team.

Reaction to the Data TeamTM initiative

Porsche believed the Data Team[™] process with its focus on collaboration positively affected student achievement. She perceived the students knew that the three of them were close. They were together a lot during the school day and reached consensus on the path the fifth-grade would follow. Porsche stated that when one of the teachers on the team spoke, she was not speaking as an individual, but rather as a team. She said, "We always say, the fifth-grade teachers, we believe; the fifth-grade teachers, we're going to work on this." Porsche thought this was extremely important because it brought all students in the fifth-grade to the same level, unlike other grades where students identified themselves in one group or another. In the fifth-grade, this was the path all fifth-graders were taking. Porsche stated, "It's been great that we are such a good bonded team. We have a lot of trust with each other because I know they're gonna come and ask me and I'm gonna be asking them. Even though we trust each other, like, you're doing this, right? You are doing this? We're still doing this, right, every day. Oh, yeah. We're doing it. So we're running the sheets and we are using the same assessments, of course, and the same fact test."

Porsche expressed some frustration with the Data Team[™] initiative in the school district. She said the number one issue with most teachers was the time commitment needed for successful Data Teams[™]. She believed the following school year would be better when the district was going to add 10 hours of paid time onto the teacher contract for Data Team[™] meetings. She expressed that everyone's plate was very full and that "it's very hard. So when you come and you said—I know we have the Data Team[™] and I don't have the time, it brings negativeness to the process. It's a big, big problem and there are no answers. Is it easy to find time? Absolutely not."

Setting goals

The Data TeamTM initially wanted to have a low goal in terms of the percentage of students reaching proficiency on the assessments because, according to Porsche, they thought only a small number of students would be able to accomplish this feat. In one of the early Data Team[™] cycles Porsche exclaimed how their prediction was true. They did not reach their goal; however, the number of students who were at the proficient level at the end of instruction had increased 23%. This inspired the Data Team[™] to work harder and to set higher goals, this time at the 85% proficiency level. The Data Team[™] then worked with students on math facts, used different instructional strategies for the first 10 minutes of math every day, gave the students timed sample tests, and adopted the attitude that they were going to reach the goal. Their work paid off and their positive attitude towards achievement resulted in student success. As Porsche described it, "That was good. We celebrated even though we knew that 85% was impossible. We went high because I think I asked them to. So I will say when I put the goal up for the students I think it was good; it was high. Because they now know that 85% is what the three of us will accept. Even for my exit slips every day, I post their results, they come in, and they know that I'll be disappointed if it's not 85% or higher." Porsche was moved on how some students were disappointed if they came to class and were not given a practice test because they spent so much time studying to be prepared for one.

Porsche believed that setting the bar high was good even though it was uncomfortable for her. She thought sometimes it was hard to set some goals because inside she personally doubted students would be able to reach it. Even with that doubt in the back of her mind, Porsche continued to move along with the team. She thought that by using this process there was a positive impact on students' math grades that school year. She stated, "We really are kind of getting in the groove, so to speak. I do think it's made a difference on me, personally, about making a commitment that I said I would do this because if I get behind, I probably would have pushed that part of the lesson aside. Well, we'll work on math facts another day. But I have two other people who are going to ask me. It's like, 'okay, your kids didn't move.' So I'm not going to be that team member who doesn't do it. So if nothing else, it makes me responsible."

The team at work

After the initial reaction and having spent some time working on a Data TeamTM, Porsche began to view her work as a teacher in a different light. She thought that before Data TeamsTM the focus of teachers in the district was solely on the state assessment, and other things such as teacher-made assessments were not really important. Porsche said, "So now I look at Data TeamsTM as a way to kind of dissect numbers. To me it's looking back at us, as teachers, our styles, what is that we are doing or not doing; instead of blaming kids. That's the way I think our focus has come off—well, I taught that and I said that and why aren't they doing that? So when we Data TeamTM, to me it's narrowing things down and looking at a small piece. That's been, to me, really exciting this year. To take a small piece and see that a little bit of gain made a huge difference. So, when we do take Math Quarterly and we did take the state assessment, our fifth-grade scores were better, and so we celebrated, and we thought that maybe it was something that we did, where before we just—when they didn't make it then we're like, well, we did what we were supposed to do." Porsche believed the excitement from the members of the Data Team[™] lay in the fact that students were actually performing better, especially in math. This inspired them as teachers to work even harder with the students. For example, Porsche relayed that the team began to notice how students were experiencing difficulty with multiplication facts, so it set a Data Team[™] goal to increase the number of proficient students. The team incorporated a lot of motivational activities and Porsche said, "It went better than we ever could have thought." She felt that working with students on the goal was actually fun and the Data Team[™] saw a thread among all the students that they were able to do it. She believed it was the focus from the Data Team[™] that caused students to reach this goal.

Porsche believed the Data Team[™] process helped her to do more than look at the big picture, which she stated she had the tendency to do. It also helped her narrow the focus. She believed it allowed the Data Team[™] to identify precisely where students were and what the focus of instruction needed to be.

Porsche felt she had control over certain aspects of student learning, but there were other areas where she had little or no control. She believed that as a Special Education teacher she had the opportunity to put the students into small groups and work on the needs of those students in each of those groups. Some students had problems keeping attention and others needed to have instructions repeated in several different ways. She felt it was possible to control that type of an environment through the use of her small groups. Porsche also believed she had control over assignments such as the format of the lessons. For example, she had one autistic student who could not accomplish all of the math expectations on the daily work so she would modify it

so he too could be successful.

On the other hand, Porsche faced challenges while working with her students as well. She had some students with disabilities they had no control over. She had other students who had extremely poor memory. Other factors she faced included students with poor nutrition and routines and procedures at home. In order to compensate for those things Porsche tried to create a positive environment, allowed students venting time, or used other behavior techniques. All in all, it was the willingness of the team to allow differentiation to take place that made it possible for a larger number of students to be successful.

Porsche and the team decided to focus initially on math because it was easier to collect data on that subject than other areas of the curriculum. The school had been trained in Everyday Math and most teachers were comfortable in using that model. Language arts, on the other hand, was a different story. The new literacy framework was still very gray to many teachers, so most teams decided to stay away from English/language arts. She mentioned the fifth-grade team did look at some literacy material as well, primarily because Barbara wanted to concentrate on that area in a strong way. Porsche went on to say, however, that the team really struggled with what it wanted to do in terms of content or area of focus. She saw this as another weakness of the Data TeamTM. She spoke of times when the Data TeamTM sat around for as much as half an hour trying to decide what its focus should be. She perceived that the fifth-grade team, along with some of the other Data TeamsTM in the building, was simply attempting to work its way through the five-step process of the Data TeamTM meeting. She believed the team would get better at determining its focus once it became more familiar

with the entire process.

Which instructional strategies to utilize in the classroom was another area the team did not always agree upon, according to Porsche. She said the team would look at the students, attempt to determine the best practices, and ultimately decide based on the comfort level of the teacher. This did not mean that the three of them would always choose the same strategies. The team did, however, keep the communication channels opened between the teachers. They began meeting every week and asking each other, "What are you doing? Is it working?" Porsche said that it was during these meetings that the teachers began to switch what they were doing and start concentrating on the same strategies. Yet, the teachers on the team more often continued to choose their own individual strategies rather than focusing on one or two that all of them would use.

Porsche viewed collaboration as the process of bringing ideas to the table, accepting others' opinions, looking at students individually and collectively, and identifying why some students do better than others. She further believed that collaboration meant meeting the team's expectations such as regular attendance, promptness, staying on task, and preparedness. In fact, when a team member would show up to a meeting without the proper material, the other two would tell that member to go get it. Porsche stated that the team had high expectations for all members and that she and Amy had actually been referred to as bullies because as she said, "We growl at each other if you really don't have what you need." She described their work as almost hyper-activeness among themselves where they had to get the task accomplished.

Member relationships

Porsche believed the collaborative background experiences of the teachers on their team allowed them to be more focused and they were able to better utilize the hour when their Data Team[™] met. Furthermore, she felt that they brought to the table a level of understanding of what they were doing. She observed that the Data Team[™] itself became more effective as time went on. She believed the team had reached a comfort level on following the five steps of Data Teams[™], it knew how to record minutes appropriately, and it could identify what it wanted to achieve. On the other hand, she once again stated that the obstacle the team still had to overcome was identifying the goal from month to month.

Porsche also believed the backgrounds and prior experiences of the Data Team[™] members made it easy for them to identify student needs. At the beginning she thought it was silly to have to write down the names of the students on the recording forms. She came to realize, however, that this was a valuable part of the process. It allowed the team to track those students. She believed this made the team even more effective. She said the team still had a long way to go, but that experience alone with the data had put them well ahead of the game. While some teachers at other grade levels were still saying, "Well, I know my kids are learning," Porsche was saying, "They know from their heart and I'm like, that's nice. You need your data." Porsche believed that her Data Team[™] was able to make its student-success claims based on real data, not on feelings.

Student Success

From Porsche's perspective, student achievement or success meant seeing the

small gains for individual students. As a Special Education instructor she was obligated to track her students and do progress notes. The data collected by the Data TeamTM gave her the ability to do just that while the other members of the team were able to look at the fifth-grade class as a whole. Porsche learned the power of sharing that data as well. She said, "So when they see that I've made some graphs for our Data TeamTM, one day they said, 'Well, can we see them?' I'm like, oh, well, okay. So yeah, I think one time we posted our goal for math, actually wrote it up, put it on the bulletin board and it made a difference. So I think I need to do something and do that more often."

When compared to the other Data Teams[™] in the school Porsche ranked her Data Team[™] as highly effective. She believed there were several reasons that contributed to this conclusion. First, she said it was a matter of relationships. She observed that there were some teams in the building that collaborated well, hers being one of them. As she put it, "We've worked together a number of years and I think, from the get-go, we have a good relationship." There were others, however, where personality types among teachers seemed to get in the way.

Second, Porsche saw success in Data TeamsTM as a matter of loving numbers. She observed that there were some people in the building that were "hard-core data and some people that just don't get it." She saw all of the members of her team as people who were comfortable in working with numbers, which according to her, "just lends itself to data."

Third, she saw Data Team[™] success as an issue of leadership. Porsche said that all three of them were leaders in the building. Barbara was the literacy facilitator, Amy was the math person, and she was the data coordinator. Porsche felt that with all three

members being building leaders it gave a certain level of strength that was absent from other Data Teams[™] where only one or two members might be strong participants while there were others who would sit back and say, "Why don't you just tell me what to do and I'll do it." Porsche perceived that all three of the members of her team were strong individuals.

Fourth, Porsche described the team as having an expectation of honesty from each member. She stated that each of the members had personality types that were very impulsive, which was a good thing in her opinion, because it meant they could fire new ideas at each other any day of the week. She observed that other Data Teams[™] could not change their plans so readily.

Fifth, she believed that friendship, coupled with physical proximity, was important to the success of the Data Team[™]. She said, "Amy and Barbara are side by side and I'm across the hall. So it's an easy walk. Shoot, after school we just yell in the hall to each other."

Sixth, constant and open communication was important to Porsche. She spoke of how the three of them shared a common grade book, electronically. They were constantly monitoring grades and sent progress reports home every week. She indicated they were very aware of their kids and talked with each other on a non-stop basis. She said, "I'm always running over there and they're running to my room. It's just, I can't tell you how many times a day I'm in that room."

Sharing Results

Porsche believed the Data Team[™] did not do a very good job in explaining and

posting results in student achievement. She did think, however, that the individual Data Team[™] members attempted to explain results to their students through the use of graphs. Her students especially appreciated looking at bar graphs so she posted charts every day for the exit slip for math. Other than sharing results with their students, Porsche believed the team did not do much beyond that. The team would occasionally share information with the principal, but not very often. She saw this as one of the team's weaknesses. Porsche compared her Data Team[™] with the Kindergarten team and noticed how they did a better job of sharing their results beyond the classroom. Porsche believed they did not post their data to share with the entire school because there were some on the team who believed nobody would care or even bother to look at the data.

Assessments

Porsche indicated that the Data Team[™] had not yet begun to develop its own common formative assessments. The teachers were using mostly published work for their pre- and post-assessments. She indicated that the team looked hard for proper content and format that would match what they were doing. They seemed to have an easy time finding math fact questions that met their needs. Porsche believed there were numerous assessments already created that they could use; however, she did appear to see the importance in the team creating its own common formative assessments. She said it was something they would probably try in the future since they already collaborated together in the other areas of instruction.

Précis

Porsche expressed a strong belief in the work of Data TeamsTM. As the Data

Coordinator, Porsche felt she needed some additional training so she could help teachers better understand how to use data to inform their instruction. She said, "I think schools have needed to be accountable for a long time, and even though it's hard on us because we're very feeling people; that when you work hard and your scores don't go up, it hurts us. And that's where I think our team has said, no, let's look at kids. . . . Teachers want to be successful. We work hard, but I think that has proven maybe we need to work hard in different ways. . . . So I'm just hoping Midwestern School District will stick to their beliefs on Data Teams[™] and not sway a whole lot, because that hurts teachers. We need a foundation and we need to stay there."

Themes

Amy, Porsche, and Barbara brought their diverse backgrounds and experiences with them to Joseph Biden Elementary School. Barbara and Porsche had more than 20 years of teaching experience, and Amy was close behind with 17. They all had more than a dozen years of teaching experience at Biden Elementary. Amy and Barbara were general classroom teachers while Porsche came from a Special Education background. As I spent time interacting with these three teachers different themes began to emerge: (a) attitudes and experiences; (b) roles and norms; (c) high standards; (d) strategies and assessments; (e) data analysis; (f) celebration of successes; and (g) effective communication (see Table 3).

Attitudes and Experiences

The varied educational experiences and attitudes about collaboration that Amy, Barbara, and Porsche brought to the Data Team[™] table led to a positive work

Table 3

Emergent themes	Common attributes
Past experiences	Quality collaborative time with colleagues on the team Developed professional and personal relationships Valued the practice of collaboration
Roles	Ability to choose the right person for specific roles Members stepped up to their responsibilities Members relied on each other's areas of expertise Members assumed the role of working together
High standards	Set high achievable goals for each data cycle Differentiated groups to reach goals Played "cheerleader" to motivate student performance Examined professional practice (cause data) and student results (effect data) to determine level of achievement on goals
Strategies and assessments	Differentiated instruction within and among student groups Selected strategies that produced higher student results Created common pre- and post-assessments to determine growth
Strengths and weaknesses	Positive attitude Capitalized on each other's strengths Dealt appropriately with conflict and weaknesses of members Clear understanding of what success looked like for the team
Data analysis	Members were prepared for Data Team [™] meetings Understood what data to collect, analyze, and act upon
Communicate results	Shared data with students
Celebration of successes	Provided opportunities for students to celebrate their successes Celebrated successes together as a Data Team TM

Themes That Emerged From the Data TeamTM at Joseph Biden Elementary School

environment. This allowed the team to function well as a unit and as individual teachers.

Quality Collaborative Time

Past experiences and current practices convinced these three teachers that spending a lot of quality time in collaborative settings was critical for Data Teams[™] to be successful. Amy referred to a past experience she had in collaboration when she said, "We were tracking all these different things about students' personalities and all that. So we had to meet a lot, and we collaborated a lot and had to write papers and on and on and on. So we really, really, really worked together, and I think it's a lot like what we're doing now. It seems like it's what you're supposed to do." Barbara also referred to a collaboration experience earlier in her career as she stressed the importance of collaboration time. She said, "The three of us spent a lot of time working together. We had all 75 kids together most of the time, so that was huge. We spent many, many hours in collaboration. But I always have to, though." Porsche believed the time spent together affected the team and the students positively. She said, "I think the students know that we work close. We're together a lot during the day."

Professional and Personal Relationships

The concept of nurturing professional and personal relationships emerged as these three teachers reflected on past experiences and thought about their own attitudes towards collaboration. Porsche talked about how she found it necessary to identify with the personality types of her colleagues. She said, "Because I'm the type of person you can stop in the hall and ask something, and I'll say, oh, okay, that's fine. And then there's people, the reflective people, they need to think. I know that I need to email them two days ahead of time. So that's good to know." She went on to say, "Yeah. We collaborate, that's said in love." This concept was also supported by Barbara's comment to me about relationships when she said, "I work best that way." Amy said, "I've always worked with my coworkers really well. When I started I was fresh behind the ears. I felt like I was kind of guided along by a couple of teachers. I've always gotten along with coworkers. When we started multi-age, it was very cohesive. We did star research for a couple of years and we were looping with our kids before we actually started with multi-age. We were very very together in everything. So we had family, we had siblings together, and we were studying certain kids for our research."

Valued the Practice of Collaboration

The teachers came to believe in the practice of collaboration because it placed them in a new paradigm from where they were previously. Barbara was not fulfilled professionally with her teaching experience before she started collaborating. She said, "I was teaching fourth-grade at the time, and just was extremely frustrated, so when I get frustrated, I read. I read a book about multi-age, so the three of us worked together. That was huge." Amy felt she got more out of the teaching experience through collaboration. She said, "That's when my light bulb came on for me, and I'm like, yeah, right on. That's good. That's a good thing, and as we've gone to where we are now and where we have to take these data pieces, and we're trying to move kids to something, it makes sense. I mean, it makes sense to know where they are and to know where you're going and how you're gonna get there. It makes a lot of sense. It's just common sense. It's like, yeah, this is a good piece." Porsche appreciated the element of one common voice from the team when it came to the practice of collaboration. She said, "When we speak to the students we speak as, not, I'm saying this. We always say the fifth-grade teachers are going to work on this. So when we address the students we speak for the fifth-grade team. I think that has been a positive thing."

Team Roles

The members established specific roles which they believed helped lead to the success of the Data TeamTM. This was particularly true for the role of team leader. The members believed it was important to choose the right person to lead the team, that that person had to step up to the plate and accept the role, that each member brought her own level of expertise which filled a needed role, and that they all had to accept the role of working together for the common good of the students.

The team all agreed that the role of leader needed to be given to Porsche. Amy believed this only made sense since Porsche was actually trained by the LLC as a facilitator in the Data TeamTM process. Amy said of Porsche, "She was trained beyond the regular training so she's leading us through it. It's real nice because we have her." Barbara also thought that Porsche's extra level of training made her the ideal person for team leader. Barbara said, "Porsche is trained, she has all the paperwork, and she's the one that goes through the process with us. I would say that's probably the biggest role." Porsche was quite interested in assuming the role of team leader and taking on the task of data coordinator for the entire building. She said, "I was sharing the job of technology coordinator with another teacher, and we were kind of also working with data for the principal. So when the position came on board I said I think I'd like to, not because I

think I was good at data, which probably would have been a requirement, but I just kind of like numbers and I really like technology and I kind of thought they would blend together."

The role of leader, as significant as they saw it, was not the only important role in the minds of the team members. They relied upon each other's expertise to fill some of those roles. For example, the team looked to Amy as the person who worked best with numbers and mathematical concepts. Porsche said of Amy, "I look to her for a lot of math expertise. She's a very mathematical person so I go to her a lot of times. She helps me try and pick out the things that are most important to secure goals. So she's my expert math person." Amy even recognized her own mathematical contributions to the team when she told me, "I would look through something and count numbers or whatever." Barbara not only appreciated this role that Amy carried out, but she also recognized how Amy assumed the role of making sure the team stuck to its agenda. Barbara said, "Amy keeps us on track. She tells me okay, get off that subject."

In addition to these roles, individual members assumed additional responsibilities to the team. Barbara was seen as the person who generated new ideas for the team to consider. She once said, "I am the one that says, 'I want to talk about this and more of let's do this." Porsche brought a unique perspective to the team because of her Special Education training. She had been used to differentiating instruction for students and this paid a huge dividend for the Data TeamTM when it began its work. Additionally the team saw in Amy the ability to recognize the member who was most capable of fulfilling a specific task. It was quite obvious that the three members of this Data TeamTM

High Standards

The members of the Data TeamTM established specific, high, yet achievable goals. The team differentiated instruction and re-grouped students according to their needs. In order to help motivate students, the members of the Data TeamTM became cheerleaders.

Set High Goals

Barbara made the initial suggestion to set lofty goals. Barbara's thinking was, "Well, we were told to shoot high so I said 85%. They looked at me and said, 'You're crazy.' I said, 'Well, why not. I mean, that sounds like a good number.'" After considering that idea for a little while, Amy thought, "We only had 32% of the kids doing what we thought would be expected for fifth-grade and we wanted 85. I thought that was huge. I was like, 'You guys, 85?' Well, they said shoot high. Okay, we'll shoot high. But to see actually 4 weeks or 5 weeks later that some 50% of them were at that, and there were like four or five really close to passing, so it was like, 'Wow!' We worked hard on that, and it really made a huge difference." Porsche thought it was probably a good idea to set the bar high, but as she said, "It was uncomfortable because it's hard to set a goal that inside I sometimes personally doubt we'll make."

Differentiated Instruction

By setting these goals, Barbara told me, "We're much more focused on what we have to do. We can change the process—what technique we use to teach it. We can change the size of groupings. We are able to change." Porsche stressed the importance of differentiation when it came to helping students reach the goals. She said, "I have the

opportunities to put kids in small groups, whether it is an attention problem or maybe they need things repeated in different ways. I have control over that. I can pull them or work with them in a small group. I have control over assignments or the format that their lessons are in." Amy thought that setting high goals gave the members of the team the needed authority to differentiate if they were going to get high numbers of students across the bar. She said, "We were really flexible because the students were all at different places. Since they're in different levels, we just decided on our own [to differentiate]. We all had a common thing above—the big umbrella. It was kinda the same idea, but then, for each group, it was a little bit different how we did it. We shared ideas. We shared games that we used, but again, just kind of at a different level. That's how we did it."

Provided Motivation for Students

It was not enough for these teachers to set high goals and work to achieve them. Each member believed she had to convince students that they had the ability and willingness to become successful. The team thought it would be a good motivator to make learning more like a game. Amy said, "Yeah, we really made it like a game, a race against the clock or a race against—It was always a race. So of course the students are like, 'Oh, can we do it again? I can do better. We can beat that time!"" The team worked with the belief that it was motivating students to do better. Each member kept progress of every student she taught in that particular data cycle, posted results, and encouraged students to examine their own progress. The members of the team constantly stressed to the students that all they needed to do was a little better the next time.

Analyzed Student Results and Adult Practices

The discussions around student achievement typically began with an examination of what students did or did not accomplish and why those who failed to reach the goal did so. But inevitably, the conversations would always turn to next steps, and that dialog then centered on teacher behaviors or actions. Success for Amy meant students were learning. She said, "If they're improving, we're excited. It is always exciting to look at every kid. Their own personal growth is really how we want to measure them, not against everybody else. And so for me, success is moving forward." Porsche initially believed that the team really did not need to focus on students who appeared to be already proficient, but as time went on she realized that all students need to grow and that is why the team began to look at each student individually. Barbara also stressed the importance of looking at each individual student. As she put it, "Proficiency has to look different for every child."

The team operated under the belief that student achievement is conditioned upon the practices of the teacher. Barbara said as the team contemplates student achievement, the members ask themselves, "What do we need to change in our practice to make it better? How do we identify the students that we think we could help do better?" Porsche summed up the team's perspective on specific achievable goals best when she said, "Well, we've had a good trend for 2 years. Our scores have improved. We're excited about that. So the Data Team[™] has helped us narrow down what we want to focus on. Teachers do too much. We just have a big picture and so the narrowing down has been good."

Strategies and Assessments

Effective Teaching Strategies

The fifth-grade Data Team[™] at Joseph Biden Elementary School regrouped the classrooms according to specific needs of the students. Once those students were regrouped the teachers differentiated their instruction, not only from group to group, but within the same group as well. Sometimes differentiation simply meant the pacing of instruction and sometimes it meant using different instructional strategies. Sometimes the team left each individual member to select her own strategies, and sometimes the group shared and agreed upon a similar strategy to employ. One thing the team never differentiated on, however, was the common goal established during the Data Team[™] meeting.

On this point, Amy said, "We track our kids and choose our strategies based on our group. Barbara has the middle and Porsche has the lower group who go at a slower pace. So I can whip through with my kids. So they all get the fifth-grade material, but at their own pace." Barbara believed the importance of selecting the instructional strategy was not necessarily the strategy itself, suggesting that some teachers choose strategies because they fit their own comfort level, but as she put it, "It's figuring out what works for that kid." Barbara stated that when it came to choosing different intervention strategies with students the team got together and decided on a group of strategies that appeared to be appropriate for the different groups and then the teacher went on her way to implement those strategies as she saw fit. However, when Porsche and Amy began to see positive results from Barbara's students, they began asking her what was working. That is when the group began to collaborate on selecting and implementing strategies. As Barbara stated, "I boasted that my group was going to get it. Amy had a group of kids that pretty much had it. Porsche had the group of kids that couldn't get it, and I swore every one of mine were going get it, and so I had a little bit more vested into it and I told the kids we were going to—so we did. We then had that discussion of what worked and why." Porsche said, "We look at our kids. We tried to look at best practices. Some of it is determined by comfort level for the teacher. But I know we'll try things and then we'll meet every week and say, what are you doing? Is it working? So, that's when we kind of switch." Although the team was not consistent in using the same strategies, it did figure out the benefits of selecting and implementing specific strategies based on what the data were showing.

Assessments

Choosing pre- and post-assessments was not an easy task for the Data Team[™], but the data generated from the assessments that they did use provided extremely useful information for the direction of their instruction. The team tended not to make its own assessments from scratch, but it looked for already created appropriate assessments. Sometimes this was done successfully and sometimes not.

Barbara thought the process of selecting assessments was not easy. She said, "It was hard, really hard." All three members of the team stated that they would look on the Department of Education website for assessments. Sometimes their searches were good, but at other times they had little or no success at all. That is why it was so hard for Barbara. Amy also stated that choosing the appropriate assessments is one of the hardest things to do. She said, "Because you have to have a piece that's not long, that can just

determine whether they know it or they don't. She did go on to say, however, that "I think this is one of the hardest things, but once you have it, you stick it in the file." Barbara was like-minded. She said, "I have to say, that when you're doing the right thing [assessments], and you're working on kids, and you're working on individuals, and you're working on that, things improve, which makes you want to do more." Porsche said the team continually looks for assessments that are already in place. She said the taem also looks at format so students are comfortable when it comes time to take the state assessment.

In all, the Data Team[™] created most of its assessments by pulling items from different sources and blending them with their own created items to make an assessment that would be useful in providing the data that were necessary to have in order to determine their instruction.

Strengths and Weaknesses

Each member of the Data Team[™] developed a positive attitude about working with her colleagues in a PLC. That opened the door for positive collaboration. The members of the team also tended to capitalize on each other's strengths while learning how to deal with conflict and each other's weaknesses. Additionally, the members had a clear understanding of what success meant to them. In all, the members of the team saw themselves as a highly functioning team.

Positive Attitude

Every member of the team reacted positively overall with a little splash of skepticism and apprehension when they learned they were going to be placed on a Data

Team[™]. Porsche said, "At first I wasn't sure. My first thought was a good one. I'm married to an engineer and I know that the business world has been data driven for years. I was uncomfortable as far as the fact of we have to make huge gains. It became a little stressful, but I really like data and looked forward to it." Barbara's first reaction was, "Well, I do it anyway." Then she began to think, "Is this going to be okay? When something is mandated it isn't quite as fun." As her thinking developed she thought, "I think this is positive if it's teacher driven." Amy's initial thought was, "I didn't really know what it was. It's just another thing that would go away in a couple of years." As the team began working together, however, their reaction to the collaborative effort became more positive with each successive meeting.

Capitalized on Each Other's Strengths

The three members of this team brought specific strengths with them that contributed to the overall success of the Data Team[™] as a whole. Barbara was a specialist in the area of literacy. Amy's strengths were in mathematics. Porsche brought her Special Education skills to the table. The unique skills brought by each of these members proved to be beneficial when it came to regrouping, differentiation, and applying interventions. For example, Amy recalled the story of how she helped Porsche understand the new method of teaching math. Amy said, "She [Porsche] would be like, 'Oh, that's how you do it?' With the new math, we were all kind of crazy anyway. She'd be like, 'Oh yeah. I get it.'"

Conflict Resolution

The three members of the Data Team[™] worked through conflicts in a professional manner. They tended to have the big picture always in the front of their minds, which seemed to help resolve any such issues or conflicts. In reaction to some literacy pieces Barbara was introducing to the team, Porsche said, "We try to go Barbara's way since she is our trainer. Amy and I have resented some things and maybe tried them and not liked them. So we try to go back and forth and I think the bottom line is what's best for our kids. So, we've grumbled but we usually can solve it within two or three meetings, I would say. It's nothing horrible that we can't solve, but I guess as a professional if you're asked to do something the bottom line is we do need to try." Amy felt the way the team best handled conflict was to simply talk it through.

Barbara summed up the team's approach succinctly in her reflections of one such conflict. She stated, "They are not out to get me. They are not out to prove me stupid. So I think it's just that thought process of we're in this for the right reason. It usually takes somebody saying okay, this isn't that big of a deal. We don't need to get caught up on this."

Reasons for Successes

The teachers on the team had a clear understanding of what success for the team meant and focused on becoming successful. Amy saw several reasons why the team was successful. First, she thought there needed to be a willingness to collaborate. She also thought that the team members needed to have a good personal relationship with one another. For her, Barbara was one of her very best friends. That made it easy to agree and work with each other. Furthermore, she felt that there was mutual respect for each other. She said, "The other two are a little bit stronger-headed than I am. I'm a little bit more laid back than they are, but still, I'm not gonna be walked over, and I have my opinion too. I don't let them stronghold me. But we respect each other enough to know that we are not always right, and that everybody is important, and that we need to listen to each other."

Barbara was like-minded. She believed the purpose of collaboration was for the success of students. She also thought that the three members of the team simply just got along. She said, "We teach well together and we have a lot of trust for each other. I think that's a big issue. We trust each other." She also thought the team did a good job of laughing and joking with one another. To her this was important for the relationships needed to make the big decisions. Furthermore, Barbara thought the level of dialog in the team contributed to its successes. Barbara thought that everyone's voice needed to be heard. She said, "Everybody has that right to say what they think. And there's that camaraderie between the three of us. It's not about individuals really. It's about what can we do to better serve the kids that we work with."

Porsche shared similar reasons for the success of the group. She thought the three of them collaborated well. She said, "We just have a good time. We don't always agree, but we disagree in a professional way. Porsche also stressed the bonding element that provided trust among the members of the team. From her perspective this gave the team the ability to hold each other accountable, which in turn caused them to operate on a higher level as teachers. In addition she said, "We're more focused. I think we have an understanding of what we're doing, and we bring that to the table."

Porsche's take on the team's understanding of its successes is worth noting. She said, "I think collaboration for us is bringing ideas, accepting each other's opinions, it's also definitely, again, looking at students' names and identifying why some kids are doing better than others. Food does help us, at times. Yeah. We are an eating Data TeamTM. I think we expect each other to come prepared. In fact, if we come and we don't have something we jokingly say, I emailed you and you were asked to bring it. Go get it. You come and you come with the kids highlighted and you come with the things that we've asked you to bring." That is the team's measure of success.

Data Analysis

The Data Team[™] had a sense of what data they needed to bring to each meeting and what data were important for them to collect, analyze, and act upon. For Porsche, bringing the right data to the meeting provided the needed focus for the group. She said, "When we Data Team[™] it's narrowing things down and looking at a small piece. That's been, to me, really exciting. To take a small piece and see that a little bit of gain made a huge difference." Barbara always had her data ready to bring to the meetings. She said, "We know what we're going to talk about. We know what it is that we are going to do and so we have that ready to go." Similarly, Amy became excited about what the data were saying to her. She said, "Sometimes it feels like a little extra work, but it's worth it to know where your kids are. And it's worth it to have a success and to say, 'You guys worked really hard. Look at what you did. We had this many, now look how many we have.' And they can see the successes too, so it's like, Yeah. Awesome. Let's party."

The Data Team[™] did not begin its PLC experience by knowing exactly what data

to track. In fact, both Amy and Porsche acknowledged that at first it was a guessing game at best. Porsche said, "That this was sometimes overwhelming." Amy said, "You know? It was a guessing game. I think this kid was here, and I think this kid was here. They were high. They were low. They were kind of in the middle. But this is when I started doing that. Now, I know where every kid is, and when those parents come in, I can say exactly. There's not a guess. I'm not guessing anymore. I'm saying, 'Look at this. This is where they are. This is where they need to be. This is where they are.' Then I was like, this is the right way to teach." Barbara was similar in her thinking. She knew there was the distinct possibility that there could be so much data that the team could be looking at data all year long and not make any of the right decisions. As time went on, however, the discussions of the team led them to see student strengths and weaknesses and that helped them focus on the right data.

Communicate Results

The members of the team felt it was important to regularly communicate results with students. For Porsche she said her students enjoyed looking at bar graphs, especially the computer-generated kind. She said, "They think that's interesting. I put charts up every day for our exit slip for math and they look at that." Barbara stated that when she put up posters of the results, her students were excited. She said, "They knew they were part of it, so it kind of made it a big deal." Amy said she communicated the results with students. The team did not do much in terms of publicly posting data. They did relay data to parents and the team leader shared the Data Team[™] minutes with the principal.

Celebrate Success

The Data Team[™] believed it was important to celebrate with students on their achievements. Additionally the team believed it should celebrate as a team the successes they made in terms of reaching their goals. Amy said, "We take the kids out for recess and stuff like that. I mean just to get them excited. We give them an extra recess or whatever." Barbara said, "We give the kids a little bit of a party and they are excited." Porsche said that she also celebrated daily with her students by posting their results on their exit slips. Barbara added that high-fives were used quite regularly as well.

In terms of team celebration, Barbara said, "One of the benefits of having a data team is when you see those kinds of results. You see, educators don't often get pats on the back. We don't often get, 'good job,' so it was good for us to see the outcome of our efforts." The team celebrated regularly with food, laughs, and all-around cheer in each of the classrooms and in Data Team[™] meetings.

Summary

In all, the fifth-grade Data Team[™] at Joseph Biden considered itself to be one of the highest performing teams in the building. In relationship to the research questions of this study, the members felt their entire careers were built around collaboration so the district's initiative was an easy transition for them. They worked together well, had a positive attitude towards collaboration, established the proper norms for collaboration, used the right data to drive their instruction, set lofty goals, chose appropriate instructional strategies, and celebrated their collective successes.

CHAPTER 7

CROSS-CASE ANALYSIS, RECOMMENDATIONS, AND CONCLUSIONS

Introduction

This final chapter summarizes my study of 10 teachers and their Data Teams[™]. It briefly addresses the critical areas by triangulating the results from the three Data Teams[™] in order to find out what individual teachers did in order to create, implement, and maintain successful Data Teams[™].

Conceptual Framework

This study was done through the lens of PLCs known as Data Teams[™]. The Data Team[™] model for effective student achievement was proposed by nationally recognized educational leader Douglas Reeves, founder and chairman of the LLC. The framework upon which this model was based builds the knowledge and skills of educators through fair and accurate academic performance assessments, the effective implementation of academic standards, and an accountability system design, all within the context of PLCs (Besser et al., 2008). DuFour and Eaker (1998) contended that the most promising

strategy for sustained substantive school improvement was through the ability to create PLCs with school personnel. By professional DuFour referred to highly qualified trained individuals who are not only specialists in their fields, but who are expected to remain current in the body of knowledge of their chosen profession. Du Four and Eaker (1998) contended that by remaining current, professional educators can work in collaborative settings to better achieve the goals of student achievement. Schmoker (2006) asserted that the surest, fastest path to student achievement was through the use of PLCs. Data Teams[™] came about, according to Allison et al. (2010), when the LLC took the concept of professional collaboration and melded it together with data-driven decision making. Theories on teacher collaborative groups provide a framework to help understand how to use data effectively to promote positive change in teacher practice and student performance.

Data TeamsTM Provide a Structure and a Process

Allison et al. (2010) claimed that "Professional Learning Communities are what we are; Data Teams[™] are what we do." By this Allison et al. (2010) meant that as a structure professional learning communities are composed of a group of teachers who teach at the same grade level or some other similar focus. Such groups are able to focus on student learning because the teams use the same assessment measures to determine student growth. Additionally these teachers have an understanding of what proficiency looks like and they have high expectations for all students in their classrooms. Allison et al. (2010) described Data Teams[™] as a systematic process of looking at student learning and evidence where members of the team are able to conduct evidence-based (datadriven) conversations on teaching and learning, including the five-step Data Team[™]
meeting cycle: (a) collecting and charting data; (b) analyzing data and prioritizing needs;
(c) establishing SMART goals (specific, measurable, achievable, relevant, and timely);
(d) selecting instructional strategies; and (e) determining results indicators.

Data Teams that are high functioning incorporate the essential principals of datadriven decision making. White (2005) referred to these principles as antecedents, accountability, and collaboration. Antecedents, according to White (2005), are those adult actions or instructional strategies that precede student achievement outcomes. McNulty and Besser (2010) asserted that effective Data TeamsTM have deliberate, explicit conversations around those antecedents. As they measure the outcomes of these antecedents through common assessments, Data TeamsTM become capable of determining which antecedents are effective and which should be reworked or discontinued.

White (2005) used the word accountability in terms of what happens internally within the Data Team[™], not what happens on the state test. McNulty and Besser (2010) stated that since Data Teams[™] are teacher driven and student-centered, members can use the structure of the team to create their own action plans for instruction, leadership, and student learning. This process is driven by the formative data the team collects and on the adult practices it monitors.

White (2005) stated that collaboration was necessary to make sure all voices on the Data Team[™] are heard. McNulty and Besser (2010) argued that collaboration breaks down the barriers of isolation and is the thread of decision-making processes. They stated, "The beauty of Data Teams[™] is just that—data provide for a focused, collaborative dialogue. Conversations are not driven by excuses and complaints. Teams
collaboratively and enthusiastically work toward a common goal, select common strategies, and celebrate results—together."

Teachers who are fully engaged participants in Data Teams[™] operate within a structured professional learning community that focuses on what to do to improve student learning. Additionally, they are faithful in implementing a systematic process for achieving their goals. Finally, they incorporate the essential principles of data-driven decision making including adult actions, accountability, and collaboration.

The Data Team Cycle

Reeve's Data Team[™] model (Besser et al., 2008) uses a 10-step approach to this collaborative professional learning community. First, members of the Data Team[™] examine standards to determine the expectations from the state and/or district. Second, the Data Team[™] develops a curriculum map, pacing chart, or calendar that will help focus the instruction. Third the Data Team[™] develops common post-assessments which will determine what students mastered as a result of instruction. Fourth, the Data Team[™] gives students the post-assessment as a pre-assessment. This helps the team to understand where students are before instruction is planned. Fifth, the Data Team[™] conducts a Data Team[™] meeting and follows the five-step Data Team[™] process: (a) collect and chart data; (b) analyze strengths and obstacles; (c) establish goals; (d) select instructional strategies; and (e) determine results indicators. Sixth, the teachers from the Data Team[™] meeting. Seventh, teachers administer the post-assessment to their students at the agreed-upon time by the Data Team[™]. Eighth, teachers score the post-assessment

and deliver the results to the Data Team[™] member responsible for aggregating the data. Ninth, the Data Team[™] meets again to determine if the goal was met and what the next steps should be. Tenth, the cycle begins again with the next critical component identified on the curriculum map.

Teachers' success, hence, improved student achievement, is dependent upon the deep implementation of the Data TeamTM model. Deep implementation to the model is possible when each element of the model is used. A piece-meal approach would not prove useful to Data TeamsTM or to student achievement. Data TeamsTM are successful because the members not only understand both the structure and process of Data TeamsTM, but they also put them into effective practice in a collaborative manner.

Research Design

The selection of a qualitative case study was chosen as the research design to explore the life experiences, attitudes, and beliefs of elementary teachers who serve on Data TeamsTM. The intended purpose of incorporating the practice of Data TeamsTM in this school district was to utilize data-driven decision making as the basis for improving instruction and student learning. I decided to use a qualitative case study design for this investigation because it was assumed the experiences of those teachers who have gone through the process of developing effective teams that focus on cause-and-effect data would be gleaned from the data collected. Qualitative methods were invaluable to this study as it explored the narratives of 10 elementary educators representing three Data TeamsTM.

Yin (2003) created a useful model for qualitative researchers to use in case study

designs. Merriam (1998) referred to the end product of a case study as being rich and thick, which could lead to a new understanding of the phenomenon under study. Merriam (1998) defined case study in terms of the process of conducting that inquiry and referred to this as the end report of a case investigation.

Teachers from three elementary-level Data Teams[™] in Midwestern School District were chosen for this study. The selection of the teacher Data Teams[™] was a purposeful process (Patton, 1990). Merriam (1998) stated that a purposeful design is based on the assumption that the researcher chooses a sample in which to study that will yield the most information in order for him to gain the most insight and understanding possible. This was accomplished by asking the building administrators from the district's 14 elementary schools to rank the Data Teams[™] in their schools in terms of effectiveness. Once the principals had determined which Data Team[™] in their respective buildings was ranked highest, they used a 5-point scale in each of five categories to rate the effectiveness of that Data Team[™] in terms of expected performance. The three Data Teams[™] in the district with the highest ratings were invited to participate in this study. One Data Team[™] declined the request, so the fourth highest rated Data Team[™] was selected.

Research Question 1

In response to the first research question—What life experiences have helped to sculpt elementary teachers into effective Data TeamsTM?—the primary life experiences identified by the teachers were: (a) past experiences; (b) collaboration; and (c) relationships (Table 4).

Table 4

Common attributes
Provided a hopeful outlook on the Data Team TM initiative Gave an optimistic point of view on collaboration Inserted a measure of realism in the teachers' minds Fostered an eagerness to collaborate Limited experiences in collaboration yet useful
Quality collaborative time with colleagues Valued the practice of collaboration Enjoyed working together
Developed professional and personal relationships Shared sense of accountability Bonding time to get to know each other

Common Life Experience Themes That Emerged Across the Three Data Teams[™]

The teachers had some previous experiences in collaboration, although this was not common practice in Midwestern School District prior to the Data Team[™] initiative. These prior collaborative experiences were not structured, they did not use data to drive the discussion, common assessments were not necessarily used, and rarely if ever did teachers concentrate on cause data. Even with this lack of collaborative structure, these collaborative experiences were useful. These pre-Data Team[™] experiences provided teachers with a hopeful outlook on the Data Team[™] initiative. It also provided an optimistic view of collaboration in general to the teachers, which fostered a level of eagerness on their part to join in a collaborative venture to improve their own performance and ultimately student achievement.

Collaborative efforts prior to the implementation of Data Teams[™] were overall

positive experiences for the teachers. This group of teachers believed the time they spent working with their colleagues was of high quality. This caused them to put more value on the concept of collaboration. These teachers enjoyed the ability to work with each other and when the district adopted the Data Team[™] process, this group of educators carried those good feelings into the new initiative.

The teachers were able to develop both professional and personal relationships with their peers. They also developed a shared sense of accountability with each other. Moreover they cherished the time they were able to spend together as they developed professional and personal bonds with each other.

Overall, these teachers' prior experiences in collaboration and building professional and personal relationships left them with a good feeling towards the concept of professional learning communities, and in the case of Midwestern School District, the Data TeamTM model.

Research Question 2

In response to the second research question—What influenced individual members to become cooperative collaborators?—the primary themes in collaboration were: (a) approaching Data TeamsTM with a positive attitude; (b) accentuating the perceived benefits of collaboration; and (c) developing a collaborative mind-set (Table 5).

By displaying a positive attitude about the Data Team[™] process, most of these teachers were able to develop an overall genuine excitement about collaboration. This is not to say that they agreed on every detail and got along with each other all of the time, yet they

Table 5

Emergent themes	Common attributes
Positive attitude	Overall genuine excitement about collaboration Eagerness to collaborate with peers
Perceived benefits	Positive interaction among peers Recognized benefits of working together A forum to share ideas Collaboration is better than isolationism
Collaborative mind-set	Capitalized on each other's strengths Understanding of what success looked like Strong belief in team's effectiveness

Common Themes in Collaboration That Emerged Across the Three Data Teams[™]

were convinced that the establishment of PLCs was a good thing, both for the students and for themselves. This move towards collaboration actually developed into an eagerness to collaborate with peers. There were numerous occasions when members of one team or another could not wait for the next Data Team[™] meeting. These teachers felt they had to immediately share with their colleagues something that could benefit the entire team. Hence, mini in-between non-formal Data Team[™] meetings would take place. For some, that occurred on a daily basis.

As these teachers contemplated the paradigm shift from isolation in a classroom of students to a shared sense of responsibility with a team of colleagues, they began to perceive benefits associated with collaboration. They perceived that Data TeamsTM provided a venue for positive interaction among peers. They saw the Data TeamTM structure as a forum from which they were able to share and glean new ideas. As they

contemplated these possible benefits, these teachers reached the conclusion that it was far better to collaborate than to live as professionals in isolation.

The teachers from these three Data Teams[™] developed a collaborative mind-set. They took the opportunity to capitalize on each other's strengths. This included assigning specific roles for members of the Data Team[™], regrouping students so a teacher with a particular skill could work with all students needing help in a specific area, representing the Data Team[™] at the building level data leader meetings, creating common assessments that all teachers could use to determine students' level of proficiency, and a host of other shared responsibilities. Additionally, the members of the Data Teams[™] had an understanding of what success looked like for their team and they developed the mind-set that they would work together in order to reach that level of success with their students. Moreover, these teachers had a strong belief in the team's effectiveness. All three teams had been told and they became convinced that they were doing Data Teams[™] "right." This meant to these teachers that they had to prove that assumption, so there was no alternative but to develop a mind-set of working together to achieve common goals.

Research Question 3

In response to the third research question—How did individual teacher experiences, attitudes, and beliefs impact the work of Data Teams[™]?—the primary themes were: (a) individual member roles and fidelity to the norms of collaboration; (b) deep implementation of the Data Team[™] process; and (c) developing a high set of standards from which to operate and judge the effectiveness of Data Team[™] work (Table 6).

Table 6

Emergent themes	Common attributes
Roles and norms	Established group norms Fidelity to the norms of collaboration Relied on each other's areas of expertise Followed norms and carried out responsibilities Effective communication within and without Worked through conflicts effectively Effective use of time Held each other accountable
Deep implementation	Examined cause-and-effect data Completed tasks timely Precise and timely feedback Prepared to participate in team discussions Collaborative planning, strategies, assessments, and scoring Reasons for existence yet beyond compliance Understood what data to collect and use Differentiated instruction based on students' needs
High standards	Realistic achievable goals Utilized motivational techniques to engage students Agreed on the definition of proficiency Used multiple data sources to make decisions Willingness to re-teach

Common Themes in Teacher Experiences, Attitudes, and Beliefs With Data Teams™

The members of the Data Teams[™] collaboratively determined the roles for each individual and established norms of collaboration. The determination of individual roles, as stated earlier in this chapter, was often based on a person's area of expertise. Early in their existence, the teams determined the norms under which they would operate. Sometimes these norms were written out and agreed upon, but there were also some

norms that emerged as part of the regular process of meeting on a recurring basis. These norms were adhered to by the members of the Data Teams[™] regardless of how they were established. Members of the teams did not always see eye to eye on every issue nor did they agree with every decision, yet they managed to work through their conflicts professionally whether that meant compromising on the issue, allowing the majority to rule, or agreeing to disagree without being disagreeable. Furthermore, the members of the team made effective use of their time and held each other accountable for completing assignments given to each other.

To the best of their ability as novices to PLCs, the members were faithful to the Data Team[™] process. In addition to the fidelity to the norms of collaboration, the teachers did various things to ensure deep implementation of the process. The members used both cause (teacher actions) and effect (student results) data to drive their work on the team and in the classroom. The members also completed their tasks in a timely manner so valuable Data Team[™] meeting time could be used for planning rather than record keeping, they gave precise and timely feedback to their students, and they were prepared to participate as active members at each Data Team[™] meeting. They additionally implemented the Data Team[™] process by collaboratively planning, agreeing upon effective teaching strategies, creating and using common assessments, and doing some collaborative scoring. For these teachers, they determined what data they needed to collect and they were able to differentiate their instruction based on students' needs. This group of teachers believed that their reason for existence went way beyond the level of compliance.

The teachers on these three Data TeamsTM set high standards for themselves and

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for their students. When they met for their monthly Data Team[™] cycle meetings, these teachers determined to set high goals, yet they strove to be realistic and make goals achievable. They had an agreement on what proficiency looked like to their teams and they operated from that definition. This tended to push students, which meant these teachers had to push themselves in order to provide the instruction needed to reach the desired levels of proficiency. In so doing, the teachers also assumed the role of motivator, where they continuously encouraged students to reach the goals that had been set. They did this even in times when they were convinced that some students would never be able to demonstrate mastery. The teachers were occasionally shocked when some students unexpectedly reached a goal or came very close to crossing the proficiency line. These teachers also knew they had to constantly monitor and check their actions as well as student results in order to make proper decisions for the next steps. They used multiple data sources to accomplish this task. Moreover, these teachers were willing to re-teach material in order to help more students reach proficiency on the established goals.

Discussion

Although the members of these three Data Teams[™] worked for Midwestern School District, the buildings they worked in and the students they served contrasted greatly. The student population from Hillary Clinton Elementary was overwhelmingly minority (48% Latino; 31% Black) and classified as free or reduced-price lunch (93%). The student population at Barack Obama Elementary school was just the opposite. Seventy-four percent of students were White, while only 30% were classified as free or reduced-price lunch. The student makeup at Joseph Biden Elementary settled somewhere in the middle. A little more than half of the students were White and 65% were on free or reduced-price lunch. This demographic information is juxtaposed against the fact that all 10 teachers in the study were middle class and White.

Teachers' Background Experiences

The 10 teachers who made up these three Data Teams[™] had varying degrees of teacher experience when the new model was adopted by Midwestern School District. The four teachers at Hillary Clinton had a combined total of 19 years of teaching experience. All of them were in their first year at the school. The three teachers from Barack Obama Elementary had more than 10 combined total years of teaching with only a couple of years each at Obama. On the other hand, the three teachers at Joseph Biden Elementary had a combined total of 60 years' teaching experience. All of them had been teaching at Biden for five or more years with one teacher having 21 years at that school alone.

Prior to the Data Team[™] initiative all 10 teachers had a limited amount of experience collaborating with other teachers to plan their instruction, some a little more than others. None of the teachers had actually been in a teaching situation where structured PLCs had been established in which teachers would collaboratively analyze data, set learning goals, plan instruction, administer common assessments, focus on adult actions, and plan next steps based on newly gathered data. The Data Team[™] model was a new experience for all of them, yet they seemed willing to implement this new paradigm of teaching. The data indicated that neither ethnic background nor socioeconomic makeup of the student population made any difference in the ability of teachers to be successful collaborators in the interest of student achievement. Similarly, the number of years of teaching experience had no bearing on the ability or willingness of teachers to collaborate. In fact, the veteran and novice teachers alike indicated how the collaborative environment allowed them to both share and learn how to be better teachers. This finding aligns with the work of Mitchell and Sackney (2001) who asserted that when it comes to PLCs, teachers are expected to facilitate the learning of all students, because these educators are in perfect positions to address the fundamental issues and concerns in relation to student learning.

The members from these three Data Teams[™] indicated that their previous, albeit limited, experience in collaboration set the foundation for them to be successful collaborators using the Data Team[™] model. For these teachers, their past experiences in working with other teachers provided an optimistic and hopeful outlook to the Data Team[™] initiative. They valued any collaborative time that was set aside to work with other teachers. They were able to develop and foster both personal and professional relationships with these teachers. Furthermore these teachers came to value the practice of collaboration. This was characterized by the way these teachers expressed thoughts such as their intense enjoyment of working with each other, developing a shared sense of responsibility, and setting time aside for bonding with each other. This aligns to what Hord and Sommers (2008) discovered about PLCs. They found that when teachers work together in teams, the feelings of isolation are dramatically reduced. Furthermore, they found that as teachers work together in groups they begin to engage in deep conversations about their own professional practices and in student learning. Moreover, they found that these teachers demonstrate higher commitment to the goals, mission, and vision of their schools when they are able to collaborate with each other.

Data TeamTM Experiences

The spirit of collaboration among the members of each Data Team[™] was due, in part, to their positive attitudes, perceived benefits of collaboration, and their collaborative mind-set. For these teachers there was an overall aura of genuine excitement about collaboration and an eagerness on the part of most of them to collaborate within their Data TeamsTM. These teachers perceived some real benefits from participating in the Data TeamTM process. These teachers chose to collaborate within their groups because they saw positive interactions among their peers when they did so. They perceived real benefits in not only holding regularly scheduled Data Team[™] meetings they had with each other, but they would also stop each other in the hallways, pass notes back and forth, and engage in a host of other interactive measures to help each other become better instructors. The teachers also saw Data TeamsTM as a forum from which they could share ideas on instruction. They all saw Data Teams[™] as a way to escape the world of isolationism and move into a collaborative environment. These perceived benefits align with four key areas identified by the Annenberg Institute (2004) at Brown University. Researchers at the Annenberg Institute (2004) found that PLCs have the potential to enhance the professional culture in a school in four key ways:

1. PLCs build the productive relationships that are required to collaborate and

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carry out a school improvement program.

2. PLCs bring all players, that is, instructors, together in collective, consistent, and context-specific learning.

3. PLCs address the inequities in teaching in learning by offering support to teachers in the community who are weak in certain areas and need professional help.

4. PLCs promote efforts to improve teacher practice and student results. Additionally, the voices of the teachers in this study provided specific examples of how relationships of members were developed and sustained and how the teachers supported each other professionally.

The combined experiences, attitudes, and beliefs of each individual team member led the Data Teams[™] to establish member roles and norms of collaboration, to engage in a deep level of implementation, and to set high standards for the team as well as for the students the Data Teams[™] served. Each of these Data Teams[™] established both agreedupon and non-spoken norms. Additionally they tended to operate with fidelity to the norms of collaboration by carrying out their prescribed and assumed responsibilities, effectively communicating with each other and with other related individuals and groups, by working through conflicts that arose within the teams, by making effective use of their time, and by holding each other accountable for group behavior and individual assignments. These norms of collaboration align with Morrissey (2000) who found that PLCs are not a thing, but they are a way of operating. In other words he described PLCs as a process, a way of doing things. Morrissey (2000) found that when staff work and learn within the confines of a PLC, continuous improvement becomes an embedded value.

The members of the three Data Teams[™], to the best of their abilities as novices in professional collaboration, approached the Data TeamTM process with deep implementation. They did so by examining both cause-and-effect data. These teachers were not content to just look at student results and figure out what was wrong with students. They also looked deeply at their own teaching practices to see what worked best with core instruction. The members completed their tasks in a timely manner so when the Data Team[™] meetings took place every one could focus on goals the team set forth. Every voice on these teams was important and was given the opportunity to be heard. The Data TeamsTM collaboratively planned their instruction, selected teaching strategies, administered common assessments, and used the results of those assessments to drive further instruction. The members of these three Data TeamsTM saw their teams' existence in terms beyond the compliance level. There may have been some Data Teams[™] in these three schools who met regularly only because the district required them to do so, but the teachers on these three teams specifically attempted to implement the Data Team[™] model with fidelity. This level of implementation aligns with Schmoker (2006) who asserted the surest, fastest path to instructional improvement was through the use of PLCs. It also aligns with several characteristics of high PLCs identified by DuFour et al. (2006), including: (a) a focus on and commitment to the learning of every student; (b) a collaborative group of teachers working interdependently to achieve common goals that are linked to student achievement; (c) action-oriented members who turn goals into action plans and reality; (d) a constant search for better ways to achieve goals and work towards the improvement of the entire school; and (e) a realization that all decisions and teacher actions are based on results data rather than intentions or mere

thoughts. This is further supported by Hord and Sommers (2008) who found the components of effective PLCs to include: shared beliefs,

values, and vision; collective learning and its application; structural and relational factors in place; and a shared personal practice among the members of the community.

The members of these three Data Teams[™] set high standards for their respective teams as well as for student achievement. They collaboratively set learning goals for each Data Team[™] cycle that were high, yet realistically achievable. Members on each team reached agreement on what proficiency meant when it came to student achievement. They were also able to find motivational techniques to inspire students to put forth their best efforts and they found various ways to celebrate their successes. This high standard for achievement aligns with DuFour and Eaker (1998), who found that effective professional learning communities establish high standards of learning where the members of the team expect all students to achieve. DuFour and Eaker (1998) further stated that in today's post-industrial society, educators have to operate from the premise that it is the purpose of schools to bring all students to their full potential. That means it is critical for members of PLCs to clarify their purpose and accept the responsibility for achieving those goals.

Successful Data Team[™] Members

The principals from the three buildings viewed these teachers as successful Data Team[™] members. Furthermore, the teachers saw themselves as successful and proceeded to act so accordingly. DuFour and Eaker (1998) found that members of successful PLCs are guided by shared goals and a sense of common purpose. These 10 teachers have set high expectations for student achievement. These teachers accept the responsibility for helping students meet those expectations. They collaborate with each other on a regular basis to work together on curriculum issues, effective teaching strategies, needs of individual students, and school-improvement initiatives. Moreover, teachers who are members of PLCs model the importance of lifelong learning by their commitment to their personal professional growth.

The thoughts and actions of the teachers from the three Data Teams[™] at Hillary Clinton, Barack Obama, and Joseph Biden elementary schools are similar to the characteristics of successful professional learning groups. These teachers developed primary year-long goals aimed at student achievement. Along the way they set monthly goals that would drive their decision-making as they traveled down the path to their primary purpose of operation. They had a shared purpose of being. Statements such as "what is best for kids" exemplified this shared sense of purpose. These 10 teachers also set high expectations for student achievement. This also meant that they had to set high standards for themselves. They collaboratively determined how to help students meet those expectations in various ways such as regrouping students for core instruction and creating intervention pieces for students who did not grasp the content or attain the skills. The members of these teams met consistently month after month to determine the content or skills to be taught and which effective teaching strategies would be most appropriate to teaching the material. These teachers also tended to their professional growth. In addition to the training workshops they attended on how to conduct Data TeamTM meetings, choosing and using appropriate teaching strategies, and making standards work, these teachers provided professional development opportunities to each other by

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sharing new ideas, insights, strategies, and such that they found to be effective in classroom instruction.

According to Hord and Sommers (2008) the culture of PLCs includes a focus on a vision of change, expectations, decision-making, and conflict resolution. Based on the findings of this study, the members of these three Data TeamsTM have a sense of such a culture that comes from their desire to see students reach the level of their expectations. As stated by the voices of the teachers themselves, successful Data TeamsTM have to do what is expected of them and not be caught up in petty disagreements. The statements made by these 10 teachers are indications of the value they place on helping improve student academic performance. Although they run into many hurdles, these teachers find various ways to work around those variables that impede student learning. These teachers do not believe it is an easy task, yet they see their roles as members of Data TeamsTM as being necessary if students are going to become successful in their learning.

Words and phrases characteristic of these 10 teachers were: collaborative, relationships, shared responsibility, high expectations, cheerleader, differentiation, positive attitude, structured, focused, excited, and communicative. These words and phrases are similar to the words indicated in the professional learning group literature such as: shared beliefs, values, and vision (Hord & Sommers, 2008); shared mission, vision, values, collaborative teams, action oriented, and continuous improvement (McNulty & Besser, 2010); similar focus, high expectations, and systematic process (Allison et al., 2010); focused (Schmoker, 2006); productive relationships, engaged educators, supporting, professional development (Annenberg Institute, 2004); and focus on learning, collaboration, action oriented, responsibility, high standards, shared goals,

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life-long learning (DuFour et al., 2006; DuFour & Eaker, 1998).

What is significant about the findings regarding teacher attitudes, beliefs, and experiences about joining and participating in a PLC, such as a Data Team[™], is that these teachers' individual and collective stories provide a real-life perspective for a teacher going through a transformation of being an isolated classroom educator to a collaborative participant with the goal of raising student achievement.

Finally, my findings indicate that successful Data Teams[™] are able to improve teacher instruction and student performance. These 10 teachers determined the purpose for the existence of their Data Teams[™] and they made personal and collective decisions to do whatever was necessary to improve the practice of teaching and raise student achievement.

Conclusions

This research study identified what members of successful Data Teams[™] perceive to be essential ingredients for the success of their teams. The overall results of this research are summarized in the following concluding statements:

1. The Data Team[™] members agreed that their experiences in collaboration prior to their participation in Data Teams[™] allowed them to build the relationships with teachers that are essential to effective collaboration.

2. The Data Team[™] members agreed that the development of a positive attitude towards collaboration, coupled with an understanding of the benefits associated with collaboration, helps to develop a collaborative mind-set which, in turn, can lead to group success.

3. The Data Team[™] members agreed that developing and operating under the norms of collaboration, as agreed upon by the members of the team, are essential to team success.

The Data Team[™] members agreed that deep implementation of the Data
Team[™] process was essential if there was going to be an improvement in student
achievement.

5. The Data Team[™] members agreed that it was important to set personal high standards and goals that were both realistic and achievable.

Recommendations

As a result of this research, which studied the attitudes, beliefs, and experiences of 10 teachers as they became participants in Data TeamsTM, it is exciting to know that there are things teachers can do individually and collectively in a professional learning group that can improve instruction and student performance. As such, the following recommendations are suggested:

1. Since the bonding agent is such an important aspect in establishing the norms of collaboration, developing positive attitudes about collaboration, and assigning individual teacher roles, school leaders should incorporate team-building opportunities for groups of teachers when establishing professional learning groups.

2. Since developing a high level of trust among members is vital for the success of Data Team[™], and since an organization's capacity to learn is greatly enhanced through collaboration, school leaders should include an element in Data Team[™] training that focuses on developing relationships, building trust, and establishing open

communication networks.

3. Since novice Data Teams[™] frequently struggle with what to do next, after analyzing the results of post-assessments, school leaders should develop and implement a structure and process for tier 2 and 3 interventions as part of the Data Team[™] cycle.

4. Since improvement in teacher practice is so vital to the success of Data Teams[™], school leaders should from the outset establish set times for teacher teams to meet, and they should build in continuous professional development opportunities for teachers.

5. Since deep implementation of the Data Team[™] process is paramount to team and student success, school leaders should develop and implement a monitoring plan and provide structured administrative support to ensure deep implementation from all teams.

Final Thoughts

These teachers will have had sustained experience in collaboration as time continues, perhaps making themselves more sophisticated in the structure and practice of PLCs. A follow-up study could be conducted in which advanced models for Data Teams[™] could be developed for those teams who are already proficient at the novice level of implementation and practice. Furthermore, a study could be conducted on the practice and impact of school and district leadership in monitoring and supporting Data Teams[™]. Also, these 10 teachers indicated that their Data Teams[™] struggled initially to identify which standards to focus, which instructional strategies to use, and how to create meaningful assessments that would yield the necessary data to drive their decisionmaking. Studies on how PLCs can focus on the most important standards, select the appropriate instructional strategies, and develop and use assessments effectively could be conducted.

APPENDIX

APPENDIX 1

THE RELATIONSHIP OF THE PURPOSE, THE RESEARCH QUESTIONS, AND THE INTERVIEW QUESTIONS

Purpose	Research Questions	Interview Questions
The purpose of this work was to	What professional experiences have	How have your personal experiences,
describe the professional experiences of	helped elementary teachers become	beliefs, attitudes, and actions impacted
elementary teachers that helped prepare	effective collaborators in Data	student achievement?
them to become effective collaborators	Teams TM ?	
in Data Teams [™] .		Prior to membership on this Data
		Team [™] , what other experiences have
		you had in working on teacher teams?
		What is similar? What is different?
Furthermore, the goal was to describe	Once Data Teams [™] were developed and	Please describe your understanding of
the development and implementation of	implemented, what influenced teachers	the definition and purpose of Data
Data Teams TM and to explore what	to become cooperative collaborators?	Teams [™] .
influenced teachers to become		
cooperative collaborators.		Explain how membership to your Data
		Team [™] was determined.
		How did your team determine the roles
		for each member? Why was it done in
		this way?
		Explain how your team started
		collaborating?
		What does call charaction look like in
		what does conadoration look like in
		your Data Team ¹
		What does collaboration look like in your Data Team [™] ?

Purpose	Research Questions	Interview Questions
It analyzed how the experiences,	How did individual teacher experiences,	Success of the Data Team [™] ?
attitudes, and beliefs of teachers	attitudes, and beliefs impact the work of	
impacted the work of Data Teams ^{IM}	Data Teams ^{IM}	Describe how the team deals with
		team.
		Describe the communication
		expectations of individual team
		members. How is information shared among team members?
		What have individual members done to
		sustain a collaborative environment in
		your Data Team™?
		Explain how each of the following has impacted the effectiveness of your Data
		Team TM : a) accountability to colleagues on the team; b) promptness to meetings;
		passive); d) preparedness for team
		students can learn: f) participation in
		meetings; f) reliability of each member;
		g) support of team decisions; h) support of colleagues.

Purpose	Research Questions	Interview Questions
as these PLCs used the results of	as these PLCs used the results of	Describe what your team looks for when
standards-based assessments to analyze	standards-based assessments to analyze	you measure student achievement.
student work and teacher actions,	student work and teacher actions,	What variables that affect student
		achievement are within the control of
		the team?
		Describe a typical Data Team TM meeting
		and how you prepare for one.
identify student strengths and areas	identify student strengths and areas	How do you determine what data to use
needing growth,	needing growth,	when determining student achievement?
		Describe your team's assessment
		procedures from creating to
		administering to scoring to reporting.
establish instructional goals,	establish instructional goals,	How does your team measure student
		success? Success as a team?
select effective teaching strategies and	select effective teaching strategies and	How do you determine which teaching
interventions,	interventions,	strategies to implement?
and determine results indicators.	and determine results indicators?	In what ways do you explain results in
		students' achievement? Why?
		How does the team share data
		internally? Publically?

APPENDIX 2

LETTERS

Teacher Data Teams Research Project Effective Data Team Survey

[Insert Date]

[Insert Principal's Name], Principal [Insert School Name] [Insert School Street Address] [Insert City and State]

Dear [Insert Principal's Name]:

I am conducting research on Data TeamsTM at the elementary level for my dissertation project as a doctoral student in Leadership at Andrews University in Berrien Springs, MI. The purpose of this research is to explore teacher attitudes, beliefs, and experiences on the development, implementation, and performance of Data TeamsTM. This research is important because it adds the perspective of the teacher to the understanding of the Data TeamTM process. The results of this study will appear in my dissertation and what is learned may be shared through publications and or presentations. I promise you confidentiality and assure you that data collected from this study will be reported anonymously.

The plan for this study is to identify and collect information from three Data TeamsTM chosen among the elementary schools. The selection of the Data TeamsTM will be determined upon the completion of a survey on Data TeamTM effectiveness by the elementary principals. Would you please take a few moments to complete the survey on the Data TeamsTM in your building? Teacher participation in this study is purely voluntary, they are not required to participate, and there will be no penalty for failure to participate. There is no remuneration for participation in this study. The Superintendent has approved this research project and the Teachers Association has given its endorsement.

Data will be collected electronically through interviews of Data TeamTM members and observations of Data TeamsTM meetings. Additional data may be obtained from other sources such as Data TeamTM minutes and district administrators. All data collected will be kept strictly confidential and stored securely in my office. Neither the name of any member of a data team nor the name of any school will appear anywhere in the results of this study.

Thank you for taking the time to complete this survey. Please return your completed survey to me, using the enclosed envelope.

Sincerely, Bradley W. Sheppard

Teacher Data Teams Research Project

Based on your professional judgment, please indicate (X) which of your Data TeamsTM is more likely to rank higher than the others for each statement below.* Then, using a 5 point scale, with five (5) being the highest and one (1) being the lowest, rate the data team in terms of <u>expected performance</u> by drawing a circle around the appropriate number.

	Kindergarten First Second	□ Third □ Fourth	□ Sixth
	I First I Second	🖵 Fourth	
	Second		□ Other
		🖵 Fifth	Rank: 5 4 3 2 1
2. D.	ata team members eng ommon rubric, and pro I Kindergarten	age students in o vide anchor pap Third	laily writing activities, assess writing skills with a ers as examples for students. (Select only one)
	First	🖵 Fourth	□ Other
	Second	🖵 Fifth	Rank: 5 4 3 2 1
3. Dr	ata team members trad	le papers for sco nstruction. (Sel	ring, meet to discuss scoring results, and plan together to ect only one)
	Kindergarten	☐ Third	Sixth
Ē	l First	Fourth	\Box Other
	Second	Gifth	Rank: 5 4 3 2 1
4. Da	ata team members exp udents to demonstrate Kindergarten	ect student work proficiency, and Third	to be proficient, provide multiple opportunities for give credit only on completed work. (Select only one) Sixth
	First	Fourth	□ Other
	Second	🖵 Fifth	Rank: 5 4 3 2 1
5. Ea ac pr in (S	ach member of the data ccepts the responsibility ractices; participates from structional planning; a Select only one)	a team provides y for student aca equently and reg nd provides acco	increased instructional time for students in greatest need; demic achievement; participates in all high performance gularly in collaborative data driven decision making and urate, specific and timely feedback to student work.
	I Kindergarten	🖵 Third	□ Sixth
	First	Fourth	□ Other
	Second	🖵 Fifth	Rank: 5 4 3 2 1
Thank you earliest co	u for taking the time to onvenience.	fill out this surv	yey. Please return it in the enclosed envelope at your
Principal's	s Signature		School

*If you need to make a distinction between two data teams at the same grade level (i.e. two thirdgrade teams) label one of them A and the other B.

Teacher Data Teams Research Project

[Insert Date]

[Insert Name], Superintendent] [Insert Street Address] [Insert City, State, and Zip]

Dear [Insert Superintendent's Name]:

I am writing to seek your written permission to conduct educational research within [Insert School District Name]. This research project focuses on Data TeamsTM at the elementary level and will be used for my dissertation project as a doctoral student in Leadership at Andrews University in Berrien Springs, MI. The purpose of this research is to explore teacher attitudes, beliefs, and experiences on the development, implementation, and performance of Data TeamsTM. This research is important because it adds the perspective of the teacher to the understanding of the Data TeamTM process. The results of this study will appear in my dissertation and what is learned may be shared through publications and or presentations. I promise you confidentiality and assure you that data collected from this study will be reported anonymously.

The plan for this study is to identify and collect information from three Data Teams[™] among the elementary schools. The selection of the Data Teams[™] will be determined upon the completion of a rubric on Data Teams[™] effectiveness by the elementary principals. I have enclosed a copy of the rubric with this letter. Participation in this study is purely voluntary on the teachers' part, they are not required to participate, and there will be no penalty for failure to participate. There is no remuneration for participation in this study.

Data will be collected electronically through interviews of Data TeamTM members and observations of Data TeamsTM meetings. Additional data may be obtained from other sources such as Data TeamsTM minutes and district administrators. All data collected will be kept strictly confidential and stored securely in my office. Neither the name of any member of a Data TeamTM nor the name of any school will appear anywhere in the results of this study.

With your approval I need to submit a letter from your office to the Andrews University Institutional Research Board (IRB) stating that I may conduct this research in [Insert District Name]. You are welcome to include the words "subject to IRB approval from Andrews University" if you wish. Please contact me if you have any questions prior to responding to this request.

Sincerely,

Bradley W. Sheppard Doctoral Student Andrews University Department of Educational Administration and Leadership Berrien Springs, MI 49104

Andrews \Lambda University

School of Education Department of Educational Administration and Leadership

Teacher Data Teams Research Project

[Insert Date]

[Insert Name] [Insert School Name] [Insert Street Address] [Insert City, State, Zip]

Dear [Insert Teacher Name]:

My name is Bradley Sheppard. I am a Supervisor in the Office of Curriculum and Instruction with [Insert School District Name]. I am conducting research on Data TeamsTM at the elementary level for my dissertation project as a doctoral student in Leadership at Andrews University in Berrien Springs, MI. The purpose of this research is to explore teacher attitudes, beliefs, and experiences on the development, implementation, and performance of Data TeamsTM. This research is important because it adds the perspective of the teacher to the understanding of the Data TeamTM process. The results of this study will appear in my dissertation and what is learned may be shared through publications and or presentations. I promise you confidentiality and that the data collected will be used for this specific research project. I assure you that the data will be reported anonymously and no individual will be identified at any time.

You and the other members of your Data TeamTM have been identified by your building principal as possible participants in this research project due to the effectiveness of your Data TeamTM meetings. Participation in this study is purely voluntary on your part, you are not required to participate, and there will be no penalty for failure to participate. There are no physical or emotional risks to your involvement in this study. There is no remuneration for your participation in this research project, however by participating you are helping the researcher arrive at a better understanding of the teacher's role in effective Data TeamsTM.

Data will be collected electronically through interviews of Data Teams[™] members and observations of Data Teams[™] meetings. Additional data may be obtained from other sources such as Data Team[™] minutes and district administrators. All data collected will be kept strictly confidential and stored securely in my office. Neither your name, the name of any members of your Data Team[™], nor the name of your school will be shared with any official from [Insert School District Name], nor will they appear anywhere in the results of this study.

If you have any questions or concerns regarding your participation in this study, please contact either the researcher, Bradley W. Sheppard at <u>bsheppard@elkhart.k12.in.us</u> (Tel: 574-262-5514), or his dissertation chairman, Dr. Larry Burton at <u>burton@andrews.edu</u> (Tel: 269-471-6674).

I have enclosed two copies of an Informed Consent Form. Please read and sign both copies if you agree to participate in this study. Send one of the copies back to me and keep the other one for your personal records. You may also wish to print a copy of this letter for future reference.

Thank you in advance for your assistance in this research project.

Sincerely,

Bradley W. Sheppard

APPENDIX 3

INFORMED CONSENT

Andrews & University

School of Education Department of Educational Administration and Leadership

Informed Consent Form

Title: Exploring Teacher Experiences, Attitudes and Beliefs on the Development And Implementation of Faculty Data TeamsTM in a Midwestern School District

Purpose of Study: I understand that the purpose of this study is to explore teacher attitudes, beliefs, and experiences on the development, implementation, and performance of elementary teacher teams whose purpose is to utilize student data in making instructional decisions. I also understand that this study is important because it adds the perspective of the teacher to the understanding of the teacher team process.

Inclusion Criteria: In order to participate, I recognize that I must be at least eighteen years of age and must be an active member of a teacher team that uses student data to plan for instruction.

Risks and Discomforts: I have been informed that there are no physical or emotional risks to my involvement in this study.

Benefits/Results: I accept that I will receive no remuneration for my participation, but that by participating, I will help the researcher and educational institutions arrive at a better understanding of the teacher's role in effective teacher teams who use student data to guide instruction.

Voluntary Participation: I understand that my involvement in this study is voluntary and that I may withdraw my participation at any time without any pressure, embarrassment, or negative impact on me. I also understand that participation is anonymous, data will be kept confidentially and no individual will be identified at any time.

Contact Information: In the event that I have any questions or concerns with regard to my participation in this research project, I understand that I may contact either the researcher, Bradley Sheppard at <u>bsheppard@elkhart.k12.in.us</u> (Tel: (574) 262-5514, or his advisor, Dr. Larry Burton, Professor in Curriculum and Instruction at <u>burton@andrews.edu</u> (Tel: (269) 471-6674. I have been given a copy of this form for my own records.

Signature of Subject

Date

Signature of Witness

Date

Signed at:

APPENDIX 4

THEMES TABLE
Table 8: Themes Table

Themes		Hillary	Clinton		Barak Obama			Joseph Biden		
	Heather	Nancy	Heidi	Christina	Kimmy	Kelly	Jack	Amy	Barbara	Porsche
Established roles and	220-231	98-127	162-175	268-273	282-290	315-320	85-93	1007-1018	676-698	48-71
norms helped the Data	235-253	418-435	475-493	277-331	241-254	321-336	101-104	1057-1100	702-710	75-84
Team [™] to be more	388-398	440-462	497-517	407-424	291-301	434-440	113-133		712-735	88-103
productive	410-413	483-493	539-540	619-623	426-437	469-479	177-187			168-201
	447-458	497-509	546-607		438-445	480-484	205-218			734-747
	463-480	539-555				485-493	301-310			1354-1371
	513-543	695-730				494-521				
	836-847									
	862-872									
	997-1004									

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:

Themes		Hillary	Clinton		Barak Obama			Joseph Biden		
	Heather	Nancy	Heidi	Christina	Kimmy	Kelly	Jack	Amy	Barbara	Porsche
A collaborative mind-set/ environment was essential	116-131 404-405 482-508 610-655 761-784 795-806	468-480 513-535 629-643 650-658 733-760 855-864 960-984		430-440 457-477 591-615 627-639 644-664 685-692 697-702 711-717 746-756	63-75 76-88 89-111 145-162 262-281 409-413 414-425	133-145 522-536	46-51 105-110 232-240 272-283			
It was important to come to Data Team [™] meetings with tasks completed	323-339 343-358 849-867	810-841 846-849 868-873		719- 741	112-129 132-144	537-567	286-296 297-300 311-321			
The Data Team [™] aimed high for student achievement (High Goals)	197-208 212-215 662-689 695-701 887-899 908-935	133-157 162-193 369-414 561-594 600-625 713-805 929-987	226-236 390-403	147-152 377-401 497-510 534-535	163-170 187-202 474-479	146-154 155-164 253-269 446-460	52-64 241-255 256-271	310-352 486-532 538-566 603-609 613-624 634-654 657-683	157-176 178-198 203-253 363-386 1041-1064 1068-1083 1085-1095 1099-1117	279-315 325-366 372-393 439-441 481-501 511-522 558-571 1062-1081

Themes		Hillary	Clinton		Barak Obama			Joseph Biden		
	Heather	Nancy	Heidi	Christina	Kimmy	Kelly	Jack	Amy	Barbara	Porsche
Selecting	420-436	897-923	276-315	139-143	171-186	221-227	137-144	428-465	390-463	233-263
teaching	563-580	879-893	413-437	361-363	343-358	270-281	145-154	468-482	801-846	267-274
strategies and	586-609		613-635			371-385	322-331	737-788	848-874	416-435
assessments	940-945					568-587		906-941	875-896	526-539
was a	950-992							1023-1052	1021-1036	540-554
collaborative								1107-1137	1675-1697	618-638
endeavor								1140-1148	1702-1752	755-785
								1172-1186	1885-1931	1440-1150
								1190-1250		1151-1180
										1189-1240
Members were					203-219	212-220	65-77	111-142	131-155	129-130
cognizant of					220-229	231-238	78-84	300-306	350-358	134-141
the Data					230-240	239-244	337-345	686-738	549-593	146-164
Team's [™]					302-319	245-252	351-358	806-862	598-604	446-479
strengths and					323-342	340-348		868-902	609-642	790-807
areas needing					466-473	349-366		945-963	646-667	847-855
growth					480-486	588-607		982-991	898-945	862-886
					488-496			967-980	952-965	924
								1252-1294	985-1016	929-967
								1299-1301	1123-1182	972-989
									1186-1215	1006-1036
									1296-1349	1038-1060

Themes		Hillary	Clinton		E	Barak Obama		Joseph Biden		
	Heather	Nancy	Heidi	Christina	Kimmy	Kelly	Jack	Amy	Barbara	Porsche
(cont.)									1402-1469 1471-1530 1532-1546 1553-1577 1586-1620 1788-1805 1810-1820 1825-1875 1935-1960 1965-1999	1082-1104 1115-1135 1241-1266 1389-1431
Members of the Data Team [™] had a positive reaction to the initiative	65-79	76-93	113-133	93-99 109-113				200-215 263-280 284-295	98-122 1757-1784 2000-2016 2020-2059	202-231 1331-1350 1440-1453
Members of the Data Team [™] capitalize on each other's strengths								740-761 765-786 788-801	512-544	709-729
The Data Team [™] has the ability to know what data to collect and track	360-384 706-720	281-291 298-315	191-205 442-446 450-452 456-470	552-561 565-577				356-383 384-423 1320-350	310-346	640-652 655-664 686-704 888-916

Themes		Hillary	Clinton		Barak Obama			Joseph Biden		
	Heather	Nancy	Heidi	Christina	Kimmy	Kelly	Jack	Amy	Barbara	Porsche
The Data Team™ takes								1153-1166	467-481	398-412
time to celebrate its successes									493-511	
The Data Team™	297-319			173-174				584-599	257-294	572-589
communicated results				187-188					969-981	591-612
internally and externally				528-530					1220-1252	995-1002
				539-544					1253-1290	
									1353-1369	
									1373-1398	
The Data Team™	92-110	199-211		157-166						
managed conflicts and	135-160	215-233		198-231						
external variables	166-192	239-276		336-355						
effectively	257-261	321-355		668-680						
	266-267	664-693		766-792						
	271-289	244-272								
	548-562	330-359								
		354-381								

REFERENCE LIST

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- ABCs of AYP. (2004). *The education trust*. Retrieved July 5, 2011 from http://www.edtrust.org/sites/edtrust.org/Files/Publications/files/ABCAYP.PDF
- Ainsworth, L. (2003). Unwrapping the standards: A simple process to make standards manageable. Englewood, CO: Advanced Learning Press.
- Allison, E., Besser, L., Campsen, L., Cordova, J., et al. (2010). *Data teams: The big picture*. Englewood, CO: Lead + Learn Press.
- Angelo, T. (1995). Reassessing (and defining) assessment. The AAHE Bulletin [Electronic Version], 48, 7-9.
- Annenberg Institute. (2004). Professional learning communities: Professional development strategies that improve instruction. Retrieved from Brown University, http://www.annenberginstitute.org/pdf/ProfLearning.pdf
- Besser, L., Anderson-Davis, D., & Peery, A. (2008). *Data teams: Training manual*. Englewood, CO: Advanced Learning Press.
- Black, P., Harrison, C., Lee, C., Marshall, B., & Wiliam, D. (2004). Working inside the black box: Assessment for learning in the classroom. *Phi Delta Kappan*, 86(1), 9-21.
- Black, P., & Wiliam, D. (1998). Assessment and classroom learning. Assessment in Education: Principles, Policy and Practice, 5(1), 7-73.
- Borich, G. (2004). *Effective teaching strategies*. Upper Saddle River, NJ: Pearson.
- Carver, C. (2004). A lifeline for new teachers. Educational Leadership, 61(8), 58-61.
- Center for Performance Assessment. (2005). Retrieved October 28, 2005, from http://www.makingstandardswork.com/index.htm
- Chappuis, S., Chappuis, J., & Stiggins, R. (2009). Supporting teacher learning teams. *Educational Leadership*, 66(5), 56-60.

- Clandinin, D. J., & Connelly, F. M. (1991). Narrative story in practice and research. In D. A. Schon (Ed.), *The reflective turn: Case studies in and on educational practice* (pp. 258-281). New York: Teachers College Press.
- Coleman, J. (1966). *Equality of educational opportunity*. Washington, DC: United Stated Department of Education.
- Darling-Hammond, L. & Richardson, N. (2009). Teacher learning: What matters? *Educational Leadership*, *66*(5), 46-53.
- Davenport, P., & Anderson, G. (2002). *Closing the achievement gap: No excuses*. Houston, TX: APQC Press.
- Dietel, R., Herman, J., & Knuth, R. (1991). What does research say about assessment? North Central Regional Educational Laboratory. Retrieved November 1, 2005, from www.ncrel.org/sdrs/areas/stw_esys/4assess.htm
- DuFour, R. (2004). What is a professional learning community? *Educational Leadership*, *61*(8), 6-11.
- DuFour, R., DuFour, R., Eaker, R., & Many, T. (2006). *Learning by doing: A handbook* for professional learning communities at work. Bloomington, IN: Solution Tree.
- DuFour, R., & Eaker, R. (1998). Professional learning communities at work: Best practices for enhancing student achievement. Bloomington, IN: National Educational Service.
- Eaker, R., DuFour, R., & Burnette, R. (2002). *Getting started: Reculturing schools to become professional learning communities*. Bloomington, IN: National Educational Service.
- Flowers, N., Mertens, S.B., & Mulhall, P. (1999). The impact of teaming: Five researchbased outcomes. *Middle School Journal*, 31(2), 57-60.
- Fullan, M. (1993). *Change forces: Probing the depths of educational reform*. London: Falmer Press.
- Fullan, M. (2008). The six secrets of change. San Francisco: Jossey-Bass.
- Green, W., & Henriquez-Roark, R. (1993). Study groups in schools: A collegial way to improve your teaching. *Journal of Adventist Education*, 56(01), 27-30.

- Grossman, P., Wineburg, S., & Woolworth, S. (2001). Toward a Theory of Teacher Community. *The Teachers College Record* [Electronic Version], *103*, 942-1012. Retrieved July 5, 2011 from http://www.tcrecord.org/Content.asp?ContentID= 10833
- Haberman, M. (2004). Can star teachers create learning communities? *Educational Leadership*, *61*(8), 52-56.
- Hattie, J. (2009). Visible learning: A synthesis of over 800 meta-analyses relating to achievement. London: Routledge Taylor & Francis Group.
- Hord, S., & Sommers, W. (2008). *Leading professional learning communities: Voices from research and practice*. Thousand Oaks, CA: Corwin Press.
- Indiana Department of Education. (2003). *English language proficiency standards*. Retrieved July 5, 2011, from http:dc.doe.in.gov/Standards/AcademicStandards/ PrintLibrary/elp.shtml
- Indiana Department of Education. (2008). *Public law 221 fact sheet*. Retrieved from http://www.doe.in.gov/pl221/2008/PL221_Fact_Sheet.pdf
- Jones, F. (2000). Tools for teaching. Santa Cruz, CA: Fred Jones and Associates.
- Joyce, B., Weil, M., & Calhoun, E. (2004). Models of teaching. Boston: Pearson.
- Kruse, S., Louis, K., & Bryk, A. (1994). Building professional community in schools. Center on Organization and Restructuring of Schools. Retrieved on July 5, 2011 from http://www.wecer.edu/archive/cors/Issues_in_Restructuring_Schools/ ISSUES NO 6 SPRING 1994.pdf
- Leadership and Learning Center. (2011). Retrieved June 15, 2011 from http://www.leadandlearn.com
- LeCompte, M., & Preissle, J. (1993). *Ethnography and qualitative design in educational research*. San Diego, CA: Academic Press.
- Lichtman, M. (2006). *Qualitative research in education: A user's guide*. Thousand Oaks, CA: Sage Publications.
- Little, J. (2003). Inside teacher community: Representations of classroom practice. *Teachers College Record* [Electronic Version], *105*(6), 913-945. Retrieved May 10, 2011 from http://www.teacherleaders.org/node/795

- Little, J. & McClaughlin, M. (1993). *Teachers' work: Individuals, colleagues, and contexts*. New York: Teacher's College Press.
- Louis, K., & Marks, H. (1998). Does professional community affect the classroom? Teachers' work and student experiences in restructuring schools. *American Journal of Education*, 106(4), 532-576.
- Louis, K., Marks, S., & Kruse, S. (1994). Teachers' professional community in restructuring schools. Retrieved July 5, 2011 from http://www.eric.ed.gov/ PDFS/ED381871.pdf
- Marzano, R.J., & Kendall, J.S. (1998). Awash in a sea of standards. *McRel*. Retrieved July 5. 2011 from http://www.mcrel.org/PDF/Standards/ 5982IR_ AwashIn ASea. pdf
- Marzano, R.J., Pickering, D.J., & Pollock, J.E. (2001). *Classroom instruction that works: Research-based strategies for increasing student achievement.* Upper Saddle River, NJ: Pearson.
- Mazzeo, C. (2001). Frameworks of state: Assessment policy in historical perspective. *Teachers College Record* [Electronic version], *103*(03), 367-397.
- Merriam, S. (1998). *Case study research in education: A qualitative approach*. San Francisco: Jossey-Bass.
- McNulty, B., & Besser, L. (2010). *Leaders make it happen: An administrator's guide to data teams*. Englewood, CO: Lead + Learn Press.
- Mitchell, C., & Sackney, L. (2001). Building capacity for a learning community. *Canadian Journal of Educational Administration and Policy*, 19, 1-10.
- Morrissey, M.S. (2000). Comprehensive school improvement: Addressing the challenges. *Southwest Educational Development Laboratory*. Retrieved April 15, 2011 from http://www.sedl.org/change/issues/issues91/welcome.html
- Murphy, C.U. (1999). Use time for faculty study. *Journal of Staff Development*, 20(2), 20-25.
- Murphy C.U., & Lick, D.W. (1998). *Whole-faculty study groups: A powerful way to change schools and enhance learning*. Thousand Oaks, CA: Corwin Press.
- Newman, F., & Wehlage, G. (1995). *Successful school restructuring*. Center on Organization and Restructuring of Schools, University of Wisconsin-Madison.

- O'Shea, M. (2005). *From standards to success*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Patton, M. (1990). Qualitative evaluation methods. Newbury Park, CA: Sage.
- Popham, W. (2008). *Transformative assessment*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Reeves, D. (2000). Accountability in action: A blueprint for learning organizations. Englewood, CO: Advanced Learning Press.
- Reeves, D. (2004a). Accountability for learning: How teachers and school leaders can take charge. Alexandria, VA: Association for Supervision and Curriculum Development.
- Reeves, D. (2004b). 101 questions and answers about standards, assessment, and accountability. Englewood, CO: Advanced Learning Press.
- Reeves, D. (Ed.). (2007). Ahead of the curve: The power of assessment to transform teaching and learning. Bloomington, IN: Solution Tree Press.
- Reeves, D. (2010). *Transforming professional dvelopment into student results*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Rosenholtz, S. (1989). *Teachers' workplace: The social organization of schools*. White Plains, NY: Longman.
- Richardson, J. (2000). *The numbers game* [Electronic version]. National Staff Development Council. Retrieved on April 1, 2011 at www.nsdc.org/library/publications/tools10-00rich.cfm
- Rudy, D.W., & Conrad, W.H. (2004). Breaking down the data: Looking for ways to improve instruction and student learning, take an informed approach. *American School Board Journal*, 191(2), 39-41.
- Schmoker, M. (2006). Results now: How we can achieve unprecedented improvements in teaching and learning. Alexandria, VA: Association for Supervision and Curriculum Development.
- Senge, P. (1990). *The fifth discipline: The art and practice of the learning organization*. New York: Currency and Doubleday.

- Smith, D., Wilson, B., & Corbett, D. (2009). Moving beyond talk: Six conditions helped these urban districts launch and sustain strong learning communities. *Educational Leadership*, 66(5), 20-25.
- Taylor-Powell, E. (1998). Program development and evaluation. University of Wisconsin Extension. Retrieved on November 15, 2005 at http://s142412519.onlinehome. us/uw/pdfs/G3658 3.PDF
- United States Census. (2000). Retrieved June 25, 2011 from http://www.census.gov/ main/www/cen2000.html
- United States Department of Education. (2011). *Elementary and secondary education*. Retrieved July 5, 2011, from http://www2.ed.gov/programs/titleiparta/index.html
- Vescio, V., Ross, D., & Adams, A. (2007). A review of research on the impact of professional learning communities on teaching practice and student learning. *Teaching and Teacher Education*, 24, 80-91.
- Wei, R., Andree, A., & Darling-Hammond, L. (2009). How nations invest in teachers: High achieving nations treat their teachers as professionals. *Educational Leadership*, 66(5), 28-33.
- White, S.H. (2005). Beyond the numbers. Englewood, CO: Advanced Learning Press.
- Wright, S., Horn, S., & Sanders, W. (1997). Teacher and classroom context effects on student achievement: Implications for teacher evaluation. *Journal of Personnel Evaluation in Education*, 11, 57-67.
- Yell, M.L., & Drasgow, E. (2005). *No child left behind: A guide for professionals.* Upper Saddle River, NJ: Pearson.
- Yin, R. (2003). Case study research: Design and methods. Thousand Oaks, CA: Sage.

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	curriculum committees; head textbook selection teams; supervise								
	several content-specific areas; provide leadership development to								
	building principals; coordinate district improvement plan; lead								
	district's curriculum mapping initiative; provide guidance in Data Team and 8-Step Process models of professional learning								
	communities; provide professional development training for								
	teachers in various curriculum and instruction areas; serve on								
	district-level committees; perform other duties as assigned by the superintendent.								
1999-2005	Director of Teacher Preparation and Field Experiences/Assistant								
	Professor of Teacher Education								
	Andrews University, Berrien Springs, MI								
	Responsible for the leadership and oversight of undergraduate and								
	MAT pre-service teachers enrolled in the Teacher Preparation								
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