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Texas Elementary Teachers' Perceptions of Data Chats

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Walden University

College of Education

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Candace Christina Hopkins

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Walden University
2020

Abstract

Texas Elementary Teachers' Perceptions of Data Chats

by

Candace Christina Hopkins

MA, Prairie View A & M University, 2006

BS, Tuskegee University, 2002

Doctoral Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Education

Walden University

June 2020

Abstract

A gap in practice at CES Elementary School (pseudonym) was the lack of data driven instructional decision making. This lack has contributed to the problem of low school scores on the State of Texas Assessments of Academic Readiness (STAAR). Low STAAR scores have negatively impacted student, teacher, and administrator retention. Data chats were implemented to help overcome the problem and improve practice, but this did not work. Hence, the purpose of this study was to explore the perceptions of data chats that occurred within CES's professional learning communities. The study was conceptually guided by the theory of action. Teachers' perceptions of data chats were the focus of the research question. A basic qualitative design using interviews of 5 teacher participants was conducted to collect data. Interview data were analyzed using open and axial coding. Analysis revealed teachers perceive the need to participate in data chats, believe data chats have an impact on improving instruction, and they could benefit from more professional development surrounding ways to use data. A 3-day professional development plan was created as a project to meet this need. By understanding teacher perceptions of data chats and creating a professional development plan, this project study has the potential to improve teacher effectiveness of student learning through data driven decision making in CES and similar school districts.

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Dedication

I dedicate this piece of work to my wonderful, loving and supportive husband, Damion, and the best children a parent can ever ask for, Damion II, “Mommie’s Lovebug” and Camille, “Mommie’s CHRISTina.” You three are the best thing that has ever happened to me, and I live for the three of you, my Holy Trinity. In the name of the Father, the Son, and the Holy Spirit.

I am also very grateful for the many angels who watch over me daily and pray to God that I have made you proud. With all my heart, I miss you all dearly: Mary Theresa Carrier-Byoune (Granny), Sarah Goree Palmer (Lil’ Mama), Cynthia Marie Carrier-Jones (Mom), Doris June Peavy (Nana), and Geraldeene Lenton-Fance (MawMaw).

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Section 1: The Problem

The Local Problem

A local Texas elementary school had a problem with students performing on state assessments; third and fourth grade students in the local school consistently underperform 20% lower than state averages on reading and math. The standard was based on the percentage of students who meet state test score expectations within the school. In response to low performance, data chats were implemented in the school in the 2013-2014 school year and were held every other week to discuss how data can be used to improve student performance. However, student performance had not improved.

Data-driven instructional practices have been shown effective for improving instruction and student performance. Bernhardt (2009), Marsh and Farrell (2015), and Mandinach and Gummer (2012) stated that teachers benefit from using data to improve their instruction. Third and fourth grade teachers, intervention specialists, administrators, and instructional staff all attended bimonthly data chats. The gap in practice is that teachers were exposed to ways to use data to improve their instructional decisions, but this did not work. Table 1 shows the school report card data.

Table 1

School Report Card Data (All Grades Tested)

Year	Subject tested	State average	School average
2016	Reading	66%	47%
	Mathematics	71%	59%
2015	Reading	75%	47%
	Mathematics	76%	59%
2014	Reading	76%	52%
	Mathematics	71%	52%
2013	Reading	81%	59%
	Mathematics	70%	63%

Note. Adapted from *State of Texas Assessments of Academic Readiness (STAAR) test or exam*. Students in Grades 3-11 in the state of Texas participate in the exam in different subject areas based on the grade level (Texas Education Agency, 2019).

According to Marsh and Farrell (2015), not much research has been published to assist teachers and leaders in using data to make instructional decisions. Teachers must understand that their role as instructors is important and that their instruction should add value to the whole child. Data-driven instruction helps to ensure that any deficit a child has can be corrected. When teachers make decisions by coming together as professional learning communities, this collaboration can serve as an intervention mechanism to make learning activities happen, such as dissecting data (Bernhardt, 2009).

According to Mandinach and Gummer (2012), making data-driven decisions has gained much attention in education circles over the past decade. Using data and research to enhance teaching are requirements of policymakers, such as the U.S. Department of Education. The U.S. Department of Education has made use of over $610 million to create the technology programs used to compute the descriptive pieces of data; however, limited efforts have been used to enhance the human capacity of educators (Mandinach & Gummer, 2012).

In Grades 3 to 11, the federal government observed the success rate of students by using data from the tests taken at the end of the school year, as stated in the Every Student Succeeds Act (ESSA; U.S. Department of Education, 2015). Teachers' daily instruction was expected to prepare students to be successful on those exams. Teachers struggled in doing this, preparing students for the exams without knowing where their students started and were expected to go. Data were the moving force on most campuses.

The government agency gave CES Elementary School (a pseudonym for an elementary school located in southwest Houston, Texas) a "met standard" rating for the 2013-2014 school year, according to the *Texas Agency Performance Report* (a pseudonym for an agency report). Table 1 contains State of Texas Assessments for Readiness (S.T.A.R.) data for CES Elementary School taken from the agency's School Report Card (a pseudonym for a state exam and report). Table 1 represents the school's average achievement scores in comparison to state averages. The averages are the percentage of students who met the standard for each subject area and year.

Though CES Elementary "met" state standards, school averages were 15% to 20% below state averages, as Table 1 indicates. This presented a problem for the campus as well as the district. An underlying assumption in regards to the accountability policy was that standardized tests produce results that teachers use to make decisions regarding their instructional practices in classrooms (Ingram, Louis, & Schroeder, 2004). CES Elementary School implemented data meetings or "data chats" 2 to 3 times per month, or after every assessment, to disaggregate data. The administration ensured that the data chats were deemed imperative, allocating the necessary time for the data chats to avoid a gap in practice. Teachers studied and reviewed data in an attempt to make informed decisions to impact student learning. Looking at data provides information to the school that could be used to make positive changes to the teaching and learning process of the teacher (see Bernhardt, 2009).

At the study site, teachers followed a scope and sequence provided by the school district. The normal routine was that teachers delivered lessons and assessed students several times per year before the state exams in April and May. Information gained from a school administrator (personal communication, April 2015) revealed that when students did not perform well on a concept, teachers did not go back and reteach that concept. This was one of the reasons that the school used data-driven instruction and had implemented data meetings or "chats." According to Prenger and Schildkamp (2018), making data-driven decisions had to be systematic and had the potential to increase student achievement.

CES Elementary School implemented professional learning communities (PLCs) with data as the focus. The participants in these PLCs included the content area person (i.e., math content specialist), administration (i.e., principal, assistant principal, and elementary school counselor), grade-level teachers (third and fourth grades), and the grade-level/content area interventionist.

The school had access to a multitude of data for teachers to use. Each year, all S.T.A.R. data were distributed to the teachers for whom the data impact directly—third and fourth grade teachers. The principal also kept a binder in her office with data from the entire school, the region, and the state. The recent rise of data mining had not been due only to the state's requirements; it was also a national expectation. Students continued to get further behind because reteaching concepts to students who did not perform well on the first assessment was not taking place. Although teachers had access to a vast amount of data, it was rare that they reviewed student assessments on their own, and students had not received interventions in their areas of weakness. Thessin (2015) interviewed teachers about how they participated on high-functioning teams who attended professional development and PLC training sessions; they felt that their participation had a great impact on their daily work.

Rationale

Data chats have not yielded improved student performance at a local Texas elementary school. The principal of the school, the state of Texas, and the federal government all viewed this as a problem. In a staff meeting, the principal reported that

student performance remained low despite on-going data chats (personal communication, April 2015). The state legislature used a teacher and leadership appraisal system throughout many regions of the state that included domains related to planning the use of data and assessments to impact instruction (Texas Teacher and Evaluation Support System, 2019). ESSA called for teachers to use data to improve (U.S. Department of Education, 2015). ESSA policies impacted how those in education use data in schools and show the adjustment to the curriculum to make informed, data-driven decisions. These policies showed the commitment that the U.S. Department of Education (2015) had for educational practices. Data-driven instructional improvements were important to multiple stakeholders, yet data chats at a local elementary school had not yielded improved student performance. Therefore, the purpose of this study was to explore the perception of data chats. A better understanding of participants' perceptions of data chats is needed to inform the local site and other interested audiences regarding data chats as a method of professional development for improving data-driven instruction.

Definitions

Adequate yearly progress: The measurement tool that is used for student achievement based on the No Child Left Behind Act of 2001 for schools, districts, and states (Editorial Projects in Education Research Center, 2011).

Campus improvement plan: A blueprint for how a campus will address the needs of the campus pertaining to accountability (Glossary of Education Reform, 2014).

Data chats: Teacher team meetings in which teachers, teacher leaders, and administrators focus on reviewing student data looking for practices that impact student learning to gain knowledge (personal communication, 2015).

Data disaggregation: Numerical data that are produced from multiple sources such as common assessments and have the ability to dissect data in alignment with a protocol (Glossary of Education Reform, 2014).

Data-driven decision making (DDDM): The system that allows practitioners to manage as well as teach practices that assist in gaining knowledge about students (Marsh, Pane, & Hamilton, 2006).

Data-driven instruction: This term is defined as teachers using data prior to actually teaching a concept. Teachers look at the data from an assessment in order to teach the deficit areas and not just follow a scope and sequence with random objectives. It is precise and systematic to improving student learning (Engage^{ny}, 2016).

Professional learning communities (PLCs): A group of teachers, teacher leaders, and campus leaders who collaborate and work together to have a focus on results (Glossary of Education Reform, 2014).

Significance

This study was significant to several audiences, including teachers, students, parents, administrators, the school, and the state. A better understanding of participants' perceptions of data chats is needed to enhance how the data chats are used in closing achievement gaps.

Research Question

Data chats have not yielded improved student performance at a local Texas elementary school. Therefore, the purpose of this study was to explore the perception of data chats. One research question was explored in this study: What are the teachers' perceptions of data chats in a Texas elementary school? A better understanding of participants' perceptions of data chats informed the local site and other interested audiences regarding data chats as a method of professional development for improving data-driven instruction.

Review of the Literature

The following literature review includes peer-reviewed articles and excerpts of text that include, but are not limited to, researchers who have studied data use for instructional practice from a variety of perspectives. Literature was found using Walden University's meta-search engine Thoreau and Google Scholar. Search terms included *data analysis, teachers and data analysis, analysis practices, teachers making instructional decisions using data, teachers and PLC,* and *data through PLCs*.

Themes resulting from the search are presented in the Review of the Broader Problem. First, I present the conceptual framework, theory of action.

Conceptual Framework

The theory of action was the conceptual framework for this project study. Action theory was historically rooted in the United States around the 1940s. Sociologist Parsons (1937) integrated the study of social order with individual factors that were acted upon

both voluntarily and in response to social structure. Around the same time, action research became an evaluation model in education and other fields (Weiss, 1998). Chen (2015) described the action model as the "nuts and bolts" of program or professional development implementation (p. 69). The Wallace Foundation, which funded educational research, offered processes for developing theories of action in schools adopting programs or professional development efforts (as cited in Center for Educational Leadership, 2013). Haertel (2009) described a theory of action as a logical set of activities that were expected to produce results. A theory of action is a set of steps applied within a broader theory of change. Applied to education, the theory of action explains how any innovation leads to improved student learning (Keane, 2016). Figure 1 was taken from the organization that Keane is associated with, VIF International, and illustrates how teachers' learning impacts classroom practice and, in turn, student learning.

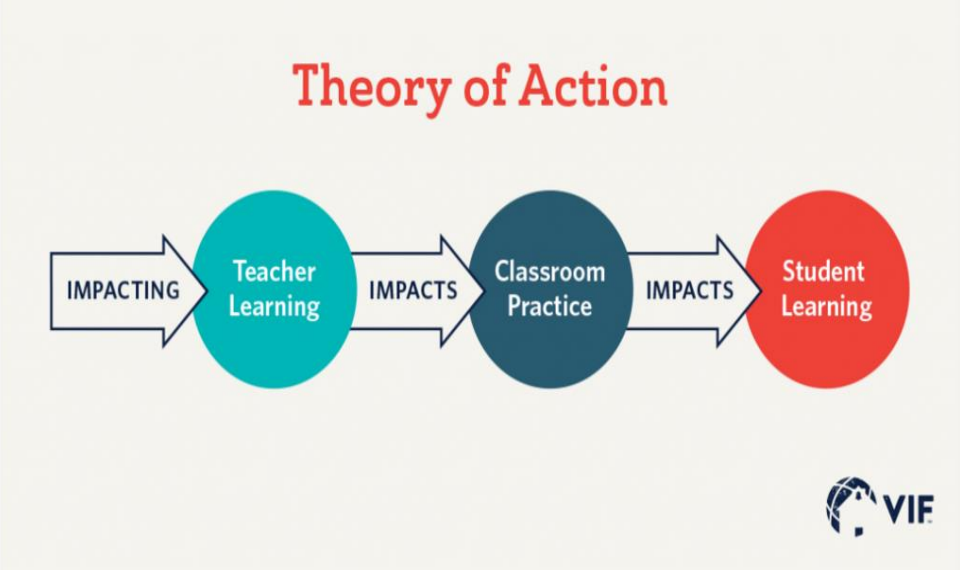

Figure 1. Theory of action.

Note. Adapted from *Theory of Action: Positive Impact on Teaching and Learning* by J. Keane, 2016, VIF International Education

Applied to the present study, the theory of action was used as the conceptual framework for understanding how teachers perceived data chats as a professional development activity to impact teacher learning and practice.

Review of the Broader Problem

Included in the literature review of the broader problem are themes related to standards and accountability in education: standards and accountability in education, high stakes testing and data as evidence, data-driven decision-making, teachers' perceptions of data, the role of the school leader, data analysis in educational settings, PLCs and how they impact the data analysis process, and teachers' use of data.

Standards and Accountability in Education

Jimerson and Wayman (2015) completed a study that focused on the accountability of schools at both levels, state and federal, in which the expectation was for teachers to work with data in ways that were structured through professional learning. They examined the needs of a teacher when specifically looking at data-related professional learning and explored whether the professional learning that teachers were exposed to support these needs (Jimerson & Wayman, 2015). Teachers attended professional development for data analysis, and Jimerson and Wayman wanted to know if it made an impact on the teachers and recommended that professional development on how to use data be a part a teacher's routine.

Farley-Ripple and Buttram (2014) stated that across the world, those who serve in education are faced with growing expectations to use data in an effort to improve instruction in schools. Support is a vital necessity in achieving that goal. These expectations have been embedded in educational policies, including federal, state, and local entities in the United States.

Lachat and Smith (2005) completed a case study in which they focused on data use in five high schools that performed poorly in urban areas that were under reform. They investigated different ways for disaggregated data to be used for improvement and how they were used to impact the reform process (Lachat & Smith, 2005). Schools are overwhelmed with "warehouses" of data, which include colorful charts and graphs and many PowerPoint presentations (Reeves & Flach, 2011). The millions of dollars that the

government was putting into systems that manipulate data were pointless and considered wasteful until more attention is given to evaluating teachers and leaders in a systematic way and basing the evaluation on data (see Reeves & Flach, 2011).

When I reviewed federal policies such as No Child Left Behind and ESSA (U.S. Department of Education, 2015), they both emphasized the need for agencies that governed education to both assemble and act on a variety of types of data to use when looking at accountability. Although mandates from federal, state, and local agencies call for time to be structured when focusing on data, there was not much guidance available for schools and districts on how to implement the reform. Leadership in schools should have a positive influence on collaborative data use, and this aspect has been implemented across schools using PLC time (Farley-Ripple & Buttram, 2014). Jimerson (2016) discussed the impact that data-driven practice had on social change, stating that the discussions regarding schooling in the United States pending the change or reauthorization of the No Child Left Behind, now ESSA, that educators should expect the stakes to be even higher when looking at formalized data use. The school district, the state, and the country have been tracking student achievement data.

My study is related to standards from both state and federal accountability as the district had to follow mandates from both entities. All stakeholders involved in this study had expectations and guidelines that they adhered to, including CES.

High Stakes Testing and Data as Evidence

Supovitz and Klein (2003) suggested that the number of high-stakes testing was growing, and the states were taking input from schools on improvement in student performance and high-stakes testing. The major dilemma for school leaders was that high-stakes tests were used as strict evidence of schools' effectiveness. However, the annual testing results and adequate yearly progress were merely helpful when teachers and leaders are looking for instructional guidance in an effort to improve their performance on the high-stakes tests. Professional learning that includes the use of data is rare (Jimerson & Wayman, 2015). Jimerson and Wayman (2015) claimed that studies that address professional learning and the use of data can assist the work of the district and campus leaders.

CES Elementary, a school in an urban district, had data that showed student performance was poor in terms of state assessments; students took standardized tests beginning in third grade. To possibly improve student performance, data chats were implemented as a regular professional development activity at CES, yet performance had not improved.

Data-Driven Decision-Making

According to Mandinach (2012), data-driven decision making (DDDM) is related to the assembly, systems, review, inspection, and understanding of data to inform practices and policies in an educational setting. The process is generic and applicable to teachers who want to make their instruction better, in addition to nonteaching staff

members who have an administrative role. Personnel who may apply this process include all stakeholders who are part of the education community, campus-level personnel such as instructors and leaders, district level personnel including data specialists, and state and federal official level personnel such as state representatives and governors.

Mandinach (2012) offered an example of DDDM: A rural district was attempting to understand why a subgroup of students struggled with their academics. Teachers, administrators, and other district administrators searched for an explanation through reviewing student performance data, medical records, behavioral data, attendance, and other quantitative data; however, no useful correlation surfaced. Administration looked at what would seem to be unrelated data, such as transportation, and that was where a direct link was found; struggling students had the longest bus commute. Due to this new information, administration modified the transportation plan so that the time students spent commuting via bus was shortened with hopes that time would now be productive and students more focused on their academic work (Mandinach, 2012).

According to Ledesma (2013), this emerging prominence on teacher use of data and the examination of the literature is imperative. Administrators use the research from DDDM to gain a better understanding of how to prepare teachers to use these new expectations, which implied that preservice teacher education programs had a role in this process.

Park, Daly, and Guerra (2013) showed that DDDM in schools was apparent in research, but not much priority had been given to how leaders make sense of strategically

using data. Park et al. explored the officials of both schools and districts and their use of DDDM in an urban high school. School and district officials cultivated frames that were reviewed for further diagnosis, inspiration, and predictions in an effort to push using data on a consistent basis for the purpose of improvement (Park et al., 2013). Park et al. exhibited how both school and district leaders innovated understanding frames of DDDM that assisted others to understand the purpose for using data to make decisions as well. The data showed that going through the frame making process and reviewing how they were used was beneficial (Park et al., 2013).

Despite the widespread use of coaches and DDDM, Marsh, McCombs, and Martorell (2010) stated that there was still limited information about the support of DDDM from school instructional coaches and how these practices related directly to improvement in both teaching and student improvement. Marsh et al. researched a program that took place in Florida that included reading coaches and investigated research questions that were connected to reading coaches and their daily work surrounding data analysis and the support that coaches provided regarding data analysis.

Data-based decision making was one of the regular notions when looking at the change that is effective. It helps to pinpoint problems and consider alternative solutions suggested Kaser, Stiles, and Mundry (2006). One way that a leader ensured data disaggregation takes place is through the establishment of PLC's. Teachers and leaders who were involved in PLC's noted the main purpose of attending school is to learn, not to be taught, which are drastic notions.

Dunn, Airola, Lo, and Garrison (2013) stated DDDM reform is a route for excelling the learning of students, although not much DDDM reform has taken place in the actual classes, and there is not much research showing factors that push teachers to embrace DDDM. The authors gave an example of DDDM when reviewing the reading needs of sixth-graders, the teacher had to: (1) identify an appropriate screening test, (2) have access to the results, (3) break down the results by pointing out the students' strengths and weaknesses and (4) use this information when completing the instructional plan. Doing this allowed the teacher to successfully use student data to impact student achievement.

Although the policies required for DDDM exist, they suggested data utilization was a straight-forward process. However, these policies neglected to reference a variety of ways for those stakeholders in education to use and comprehend the data available to make informed decisions and according to Ikemoto and Marsh (2007).

This study explored perceptions of teachers who used data chats to understand how teachers may have used data to improve their classroom practice and student learning as revealed as best practice in previous studies about data-driven decision making. Though data-driven decision making was revealed as a valued practice, teachers' perceptions of data and data analysis had changed. Older studies revealed teachers as unskilled at accessing and using data. Newer studies revealed teachers were more open to and able to access and use data (Ikemoto & Marsh, 2007).

Teachers' Perceptions of Data

Piro and Hutchinson (2014) examined the trends of the perceptions of contentment toward being literate in data, before and after data chats, an instructional technique, was implemented for students who participated in a teacher preparation program. The pressure for public schools was not decreasing when reviewing areas that impacted the progression of students. Some of these problems pertained to practices of teaching to make data-driven decisions that impacted instruction.

The pressure existed for teachers when looking at the notion that they had to understand the data, analyze the data, and use the data from assessments needed to make informed decisions with regards to instruction (Piro & Hutchinson, 2014). Piro and Hutchinson (2014) stated the data chat was an "instructional intervention" which directly followed the ways and requirements that were listed under the model of local education agencies; the purpose was to give new teachers an understanding of local classroom data and completed interventions using that data. The data chat gave those looking to become teachers the expectation to dissect current test data, which were standardized state assessments, find the pros and cons of the data set, choose specific tests, such as formative or summative, to use the data presented, and then cultivate an instructional plan which includes strategies to address the cons.

Cho and Wayman (2014) denoted that educators, including teachers have the expectation to use data when making decisions. Using data effectively is not an easy task, it is proven to be difficult, but not impossible and there has to be systems in place,

including computer data systems. Teachers have to also make sense of the systems in place, including the technology-based ones as well.

The Role of the School Leader

Although school leaders have many roles, one of the first and most important things that should be done is to establish the mission, vision, and goals for the campus. The principal provides leadership that incorporates clear statements of where the school is going; an understanding of how to create an atmosphere of learning, collegiality, and leadership for all; and a commitment to a vision of excellence and equity (Barth, 1990). Members of the school staff should be educated in how to generate and analyze data about student achievement and the way schools function. Teachers, regardless of their experience, are always in need of training, especially being that education is an evolving entity. Handling data is a trait that can be learned. One can work with data in order to become productive and put it to adequate use, data does not speak for itself, it is to be handled (Richards, 2014).

According to a study by Sebastian and Allensworth (2012) where they reviewed school leadership, classroom instruction, and student learning within high schools, they found variation in classroom instruction. It was found that it was associated with the leader or principal through multiple ways, mostly professional development which showed a difference in classroom instruction and student achievement.

Lunenburg (2008) stated that the fulfillment of a school's needs when reviewing at instructional leadership is not the principal's role alone; there is argument about the

value of teachers serving along with the principals as instructional leaders. Lunenburg (2008) also compared and contrasted different categories of leadership such as instructional and transformational. Instructional leadership normally focuses on the way teachers behave when they are engaged in activities that directly impact the growth of students. In contrast, transformational leadership uses several terms to be defined when looking at the concept such as charismatic, visionary, cultural, and empowering, and these types of leaders raise the members of the organization level of commitment to achieve the goals, ending in greater productivity.

Leaders have used data at CES Elementary, but the expectation for teachers to use data at CES was relatively new. Data chats were implemented by leaders in regular PLC meetings to assist teachers with their utilization of data and data analysis for decision making.

Data Analysis in Educational Settings

The goal of data analysis is to gain a better understanding of ways students learn best and what is the setting in which the students excel in their educational ventures, as well as explain this educational phenomenon of data mining (Romero & Ventura, 2013). Data chats, the topic of the present study, are a means to discuss data analysis. Prior to the data analysis discussion, Bull and Wasson (2016) recognized the need to choose the correct data to learn from which can assist teachers to both reflect and monitor their very own learning, while supporting the decision making process of the teacher while in class as well as planning for sessions to come. The only way teachers are going to “buy-in” to

the data disaggregation process is if the leader discusses its importance and is knowledgeable of the process as well. Effective leaders and change agents collect data to inform decisions, and they use data in multiple ways (Bull & Wasson, 2016).

PLCs and How They Impact the Data Analysis Process

Learning should impact those in the school to focus on three components that are crucial according to DuFour, Eaker, and Karhanek (2004). Teachers and leaders want students to learn depending on their grade level and once the students have mastered the knowledge and skills learned, how does that impact the teachers and leaders' knowledge? Some students may have trouble; how will teachers and leaders react? These are the questions that DuFour et al. (2004) posed for schools to focus on. Many schools are being told they know what improvements to make and the teachers and leaders should take one step at a time (DuFour et al., 2004). If the desire is to increase student test scores in all subjects and grades, as well as cohorts, teachers/leaders have to look at the end goal and vision and comprehend the implementations that are necessary for change (Bernhardt, 2009).

Reeves (2010) denoted in a comprehensive needs assessment, specifically the planning section, the plan should provide evidence of the school's learning effectiveness (for instance, student subgroup and subscale achievement data, teaching practices, classroom and department trends and/or patterns). Challenges in both student achievement and adult practices (actions of educators) are specific enough to guide and facilitate other components of the school's improvement plan.

The definition of "data" according to Schildkamp, Lai, and Earl (2012) was in opposition with the normal definitions of data in the field of education, which were mostly quantitative or numbers from test data; a narrow concept. Simply reviewing data from tests suggests that it is feasible for teachers to be blind to other data that are crucial and valuable when looking to improve the achievement of students as well as the entire learning experience for students.

Blink (2014) stated that the need to reflect when using data is an imperative step in making sure districts use data as a guide for the classrooms. In an effort to complete data reflections, schools have to provide teachers with the tools needed such as the time necessary to collect, analyze, and interpret data. School leaders explored sending teachers to workshops and conferences or established professional learning days on campus or within the district (Blink, 2014).

Bernhardt (2006) stated school districts that choose not to review their data comprehensively cannot guide their schools' complete data analyses or sustain student improvement. If business affiliates use educational data to predict the future, educators should be able to do the same. Teachers and leaders should be able to predict as well as use identical data to "prevent" poor results.

A very resourceful technique that educators, both teachers and leaders can use to make decision making better in classes is the use of the "data wall." Basically, the Data Wall is a display that is easy to move, using the science fair three-dimensional board. When school leadership met to discuss how to improve student achievement, data walls

were referred to and a reliable source of information in regard to the strategies used by the school (Reeves, 2008). Reeves stated the three notable portions of the data wall are:

1. Data are considered “external”, such as standardized test scores from state assessments.
2. Data are deemed “internal”, such as classroom exams, measurements chosen by the school that meets its individual need.
3. Data contains inferences and conclusions retrieved from the data.

When CES Elementary created their campus improvement plan, the team included data related to grade levels as well as sub-populations such as cohort groups by race, special education, limited English proficient students, and socioeconomic status.

Teachers’ Use of Data

Mohr (2004) chronicled different teachers working with students in an effort to train them in researching. One of the teachers in the study stated the following teaching methods: modeling and demonstrating, starting at the beginning, making learning visual, questioning, evaluating, and rewarding. One would assume that the “evaluating” method included some type of assessment or tool that would allow for data to be collected. The teacher stated the following for the “evaluating” method: “To check periodically to see if students are learning” (Mohr, 2004). It is never stated how students’ learning was checked but based on this statement, it seems that the method should be called *check for understanding* rather than *evaluating*.

Murphy (2005) stated that teachers bring their leadership roles to life by acknowledging specific tasks teachers can do at their schools. Amongst those tasks are curriculum development, classroom teaching, professional development, and leading and assisting in the development of curricula and instructional strategies.

After reviewing a detailed analysis of direct instruction, Orlich, Harder, Callahan, Trevisan, and Brown (2012) saw that data-driven evidence ranges throughout all the strengths of direct instruction which include delivering content to the whole class, the teacher holds the focus, maximizes their time, and focuses on objectives.

Carlson, Borman, and Robinson (2011) completed a study that dissected the reading and math scores from a random assignment given by 59 districts, in 500 schools ranging over seven states. Carlson et al. (2011) estimated that the impact of the reform called data-driven reform was a one-year initiative implemented by the Johns Hopkins Center for Data-Driven Reform in Education (CDDRE). The CDDRE team up with school districts to distribute student assessments in benchmark form, meaning they are administered in specific time ranges, and are designed to give leaders and district personnel professional development on the interpretation of data and how to use it for the nature of school reform.

The National Center of Student Progress Monitoring (2007) defined progress monitoring as a practice that is based on the student's ability to perform academically and track the if instruction is effective with regards to the assessment. Dana and Yendol-Hoppey (2014) describes DDDM, data-driven decision making as an entity of practices

that teach and manage student information to be readily available to the persons who are practicing the craft of teaching. Dana and Yendol-Hoppey (2014) stated that when looking at the goals of teacher research, DDDM along with progress monitoring are professional activities that school reformers believe will lead to improvement in student learning. DDDM is included in teacher inquiry as teachers use the assessment data and background information to make informed decisions that are in relation to planning instruction in classrooms and on the individual levels of students (Dana & Yendol-Hoppey, 2014).

Hawley (2007) stated that the actual procedure the identified school chooses does not mean as much as how the school grasps the basic components of evidence-based decision making. One principle is assessments are communal and teachers collaborate as a professional learning community to choose the tests they will use. The school is to make it a normal practice for teachers to show the data that students are learning and discuss the information in a public forum. Schools that are effective schedule time for assessment practice which is collaborative, ensuring it is a part of the work day. Additionally, schools make it a priority by including it in their professional development. Marsh (2012) demonstrated that interventions exist that supported educator's use of data.

CES Elementary had different facets of data. They received support from not just state and federal entities, but also received grants upon approval. Many of the instructional grants came with assessments that the school used to review if reform had

happened. CES Elementary was provided with curriculum to deliver instruction from the district. The curriculum included objectives that teachers should focus on teaching.

CES Elementary used a Small Learning Community (SLC) model where the assistant principals and instructional specialists were assigned to each SLC. The classroom instruction on each grade level and each classroom at the study site differed as there were teachers that ranged from experienced and novice on the campus. CES Elementary implemented data chats to intervene with teachers and teacher leaders that used data. Whether it was comprehensive data or a system-level initiative, the reforms sponsored by districts such as workshops, exist as an intervention to push educators to use data. Blankstein (2012) stated the one of the most important tasks for educators is to ensure that learning takes place for all students and it is meaningful. Many educators try their very best to do all that they can to provide for their students, although there are many problems that deter learning. Some of the obstacles are limited time, race and economic status, languages spoken at home, and family issues.

Enhancing the quality of teaching is largely noticed as crucial to the need of correcting deficient areas in schools on the secondary level such as middle and high schools, as stated by Allen, Pianta, Gregory, Mikami, and Lun (2011), who completed an "interaction-based approach to enhancing" middle and high school instruction and the achievement of the student population, the realm of education has had trouble when looking for approaches that are developed by teachers which enhance student achievement through instruction that is data-driven.

Superintendents of the school districts are currently pushing for highly effective leaders and highly effective teachers to make up the faculty and staff of their campuses. The assumption can be made that having highly effective leaders and teachers can positively impact student achievement. When reviewing schools that perform well, the variables are adjusted so that they do not impede in the success of all students and success is continuous. They are dedicated to finding interventions that work, and the notion of "throw-away" students is non-existent. According to a study completed by Picciano (2012), data-driven decision making became popular in the 1980s and 1990s and has evolved into a much more sophisticated concept in higher education as well as primary through secondary education.

Blankstein (2012) stated that "ensuring achievement for *all* students' means having an overarching strategy that encompasses the majority of learners while also having specific strategies aimed at those who need extra support (Blankstein, 2012, p. 36)." Blankstein (2012) believed that components that were essential for success for all include the following:

- All students acquire an improvement plan,
- A system must be in place to rapidly identify those in need,
- Support must be continuous that includes strategies that assist low-performers, and
- Results to close the learning gap must be shared.

Without analyzing data, the components above are null and void. In order to disaggregate data, there has to be a plan in place and it has to be done on a consistent basis, which would provide for a quick turn-around in an effort to close the achievement gap.

CES Elementary is in an urban area. Cosner (2011) reviewed a multi-case study over three years that examined three elementary schools, in urban areas being that these schools implemented grade level data-based collaboration on and a literary initiative that was school-wide. Knowledge of student learning and inferences related to learning were shown to cross, over a specific period of time, the collection of literacy initiative data. The use of data or the drawing of information while making decisions has risen as a primary plan of action for both public school sectors and universities, as a way to impede improvement (Coburn & Turner, 2012). As stated by Jennings (2012) data is useless by itself, it cannot do anything. The missing component is an understanding of if and how data impacts practice at all levels, the school campus, the district, and if it leads to improvement in education.

CES Elementary administration added data chats as a part of their weekly meetings to expose teachers on ways to use data to make decisions. Little (2012) stated that “data-based decision making” has had a widespread appeal across many entities such as public health, medicine, and of course, education. These appeals have prompted the creation of new systems for data, new routines for the organizations, and the roles of the professionals of the organization. Little (2012) stated that by having a collective

discussion about student learning data and looking at any other measures of school improvement is a part of whole-school reform.

Fullan (2002) stated that establishing the practice of sharing knowledge is as much a road to making cultures collaborative as it is a product of them. This means the organization must make the process of sharing knowledge, both giving and receiving, a requirement and must inspect the routines of the organization to ensure sharing takes place with incentives attached to it and engaging opportunities for stakeholders. The organization is the school and the collaborative culture is built through establishing effective PLCs where all parties are responsible for giving and receiving the knowledge associated with data disaggregation. It is important for both PLC meetings to be led by teachers and leaders of the school. Learning from each other, especially a peer is essential.

Supovitz (2012) stated much has been written about formative assessment, although there has not been much research in which focuses on how assessments are designed and if that information is useful to teachers. At the heart of research on the use of data in schools and their corresponding districts is that exams, tests, or student assessments are only as good as the educators use them as stated by Coburn and Turner (2011) who went a step further wanting to know what influences how data are used. Data-driven decision making is an essential component that has come to fruition for educators at all levels, including teachers and state officials, and has been subject to much attention regarding of policy and finances Mandinach (2012). Teachers from CES were

not novice to the profession but using data were a new best practice for them. Data-driven decision making works within education as teachers use the data from assessments as well as background information that they can use to make decisions while planning their instruction (Dana & Yendol-Hoppey, 2014).

For an educator to be considered literate in data analysis, one must be able to collect data, analyze it, communicate it, and use different sources for data in order to continuously improve each aspect of the learning environment, mostly teaching and learning as denoted by Bernhardt (2009). When students take an exam or common assessment and the end result is not positive, it can be received as a mistake and mistakes can be corrected. Teachers have the power to "reteach" in order to ensure that the end result was better the next time students were assessed. Educators work to assist their students evolve into "lifelong learners" while developing "learning-to-learn" skills. Mistakes are an essential way to build those skills. "Mistakes should not mark the end of learning; rather, they can be the beginning (Reeves, 2007, p.13)."

Kane, Taylor, Tyler, and Wooten (2011) stated that classroom data, such as observing teachers while in action, looking at best practices, and the measurement of improving student achievement via the actual teacher were combined during the study. Kane et al.found that using teacher observations when examining the effectiveness of a teacher is related to student progression towards achievement. In a comparative case study completed by Cohen-Vogel and Harrison (2013) the use of data are reviewed as having open access to performance data on students, with the ability to use them to

indicate decisions for instruction, while implementing a culture that data are viewed as an improvement practice.

Teachers and leaders who share an issue, a passionate topic, and go further in developing their knowledge in improvement practices in a continuous manner are communities of practices (Wenger, McDermott, & Snyder, 2002). Teachers and leaders share the concern of improving student achievement, low student performance can pose a problem, and teachers and leaders show passion about the number one concern, the students. Meeting as a professional learning community, on a consistent basis, to analyze data and discuss ways to impact student achievement is a community of practice and this allows knowledge to be deepened and growth in data disaggregation stated Wenger et al. (2002).

Data is viewed as having power to move the practices of teachers, but policymakers' success will depend on the practice they want to move, not the measure they want to use. Policy texts still seem to be very vague when it comes to the how to actually use data as denoted by Spillane (2012). Realistically, education has shifted dramatically for teachers in the past decade. Teachers can no longer go into classrooms with high hopes and prayers, with the notion that students will succeed. Educators now hold the accountability for all learners (Gregory & Kuzmich, 2014).

In education, data-driven decision making has become more than imperative. Policymakers have made it a requirement for educators to use data to inform practice. The policies are growing, but not the training for educators for data use. There is a need

for increased data literacy for educators. There is some professional development for educators; few formal courses such as education courses or even other opportunities for data literacy to develop in schools (Mandinach & Gummer, 2013).

Implications

Results from the present study were applied in a project deliverable. Results revealed teachers' perceptions of data chats which might include their attitudes about data chats, changes to their practice based on data chats, and suggestions for better use of PLC time in data chats. Once data were collected and analyzed, options for a project deliverable for the study site were explored. The options for the project deliverable were a curriculum plan, an evaluation report, a policy recommendation, and a professional development training.

The goal of the project deliverable was to offer a solution to the problem of this study, low student achievement on state assessments creates a gap in practice which created the need for data chats. A curriculum plan was considered. Time spent in data chats and efficiency planning chats could have been included in a curriculum plan. Discounted practices such as data chats and finding a replacement for the method was also an option for a curriculum plan project deliverable. Based on the results of the research, staff development training was the option chosen to improve data chats. Staff development was selected because teachers specifically mentioned the need for more training in interviews with them.

Summary

Section 1 introduced the study. The local problem was presented as was a rationale for the study. The local problem at the study site, a Texas elementary school had a problem with students performing on state assessments; third and fourth grade students in the local school consistently underperform 20% lower than state averages on reading and math assessments as shown by local, state, and national evidence. Definitions were presented for eight number of terms used throughout the study. The one guiding research question focused on what were teachers' perceptions of data chats in a Texas elementary school. The study was framed in the theory of action, a concept which reflected on the process of teacher learning that impacted teacher classroom practice and student learning.

The review of the literature contained 52 references. Several key points were revealed about data and its use in instructional decisions. Notable from a synthesis of literature were three key points. a) Data-driven decision making was viewed as a positive practice for its potential to improve student learning. b) Data were used by federal government and state agencies to rank schools and set priorities for funding. c) Teachers' leadership skills improved when teachers use data to make decisions about their classroom practice.

Section 2: The Methodology

Qualitative Research Design and Approach

A basic qualitative design using interviews was the approach taken to conduct this study (see Merriam, 2009). Basic qualitative research "is used when the researcher is interested in the meaning a phenomenon has for those involved" (Merriam, 2009 p. 23). I wanted to know the teachers' perceptions of data chats, which made the basic qualitative approach appropriate. Interviews were held with five teacher participants.

Setting

CES, an elementary school in Southwest Texas, had an enrollment of 928 students. Of these 928 students, 907 were economically disadvantaged, and 817 were at-risk. The school had a mobility rate of 260 out of the 928 students and an attendance rate of 95.3%. The school employed 53.5 total professional staff members. In addition to the professional staff, there were two members who made up the school leadership team, and four educational aides. Although the school was nestled in a small, retirement neighborhood, the students who attended did not live in the homes within the neighborhood. The students were bused in from neighboring apartment complexes. The school had a renovation, but the main building only held the common areas such as the cafetorium (cafeteria with a stage), offices, and classrooms from Kindergarten through first grade students; all other grades held classes in the temporary buildings.

Participants

Purposeful sampling was used to select participants. Purposeful sampling is used when information-rich cases are sought (Creswell, 2009). Participants were eligible if they had participated in at least one data chat. Ten potential teacher participants were invited to be interviewed. I interviewed participants who volunteered and gave consent until I reached saturation, a point at which no further insight was gained from addition data (see Charmaz, 2006). Saturation was reached prior to interviewing all 10 invited voluntary participants; data collection ceased, and data analysis was completed using the data from five participants.

Access to teachers was sought through a letter of cooperation that was sent to the principal for signature and subsequent submission to Walden University's Institutional Review Board. I previously worked at the local school study site from where data were collected, which allowed me direct access to the principal and teachers. Once approved by the local school site and Walden University's IRB, approval number 0710-19-0138873, potential participants were contacted via email. An invitation was sent through my Walden University email account that described the study and enlisted next steps with the consent form attached.

Data Collection

Interviews were held with five participants based on basic qualitative research data collection methods, as suggested by Merriam (2002). Interviews were completed using the following procedures:

- The five interviews with teachers took place at the study site, in 30-minute increments per teacher.
- I obtained written consent to conduct the interview.
- I used an interview protocol that included a brief explanation of the purpose of the study and several open-ended questions (see Appendix B.
- During the interviews, I used a digital audio recorder and took notes. I recoded interviews with a Sony Digital Voice Recorder (Model ICD-PX370).
- No personal identifiers were present in recordings or notes. Each participant was assigned a number to maintain confidentiality.

Data Analysis

Interviews were transcribed in Google Talk. Corrections to transcriptions were made by listening to the audio recording and referring to my notes. I intended to use NVivo to unveil potential categories from which themes could be derived. I determined that NVivo was not needed, and so I manually coded data by interview questions that directly related to the research questions.

For initial coding, I used an open coding approach (see Saldaña & Omasta, 2016). Open coding is a process used during qualitative data analysis in which researchers label concepts and define and develop categories. Completing open coding during qualitative data analysis includes researchers going through a cycle of noticing things, collecting the data, and analyzing the data (Khandkar, 2009). After I openly coded data, axial coding

was then used to search for patterns to develop themes (see Saldaña & Omasta, 2016). There were no discrepancies identified within the data.

Trustworthiness

I took several steps to assure rigor of my qualitative study. I improved credibility, transferability, generalizability, and confirmability by taking the following steps to ensure trustworthiness, as suggested by Shenton (2004). According to Fusch, Fusch, and Ness (2018), it is important for the researcher show that their research is trustworthy.

To improve credibility, I took the following measures. During the interview process, I frequently debriefed the participants by restating the information given to me to ensure that I understood the participant's response. When I needed clarification about words transcribed, I checked with the participants to make sure my transcription of their words was correct. To improve transferability, I provided a detailed description of the local study site in the Setting section above. To improve dependability, I provided details about my study design and procedures in the Methodology section. I also presented a "reflective appraisal of the project, evaluating the effectiveness of the process of inquiry undertaken" in Section 4 of the project study, as suggested by Shenton (2004), to improve dependability.

To improve confirmability, at the beginning of the interview, I explained to the participants that their responses should reflect their own thoughts and experiences in data chats and not expectations of leaders or peers. Audio-recording allowed me to capture participants' own words and to return to the recording if I needed to check for accuracy

or to interpret any voice inflections that were helpful for interpretation. To check my own bias, I kept a researcher's journal and jotted notes down of any reaction I had that would bias my interpretation of the participant's response. With these steps, I was confident my data were of quality.

Limitations

According to Shenton (2004), certain measures should be taken when collecting data to ensure credibility, transferability, and conformability. One limitation was capturing the vocabulary or terms used by the participants. There were some moments when I needed to make sure I understood what some of the vocabulary or terms that the campus used were indeed what I thought based on context clues. One word that continued to surface during my note-taking process was in my "snapshots." Miniassessments or unit assessments that the students took occurred about every 2 to 3 weeks were brief and provided a snapshot of where students were. This was also a limitation due to time constraints of the interview process, but that was also another reason for the audio-recording device. I explained the purpose of the audio-recording device so that participants understood it was an additional resource to my notes, which impacted conformability.

Data Analysis Results

From my coding, I identified three themes related to my research question about what teachers' perceptions were of data chats in a Texas elementary school. The first theme was that participating in data chats helped the teacher self-reflect on their best

practices that had a direct impact on planning and instruction. The second theme was that data chats had a direct impact on the students because they were able to use the results for goal setting. The third theme was the need for more staff development or training on data disaggregation protocols in their interview responses.

Participating in Data Chats Helps Teachers Self-Reflect

The theme that participating in data chats helped the teacher self-reflect on their best practices emerged from data analysis. All five participants' discussed that they liked participating in data chats because chatting drives instruction, adds value to the learning, provides an opportunity to look at misconceptions, and create target goals. Although Participant 1 originally thought data chats were "a waste of time," Participant 1 continued by stating even though data chat procedures were tedious, they were helpful for the teacher's "psyche." They went on to say that seeing students grow was satisfying and felt like what they were doing, day-to-day, actually worked.

Participant 2 stated that data chats were important "so that you can know where your students are." All wanted to reach the goals they had set during the data chats. Working to reach goals was connected to teachers working toward the accountability systems of the schools, from both state and federal aspects. Jimerson and Wayman (2015) completed a study in which teachers focused on the accountability of schools at both levels, state and federal.

Data Chats Directly Impact Students

Participant 3 observed that teachers who participated in data chats realized that gains were motivated by students feeling good. Student gains, in turn, motivated teachers. Participant 3 said that the process "makes the students feel good and their success motivates them [the teachers]." This is in alignment with Bernhardt (2009), Marsh and Farrell (2015), and Mandinach and Gummer (2012), who stated that teachers benefit from using data to improve their instruction. The problem was that students at a local elementary school consistently underperformed 20% lower than the state in reading and math. In an effort to close that gap in practice, teachers were exposed to ways to use data to improve their instructional decisions during data chats. Participants 1 to 5 shared the consensus that "growth is growth." Participants 3 to 5 shared that both the students and teachers were happy when students' scores "grew" or increased from the 30s to the 50s.

Participant 5 shared an actual data tracking sheet (Appendix C) that the campus used with students after stating how the students track their data after each "big assessment." The sheet included an area for the student to input their name, assessment name, date of the assessment, scores that ranged from 0% to 100%, and boxes for students to color or shade in their grade.

The Need for Staff Development

Being able to share strategies with each other was a pattern among all participants' responses. Each participant stated that they benefited from getting together as a team to look at the data. Participant 1 and 2 felt the need for more trainings to know

exactly was data points needed to be met. The state had provided a chart to indicate the numbers, both raw scores and percentages, to meet standard. In addition, the chart also included information such as grade level, subject, race, and socioeconomic factors like Limited-English proficient (LEP), special education, or Title I indicators.

Participant 3 stated that the process "allows for teacher learning" stating that during data chats, they were able to look at one class who mastered one objective and another who did not do so well. Being in the setting of data chats allowed for the teacher whose students mastered the objective to share their "tricks of the trade" when they taught that particular objective. Participant 4 thoughts were, "I can look how I taught it, going deeper, being able to reflect on concepts and skills, and showing that there isn't just one way." Participant 4 also share that the self-reflection trait and the ability to dissect the teacher's own data did not come easy, that "training and time is necessary." During the data collection process, Participant 4 discussed that it was crucial to receive the data in a timely manner so that it was disaggregated, and discussion points were noted about trends before going into the data chat PLC. The school leaders such as the assistant principal and instructional specialists were responsible for "running" or scanning the answer documents in order to create the student data documents and provide it to the teachers.

Participants 3, 4, and 5 stated that the data presented had to be organized and they wanted more opportunities for training or staff development on using data. Participant 2 and 3 also stated the environment played a part in the data chats was dependent upon who

led them, what protocols were used, and what type of data were disaggregated (i.e. snapshots of campus assessments and district level assessments). Participants felt that they learned how to have a cohesive environment through more exposure to training. Specifically, Participant 3 stated that "participating in data chats adds value, but only if you know what to do with the data." According to Farley-Ripple and Buttram (2014) support is a vital necessity in achieving the goal of improving instruction in schools. Administrators can provide support to the teachers by providing staff development (Farley-Ripple, & Buttram, 2014). From these findings, the project that was delivered is a 3-day plan for staff development that addressed the organization of data, finding trends to make instructional decisions, and celebrating growth for students and staff.

Project Deliverable

Based on the Data Collection and Data Analysis Results portions of Section 2, I was able to determine that the study site would benefit from a project deliverable that focused on staff development. The need for staff development was determined after reviewing the results of my research and meeting with my study committee to discuss the findings. There was a common theme amongst participants, which were teachers at a Texas elementary school who participated in data chats. The reoccurring need or want most often expressed during the interview process with 3rd and 4th grade teachers was the call for more training. More training was needed for data chats to become more beneficial and impact student achievement. The proposed project deliverable, a 3-day staff

development plan's purpose was to train teachers about data-based instructional decision-making through data chats. Goals to meet this purpose included the following goals:

1. Teachers and administrators will be able to identify the data needed and organize it before the data chat.
2. Teachers will be able to complete a protocol around a selected piece of data to find the trends, and view a minilesson for the identified learning objective, and
3. Teachers will create a short-win tracker with student goals and celebrations for growth.

The project deliverable is further described, in depth, in Section 3.

Summary

Section 2 of this project study included a description of the qualitative research design and approach, setting, participants, data collection and analysis, trustworthiness, limitations, data analysis results, and an introduction to the project deliverable.

A qualitative approach was taken to study teachers at CES Elementary school regarding their perceptions of data chats to improve their teaching effectiveness and address the school problem of low state assessment scores. Five participants were interviewed. No discrepant cases were noted. Three themes emerged from several rounds of data analysis using open, axial, and theming: participating in data chats helped the teacher self-reflect on their best practices that had a direct impact on planning and instruction, data chats had a direct impact on the students because they were able to use

the results for goal-setting, and the need for more staff development or training on data disaggregation protocols in their interview responses.

These themes were consistent with the theory of action, the conceptual framework of the study portion of this project study. The theory of action (Keane (2016) posits, "teacher learning impacts classroom practice which in turn impacts student learning." Haertel (2009) described a theory of action as a logical set of activities which are expected to produce results. Data chats included a "set of activities" for teacher learning. Teachers used student data achievement to make improvements to their teaching practices which effected student learning.

To address the needs of teachers for more staff development or training on data disaggregation protocols, a 3-day professional development workshop was introduced as a project deliverable based on study findings. Section 3 of this project study focuses on a professional staff development project deliverable based on a comprehensive literature review.

Section 3: The Project

Introduction

The proposed project includes a 3-day staff development plan for Texas teachers who teach Grades 3 and 4. The staff development plan includes a PowerPoint presentation, a schedule for each day, a budget, a teacher inventory for data chats, and an evaluation plan. The results from the data analysis portion of my study provided information for the staff development plan that I created. Data collection was completed via teacher interviews that focused on the research question: What are teachers' perceptions of data chats in a Texas elementary school? The need for more staff development on data disaggregation protocols was a theme that emerged. I returned to this theme and discerned specifics. More specifically, participants called for three elements related to training: organization of data, finding trends in the data to make instructional decisions, and implementing celebrations for growth.

The staff development plan focused on these specific elements. Each day, I present ways to address these elements in data chats. The 3-day staff development training's purpose is to train teachers about data-based instructional decision-making through data chats. Goals and learning outcomes to fulfill this purpose included the following:

1. Teachers and administrators will be able to identify the data needed and organize them before the data chat.

2. Teachers will be able to complete a protocol around a selected piece of data to find the trends and view a minilesson for the identified learning objective.
3. Teachers will create a short-win tracker with student goals and celebrations for growth.

The project is presented in Appendix A. Although my target audience for the data collection was third and fourth grade teachers, I opened the staff development training to all teachers who used data to improve their instruction and attended data chats at this Texas elementary school, which included Grades 1 to 5.

Rationale

My professional staff development project was chosen in consultation with my committee because the data analysis in Section 2 indicated a need for staff training related to the effective use of data chats. Participant responses allowed me to name the following emergent themes when analyzing the data collected: (a) participating in data chats helps teachers self-reflect, (b) data chats directly impact students, and (c) there is a need for staff development. The goals that were chosen for the project deliverable support these themes. The genre of professional or staff development was chosen being that it was directly stated as a need from the participants. Akiba and Liang (2016) researched six types of professional development and its impact on teachers and student growth for over 4 years, specifically looking at the change it created in math scores. They found that the teachers' participation in professional development or learning and their collaboration

amongst one another impacted the improvement of the mathematic scores (Akiba & Liang, 2016).

Each activity included in the staff development plan addressed the specific elements of training from the data analysis. The first activity included a Teacher Inventory, in which teachers briefly described their experiences, both positive and negative. The activities following included a PowerPoint presentation along with small group practice of organizing data, finding trends, and implementing celebrations for growth. On the last day of staff development, the teachers received an evaluation survey to rate the staff development plan, component by component.

Review of Literature

Upon completion of data collection and data analysis for my study on *Texas Elementary Teachers' Perceptions of Data Chats*, I decided that the study site would benefit from a staff development plan that addressed the elements of training that I compiled from the research. The following literature review provides a summary of relevant literature related to staff development for teachers, professional development for teachers when using data, and staff or professional development that impacts student achievement. Desimone and Pak (2018) provided a conceptual framework for the literature review on teacher learning by offering a coaching model to expand and deepen teacher learning. After the search process is explained, literature about the project topic, professional development, is presented. Literature themes include effective staff

development, staff development on the use of data, staff development, and student achievement.

Search Terms

In order to provide relevant literature on the topic of teacher staff development, I was able to find scholarly resources related to several concepts of staff development. Search engines Google Scholar and ERIC produced articles from searching using the following keywords: *staff development for teachers, academic staff development, staff development for elementary teachers,* and *staff development training and activities.* When I used some of these keywords, I collected articles that included the term professional development such as *effective teacher professional development, effects of teacher professional development activities*, and *impact of data use on student achievement.*

Effective Staff Development

Darling-Hammond, Hyler, and Gardner (2017) defined professional development as professional learning that is structured and has a direct impact on student outcomes through the improvement of teachers. Darling-Hammond et al. noted seven essential components for effective professional development:

- Professional development is content focused,
- Professional development includes active learning,
- Professional development includes collaboration,
- Professional development includes effective models for practice,
- Professional development includes coaching from an expert,

- Professional development includes opportunities to receive feedback and reflection, and
- Professional development includes adequate time, practice, and implementation.

Professional development must address not only what teachers learn but also how they learn (Darling-Hammond et al., 2017).

The goals of teaching have shifted in the 21st Century to include not only understanding child development but also the goals of having the capability of addressing diversity, learning styles, and being able to tackle school improvement. Staff development programs cater to educating teachers on these 21st Century goals (Darling-Hammond, 2019). In order for teachers to make effective use of data, they need to feel supported (Schildkamp, Poortman, Luyten, & Ebbeler, 2017). Schildkamp et al. (2017) also stated that teachers need to collaborate, which can happen during staff development. Teachers can use data once they have the knowledge and skills gained through staff development (Schildkamp et al., 2017).

Johnson (2018) called for elementary teachers to be great and recommended ways to develop teachers. Elementary school is where students attain a foundation. Therefore, teachers in elementary need to provide the best teaching for students to become excellent. Johnson observed that professional development does not have anything to do with continuous improvement for teachers to be great.

Mraz, Salas, Mercado, and Dikotla (2016) completed a study on literacy coaches and professional development. They showed that teachers who have the ability and opportunity to discuss their strengths, struggles, and goals, and who have the opportunity to reflect in a professional development setting or training allows them to put theory into practice (Mraz et al., 2016).

Mraz et al. (2016) also described how professional development may take place, either in a large group setting or when the literacy coach works with small groups or even individual teachers. Although professional development can be delivered in a variety of ways and with many different facilitators, Desimone and Pak (2017) examined high-quality professional development for which instructional coaches were often used as the facilitators. Gallagher (2016) adduced that professional development has a direct link to teachers changing their skills and practices. PLCs are settings where professional development can be delivered (Popp & Goldman, 2016). Popp and Goldman (2016) stated that PLCs can foster knowledge needed when teachers look at the analysis of assessment data.

Staff development does require funding, especially if using outside resources such as consultants (Datnow & Hubbard, 2016). Akiba and Liang (2016) stated that schools should find it beneficial to use their resources to provide opportunities that are collaborative, research-based activities for teachers to improve student achievement.

Staff Development on the Use of Data

Datnow and Hubbard (2016) published a study looking at teachers and their beliefs about data-driven decision making across the world. They showed that in order for teachers to have the capacity to analyze data and use them with the purpose to improve instruction, there was a need for staff development (Datnow & Hubbard, 2016). Staff development can be delivered by coaches, consultants, principals, and in the setting of PLCs. Foster (2018) looked at the impact of coaching on teacher practice and student achievement in a research review. Foster found that coaching does impact student achievement. Principal supported common assessment, PLCs, and focus on data-driven instruction were the strategies Brown (2016) found in his study of leadership to gain high performing status at diverse schools. Coaching, in the form of PLC data chats, was the setting of this project study.

Lai and Schildkamp (2016) discussed that using data in education today is prominent across the world, on both the state level as well as a national level due to accountability systems in place. The expectation is that teachers use data to make decisions to improve their instruction in order to impact student achievement. Data are more than just assessments; they also include entities such as student engagement and discipline, both academic and nonacademic data pieces. Data chats in the PLC setting allowed for teachers to discuss many of the nonacademic data sources, such as attendance, discipline, student engagement, and other areas.

Bernhardt (2017) stated that schools that use systems for continuous improvement in addition to data analysis can track their results. Teachers are able to see what works and what does not. Bernhardt's (2017) observation echoes what participants of the study site mentions. When teachers were in data chats, they were able to see if their daily instruction worked. Similar to Lai and Schildkamp (2016), Bernhardt (2017) noted that all types of data should be used when completing data analysis.

Staff Development and Student Achievement

Kennedy's (2016) research article states that professional development programs connect to different theories of action. Ongoing support of practice is one theory. Ongoing support of practice is accomplished through ongoing professional development (Wright, 2019). With ongoing practice, professional development can impact student achievement (Kennedy, 2016).

A case study by Lynch, Smith, Provost, and Madden (2016) argued that student achievement is impacted by school vision led by leaders working with teachers and their classroom performance. Their study showed that using current data was key. The sooner data are presented and discussed, the better impact data has on teachers making instructional decisions. The school reform model studied by Lynch et al. (2016) is a combination of coaching and data-decision making.

Bridges (2016) investigated the number of professional development hours that teachers need so to impact on student achievement. The study focused on differences in student gains from a pretest and posttest when administered by teachers who had 5 hours

of professional development and 10-hours of professional development. The results showed that the teachers who had 5 hours of professional development showed increases in student achievement (Bridges, 2016). Teachers with 10 hours of professional development felt overwhelmed with the many practices to which they were introduced. Sometimes less is more. Such was the finding of Bridges (2016) study.

Jacob, Hill, and Corey (2017) conducted a 3-year evaluation of professional development for teachers about mathematics. Best practice and knowledge level were the focus of a summer institute and a 4 to 6-days of training during the school year. Evaluators concluded that the professional development, did indeed impact teachers' instructional practices. The same conclusion was made by Meissel, Parr, and Timperley (2016) in a New Zealand study site. Teachers who participated in professional development or learned groups made larger gains.

Four studies found teacher data teams yielded gains in student achievement. Support in the use of data teams was called for by Schildkamp, Smit, and Blossing (2019). They held that teams gathering to look at student data was a promising means to enhance instruction. Donohoo's (2017) study of collaborative teacher teams who collaborate to monitor and track student data hold promise to strengthen student learning.

Schildkamp, Poortman, and Handelzalts (2016) found that five of nine teams that were coached on how to use data by school leaders in a staff development setting showed improved instruction and school improvement. Lieberman, Campbell, and Yashkina (2016) stated that teacher learning and leadership programs (TLLP) can impact teachers

by training and supporting them through professional development opportunities. The results were described incredible as successful from groups of teachers who were in TLLP programs for 2 years.

Project Description

The project created was a 3-day staff development plan that includes daily activities that provided new learning for the teachers that participated. The activities were aligned to the themes presented in earlier sections of the study that impacted data chats. The staff development plan was created for the teachers that participated in the interview process. During the data collection process, the teacher participants stated that there was a need for more training about participating in data chats. The project included daily agendas, PowerPoint presentations, resources, which are listed below, and an evaluation tool that was provided to the teachers to rate the training.

Project Resources

The study site planned to host different types of staff development during Opening Week in addition to the project deliverable. The following materials are needed and available to present the staff development plan:

- Campus library,
- Tables and chairs,
- Toolkits that include sticky notes, pens, and highlighters,
- Data binders,
- Sign-in sheet for staff,

- Staff development log for opening week,
- Projector and screen, and
- Chart stands.

Additional materials, listed below, are outlined with the quantity and prices in the Staff Development Budget in Appendix A:

- 3M Chart Paper,
- Markers,
- Cardstock (name tents & group letters),
- Laptop*, and
- Flash drive.

Copies (Teacher Inventory, Agendas, PPT presentation, Data Pieces, Facilitator Evaluation)

- Continental breakfast (x1); snacks/candy and water (x3).
- Candy dishes (facilitator's own), and
- Paper goods (plates, napkins, cutlery).

I proposed to present the staff development plan over three consecutive days. I wanted it to start after the campus administration presented the campus non-negotiables which included their weekly PLC schedule and Data Chat schedule. Doing this was beneficial for any new staff so they could make the connection between the information presented surrounding campus norms and the staff development plan. For each of the 3 days, the start time was 8:30 a.m. and an end time of 4:00 p.m.

Potential Barriers

Time was always a potential barrier when working with schools. The staff's time was always limited due to instructional time, mandatory meetings such as parent conferences and special education meetings. When the district mandated specific staff development, teachers had to attend and were not available for other events or trainings. I requested that the staff development plan be presented during Opening Week, which were the staff development days at the start of new school year. This time was "sacred" to campus administration because they had the liberty to organize the staff development that best meets the needs of the campus.

Project Evaluation Plan

The stakeholders that completed the evaluation plan were those teachers in grades first through fifth at a Texas elementary school. The evaluation was aligned to the following goals derived from the Data Analysis portion of Section 2: a) Teachers and administrators were able to identify the data needed and organize it before the data chat. b) Teachers were able to complete a protocol around a selected piece of data to find the trends and observe a minilesson for the identified learning objective, and c) Teachers created a short-win tracker with student goals and celebrations for growth. I used a rating scale, listed in Appendix A, with the score of "1" being the least and "5" being the highest that the presentation was rated. The teachers did not evaluate me as the facilitator of the staff development, but rated the training components such as the material presented

and the effectiveness of the activities. The purpose of using a rating scale was because I was able to ensure that the goals were attainable and that the staff left with new learning.

Project Implications

The staff development project was directly related to the study site, the school community, and local school district. The project contained activities that support social change in a positive and professional manner by adding value to teachers and administrators' practices of participating and implementing data chats. Teachers and administrators' utilization of the staff development project allowed for social change shown through their desire to be active participants and collaborate in the data chat setting. The staff development project influenced schools that were going through reform or in a turnaround phase such as the local study site.

Section 4: Reflections and Conclusions

Project Strengths and Limitations

The staff development project was created to address teachers' perceptions that data chats were necessary but they needed more training on what data pieces to use and how to organize them, how to ensure that data chats impact instructional decisions, and how to celebrate student and teacher growth after reviewing the data. Section 3 of my study included the staff development project that was delivered to the actual study site. The data from Section 2 and the qualitative information from Section 1 supported the goals and sessions of the staff development project. The staff development plan was designed for 3 days and included sessions for choosing and organizing data pieces, creating minilesson as a result of making informed instructional decisions, and creating a calendar that targeted ways to celebrate growth for both students and teachers, short-term and long-term.

I created the staff development project to address the teachers' perceptions of participating in data chats. The teachers felt that they were necessary when looking to improve student achievement, but they needed more training in different areas. The staff development plan was compiled using the different areas that the teachers felt they needed more training in, such as organizing data, creating minilesson, and celebrating growth. This project may not only impact teachers but can also assist school administrators in providing them with a plan to consistently work with teachers in using data to make informed instructional decisions. One significant strength of this project is

that it was a turnkey. Turnkey means that anyone who has worked in a school setting who used data would be able to implement it. The PowerPoint and Agendas included in Appendix A are detailed and specific, giving school leaders or teacher leaders the ease and conformability needed to deliver the project. It was also designed to be implemented over a 3-day period, and most elementary schools have at least 7 to 10 days of staff development days at the start of each school year.

When I explored the possible limitations that this staff development project presented, choosing content areas and scheduling was limited. Most Kindergarten through second grade teachers are responsible for teaching all subject areas (i.e., reading, math, language arts, science, and social studies). Grade 3 through 5 teachers are departmentalized, meaning they teach with a partner. One teacher partner is responsible for reading, language arts, and social studies while the other focuses on math and science. The sessions of the staff development project included instructions for teachers to work as grade level teams, but facilitators have to be creative when assigning teachers tasks and the time allotted. One way to address this limitation is to focus on the content areas that have a corresponding state assessment, for example, third grade students take state assessments in math and reading every year, so the grade level could be divided to ensure they are using the time allotted on the specific subject.

In each session of the staff development project, teachers complete an activity to reach the attainable goals. The activities were designed to be completed so teachers can use them during data chats and throughout the next school year. Teachers used their time

to work with their teams and gained tangible outcomes from the staff development project. In order for the project to be a success, it needed committed staff to facilitate the project as designed.

Recommendations for Alternative Approaches

Reeves (2010) offered several alternatives to accountability for learning other than data chats within PLCs. Reeves suggested holistic accountability, which goes beyond test scores and focuses on strategies to reframe state assessment in contexts of curriculum, parent and community involvement, leadership, and teaching. Reeves argued that curriculum mapping, so prevalent in standards-driven schools, does not typically measure the association between curriculum efforts and actual implementation. Reeves called for alternative ways to measure and use curriculum within a holistic accountability system, such as the percentage of students who are receiving assistance and who are one or more levels below their grade.

Assistance for students who need it would involve not only the school but also the parents. Reeves (2010) recommended multiple communication channels to involve parents as a part of holistic accountability. Holistic accountability holds that leaders will be more accountable than teachers and staff so that accountability is not perceived as a top-down effort. Leadership is assumed by everyone and is measured by indicators such as percentage of faculty meetings held to discuss student achievement and percentage of professional training activities directly dealing with practice in the classroom. Authentic assessments of writing and complex problem-solving are suggested not just by Reeves

(2010) but also by Calkins (1994) and Darling-Hammond (1997). Holistic accountability offers several alternatives to solve the problem of reaching state testing standards.

Scholarship, Project Development and Evaluation, and Leadership and Change

In creating this project, I was able to broaden my thought process on how much work went into creating a staff development plan for teachers. In my career, I have provided staff development often, but I was always responsible for my own portion. There was no thought of budget, scheduling each day, and similar details. I have only been responsible for my portion, my session. For instance, summer of 2019, I was invited to provide a choice session for the New Teacher Academy Staff Development. The academy lasted for 3 days for all new teachers to the school district. I only had to attend 1 day and prepare for a session on Parent Communication in which I presented the same training three times during that 1 day. Materials such as technology, room assignments, chart paper, toolkits, and other resources were already available. I was only responsible for the copies of my presentation, and I brought candy for the participants to enjoy during each session.

Creating this project using the template provided by Walden University, committee feedback, qualitative research, and the EdD Qualitative Doctoral Project Study Checklist allowed me to explore perceptions of teachers when participating in data chats. Combining the collected and analyzed data, I was able to create the staff development project based on findings of my study. Once the staff development project was implemented, it confirmed that data chats have a positive impact on teachers'

perceptions. Evaluation of the project yielded valuable recommendations. Recommendations included were continuous improvement of data chats using teachers' perceptions of them, implementing data chats in all grades to increase the buy-in of participation, and providing the opportunity for staff development about data analysis and its impact on teacher best practices and student achievement.

When reflecting on the research found surrounding teachers and data, there was one topic, PLCs, presented by DuFour et al. (2004), that intrigued me the most. DuFour et al. used the notion of the Three Big Questions in the PLC setting. The Three Big Questions consisted of the following:

- What do teachers and administrators want students to learn?
- Once the students have mastered the knowledge and skills needed to learn, how does that impact the knowledge of teachers and leaders?
- How does that impact the teachers'/leaders' knowledge?

These questions were essential and were only answered by completing some sort of questionnaire. The data chats that took place at the study site were in total alignment with these questions. These questions supported the fact that teachers need a setting in which they can look at student data and make informed decisions to impact students, which ultimately improves student achievement. The evaluation tool at the end of the staff development project allotted for additional data to improve data chats and provide information of teachers' perceptions.

Reflection on the Importance of the Work

This project study afforded the opportunity for teachers to learn how to organize data, create minilessons that impact student achievement, and create a calendar to celebrate the student and teacher achievement. Through this process, I learned that teacher buy-in is imperative when the goal is changing teachers' mindsets. I also learned that leaders must be active, visible, and truly listen to their teachers, whether they are sharing positive or negative feedback. Teachers did not want to waste their time, and they wanted to know that their efforts had an impact on their students and that they were acknowledged for it.

The purpose of this study was to explore the perception of data chats that occurred within a Texas elementary school. The qualitative study was conceptually guided by the theory of action as described by Chen, Haertel, and Parsons (2015). The perceptions of teachers surrounding data chats were the focus of the research question. During the teacher interviews, which was the data collection protocol, the data collected showed that teachers saw the need to participate in data chats, believe that they have an impact on improving instruction, and can benefit from more professional or staff development surrounding ways to use data.

Teachers shared the need for more staff development during the data collection process, so I proposed a staff development project that provided both teachers and administrators with practices that impacted data chats in addition to teacher's desires to participate, knowing that in the end, it produced better student achievement results. The

staff development project potentially has a positive influence on social change for teachers, administrators, and other school officials who are employed at the study site.

Implications, Applications, and Directions for Future Research

This project study may be beneficial for the study setting's school administrators who provided means for teachers who participated in data chats and who reflected on how they trained their staff. Social change may take place if administrators focus on providing staff development on the use of data, offering best practices to impact student achievement, and celebrating both the teachers and the students for their efforts. This study had implications for social change throughout the school community in which the study took and could impact other school communities working toward the same ends. The staff development project was a resource for both teachers and administrators. The project was implemented during the study site's Opening Week Staff Development schedule. Teachers worked together to make a positive change in student achievement.

Schools wishing to change teacher practices in addition to improving student achievement could benefit from this project and study. The staff development project is flexible and could be revised and adapted for use in any public school. All public schools in Texas administer a state assessment starting in grade 3, yearly until grade 12. Although this qualitative study was limited being that I only focused on one elementary school with interviewed participants, this study can be extended to include any combination of settings at the district, state, or national level to make informed decisions about improving education in the United States.

In addition to replicating the study to other levels and geographies, I recommend a multi-modal approach. Student achievement data could be added to teacher perception data to provide both qualitative and quantitative evidence to the study of data chats. Administrators could be included as a source of data. Their perspectives might lend a comparative perspective.

Conclusion

Teachers at the local study site were very clear that they understood the purpose of data chats and that they were a necessity. They did have some concerns about getting smarter and stronger at participating in data chats, hence the need for staff development. Teachers who participated in this study stated that they felt a sense of need and accomplishment when they witnessed their students' growth on an assessment, no matter how big or small. Teachers wanted to celebrate their students for their accomplishments and they wanted to be celebrated for their hard work. Although student achievement scores are a huge part of the accountability system, change takes time—a process of teachers looking at data often and being able to make instructional decisions to impact student learning and achievement.

I used a qualitative study approach to research teachers' perceptions of data chats at an elementary school in Texas. The research findings provided a basis for me to create a staff development plan for teachers to attend and attain information on how to make data chats even more successful for them and their students. I created a 3-day staff development plan for elementary teachers and administrators to participate with the

expected outcome of honoring the teachers' perceptions of desiring more training on how to organize data, creating minilessons, and completing a calendar of celebrations for students and teachers when growth is achieved on campus assessments. This study may add value to teachers' perceptions of participating in data chats and could potentially have a positive impact on social change in terms of teacher effectiveness and resultant student achievement.

Section 4 of this study included the project strengths and limitations, project development, reflections, and recommendations for future research. As a doctoral student, I was socially aware about the need to analyze data and conducting scholarly research. Having conducted this study and created the project deliverable to address the local problem pushed me to grow as a student.

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Appendix A: Data Chat Staff Development Plan for Elementary School Teachers

Purpose: Enhance teachers' ability to use data for instructional effectiveness.

Goal: Deliver a 3-day staff development plan about Data Chats

Learning Outcomes: Three learning outcomes will be achieved.

1. Teachers and administrators will be able to identify the data needed and organize it before the data chat.

2. Teachers will be able to complete a protocol around a selected piece of data to find the trends and observe a minilesson for the identified learning objective.

3. Teachers will create a short-win tracker with student goals and celebrations for growth.

Audience: Elementary school teachers, grades 1 to 5

Icebreaker for Staff Development on Day 1: Teacher Inventory

Letter Assignment: _____

Each teacher received a letter upon arrival; please write your assigned letter above.

Positive Experiences with Data Chats:

Negative Experiences with Data Chats:

Previous Trainings on Data Chats:

Describe your needs in regards to participating in Data Chats:

Volunteer: Are you willing to model a mini-lesson on a specific learning objective chosen from the data?

Staff Development Agenda for Day 1

Topic of Discussion: Teacher's Perceptions of Data Chats: "Getting Organized"
Audience: 1st-5th Teachers at a Texas Elementary School

8:30-9:00am	Check-In w/ Continental Breakfast
9:00-9:30am	Introductions and Icebreaker (Teacher Inventory)
9:30-11:00am	Whole Group Session: What do Data Chats Look Like/Sound Like? *The facilitator will present a PowerPoint presentation on the topic of Data Chats. The presentation will include some exploration of different data pieces as well as data protocols and timelines.*
11:00-11:15am	Morning Break
11:15am-12:15pm	Think-Pair-Share (Reflections RE: Whole Group Session) *Teachers will be able to work as their grade-level teams to reflect on how they would implement or use the information from the whole-group session to their Data Chat PLC. Each team will share out with the whole group.*
12:15-1:15pm	Lunch (On Your Own)
1:15-2:30pm	Break Out Session: Data Chats in Practice *Teachers (no more than 5 participants) will participate in a Data Chat, using the identified pieces of data. The information will be printed and teachers will answer a series of questions and complete a task to analyze the data. Group A/C will be the teachers to participate in the Data Chat and Group B/D will be those that observe the Data Chat, in which they will provide feedback.* Group A-Active Participants Group B- Active Observers
2:30-2:45pm	Afternoon Break
2:45-3:45pm	Think-Pair-Share (Reflections RE: Break-Out Session) *Group A/C teachers will share what worked and what needs to be tweaked. They will do this after the Group B/D teachers share their reflections using the "Observer as Learner" protocol.*
3:45-4:00pm	Closing Remarks/Review of Day 2 Agenda *The facilitator will meet with those who indicated they would be willing to model a mini-lesson on Day 2 (information asked on Teacher Inventory).*

Staff Development Agenda for Day 2

Topic of Discussion: Teacher's Perceptions of Data Chats: "Finding Trends to Improve Instructional Practices"

Audience: 1st-5th Teachers at a Texas Elementary School

8:30-9:30am	"What Am I Looking For: Trends in Data?" *Teachers will scribe their thoughts around the question above on chart paper RE: trends in data. Teachers will also look at learning objectives.*
9:30-11:00am	Whole Group Session: What Is a Minilesson? *The facilitator will present a PowerPoint presentation on the topic of minilesson and how trends from data lead to teachers creating minilesson for the purpose of re-teaching.*
11:00-11:15am	Morning Break
11:15am-12:15pm	Creation of Minilessons *Teachers will create a mini-lesson based on a learning objective students struggled in on an assessment.*
12:15-1:15pm	Lunch (On Your Own)
1:15-2:30pm	Mini-Lesson Presentations *Teachers will present their minilesson and those that observe will take notes.*
2:30-2:45pm	Afternoon Break
2:45-3:45pm	Think-Pair-Share (Warm-Cool-Feedback Protocol) *Teachers will provide feedback on the minilesson using the protocol from the School Reform Initiative.*
3:45-4:00pm	Closing Remarks/Review of Day 3 Agenda

Staff Development Agenda for Day 3

Topic of Discussion: Teacher's Perceptions of Data Chats: "What Does Growth Look Like?"

Audience: 1st-5th Teachers at a Texas Elementary School

8:30-9:00am	What Does Growth Look Like? *Teachers will look at different data pieces to identify growth.*
9:00-9:30am	Chart Paper Activity: *How do you currently celebrate growth on assessments?* *Teachers will chart how they currently celebrate students when they show growth on assessments.*

9:30-11:00am	Whole Group Session: *Celebrating Growth: No Matter How Big or Small!!* *The facilitator will present a PowerPoint presentation on the topic of Celebrating Growth. The presentation will include some exploration of different options for student and staff celebrations.*
11:00-11:15am	Morning Break
11:15am-12:15pm	Make a Choice: What Will We Celebrate? *Teachers will work with their teams to choose what subjects and assessments they will celebrate throughout the school year.*
12:15-1:15pm	Lunch (On Your Own)
1:15-2:30pm	Break Out Session: Celebrate Growth in Practice *Teachers will be able to work on their grade-level teams to choose 3 "big wins" and 3 "short wins" to celebrate.*
2:30-2:45pm	Afternoon Break
2:45-3:45pm	Gallery Walk (Reflections RE: Break-Out Session) *Teachers will walk around the room, use post-it notes, to scribe feedback to each team's Celebration Calendars that have been posted on the chart paper.*
3:45-4:00pm	Closing Remarks/Evaluation Survey *Teachers will complete the evaluation survey and turn it in so that they can receive my signatures on their staff development log for Opening Week.*

Evaluation

Staff Development Presentation: “Making Data Chats Work for Staff & Students”

Date: _____

1. To what extent do you feel the goals for this training were accomplished?

   NOT AT ALL 1 2 3 4 5 COMPLETELY

   Additional

   Comments:_____

   _____

   _____

   _____

   _____

2. To what extent did you find the components of the training useful and applicable to your daily work?
   NONE 1 2 3 4 5 ALL

   Additional

   Comments:_____

_____

_____

_____

_____

3. To what extent do you think you enhanced your skills surrounding data chats due to this training?
   NOT AT ALL 1 2 3 4 5 COMPLETELY

   Additional

   Comments:_____

   _____

   _____

   _____

   _____

4. How valuable were the activities in which you actually had to present or complete (i.e. Gallery Walks, Reflections, and/or Minilesson)?
   NOT AT ALL 1 2 3 4 5 COMPLETELY

   Additional

   Comments:_____

   _____

   _____

_____

_____

5. As a participant, I had the opportunity to ask questions and receive answers.
   NOT AT ALL 1 2 3 4 5 COMPLETELY

   Additional

   Comments:_____

   _____

   _____

   _____

   _____

6. The goals and agenda of each training day were clearly communicated.
   NOT AT ALL 1 2 3 4 5 COMPLETELY

   Additional

   Comments:_____

   _____

   _____

   _____

   _____

7. What did you find effective during the staff development training? Please explain.

_____

_____

_____

_____

_____

_____

8. How could the staff development training experience be improved? Please explain.

_____

_____

_____

_____

_____

Staff Development Budget

Facility Materials: Campus administration will provide the following items to ensure Staff Development can take place for 3-days in the campus library during Opening Week Staff Development for the 2020-21 School Year.

- Tables and Chairs
- Toolkits that include sticky notes, pens, and highlighters
- Data Binders
- Sign-In Sheets for the Staff
- Projector and Screen
- Chart Stands

Facilitator Materials: The facilitator will provide the following items using the budget below to ensure Staff Development can take place over 3-days required to complete the Project Deliverable.

- 3M Chart Paper
- Markers
- Cardstock (name tents & group letters)
- Laptop*
- Flash Drive
- Copies (Teacher Inventory, Agendas, PPT presentation, Data Pieces, Facilitator Evaluation)
- Continental Breakfast (x1) Snacks/Candy and Water (x3)
- Candy Dishes (facilitator's own)
- Paper Goods (plates, napkins, cutlery)

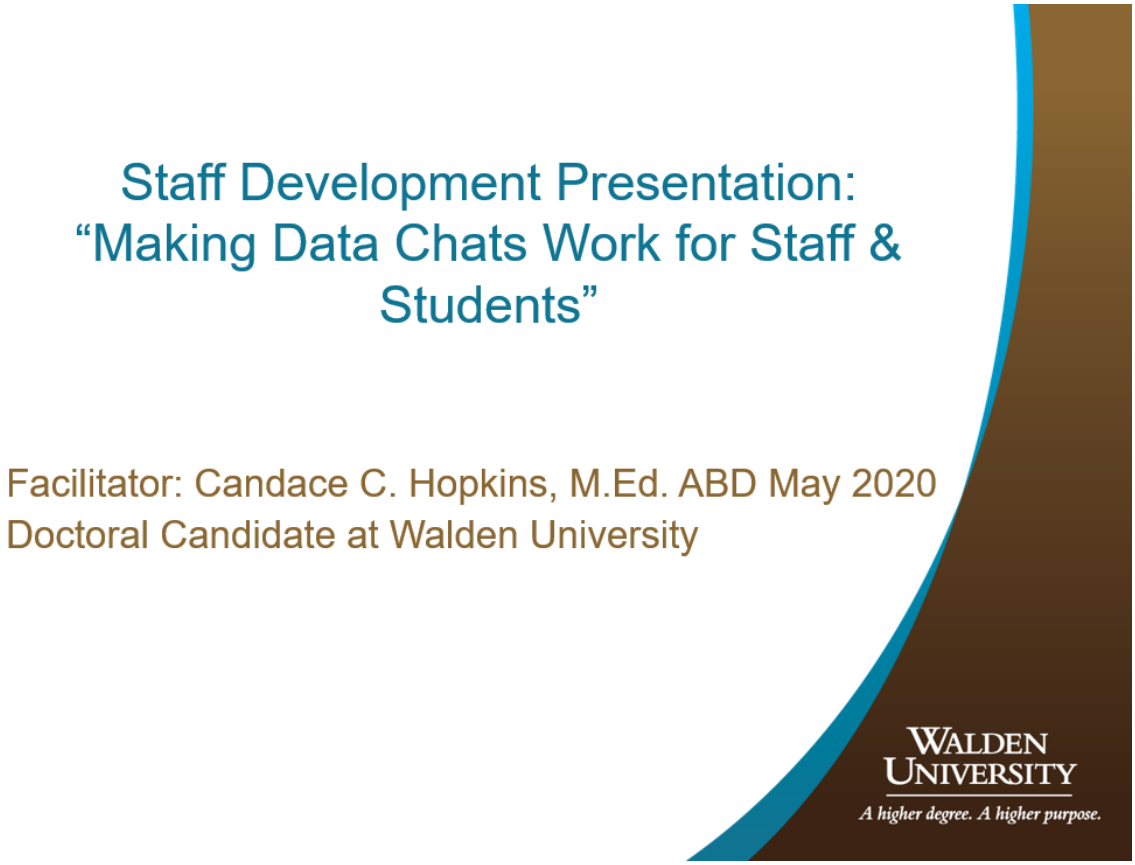
*Facilitator owns a hp laptop in which will be used for the presentation. The materials that will be purchased will not be charged any taxes as the facilitator will use tax-exempt number issued from employer.

Item	Store to be Purchased	Quantity Needed	Price per unit	Total
3M Chart Paper	Office Depot/Max	1	59.99	59.99
Expo Markers	Office Depot/Max	1	12.99	12.99
White Cardstock (1 ream)	Office Depot/Max	1	15.99	15.99
USB Flash Drive	Office Depot/Max	1	5.99	5.99
Copies (binded in portfolio)	Office Max	30	5.02	147.00
Assorted Muffins (4-pack)	HEB	5	3.99	19.95
Fruit Tray	HEB	2	12.98	25.96
Bagels w/Cream Cheese	Panera Bread	2	14.49	28.89
Coffee w/Condiments	Panera Bread (provides cups)	2	17.49	34.98

Assorted Candy: Hershey Miniatures (56 oz)	Costco	2	13.99	27.99
Assorted Snacks: Nabisco Cookie & Cracker Variety (40-count)	Costco	3	11.49	34.47
8 oz Kirkland Water Bottles (80-count)	Costco	2	7.99	15.98
Moziac Plastic Plates (75-count)	Costco	1	9.99	9.99
Reflections Plastic Cutlery Set (160-count)	Costco	1	13.99	13.99
Bounty Quilted	Costco	1	10.49	10.49

Napkins (200-count)				
			Grand Total:	**$438.67**

Staff Development PowerPoint Presentation



Introduction

- In September 2019, I completed a study at a local Texas elementary school has a problem with students performing on state assessments; third and fourth grade students in the local school consistently underperform 20% lower than state averages on reading and math. The standard is based on the percentage of students who meet state test score expectations within the school. In response to low performance, data chats were implemented in the school in the 2013-2014 school year and are being held every other week to discuss how data can be used to improve student performance. Yet, student performance has not improved.
- Data-driven instructional practices have been shown effective for improving instruction and student performance. Third and fourth grade teachers, intervention specialists, administrators, and instructional staff all attend bi-monthly data chats. The gap in practice is that teachers are exposed to ways to use data to improve their instructional decisions but do not.

Data Chats

- Data chats are defined as teacher team meetings in which teachers, teacher leaders, and administrators focus on reviewing student data looking for practices in which impact student learning to gain knowledge (Personal communication, 2015).

Goals for Staff Development Training

- Teachers and administrators will be able to identify the data needed and organize it before the data chat.
- Teachers will be able to complete a protocol around a selected piece of data to find the trends and observe a mini-lesson for the identified learning objective.
- Create a short-win calendar with student goals and celebrations for growth.

Icebreaker

- Please complete the Teacher Inventory (5-7mins)
- Once it is complete, discuss your inventory with a partner (5-7 mins)
- Partners will have the opportunity to share-out (5-7 mins)
- Please turn in for a treat!

Day 1 Agenda- "Getting Organized"

Staff Development Agenda for Day 1

Topic of Discussion: Teacher's Perceptions of Data Chats: "Getting Organized"

Audience: 1st-5th Teachers at a Texas Elementary School

8:30-9:00am	Check-In w/ Continental Breakfast
9:00-9:30am	Introductions and Icebreaker (Teacher Inventory)
9:30-11:00am	Whole Group Session: What do Data Chats Look Like/Sound Like?
	The facilitator will present a PowerPoint presentation on the topic of Data Chats. The presentation will include some exploration of different data pieces as well as data protocols and timelines.
11:00-11:15am	Morning Break
11:15am-12:15pm	Think-Pair-Share (Reflections RE: Whole Group Session)
	Teachers will be able to work as their grade-level teams to reflect on how they would implement or utilize the information from the whole-group session to their Data Chat PLC. Each team will share out with the whole group.
12:15-1:15pm	Lunch (On Your Own)
1:15-2:30pm	Break Out Session: Data Chats in Practice
	Teachers (no more than 5 participants) will participate in a Data Chat, using the identified pieces of data. The information will be printed and teachers will answer a series of questions and complete a task to analyze the data. Group A/C will be the teachers to participate in the Data Chat and Group B/D will be those that observe the Data Chat, in which they will provide feedback.
	Group A-Active Participants
	Group B- Active Observers
2:30-2:45pm	Afternoon Break
2:45-3:45pm	Think-Pair-Share (Reflections RE: Break-Out Session)
	Group A/C teachers will share what worked and what needs to be tweaked. They will do this after the Group B/D teachers share their reflections using the "Observer as Learner" protocol.
3:45-4:00pm	Closing Remarks/Review of Day 2 Agenda
	The facilitator will meet with those who indicated they would be willing to model a mini-lesson on Day 2 (information asked on Teacher Inventory).

What do Data Chats Look Like/Sound Like? (Day 1)

- How much is too much?

No more than 3 data pieces at a time.

- Do you need data protocols in advance?

Yes. Being able to complete the information requested on the protocol helps you stay organized and allows time for discussion rather than working on the document during the Data Chat.

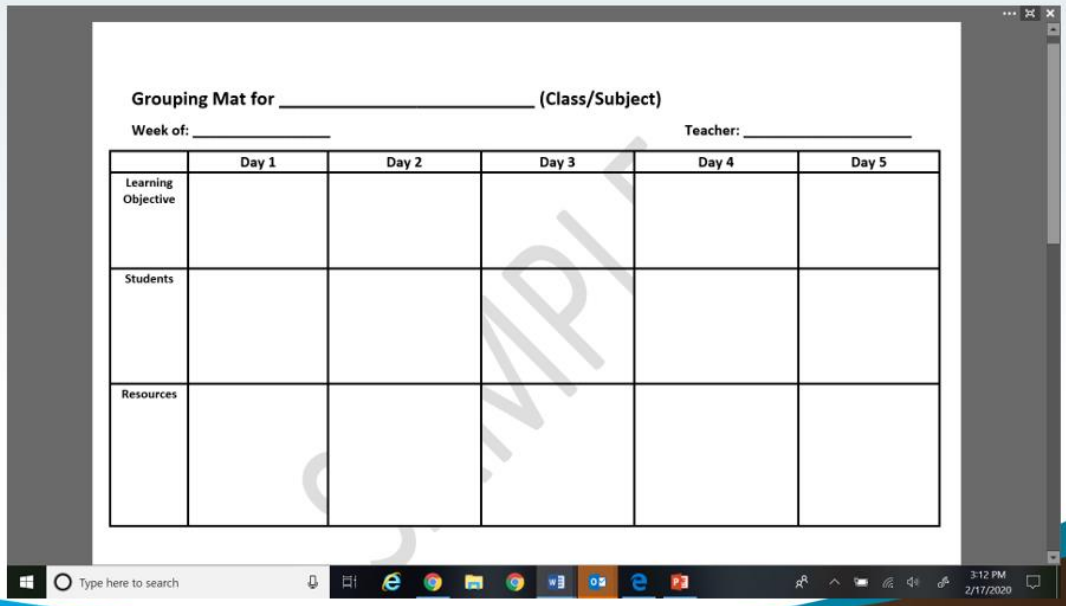
What do Data Chats Look Like/Sound Like? (Day 1)

- THE GROUPING MAT
- Using the grouping mat should be a standard practice at each data chat.
- The purpose of the grouping mat is to organize students by weaknesses and strengths per learning objective.
- The grouping mat allows the teacher to know who to work with and on what.
- Trick: Copy blank grouping mats on cardstock, laminate, and use post-it notes to create. Make a copy and place in your data binder. Then you can leave it at your small group table and re-do when needed without loosing that piece of data.

What do Data Chats Look Like/Sound Like? (Day 1)

- THE DATA BINDER
- Binders are a necessity when working with student data.
- Staff should bring their data binders to each Data Chat.
- Use dividers and tabs to keep data up to date and organized.
- Trick: Sort by date, then subject (if you teach multiple subjects), and homeroom. Organize by month/year.

What do Data Chats Look Like/Sound Like? (Day 1)



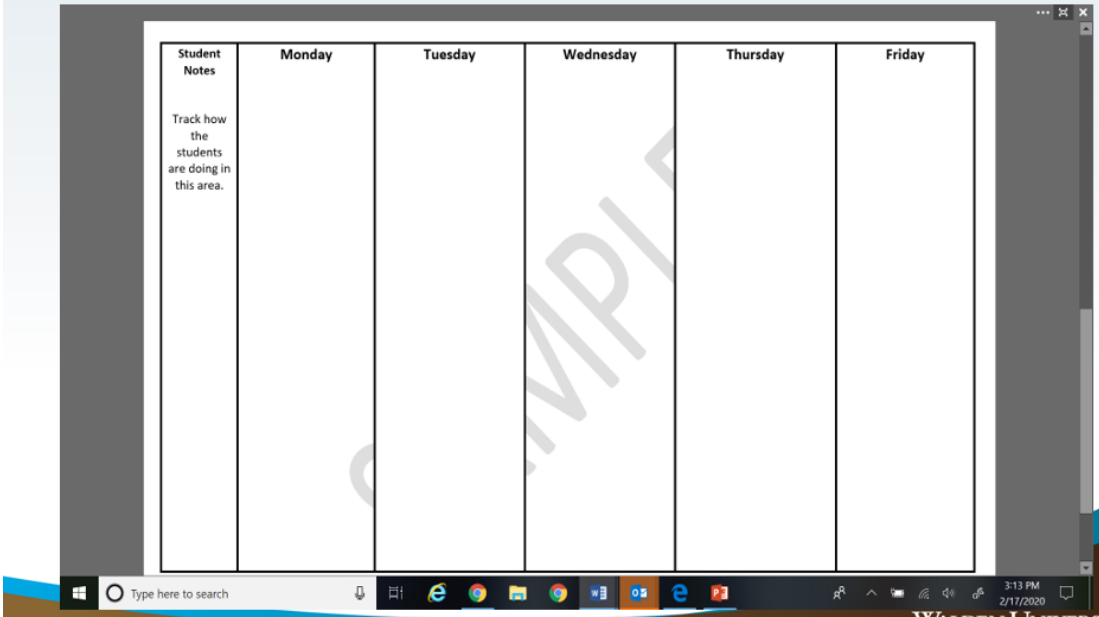
Grouping Mat for _____ (Class/Subject)

Week of: _____ **Teacher: _____**

	Day 1	Day 2	Day 3	Day 4	Day 5
Learning Objective					
Students					
Resources					

SAMPLE

What do Data Chats Look Like/Sound Like? (Day 1)



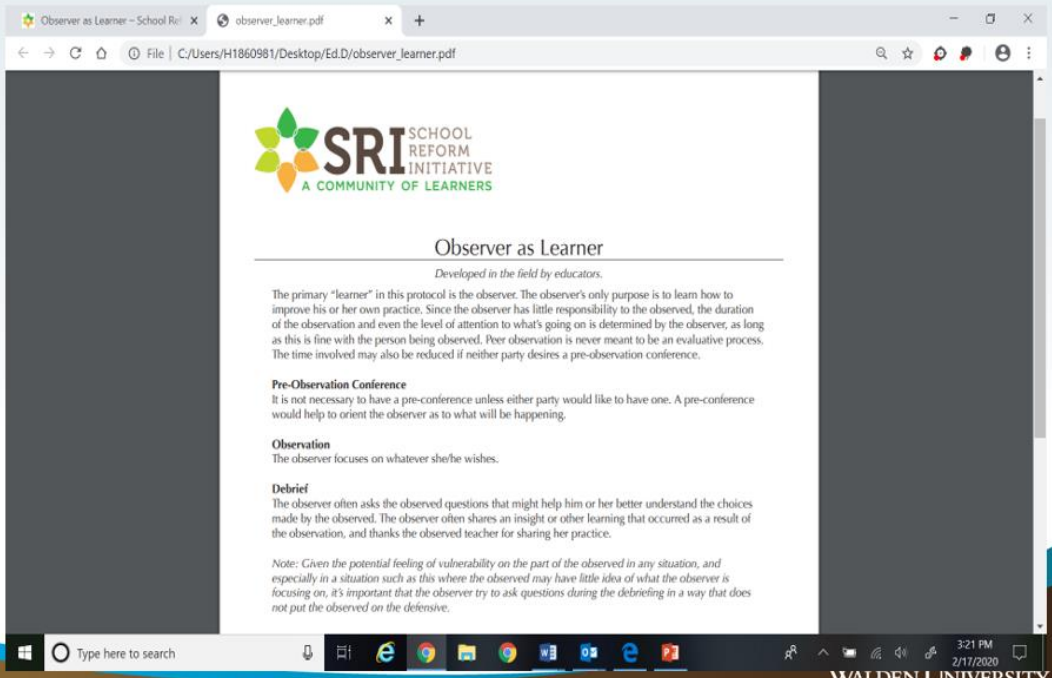
Student Notes	Monday	Tuesday	Wednesday	Thursday	Friday
Track how the students are doing in this area.					

What do Data Chats Look Like/Sound Like? (Day 1)

Data Chats in Practice

Teachers (no more than 5 participants) will participate in a Data Chat, using the identified pieces of data. The information will be printed and teachers will answer a series of questions and complete a task to analyze the data. Group A/C will be the teachers to participate in the Data Chat and Group B/D will be those that observe the Data Chat, in which they will provide feedback.

Reflection



SRI SCHOOL REFORM INITIATIVE
A COMMUNITY OF LEARNERS

Observer as Learner

Developed in the field by educators.

The primary "learner" in this protocol is the observer. The observer's only purpose is to learn how to improve his or her own practice. Since the observer has little responsibility to the observed, the duration of the observation and even the level of attention to what's going on is determined by the observer, as long as this is fine with the person being observed. Peer observation is never meant to be an evaluative process. The time involved may also be reduced if neither party desires a pre-observation conference.

Pre-Observation Conference
It is not necessary to have a pre-conference unless either party would like to have one. A pre-conference would help to orient the observer as to what will be happening.

Observation
The observer focuses on whatever she/he wishes.

Debrief
The observer often asks the observed questions that might help him or her better understand the choices made by the observed. The observer often shares an insight or other learning that occurred as a result of the observation, and thanks the observed teacher for sharing her practice.

Note: Given the potential feeling of vulnerability on the part of the observed in any situation, and especially in a situation such as this where the observed may have little idea of what the observer is focusing on, it's important that the observer try to ask questions during the debriefing in a way that does not put the observed on the defensive.

Day 2 Agenda-
"Finding Trends to Improve Instructional Practices"

Staff Development Agenda for Day 2

Topic of Discussion: Teacher's Perceptions of Data Chats: "Finding Trends to Improve Instructional Practices"

Audience: 1st-5th Teachers at a Texas Elementary School

8:30-9:30am	"What Am I Looking For: Trends in Data?" *Teachers will scribe their thoughts around the question above on chart paper RE: trends in data. Teachers will also look at learning objectives.*
9:30-11:00am	Whole Group Session: What Is a Mini-Lesson? *The facilitator will present a PowerPoint presentation on the topic of Mini-Lessons and how trends from data lead to teachers creating mini-lessons for the purpose of re-teaching.*
11:00-11:15am	Morning Break
11:15am-12:15pm	Creation of Mini-Lessons *Teachers will create a mini-lesson based on a learning objective students struggled in on an assessment.*
12:15-1:15pm	Lunch (On Your Own)
1:15-2:30pm	Mini-Lesson Presentations *Teachers will present their mini-lessons and those that observe will take notes.*
2:30-2:45pm	Afternoon Break
2:45-3:45pm	Think-Pair-Share (Warm-Cool-Feedback Protocol) *Teachers will provide feedback on the mini-lessons using the protocol from the School Reform Initiative.*
3:45-4:00pm	Closing Remarks/Review of Day 3 Agenda

"What Am I Looking For: Trends in Data?" (Day 2)

- Chart Paper Activity: What types of trends do we look for?

"What Am I Looking For: Trends in Data?" (Day 2)

- Trends such as distractors and answer choice issues are the easiest to identify and correct.
- Trends such as misconceptions take more planning to correct and require a re-teach.
- Mini-Lessons are the best way to re-teach for learning objectives that need to be addressed whole-group.
- TRICK: Always look at the learning objective first….some just have a bad wrap!!!

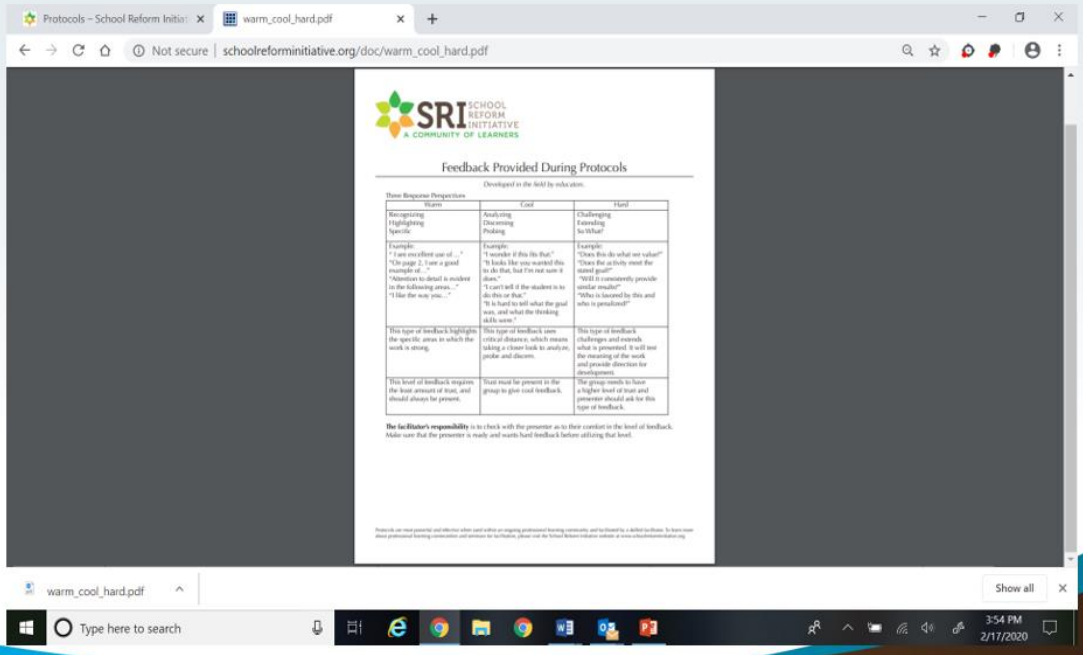
"What Am I Looking For: Trends in Data?" (Day 2)

- Mini-Lessons address learning objectives head-on.
- Mini-Lessons are short and sweet; no longer than 15-20 minutes.
- Mini-Lessons include an "I-Do, You-Do, We-Do."
- Mini-Lessons include opportunities to check for understanding (CFU's).
- TRICK: If you are doing all the talking, how do you know if they are learning anything?

Data Chats in Practice

- Teachers will create a mini-lesson based on a learning objective students struggled in on an assessment.
- Teachers will present their mini-lessons and those that observe will take notes.

Reflection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SRI SCHOOL REFORM INITIATIVE
A COMMUNITY OF LEARNERS
Feedback Provided During Protocols
Developed in the field by educators.
Three Response Perspectives
Warm
Cool
Hard
Recognizing
Highlighting
Specific
Analyzing
Discerning
Probing
Challenging
Extending
So What?
Example:
" I am excellent use of ..."
"On page 2, I see a good example of..."
"Attention to detail is evident in the following areas..."
"I like the way you..."
Example:
"I wonder if this fits that."
"It looks like you wanted this to do that, but I'm not sure it does."
"I can't tell if the student is to do this or that."
"It is hard to tell what the goal was, and what the thinking skills were."
Example:
"Does this do what we value?"
"Does the activity meet the stated goal?"
"Will it consistently provide similar results?"
"Who is favored by this and who is penalized?"
This type of feedback highlights the specific areas in which the work is strong.
This type of feedback uses critical distance, which means taking a closer look to analyze, probe and discern.
This type of feedback challenges and extends what is presented. It will test the meaning of the work and provide direction for development.
This level of feedback requires the least amount of trust, and should always be present.
Trust must be present in the group to give cool feedback.
The group needs to have a higher level of trust and presenter should ask for this type of feedback.
The facilitator's responsibility is to check with the presenter as to their comfort in the level of feedback. Make sure that the presenter is ready and wants hard feedback before utilizing that level.
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Day 3 Agenda-
"What Does Growth Look Like?"

Staff Development Agenda for Day 3

Topic of Discussion: Teacher's Perceptions of Data Chats: "What Does Growth Look Like?"

Audience: 1st-5th Teachers at a Texas Elementary School

8:30-9:00am	What Does Growth Look Like?
	Teachers will look at different data pieces to identify growth.
9:00-9:30am	Chart Paper Activity: *How do you currently celebrate growth on assessments?*
	Teachers will chart how they currently celebrate students when they show growth on assessments.
9:30-11:00am	Whole Group Session: *Celebrating Growth: No Matter How Big or Small!!*
	The facilitator will present a PowerPoint presentation on the topic of Celebrating Growth. The presentation will include some exploration of different options for student and staff celebrations.
11:00-11:15am	Morning Break
11:15am-12:15pm	Make a Choice: What Will We Celebrate?
	Teachers will work with their teams to choose what subjects and assessments they will celebrate throughout the school year.
12:15-1:15pm	Lunch (On Your Own)
1:15-2:30pm	Break Out Session: Celebrate Growth in Practice
	Teachers will be able to work on their grade-level teams to choose 3 "big wins" and 3 "short wins" to celebrate.
2:30-2:45pm	Afternoon Break
2:45-3:45pm	Gallery Walk (Reflections RE: Break-Out Session)
	Teachers will walk around the room, use post-it notes, to scribe feedback to each team's Celebration Calendars that have been posted on the chart paper.
3:45-4:00pm	Closing Remarks/Evaluation Survey
	Teachers will complete the evaluation survey and turn it in so that they can receive my signatures on their staff development log for Opening Week

"What Does Growth Look Like?" (Day 3)

- Chart Paper Activity: Use post-it notes to respond to the set of questions below. Place them on the chart paper labeled "Growth Status."
- How do you currently celebrate growth on assessments?
- Is student growth posted in your classroom?
- Is your class growth posted in the PLC room?

"What Does Growth Look Like?" (Day 3)

- Students need to see their accomplishments.
- Teachers need to see their accomplishments too.
- Celebrate the good, coach the "not so" good.
- Use campus based assessments and district level assessments to get to the big picture such as EOY assessments and STAAR.
- TRICK: A treasure chest is always a win…and it's cheap!

"What Does Growth Look Like?" (Day 3)

- Plan your celebrations using your assessment calendar for the school.
- Involve campus administration in your celebrations so that the students can see that they are proud as well.
- TRICK: Announcements, t-shirts, and social media are great ways to get everyone pumped up for your wins!!

Data Chats in Practice

- Teachers will work with their teams to choose what subjects and assessments they will celebrate throughout the school year.
- Teachers will be able to work on their grade-level teams to choose 3 “big wins” and 3 “short wins” to celebrate.

Reflection

Gallery Walk Protocol

1. Write/Post

Hang or place the Short Win Calendars on chart paper various places around the classroom to create six stations.

2. Group

Group as a grade level team. Each group should start at a different station. Choose a recorder.

3. Begin

At their first station, groups will read what is posted and one recorder should write the group's responses, thoughts, and comments on the post-it notes and place on the chart paper.

4. Rotate

After three to five minutes, have the groups rotate to the next station. Read and discuss the previous group's response and add content of your own. Repeat until all groups have visited each station. To involve all group members, you can have groups switch recorders at each station.

5. Monitor

As the facilitator, it is important to monitor the stations while the groups participate. You may also need to clarify or provide hints if participants don't understand or misinterpret what is posted at the stations.

6. Reflect

Have participants go back to their first station to read all that was added to their Short Win Calendar. Bring the groups back together to discuss what was learned and make final conclusions and note any revisions that need to be made.

Evaluation

- Please take an Evaluation Survey!
- Complete it to the best of your ability!
- Turn it in for an extra treat!

References

School Reform Initiative: A community of learners. (2017) *Observer as learner protocol.* Retrieved from www.schoolreforminitiative.org.

The Teacher Toolkit (2019) *The gallery walk.* Retrieved from www.teachertoolkit.com.

Appendix B: Interview Protocol

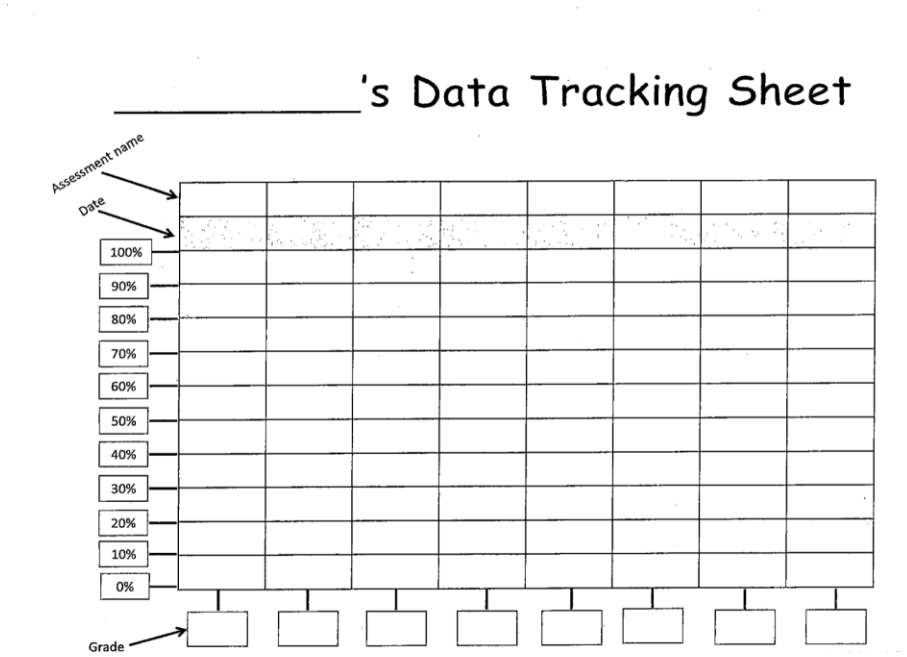
Interview Protocol

The purpose of this study is to explore teachers' perceptions of data chats.

One overarching question will be asked of teacher participants:

What do you think of data chats?

Several questions may be asked to prompt teachers if they do not respond to the overarching question:

1) What is your opinion of data chats?
2) What has been your experience with data chats?
3) An open conversation will be had with teachers. The interview will last no more than 30 minutes in a quiet place set by mutual agreement between the researcher and the teacher participant.

Appendix C: Data Tracking Sheet