FREEMAN, JR., TYRONE S., Ed.D. After the Professional Development Training: Evidence of the Data Wise Improvement Process within Teachers' Practices in an Elementary Urban School. (2013)
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Within the profession of education, one essential resource that contributes toward enhancing an educator's growth is professional development. However, once an educator completes the training and returns to his or her assigned building, the question is whether the educator utilizes the information learned from the training. One such professional development training was conducted in 2009 within an urban school district to introduce a selected group of pilot elementary and secondary schools to the Data Wise Improvement Process. The purpose of this case study is to determine, through data collection, whether there is evidence that the Data Wise Improvement Process has been implemented after the professional development.

Of the pilot schools that completed the initial training, one of the elementary schools was selected as the school to utilize within this research. The case study school is located in the Logan County School District (a pseudonym) within the South. The school has been one identified by the state's Department of Public Instruction's ABC's of Public Education Growth and Performance Report as a School of Progress. Additionally the school was also recognized for achieving the ABC status of high growth based on the recent end-of-year state summative assessments. This case study school is also identified as a Professional Development School through its partnership with the local public university.

The qualitative research method was utilized for this case study. This research method involved the use of data coding to organize and correlate the data. Data consisted of field notes derived from classroom observations and instructional planning sessions, open-ended interview questions, and instructional documents. Thirty-three certified staff members who participated in this study; from this group, 10 educators participated in the interview process.

For this study, data were triangulated through the coding method used. This process enabled the organization and correlation of all data collected for the data. Three themes evolved from the analysis of data: the usage of data, progress monitoring, and teacher collaboration. These themes were associated with the evidence that was collected for determining the existence of the Data Wise Improvement Process within the school setting today.

AFTER THE PROFESSIONAL DEVELOPMENT TRAINING: EVIDENCE OF THE

DATA WISE IMPROVEMENT PROCESS WITHIN TEACHERS'

PRACTICES IN AN ELEMENTARY

URBAN SCHOOL

by

Tyrone S. Freeman, Jr.

A Dissertation submitted to
the Faculty of The Graduate School at
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of the Requirements for the Degree
Doctor of Education

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Approved by

_____
Committee Chair

DEDICATION PAGE

IN LOVING MEMORY
OF

Mr. Tyrone S. Freeman, Sr.

Mr. & Mrs. Max D. Freeman

Mr. & Mrs. Claude H. Suggs, Sr.

Not a moment goes by that I don't stop and think of you. While you may not be with me in person, I know that you have been and continue to be with me, in spirit, every step of the way. I continue to try to make you proud of me as you look down upon me. I know that each of you has been assigned as my guardian angels and that you continue to watch over me. I love you so much.

APPROVAL PAGE

This dissertation has been approved by the following committee of the Faculty of The

Graduate School at The University of North Carolina at Greensboro.

Committee Chair   _____

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Date of Final Oral Examination

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We Thank God for everything because He is the Best and He is the One that made us. I am happy for the life I am living.

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CHAPTER I

INTRODUCTION

Introduction to the Problem

Within the spectrum of public education in the United States, student achievement is a top priority. This priority has set the tone as to the fact that "leadership is required to maintain focus on the quality of student learning, but in that context everyone in the school is 'in it together' to enhance student achievement, and their efforts should be seen as working in concert" (Danielson & McGreal, 2000, p. 29). American society as a whole, wants its children to be fully prepared to succeed in a global economy. In order to meet this challenge, it is important that our children are properly educated. For our schools to meet the academic needs of all of our students our public school educational leaders must monitor academic programs that are implemented in our schools. It is a focus that "as schools continue to change and educational reforms continue to dominate the educational culture teachers are expected to continue to develop, update their knowledge and skills, and remain current" (Gartia, 2012, p. 1). If done, this will help ensure that educators are prepared to meet the challenges awaiting them in the classroom.

To hold educators accountable for making sure that all children are prepared for life beyond high school, state and local districts must ensure that teachers are fully aware of their professional responsibilities. Undergraduate educational programs have been

designed to prepare college students to receive their teaching license and to enter the

profession. However, once beginning teachers enter the profession, they find that their

initial training is not going to sustain them throughout their career. Teachers have come

to realize that as they progress in the profession, their instructional practices must adjust

to meet the changing educational needs of the students entering their classrooms. Kariuki

(2009) wrote that, "research has shown that teachers are the most powerful factor

impacting student achievement and learning" (p. 3). It is important that teachers

understand that their instructional practices are essential for supporting those students

who enter the classroom with special needs as well as those who, currently, are not

functioning on grade level.

As time progresses, it is noticed in the profession of Education that the needs of

the student population are also changing. There are students who are entering the

classroom with learning disabilities, students who have psychological concerns,

emotional concerns, and other issues which impacts a student's capabilities of being able

to learn at the same rate as their peers. Focusing on the students as they enter the

classroom with these needs, they are still entitled to a quality public education.

Understanding this, school districts strategize how to provide support to help teachers

meet the educational needs of all of their students. Through their support, districts are

providing "…professional development that improves their ability to help students who

are behind and to teach content to diverse groups of students" (NGA Center for Best

Practices, 2009, p. 5). What is important to consider as well when targeting support for

teachers who are working to address these needs is the support of the novice teacher.

Burkman (2012) writes that:

> without appropriate professional development or support, a novice teacher might quit when faced with a classroom full of students, each needing work adapted to his or her academic needs, and several needing behavioral modifications as well. (p. 30)

With this in mind, there is the question of what type of professional development is needed.

Citing Guskey (2000), McMeeking, Oral, and Cobb (2012) shared that professional development is classified as "those processes and activities designed to enhance the professional knowledge, skills, and attitudes of educators so that they might, in turn, improve the learning of students" (p. 160). Understanding that many teachers have completed a teacher education program prior to their entering the profession, districts have come to realize that teachers need continual educational support to help them enhance their instructional practice. This is important because as Rinke and Valli (2010) cited Kennedy (1998) the support of "enhancing teacher knowledge of content, curricula, and students appears to be the most effective focus for professional development in terms of raising student achievement…" (p. 649). As education evolves and as teachers are able to determine the needs of students who are not succeeding academically, it is important for the teachers to attend professional development sessions that will guide them through learning how to enhance their current practice.

In particular, when teachers are focusing on professional development, the focus is not only geared toward what they need but what is also relevant to their current practice. Moreover "teachers need professional development directly related to what they

are presently doing, not to skills and content already taught" (Varela, 2012, p. 18).

Teachers are more adept to choose professional development which has a focus on the

curriculum they are currently teaching or professional development which focuses on

possible strategies that they could implement with the students they are currently

assigned who may have various needs which impede their academic learning. As

teachers continue working in Education, the professional development they participate in

has to assist in the process of increasing their effectiveness within their current

assignment. Workshops selected by teachers must be relevant and geared specifically

toward what they need to enhance their instructional practice. (Murray, 2010) As their

level of accountability increases, teachers work to maximize their time, within a given

day that will prove to have the greatest impact with meeting their assigned

responsibilities. This focus alone guides the teacher's decision when participating in

professional development.

Understandably, professional development programs can be deemed effective,

based on the level of interest. Specifically, it has been determined that professional

development is only as effective as the active participation of the participants (Archibald

et. al., 2011, Fields et. al., 2012). It is crucial that when teachers are participating in

professional development activities, they become involved in and complete the activities

that are embedded in the professional development. Research has shown that the active

participation allows for the teachers to learn new strategies which have been proven to be

effective in positively impacting student achievement (Fields et. al., 2012, Marzano,

2003). As professional development training sessions are designed and required by

districts, it is interpreted by teachers, and administrators, that they must be in attendance. However, districts also are starting to understand that to garner teacher support for implementing the strategies taught, there is the need to design the sessions in a manner which will be of interest to the teachers and also encourage their participation.

Indeed, when one looks at the active participation of the registrants in a scheduled professional development session, the question arises as to how they were encouraged to participate? It is understood that sometimes teachers are not as intrinsically motivated to sit through a professional development session after working all day in their classrooms. Research shows that simply attending workshops doesn't help with improving student achievement nor does it help teachers enhance their pedagogical skills (Kinnucan-Welsch et. al., 2006). Designers of the professional development have to structure the training in a manner that will encourage teachers to become willing participants who are eagerly looking for innovative ways for helping students to succeed.

Increasingly, there are some teachers who have questioned the rationale for district sponsored professional development training sessions. Feeling as though the trainings, which consume times they could be doing something else, are ones which are of no interest to them. McMeeking, et. al., (2012) shared the opinions of some participants from their study that, "these workshops typically were chosen by school or district officials, were seldom planned with input from teachers, and were only sometimes directly related to their subject areas" (p. 161). There are some teachers who believe that the trainings would be well received if they had more of an input into the designs of them.

One option to consider is the type of professional development that is available. What benefits teachers most is professional development that is high quality: -"high-quality professional development is certainly a powerful approach…. . " (Archibald et. al., 2011, p. 3). To attract teachers to a training session, organizers have to consider how the training will be structured as well as the relevance of the content of the training. Organizers have to make sure that there are different forms of professional development activities that will help motivate teachers into becoming active participants as they attend these sessions (NGA Center for Best Practices, 2009). Not only should a training session be set up where the facilitator is spending time explaining a concept, it is encouraged that the facilitator provides the opportunity for teachers to practice what has been shared in the training session. This will prove beneficial in that as the participants are able to participate in the activity, they are able to ask the facilitator questions of concern or for clarity. Additionally, the activities should include addressing the different learning styles represented within the group of participants. This will provide the opportunity for the participants to garner the new material in the manner they learn most easily.

High-quality professional development is based on what the training will address and its relevance to the needs of the participants. Masuda, Ebersole, and Barrett (2013) cited Darling-Hammon, Wei, Andree, Richardson, and Orphanos (2009) by defining high quality professional development as that of "…providing for improvements in teachers' knowledge and instructional practice that would result in improved student learning" (p. 7). Archibald, Coggshall, Croft, and Goe (2011), highlighted that when focusing on research and professional development, they shared that "in sum the five characteristics

of high-quality professional development, as described by current research, are as follows:

1) Alignment with school goals, state and district standards and assessments, and other professional learning activities including formative teacher evaluation.
2) Focus on core content and modeling of teaching strategies for the content
3) Inclusion of opportunities for active learning of new teaching strategies
4) Provision of opportunities for collaboration among teachers
5) Inclusion of embedded follow-up and continuous feedback (p. 16).

Professional development training is beneficial for teachers when the training correlates with the topics of focus and goals that the teachers have set for their students for the instructional year. One topic that is the focus of professional development training this year is the Common Core Standards. Varela (2012) states that:

as schools works to implement the Common Core Standards, new teacher evaluations, and accountability procedures, teachers must, in turn, demand high-quality professional development – development that helps mentor, nurture, and enhance their professional repertoire (p. 17).

As teachers proceed with becoming familiar with the Common Core Standards, training to support them in this endeavor is needed. Through the support of training, the experiences and the lessons learned are ones which will help teachers strengthen their instructional practice in the classroom. When targeting high-quality professional development ultimately, the primary focus is student learning. What do teachers need to help students increase their learning? In addition, there is also the focus of what

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administrators can do to assist teachers with their instructional practices as they continue

working with students.

When focusing on professional development to meet the need of supporting

teachers to increase student learning, "the teachers have expressed the need for a good

professional development design which includes both strong content and an effective

process for making initial and ongoing decisions" (Virani, 2010, p. 33). It is important to

include the voice of the teacher in the design of the ongoing professional development as

they provide feedback as to what is which strategies are working and which ones are not.

Danielson and McGreal (2000) also points out that when focusing on the administrator

voice of professional development "… the supervisor's role is more one of coach and

mentor, rather than one of judge. The teacher does not have to hide concerns, but can

voice them with the expectation of receiving assistance" (p. 9). Administrators realize

their responsibility in the design of professional development and for meeting the needs

of the teachers. They are being held accountable for making sure that teachers have

"…access to necessary resources for professional development and to positively shape

school culture around the value of teacher learning" (Rinke & Valli, 2010, p. 650). As

the instructional leader of the school building, administrators are being held accountable

for what is taking place in the classrooms. There is the understanding for them to ensure

that when the teachers are not meeting the needs of the students that the administrator

will assess the area of need to support the teacher in being able to meet this goal.

Educational leaders, locally, statewide, and nationally over the years, have started

to focus on the design of accountability systems to help address concerns with improving

student achievement. The process of accountability has been utilized to measure how well programs are working, teachers are performing, and how students are excelling. Moreover, "an effective accountability system should embody an assessment system, a set of indicators, school profiles, and a school improvement process" (Du & Feglesten, 2001, p. 1). Through an accountability system, educators are able to measure how well students have comprehended the curriculum being taught. An accountability system helps guide states and local districts in the analysis of current data in order to see how well students are doing academically, in addition to determining which schools are in critical need of instructional support. Militello and Heffernan (2009) stated that "the legislation ushered in a new era of accountability rooted in the collection, analysis, and use of student assessment data for educational improvement" (p. 2).

When focusing on accountability, the federal government through the No Child Left Behind legislation (NCLB), is holding states accountable for addressing the academic needs of its students through an accountability system. In turn, states are working collaboratively with its districts as they implemented their plan to meet the requirements established by NCLB. To measure student performance, Marzano (2003b) focused on how important data is needed by schools to measure student performance. He shared that "a school must use assessments that actually measure the content that teachers teach" (p. 57). Through the accountability system, the data collected from the assessments helps to highlight how well students comprehend the curriculum being taught. Understanding this, it is also of note that Marzano (2003b) shared, "no matter how good a curriculum-specific test is, it cannot assess the rich variety of data captured

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by teachers who interact with students on a daily basis" (p 57). This is especially

important because, "teachers have been seen as a key to improve the performance of the

students" (Gartia, 2012, p. 1). Teachers are the first line of contact for the students as

they enter the classroom each day and their instructional practices are what guide the

process for student learning.

What is becoming evident is that assessment data are having an impact on how

schools are structuring their academic programs. Research shows that

> … when teachers and administrators examine data as part of the school
> improvement process, school improvement teams become more efficient and
> effective, decision making becomes more collaborative, teachers develop more
> positive attitudes about their own and their students' abilities, and educators begin
> to feel more in charge of their own destinies (Jerald, 2006, p. 2).

Data is a resource that can be used to assess how well a program is working, how well

students are comprehending a lesson taught and whether a lesson needs to be retaught,

and even what areas of weakness will need to be targeted during instructional planning

sessions just to name a few. Utilizing data allows schools to determine where the focus

will need to be placed when addressing school improvement, addressing student

academics, and even when determining professional development training. This
As well, Love (2002) recognized what role data plays when utilized by the schools. He

stated that "it involves looking for trends, plausible explanations, clusters of information

that fit together, meanings, and implications for action" (p. 44).

This qualitative research focuses on whether the teachers participating in this

study returned to their school and shared the strategies and practices covered during the

implementation of a professional development course. Being able to produce evidence of

that professional development was successfully implemented in the classroom is the

primary focus for my study. Creswell (2007) stated:

> Although findings from qualitative data can often be extended to people with
> characteristics similar to those in the study population, gaining a rich and complex
> understanding of a specific social context or phenomenon typically takes
> precedence over eliciting data that can be generalized to other geographical areas
> or populations (p. 2).

The focus will be on the professional development training sponsored by a large urban

school district in the South. During the data collection, it will be interesting to determine

if there are any points which highlight the perceptions of those participants who went

through the training, their interpretation of why they went going through the training, and

any district level communication received in preparation of starting the training. Citing

Yin (2003), Baxter, and Jack (2008) shared that,

> a case study design should be considered when: (a) the focus of the study is to
> answer "how" and "why" questions; (b) you cannot manipulate the behavior of
> those involved in the study; (c) you want to cover contextual conditions because
> you believe they are relevant to the phenomenon under study; or (d) the
> boundaries are not clear between
> the phenomenon and context (p. 545).

Purpose of the Study

The purpose of this qualitative study is to assess whether educators, who were

trained in the Data Wise Improvement Process, are continuing to utilize the skills learned

after completing the professional development training. The Data Wise Improvement

Process was first conceived in 2003 between the established partnership of the Harvard

Graduate School of Education and the Boston Public School System. The group of faculty members and school system employees "… envisioned the process of learning to use data constructively as one that could also serve as a toe-hold for the overwhelming and amorphous task of instructional improvement" (Murnane, Boudett, & City, 2009, p. 1). Through this improvement process, data teams which are structured in the school and made up of volunteers, come together to discuss the school's data with a primary focus. The process has a cycle "… which is replete with protocols and strategies for structuring the tough conversations and overcoming resistance, should enable schools to do just that" (p. 2). Reeves (2008) when focusing on the review of data stated that "having a clearly focused question will avoid the tedious and time-wasting exercise of trolling through spreadsheets, papers, and databases without any direction" (p. 89).

Concentrating on the analyzing of data and how it informs instruction, this process has been used to help educators develop the practice of analyzing school data. While analyzing data can be a tedious process, the important measure of analyzing data comes from the discussions surrounding the data. As the Harvard faculty group went through the initial process with the teachers in the participating schools within the Boston Public School System, they found that "…organizing the work of instructional improvement around a process that has specific, manageable steps helps educators build confidence and skill in using data" (Boudett, City & Murnane, 2006, p. 1). This process, which is not a program, has three phases with various steps within the phases. However, there are teachers in the profession who have a concern with analyzing data. "While principals, in the past, were the ones who received the data and analyzed it for the

teachers, it is important for teachers to develop their skills with analyzing data. To best

assist with their professional growth, "… teachers should know how to determine the

accuracy of students' scores on particular standardized tests…" (Popham, 2006, p. 84-

85).

When analyzing data, the allotted time to do so is important. It is evident that,

"even with good training and strong leadership, teachers need enough time to learn to use

data thoughtfully and additional time to practice what they learn" (Jerald, 2006, p. 5).

There is one school system in the South that implemented the Data Wise Improvement

Process. Through this process, the focus is on training teachers to interpret data in a

structured manner utilizing various strategies within the process cycle.

Administrators are encouraged to share data reports with teachers so that they

may be able to plan to address the areas of weakness as identified in the results.

Consequently "assessment has a unique place in data-driven reform: it is both a way to

measure change and a measure that needs to be changed" (Love, 2002, p. 194). Teachers

are encouraged to include assessment data, as a guide for helping to decide what next

steps should be taken in their instructional planning. The Data Wise Improvement

Process guides the participants into being able to analyze the data they collected which

identifies the performance and growth of their students both collectively and individually.

In this study, I will investigate whether the instructional practices of the

classroom teachers exhibit strategies and skills garnered from the professional

development training of the Data Wise Improvement Process. The Data Wise

Improvement Process, as stated previously, is a process originally designed by the

Harvard Graduate School of Education in conjunction with three schools within the Boston Public Schools System. The improvement process is one that helps teachers with "… organizing the work of instructional improvement around a process that has specific, manageable steps helps educators build confidence and skill using data" (Boudett et. al., 2006, p. 1). As teachers being the process of analyzing assessment data, the process guides them through the act of being able to identify what areas need their attention. They will be able to use this information to strategically plan how to address these needs while also setting goals which will help them ascertain whether their plans, upon implementation, are making a difference for the better.

Having served as a trainer of the Data Wise Improvement Process in the district I worked, I found myself really embedded in learning all I possibly could. Not classified as a program, but more of a process, the Data Wise Improvement Process is structured upon the conversations and actions that teachers and administrators implement involving data and how it should inform instruction in the classroom. Bourdett, City, and Murname (2005) explained that when designing the Data Wise Improvement Process, "We have found that organizing the work of instructional improvement around a process that has specific, manageable steps helps educators build confidence and skill in using data" (p. 4). Included in this concept is also helping teachers to understand the importance of reflecting upon their practice. Through reflection, this process allows for the embarking of "…instructional decision-making process of the teachers to gain insight about decision making in action" (York-Barr et. al., 2006, p. 194). Reflection plays an important key in teachers being able to assess what is taking place in their classroom and whether what

they are doing is positively or negatively impacting student achievement based upon the course they are assigned to teach. As teachers reflect upon their practice, they are able to determine what they believed they did well and what they need to improve upon. Utilizing time to reflect upon their practice provide teachers with the opportunity to search out necessary resources which will support their instructional practice as they continue working with the students.

Having first started in 2009 with a few pilot K-12 schools, the plan was for this school district, located in the South, to expand the training program to include every school in the district the following year. The pilot schools were instructed to form a data team of school representatives, such as teachers, facilitators, and administrators, who would be responsible for helping to implement the train-the-trainer model for their school. It was essential for the building principal to select representatives who would be preparing to lead this initiative at the school. Also taken into consideration was the understanding that "the few educators who actually do take a formal course in education assessment often find the course's content to be quantitatively intimidating and instructionally irrelevant" (Popham, 2006, p. 84). Within the design of the professional development to the school teams, this concept was heavily considered. The district trainers demonstrated, through this professional development training, the data team would train teachers who, after completing the course, return to their schools and train their colleagues on the Data Wise Improvement Process.

While participating in the initial training with the pilot schools in 2009, I noticed that many of the participants seemed interested in the process. They voiced excitement at

the thought of returning to their perspective schools to train their colleagues. Citing Bork

(2004), Klein and Riordan (2009) reflected, from research they highlighted that "there is

some research showing how professional development aids teachers in implementing new

ideas about content and pedagogy" (p. 63). It is important that teachers are exposed to

new strategies and programs that can spark their creativity as it applies to their

instructional practice. However, I have wondered just how high the enthusiasm really

was when the teams returned to their schools. I have also found myself interested in,

whether they actually did conduct professional development training of the Data Wise

Improvement Process for their colleagues, and whether it was delivered with fidelity?

Additionally I am interested in if the strategies learned are being implemented today

more than 3 years after their initial training? This curiosity surrounding the aftermath of

professional development training drives the focus for this study.

The initial training process focused on the premise of being able to interpret data,

which was a new process for many teachers. Some had never been exposed to various

data reports nor had they ever been required to interpret data. Furthermore, many never

took the opportunity to discuss the data reports with their colleagues in addition to using

the reports as a guide for improving instruction. In fact, many teachers even viewed the

process of data analysis as something of a foreign language that was of no use to them.

However it was the target of the trainer to help teachers understand that "the real payoff

will come, however, when we use data to make decisions about improving education"

(Rudner & Boston, 2003, p. 65).

As teachers design their instructional lessons, one tool that is essential when addressing the learning deficiencies represented in the classroom is the assessment data. However, mentioning data to some teachers will bring a stare of confusion. For veteran teachers, they are used to the practice of principals receiving the data and after they review them, share some of the data results regarding student academic performance as it relates to the curriculum taught the previous year, with teachers at the start of the new school year. After that first day, in past times, the data are usually no longer discussed.

Rationale for the Study

In today's classrooms, teachers are expected to be able to take their data, analyze them and use them to inform instruction. As teachers work to develop a sense of efficacy when it comes to analyzing data, they are encouraged to take an active role in the process. This will help to serve as a resource for the teachers because "better access to data offers an unprecedented opportunity for educators to become problem solvers, using hard evidence to analyzing student performance and craft data-drive school improvement plans" (Jerald, 2006, p. 1). This includes being able to understand the effective use of assessments and how to best use them to inform instruction.

During the collection of data in this study, it was interesting to see if the data points highlighted whether the professional development implemented helped to enhance a teacher's understanding of interpreting data. One important element of interpreting data is that "informal and formal data about student learning not only shape instruction but also determine its effectiveness" (Brimijoin, Marquissee, & Annson, 2003, p. 72). As teachers become more exposed to the correct ways of using data, education leaders need

to know if they will be able to use assessment data to impact student achievement. In order for teachers to become more effective, they must have continual exposure to activities that will help with pedagogy that is the manner in how teachers instruct when presenting the lesson to the students (Kariuki, 2009). Ultimately evidence of whether the benefits from the professional development could be determined through summative data, received from state assessment testing programs administered at the end of each school year, would prove to be valuable.

When looking at the data, teachers must realize what the data entails. Essentially the interpretation of data is one where "the real power of assessments lies in the transformation of raw data and disseminated information into explicit knowledge to guide instructional improvement" (Militello & Heffernan, 2009, p. 6). As teachers start to formulate a plan of improvement, their primary target should center upon what the next steps should be enhancing their performance to help students improve academically. The Data Wise Improvement Process, guides teachers through discussions that will help with deciding the next steps. Through the professional development training, the participants were guided through the process of being able to ultimately determine, through analyzing data and collaborating with their team members, how to design an effective plan that meets the needs of the students being taught. However, once the training is over, what will the teachers do with the information?

Research Questions

It is commonly believed that as some teachers return from a training session, the information gathered from the training is not shared with their colleagues nor

implemented in the classroom of the participant. Knowing this, it is also believed that

when some teachers return to their schools, they are not willing to change the practices

they already have in place. This prevents them from incorporating new strategies

because they will have to change from their normal routine. I believe that when teachers

are not willing to go through a paradigm shift to improve upon their instructional

practice, it causes a serious concern especially when the shift focuses on the needs of the

students who may be struggling academically. My interest is to investigate whether

teachers utilized the professional development strategies that were taught them when they

returned to their classrooms after the training. Upon their return, do teachers implement

this process? Will there be evidence of the Data Wise Improvement Process at work

within the instructional structure in the classrooms and planning sessions of the school?

The focus of this investigation is to conduct a case study to determine how, if at all, the

resources and strategies gathered from the training were (1) shared by the teacher

participants with their colleagues within the school and (2) utilized in the classrooms

where observations will be conducted.

This study will encompass the following research questions during its investigation:

1) After the initial training, what evidence supports that professional development led to the Data Wise Improvement Process being implemented and utilized?
2) How structured are the conversations and what is the context of these conversations during the instructional planning sessions?
3) How are the design and structure of the Data Wise Improvement Process being used within the classrooms?
4) How has the pedagogy been impacted by the professional development provided to prepare for the Data Wise Improvement Process at the school?
5) What are the perceptions of professional development training the participants received on the Data Wise Improvement Process?

Definition of Terms

Adequate Yearly Progress (AYP)….. The measure by which schools, districts, and states are held accountable for students performance under Title I of the No Child Left Behind Act of 2001 (NCLB) – ([www. edweek. org/ew/issues/adequate-yearly-progress/](http://www.edweek.org/ew/issues/adequate-yearly-progress/))

Accountability…..The idea of holding schools, districts, educators, and students responsible for results - ([www. edweek. org/ew/issues/accountability/](http://www.edweek.org/ew/issues/accountability/))

No Child Left Behind Act of 2001 (NCLB)…..Legislation put into place consisting of a number of measures designed to drive broad gains in student achievement and to hold states and schools more accountable for student progress ([www. edweek. org/ew/issues/no-child-left-behind/](http://www.edweek.org/ew/issues/no-child-left-behind/))

Data Wise Improvement Process…..A process to help schools discover a step-by-step process for using student assessment data – from daily class work to annual standardized tests – as a catalyst for improving the quality of education – ([www. gse. harvard. edu/ppe/programs/prek-12/portfolio/data-wise. html](http://www.gse.harvard.edu/ppe/programs/prek-12/portfolio/data-wise.html))

Professional Development (PD)…..Generally refers to ongoing learning opportunities available to teachers and other education personnel through their schools and districts – ([www. edweek. org/ew/issues/professional-development/](http://www.edweek.org/ew/issues/professional-development/))

Teacher Performance Appraisal Instrument (TPAI)…..An appraisal system to assist employees to improve the instructional program for students – ([www. growouragleaders. com/pptsanddocs/tpai-observations. pdf](http://www.growouragleaders.com/pptsanddocs/tpai-observations.pdf))

Organization of the Study

In this study, there are five chapters. Chapter I provide the reader with an overview of the focus to this study. In this overview, the reader was introduced to the purpose of the study, the rationale of the study and the research questions that guided the study. Additionally, the reader will also be introduced to the literature review regarding professional development in Chapter II. In this chapter, the reader will be exposed to the topics covered which include Understanding Teacher Accountability, District Initiatives and Directions, Teacher Efficacy of Data Usage, Professional Development, and the Data Wise Improvement Process. Chapter III will provide the methodology used to guide this research study. Included in this chapter will be information pertaining to the groups participating in the study, the collection of the data and an explanation of how the data was analyzed. Chapter IV will provide an analysis of the collected data as well as verification to the research questions posed. Chapter V will focus on determining whether the Data Wise Improvement Process is being implemented successfully at the school of focus in this study.

CHAPTER II

LITERATURE REVIEW

Focus of the Study

The focus of this study is to identify whether there is evidence that the Data Wise Improvement Process is being implemented successfully, after the professional development in one of the school that went through district level training in 2009. What impact did the training have on the teachers' instructional practice? What impact did it have on student performance in the classroom? This review will focus on looking at the importance of professional development as it applies to enhancing teacher instructional practices with a focus on increasing student achievement. Further to increase student achievement is the need to focus on instruction taking place in the classroom. "While reforms to improve student achievement involve a variety of strategies, one frequently cited is the professional development of teachers to improve instruction" (Thornburg & Mungai, 2011, p. 206).

Encompassing this review will also include literature regarding various facets of the Education profession and how it pertains to professional development and teacher performance. Accountability is essential to reviewing how well students have comprehended the curriculum taught them for the academic year. Hochberg and

Desimone (2010) cited Sanders and Rivers (1996) with reference to the role that teachers

play in student achievement:

> Teachers play a pivotal role in our current system of accountability.
> Improved student achievement depends in large part on the quality
> of teachers and teaching; the impact of a high-quality teacher has
> been found to play a larger role in student achievement than any
> other school-based factor (p. 89).

Teacher efficacy is also crucial as a focus is geared toward how teachers' design of their

instructional lesson plans as well as their instructional practices is affected. The literature

review will also highlight how District Initiatives are guided through state and federal

legislation and how the decisions made impact the schools in the district.

In this chapter, the literature review will cover topics which are data points to this

study. One topic discussed is that of Education Accountability and its impact upon the

profession. Another topic that will be covered is that of the District Initiatives and

Directions which highlights the implementation of professional development from the

perspective of the school district. Another point of focus is that of Teacher Efficacy of

Data Usage. This point will share some insight on the encouragement of teacher usage of

data within their instructional practices. In addition to covering the topic of Professional

Development, this chapter will also introduce the phases and steps of the Data Wise

Improvement Process. Closing out the chapter will be a summary of the data points of

focus and a preview of introduction to Chapter 3.

Background

In the profession of Education, it is essential that educators are providing the highest

quality of education to every student who enters the classroom. Even with this focus, it is

also essential that the educators make sure that they are implementing whatever strategies

are necessary to help students meet their highest level of academic success. One facet of

education, which is clearly evident, is the fact that as time progresses, the profession

continues to evolve. Through this evolution, teachers have to work diligently to make

sure that they are enhancing their instructional practices to meet the changing dynamics

of the educational needs of their students from year to year.

To assist teachers with enhancing their instructional practices as well as

strengthening their skills in their identified areas of weakness, the profession works to

provide professional development. Littaky and Grabelle (2004) understand the

importance of professional development: "We give our people what they need at the time

that they need it and in an ongoing way" (p. 77). Even when focusing on professional

development and "while training is a critical issue, remarkably little is know about how

much training there is, who pays for it, and who benefits" (Lengermann, 1996, p. 361).

The purpose of this study pertains to what is done with the professional development

experience when teachers return to the school. Did the teachers share the information

and resources? Is there evidence that the strategies and activities garnered from the

training are utilized? This study examines one such training that was conducted with an

urban school district -- the Data Wise Improvement Process.

The Data Wise Improvement Process was originally introduced in 2003 by the Harvard University Graduate School of Education (HGSE). Kathryn Boudett was selected to lead the process which was designed as a course. Along with the Boston Public Schools (BPS), "… they staffed and funded the creation of a year-long course that taught teams of educators from BPS and HGSE students how to make constructive use of student assessment results" (Boudett, City, & Murnane, 2005, p. X). From here, the groups were able to move forward with the implementation of the initial phase to this new improvement process.

Education Accountability

Each day as school begins, it is evident that teachers are working diligently to the curriculum they are assigned. To determine how good of a job they are doing can be viewed through the academic success of their students. While we know that all teachers should strive to make sure they are meeting the academic needs of their students, how well do they know if they are succeeding? Additionally, how do we know if they are not succeeding and how is this being addressed? As educators focus on trying to accomplish this goal, there are provisions that are designed to ascertain how well our students are growing academically. Ultimately, in order for the educational system to make sure that we, as educators, are meeting the expectations that society has set for us, there is the process of making sure that we are being held accountable for what it is that we are doing. After all, "helping all schools and students achieve, regardless of ethnic and socioeconomic background, requires that we identify and develop processes and practices

that support teachers' deep and sustained examination of data in ways that are aligned to local instructional goals" (Mandinach, Honey & Light, 2006, p. 3).

The first step is determining what accountability is. Referenced as "Accountability – the idea of holding schools, districts, educators, and students responsible for results – has become the most recent watchword in education" (Accountability, 2004, p. 1). As this profession continues to evolve, educators are beginning to understand that accountability is the basis for what is being done in the classrooms on a daily basis. Society has elevated its demand that the public educational systems be held accountable for providing a well-rounded and sound education. Through this understanding, public educational systems have to make sure that they are meeting this goal.

Accountability is also essential when it comes to making sure that all is being done to meet the needs of the students being served: "Accountability is the catalyst that drives educational progress" (Johnson & Bonaiuto, 2008, p. 26). It is understood that, at times, society feels that the way in which public education has been operating has not met the needs of all students being served. The American society believes this argument to be justifiable because of student test scores, the growing dropout rates, the lowering of the graduation rates, and the lower rates of students who are graduating with their cohorts. Wanting to make sure that we are providing all of the necessary resources and strategies that will help students become as successful as they possibly can be, it is important that educators and the educational systems themselves be held accountable for what is taking place in the schools.

In the educational structure, measuring tools have been put into progress to monitor how well our schools are doing. Focusing on the belief that all schools work diligently to make sure that students are reaching their full potential, districts have started focusing on designing accountability structures to assure this is the case. Militello and Heffernan (2009) explained that when it comes to what society expects from our public schools, "first the public demands our education prepare our students to compete in a global economy" (p. 1). Understanding this, how do educators know if they are meeting this goal?

Due to the federal government wanting to implement a way to monitor the progress of the individual states, an accountability structure was established. This system was formulated through federal legislation: "Assessment and educational accountability were directly linked in 2001, with the No Child Left Behind (NCLB) legislation" (Militello & Heffernan, 2009, p. 1-2). Through this accountability structure, states are being monitored to see if students are growing academically from one year to the next.

It is important to know that through this federal legislation, this monitoring system has consequences that are based on whether or not schools are meeting the necessary goals that have been pre-determined for them. The NCLB legislation focuses on the accountability of schools. The process for monitoring progress is not only contingent upon the federal standards but the state standards as well. Ylimaki (2007) explains that, "current US federal legislation requires all states to administer annual standardized tests in reading and math for all students in grades 3–8" (p. 11). Along with

the administering of the standardized tests, the results play an important role with the monitoring component of the legislation.

The monitoring component embedded in the legislation is identified as the Adequate Yearly Progress (AYP). Subsequently: "Schools seek to meet Adequate Yearly Progress (AYP) requirements of NCLB face tremendous pressure to monitor carefully student performance on the high-stakes assessments that determine their success or failure" (Mandinach, Honey, & Light, 2006, p. 2). Throughout the year, teachers work diligently in structuring instructional lessons to not only teach the assigned curriculum but in a manner to meet the academic needs of their students. The AYP assessment results are one tool that helps to determine whether teachers were successful, or not.

Interestingly enough, this accountability monitoring system has changed how educators look at instructional practices in the classroom. "One consequence of the standards and accountability movement is that district and school administrators are being asked to think very differently about educational decision-making, and are being asked to use data to inform everything from resource allocation to instructional practice" (Mandinach, Honey & Light, 2006, p. 3). It is important that schools start to look at their testing data to determine how students are performing in the classrooms. Additionally, when looking at this practice, "the data are used to identify a student's current level of learning and to adapt lessons to help the student reach the desired learning goal" (Heritage, 2007, p. 141). As well, there is the need to determine what next steps schools should take to address the areas of concern as determined through the data analysis.

Teachers are being held more accountable for what is taking place in the classroom, and the focus has been on the academic growth of the students. How are educators able to determine if students are growing academically? How are educators able to determine if students comprehend the lesson being taught in the classroom? How are educators able to determine if there is the need to provide remediation before proceeding on to the next level within the curriculum? In fact: "Today, more than ever, education assessment plays a pivotal role in the education of students" (Popham, 2006, p. 84). Through the use of assessments, the concern has surfaced as to what is exactly being done with the data once the teachers receive it.

Educators are becoming more aware of the importance of summative assessments. This became evident as Desimone and Hochberg (2010) cited Goertz (2005) "… when the National Commission on Excellence in Education's 1983 report, A Nation at Risk, called to attention the poor performance of American students on national and international assessments, and the lack of high standards in the nation's schools" (p. 90). Even with the use of various assessments in the classrooms, there is more to understanding data than just the actual numbers. "Assessment-literate educators, however, understand that education tests merely provide evidence that enables people to make judgmentally based inferences about students" (Popham, 2006, p. 84). Educators understand more and more that there is a wealth of information embedded within a data report. This is especially the case when educators start unpacking the data. Through the unpacking of data, educators are able to use the information to determine how well their

students are growing academically and start to plan the direction the lesson should continue.

To completely unpack the data means that educators have also had to become abreast of designing effective tests and their true measurement. To arrive at this point, teachers have to determine what exactly the tests are supposed to measure. Additionally, it has also become evident that teachers also need to understand just exactly how tests are developed. Understandably: "That's why educators–and everyone else who has an interest in education-need a dose of assessment literacy" (Popham, 2006, p. 84). Even with this context, it has to also be understood that teachers do not have to possess a graduate degree in measurement. To the contrary, they should possess at least a general understanding of test design, its validity, its reliability, and the ability to decipher the information embedded within the test results.

<div align="center">**District Initiatives and Directions**</div>

For teachers to develop the skill in being able to interpret data and focus on what information is embedded within the reports, school districts have had to take on the charge of making sure that there is guidance for the effective use of data. "In the wake of NCLB (2001), data-driven decision making has become a central force of education policy and practice" (Mandinach, Honey, & Light, 2006, p. 2). Due to the enactment of this legislation, states and districts have found themselves under scrutiny with being held accountable for what is taking place within their schools. Given this understanding, states have also put into place additional accountability measures that are believed to help schools improve the educational practices taking place within the schools. Through this

understanding, school districts have come to realize that formative and summative assessments are just some of the tools that will help to determine how well students comprehend what is being taught in the classroom.

Through the usage of assessments, it has become evident that the results must be used to inform the instructional practices. Previously the practice in many districts had only the administrators of the building receiving data reports. As stated earlier, once the administrators received the data, the information was reviewed and a report was presented to the staff at the start of the following year. Once the report ended, this was usually the last time that the teachers heard about the data. Now however, we are finding that as schools work to improve what is taking place instructionally it is no longer valid just to have only administrators exposed to the data. Thus: "The barriers to constructive, regular use of student assessment data to improve instruction can seem insurmountable" (Boudett, Parker, City, & Murdane, 2006, p. 1). What has become clearly evident is that it is not so much for school administrators to receive the data but to start providing the data to the teachers so that they will be able to use it to impact instruction.

To address this concern "for example, many districts have begun requiring schools to analyze data as part of the school improvement process" (Jerald, 2006, p. 3). Many school districts do require that data analysis be integrated into the strategies that will be utilized to improve the academic programs represented in the school. Teachers are expected to determine, through unpacking the data, whether students comprehend what is being taught or if there is a need to divert the path of the instructional plan to include remediation. There are also data reports that teachers are privy to – be they

district level assessments or school-based common assessments - that will help determine if there are students who may need alternate instruction due to elevated performance on the test or the opposite.

In making sure that our teachers are able to fully utilize whatever resources are available to accurately interpret and use data, districts are providing professional development opportunities to meet this need. Through the design of the professional development opportunities, "…districts and assistance providers should look for opportunities wherever they can find them to model thoughtful data use" (Jerald, 2006, p. 5). Districts, throughout the United States, have become more aware of their responsibility for providing teachers and administrators with exposure of various models and other strategies that will help to empower all educators when it comes to designing sound lesson plans for all schools involved. The models can range from what is currently available in the district to outside resources, all which have proven effective.

Even as districts become abreast of providing data to teachers and administrators, it is also clear that districts have to provide opportunities for clear exposure to the data beyond just the beginning of the year. Data has to be accessible whenever teachers and administrators need it, especially during planning and the redesigning of the instructional programs within the building. It has become clear that districts had to design systems of support for building educators to have continual access as needed. In fact: "Whether the district creates its own system or purchases a software program…" (Boudett, et. al., 2006, p. 3), the system of support has to be one that will provide the information needed by schools as they set out to improve the academic performance of the students.

Teacher Efficacy of Data Usage

An important aspect of data collection knows what to do with it once a teacher receives it. Love (2002) explains that "once the data are collected, you have to make sense of them all" (p. 44). The data must clearly be analyzed, by the teachers, to determine what the underlying story is. It can also be used to see how well the students did on the test. Another aspect to review is to determine what percentage of students showed mastery. If the data report itemizes the results by objective, educators can also utilize the data to determine which objectives the student mastered and which ones the students will need to revisit. There is an endless realm of possibilities that educators are exposed to when starting to unpack the data.

One reason, which causes teachers to become weary of analyzing the data, is due to how it has been delivered to them. As well: "Even when data were made available too often they were in a form that made the information hard to understand and manipulate" (Jerald, 2006, p. 2). Once teachers received the data in a format that seemed overwhelming to them, there was the response of apprehension in analyzing the data. For the most part, if they weren't placed on the bookshelf, the reports were usually stored away in the filing cabinet.

It is also learned that "many schools are not capitalizing on the newly available data at all, and still others seem to be missing the point entirely" (Jerald, 2006, p. 1). By teachers not being able to analyze their own data, they are not able to use the results to mold their professional growth. If they are not able to use the results, they are not able to determine what weaknesses their students are exhibiting. From here, the teachers would

not be able to devise a plan that would help cultivate the academic growth of their students. As Archibald et. al., (2011) cited Youngs (2001), "aligning professional learning activities with data analysis, student goal setting, implementation strategies, and monitoring and evaluating improvement also can be highly beneficial to administrators, teachers, and students" (p. 4).

It is important for teachers to understand that a paradigm shift must take place when it comes to data. Most importantly: "Data can provide rich opportunities for dialogue, sense making, and learning" (Love, 2002, p. 44). Holding educational conversations surrounding data provides the opportunity for teachers to brainstorm on strategies to address the learning deficiencies exhibited in the classrooms. Love, Stiles, Murdy, and DiRanna (2008) explain that effective leaders, "…do encourage teachers to share and learn from each other concerning effective teaching practices they are implementing in their classrooms" (p. 239).

To determine if we are implementing a sound academic program that causes our students to grow academically, there is the need for some type of measuring tool. Educators do understand that "states are not only seeking to hold schools more accountable for results, increasingly they are also holding students accountable for individual performance" (Accountability, 2004, p. 2). It is important to understand that not only are educators being held accountable for what is taking place in the classroom but also that students are being held accountable for what is being learned in the classroom as well. The NCLB legislation policy has been established to guarantee that what is being implemented in the classroom will be scrutinized to a measure that will

help determine if what we are doing is working or if we need to redesign our instructional practice.

However, to revert back to how our public educational system found it entrenched in a process where accountability is being scrutinized even more, we have to distinguish the tool itself. What exactly is the driving force behind this accountability tool? It is precisely the act of educators knowing how to analyze the data. "Schools must digest and analyze information provided in the school profiles to review past performance, set specific measurable targets for improvement aligned with districts goals" (Du & Feglesten, 2001, p. 20). Schools have to be able to determine through the analyzing of their data, whether they are on target with meeting their goals or if there is a need for administration to provide support to teachers who may be struggling with their instructional lesson designs.

As educators focus on assessing students, a key factor is to understand that "achievement scores are important indicators of students' and schools' performance and accountability" (Du & Feglesten, 2001, p. 3). These indicators help determine if what the schools are actually implementing within the classrooms are actually making a difference in student academic growth. These indicators are also vitally important in measuring whether if schools have met the standards and goals as set by the federal government through the NCLB legislation. Focusing on the classrooms, it is important to understand that the data being filtered to the state and federal accountability systems all derive from what is taking place in the classroom. However once the data results are sent back to the

classroom, what happens to them? How are they utilized? What are the next steps after determining the results?

In order to help guide teachers into being able to not only answer these questions but to develop the skills that will help them to be more effective instructional practitioners, it is crucial that the school level and district level administrators provide relevant professional development. Notably: "In most schools today, there is no system for improving teaching. Teachers struggling with issues-everything from how to reach a particular student to how to meet the new subject content standards-rarely have anyone to whom they can turn for help" (Wagner, 2003, p. 102). While providing professional development opportunities for teachers has been a practice implemented within this profession for years, the level of professional development has come into question. In order to improve the instructional practice which is represented within the classrooms today, it is vital that the level of professional development is highly effective and contain strategies that can be taken back to the schoolhouse and not only easily implemented but shared with colleagues throughout the building.

<center>**Professional Development**</center>

Professional development is essential for helping teachers to garner a sense of purpose for the responsibility in which they have within their classrooms. Throughout their training while in college, the educators completed a series of courses that helped train them for their entrance into the profession. Once the educators secured a job and started the process for what hopes to be a long and successful career, it is immediately understood that the college training was only beginning. Teachers will need to consider

if their undergraduate studies will be enough for them to establish and maintain a successful career in education. This train of thought could cause teachers to become complacent and non-effective in their practice. "Thus, the more staff development provided, the greater the change in teacher behavior" (Marzano, 2003, p. 66).

As teachers enter the profession, it is essential they understand that the training they received during their undergraduate studies provided them with the necessary skills for starting in the profession of education. However, the initial training received will not sustain them for the duration of their career. It will be important for them to participate in professional development that will help contribute to their professional growth. This will include not only the opportunity for the teachers to garner knowledge, which will help enhance their instructional practices but also student achievement.

While professional development has proven beneficial to educators, it is important for teachers to know that it is not a one-time process. Murray (2010) shares that "Professional development is an ongoing process, one that evolves as you assess and reexamine your teaching beliefs and practices." (p. 10). Teachers are encouraged to participate in professional development as a means for enhancing their skills. Additionally, teachers are also encouraged to seek out professional development opportunities that target areas of weakness that have been identified either through reflective practice or from observational practices.

It is essential that as teachers are focusing on their areas of weakness or areas where growth is needed, they must focus on a process, which will help them improve upon their practice. As shared earlier, the initial degree program completed during their

undergraduate years was designed to prepare them for the beginning phase of their career. Thus, as teachers, both novice and veteran, continue to grow within the profession, they must take advantage of what educational opportunities are available and address their area of focus. Varela (2012) shares that "Professional development should encompass improvement of classroom techniques, which leads to enhancement of pedagogical skills that, in turn, facilitates the education of all students" (p. 17-18). Our primary focus for always targeting topic for professional development is what will best meet the needs of the students being served.

Educators must understand that as they work to expand their knowledge of the curriculum they are assigned to teach they must also become familiar of new trends, which are evolving in education that could increase student achievement. Furthermore "In order to influence student achievement, the teacher practice designated for change must clearly relate to student learning so that professional development will result in more students learning the content in higher levels" (Archibald, Coggshall, Croft, & Goe, 2011, p. 3). They have to be willing to edit their instructional practices to incorporate strategies that will help not only to increase the level of student comprehension to the curriculum being taught but also student mastery of the curriculum. As teachers focus on professional development, they should focus on those seminars, sessions that will address creative ways to address various aspects to their practice. These aspects would include identifying the learning styles of their students, understanding out to how to increase the academic rigor of the activities used, and being able to design quality assessments, which will measure a student's mastery level to the curriculum topics covered.

As designers of professional development sessions, the focus then turns to a very simple question. Designers have to ask themselves just how they can design their professional development seminar in such a way that it will draw interest to the targeted audience of teachers who really need it (Fields, et. al., 2012). The professional development has to draw them in. A reason this is crucial when designing professional development is due, in part, to the rigorous schedule that impact a teacher's time. Not only are teachers responsible for their instructional duties but their schedule also includes various items such as instructional planning meetings, before school and after school duty, parent-teacher conferences, and departmental as well as general staff meetings. Thus, teachers hesitate when they are approached with the concept of professional development, especially if it is outside the normal school hours. When speaking with them, "Teachers often cite lack of time as the greatest challenge they face" (Fields et. al., 2012, p. 45).

Even when considering professional development, the question one would ask is, how important is it when considering what is taking place in the classroom? It could be researched that "in fact, teacher experience and involvement in professional development activities accounted for about as much of the variance in student achievement as did student background" (Marzano, 2003, p. 64). We know that as teachers start to grow and become more experienced in their practice, they learn how to tighten their schedules and how to enhance their instructional presentations. However being able to learn new strategies and finding out about new programs, which are proving effective, plays a pivotal role in the improvement of the academic achievement of our students. This was

part of the focus for the Data Wise Improvement Process professional development

training was introduced to the Logan County Schools district.

Data Wise Improvement Process

Two years ago, executive staff members with the Logan County Schools district

located in the South, introduced a new concept to analyzing data. This new concept was

one coming out of the Harvard School of Education known as the Data Wise

Improvement Process. Knowing that assessment data plays a key in understanding the

areas of strength that students exhibit as well as being able to identify targeted areas of

concern, the focus was to initiate a pilot program that would be essential to helping

teachers become stronger data analysts while also introducing them to a process that

would help them develop their skills in using the data to inform instruction. The

executive staff members understood that, "Research and data are powerful tools. Used

thoughtfully, they are dynamic levers for improving schools and schooling" (Hess, 2009,

p. 4).

Realizing the importance of understanding data, there was a new process that

addressed various approaches that educators could implement. Boudett, City, and

Murnane (2006) explain, "our group of faculty and doctoral students at the Harvard

Graduate School of Education and school leaders from three Boston public schools

worked together for over two years to figure out what school leaders need to know and do

to ensure that the piles of student assessment results landing on their desks are used to

improve student learning in their schools" (p. 1). Focusing on what could be done to

improve the instructional practices within the classrooms, one method of focus was

interpreting of data reports being generated. As stated earlier, many teachers find

themselves intimidated by data and with this level of discomfort, they find it easier to shy

away from it. These researchers focused on various ways that could be generated to help

to not only bring a sense of comfort to teachers in the reverence of reviewing and

understanding school data but to also become empowered by the knowledge of the

information that is embedded within a data report.

"The Data Wise Improvement Process at the Harvard Graduate School of

Education is designed to help schools turn student assessment data into a tool to improve

instruction and turn the act of data analysis into a process that improves the organization,

function, and climate of schools" (Murnane, Boudett, & City, 2009, p. 1). Improving

instruction centers on what resources are available that an educator can review to

determine what areas of concern need to be targeted. Within this realm of professional

development, this process is one that focuses on taking instructional improvement to a

level that not only is viewed as a positive aspect to those teachers in the building but that

everyone in the building understands what is depicted in the data reports and what is

needed for the best interest for all of the students.

Within the Data Wise Improvement Process, it is important to understand that this

is not a program but a process. This concept is crucial for the teachers to understand. It

was important for participants to understand that this professional development

opportunity would prove to be beneficial. Professional development, sometimes, can

take on a negative connotation by teachers who feel as those they are good at what they

do and don't need any help. To the contrary, this process is one which is geared toward

helping teachers fine-tune most of what they are already implementing within their daily

practice currently. The group from Harvard was able to take the data collected from their

research to formulate a structure, which would help make the instructional practices of

teachers more informative and empowering. They explained that, after much discussion,

they settled on a process that includes "…. eight distinct steps school leaders can take to

use their student assessment data effectively, and organized these steps into three phrases:

Prepare, Inquire, and Act" (Boudett et. al., 2006, p. 1-2). Within each of the three phases

are a series of steps which teachers are able to implement within the process as they build

upon the foundation of enhancing their instructional practice.

Phase One: Prepare

The first phase within the process is that of Prepare. "Initially schools prepare for

the work by establishing a foundation for learning from student assessment results"

(Boudett et. al., 2006, p. 1-2). As schools start this process, they need to focus on what it

is exactly taking place within their instructional program. Within this process, is Step

One, which is Organizing for Collaborate Work. This is the beginning of the process

where teachers are to focus on how, exactly, they are going to begin this work. To begin

this work, teachers will first look at what types of programs are being utilized in the

building. This will focus on the types of instructional initiatives that are being utilized,

how these initiatives are being utilized, what type of professional development was

provided for teachers to effectively implement these initiatives and how effective these

initiatives are. As teachers continue with their focus of starting the process of

collaborating, another focus of inventory that teachers will concentrate on will be that of

their data inventory. Teachers will need to produce an inventory of the different portals from which they are deriving data. This could include classroom observations, common assessments, student work and even standardized testing data.

All of this information being collected helps with the establishing of a system of how teachers will start the collaboration process. Through the organizing process, the teachers are going to look at the forming of their teams. Many schools already have various teams in place including grade level teams, curriculum teams, and leadership teams. However, what is going to be instrumental in knowing is that these teams will be ones which teachers will be working collaboratively to analyze what academic instructional practices are taking place in the classrooms. This is an important fact "because looking deeply at student performance and teaching practice can be uncomfortable at first, you may find that using formal protocols to structure group discussions can be quite helpful" (Boudett et. al., 2006, p. 2). As the teams prepare to come together to start the process of collaboration, it is imperative that the teams develop a list of guiding practices to help with establishing the expectations for effective work sessions.

Step Two of this phase is that of Building Assessment Literacy. This step is viewed to be important within this first phase. In fact "an essential step in the "Prepare" phase is to help your faculty develop assessment literacy" (Boudett et. al., 2006, p. 2). In order for teachers to truly understand how to interpret data, they will need to be fully knowledgeable of the jargon that is used within the assessment tools. This also includes the various forms of acronyms and key assessment terms. In actuality, "to interpret score

reports, it helps to understand the different types of assessments and the various scales that are used" (Boudett, et. al., 2006, p. 2). Within this profession, "the most important aspect of an accountability system is how the data is used to improve instruction on a daily basis" (Quinn & Keith, 2011, p. 70).

Phase Two: Inquiry

The second phase of the Data Wise Improvement Process is that of Inquiry. To explain: "schools then inquire-look for patterns in the data that indicate shortcomings in teaching and learning…" (Boudett et. al., 2006, p. 1-2). During this step, the teams are starting the process of reviewing the data. Through the review of the data, it is important for the team to start the process of being able to fully understand the story that is encompassed within the data. One way of doing this is by first reviewing the report and being able to interpret what is being shared within the report.

Step Three consists of Creating a Data Overview. This step starts the process of moving into the process of introducing the data to the staff members of the school. It is explained that: "as you move into the "Inquiry" phase of the process, a good starting place is to have your data team create graphic displays of your standardized test results" (Boudett et. al., 2006, p. 2). At the start of each school year, teachers are always introduced to the most recent standardized test data by the principal and the administration team. Usually the presentation consists of a series of numbers that are prepared in a manner that is uninviting and incomprehensible. However, during this step, the team is encouraged to prepare a data overview that will present the data in a manner that will be easily understood by the general group.

During this process, it is important for administrators to provide an environment that encourages active participation. Specifically: "as a school leader, you can then engage your teachers and administrators in constructive conversations about what they see in the data overview" (Boudett et. al., 2006, p. 2). It is not only the fact that the data is presented to the staff, but it is also important that teachers have the opportunity to discuss the data and interpret it. Usually the data report formats consist of mountains of paper with a series of numbers printed on them. However, to encourage active participation with interpreting the data and determining what the focuses are for the teams, presenting the data into another format would prove to be invaluable.

Step Four of the process consists of Digging into Student Data. Once the data has been reviewed, the teams of teachers will need to determine what the next step will be. The conversation should entail what is it they will need to focus on as they work to address the student academic needs and areas of weakness as depicted within the data report. It is important to understand that "once your faculty has discussed the data overview, it is time to dig into student data to identify a 'learner-centered problem' – a problem of understanding or skill that is common to many students and underlies their performance on assessments" (Boudett et. al., 2006, p. 2). By using the information from the data, it will help to inform how the team will start to design how the work will look to address the areas of concern.

It is clear that the ownership of the data is not that of the administration but of the teachers inclusively. It is imperative at this point that the administration works collaboratively with the teams during the processing of the data; not from a leadership

stance but from that of a collaboration and then from a supportive resource. Understand that "some schools are using the data only in nominal or symbolic ways to comply with requirements" (Jerald, 2006, p. 3). It is evident that there are times when some teachers follow the process only to have the opportunity to say that they are being compliant. However, it is crucial that teachers understand that the data report contains more value than just a series of numbers on the page. It is also crucial to obtain staff buy-in in order to work toward a successful implementation of this process.

Step Five transitions the teams into Examining Instruction. Once the teams have completed the data overview and have completed unpacking the data, the next step will be for the teams to start examining the practices that are taking place in the classrooms. In fact: "in order to solve your learner-centered problem, it is important at this stage to reframe it as a "problem of practice" that your faculty will tackle" (Boudett et. al., 2006, p. 3). What are the commonalities that teachers are seeing when it comes to students not comprehending the material? When reviewing student work, what are some of the mistakes that are common throughout? These questions are just a few to help guide the teachers' concentration on what the problem of practice is that will need to be addressed as they work to help students to improve their understanding of the material being covered in the classroom.

Phase Three: Act

The third phase of the improvement process is that of Act. During the Act phase, the teachers are able to garner their skills "… and subsequently act on what they learn by designing and implementing instructional improvements" (Boudett et. al., 2006, p. 1-2).

This phase consists of the last three steps to the Data Wise Improvement Process. While focusing on the problem of practice, teams start the process of being able to focus on what instructional strategies can be utilized to encourage student growth.

Within this improvement process: "in the first step of the "Act" phase of the work, you begin by deciding on an instructional strategy that will solve the problem of practice you identified" (Boudett et. al., 2006, p. 3). Step Six, Developing an Action Plan, the teams focus on designing a plan to address the academic problem of practice. Within the plan, the teachers will look at what strategies will best meet the needs of the students as well as focusing on the best way to implement the plan. What will play a crucial role to this plan is a sense of consistency among the team. The team will have to mutually share an agreement as to what the solution will be that will be used to address the problem of practice.

Once the teachers have designed the plan, their focus will have to be on its implementation. As you proceed, "you then work collaboratively to describe what this strategy will look like when implemented in classrooms" (Boudett et. al., 2006, p. 3). What is instrumental about this step is that the plan must be in written format. All teachers must have a copy as they focus on implementing the plan. This written plan, which entails how the problem will be addressed and what strategies will be implemented, will serve as the guide for the team.

The next step is that of assessing. Step Seven is Planning to Assess Progress. This step helps with the monitoring of the plan that the teachers have in place to address the problem of practice. It has been realized that "too often, educators skip this step and

find themselves deep into implementation without a clear sense of how they will assess progress" (Boudett et. al., 2006, p. 3). It is not enough to design the plan but there must also be a plan to assess if the plan of action is helping to achieve the targeted goal or if there is a need to revise the plan.

After the team completes step six and move on to step seven, it is imperative that they include a design in the plan for progress monitoring. What will be most beneficial within the plan is determining how often the plan will be assessed to determine if the strategies are working. The team, "… can then work together to set clear short, medium, and long-term goals for student improvement" (Boudett et. al., 2006, p. 3). This plan must entail how often and at what intervals with the team assesses if the plan is one that is effective or if there is a need to readdress parts of it.

The last step is the actual implementation and assessing of the plan. Step Eight consists of Acting and Assessing. "Now that it is time to bring the ideas up off the paper, four questions can guide your work as a school leader: Are we all on the same page? Are we doing what we said we'd do? Are our students learning more? Where do we go from here?" (Boudett et. al., 2006, p. 3). During this step, the plan is implemented with a high level of support from the key stakeholders within the school. This comes in the form of classroom visits, continuous meetings to determine if everyone is following the plan and discussions as to what progress is becoming evident.

As the plan is being implemented, one crucial aspect to the entire process is that of the conversations. It is vital that teachers are honest and candid about what is working and what is not. Specifically "we have to be very clear about what true teamwork entails;

a regular schedule of formal meetings where teachers focus on the details of their lessons and adjust them on the basis of assessment results" (Schmoker, 2006, p. 108). What will prove beneficial of the plan is the teamwork aspect. No teacher should be working in isolation. They will have to come to not only rely on each other but to also support each other in the growth aspect of helping the students to succeed.

Once the team has reached the last step of the improvement process, and once the assessment has taken place, there is the process of determining the next step. As this will take the team through the end of the process, the next step will focus on the implementation to address the problem of practice. Team members will find that "once you get to the "end" of the "Act" phase, you continue to repeat the cycle with further inquiry" (Boudett et. al., 2006, p. 3). As the teams become more knowledgeable and comfortable of the process especially with the incorporation of true and honest dialogue, the teams are able to increase their focus of not only being able to work together but also develop the ability to dig deeper into the process to enhance their ability for addressing the learner-centered problems that become evident as the instructional lessons continue.

Summary

The Data Wise Improvement Process is one that helps guide schools into effective ways of utilizing assessment data within their instructional practices. Understanding that "the real power of assessments lies in the transformation of raw data and disseminated information into explicit knowledge to guide instructional improvement" (Militello & Heffernan, 2009, p. 6). As teachers start to formulate a plan of improvement passed on the data, their primary target should center upon what the next steps should be. This

primarily should be geared toward next steps of instructional practice. Teams would

garner this skill through the Data Wise Improvement Process. The professional

development training consisted of the various strategies, which help guide teachers into

the effective ways of using data to guide instructional designs.

Highlighted in the methodology section, the focus will be on the Data Wise

Improvement Process training and the process the district implemented. This will also

include identifying the various components that were addressed during the training.

Included as well will be the data collection process to determine whether the Data Wise

Improvement Process is being implemented after the initial training more than three years

ago. The various forms of data collection consist of teacher interviews, classroom

observations, analyzing of lesson plans and instructional planning observations. Through

these data points, it will help to identify whether there is evidence of the Data Wise

Improvement Process and if it is still being utilized today. One crucial aspect to the Data

Wise Improvement Process is identifying whether the teachers are utilizing the school's

summative data as a guide for impacting instruction within their classrooms.

Once teachers receive the data and for some, there is the concern as to what

should be done with it. Unfortunately, "… few are told how to use their results"

(Schmoker, 2006, p. 86). Once the results have been analyzed, novice teachers are

unaware as to their next step and how to implement a plan. Being able to design common

assessments to gauge student academic success once an improvement plan was put into

place is essential. In fact "benchmark common assessments can be used both

formatively, to immediately improve instruction, and summatively, to inform

programmatic changes in the future, such as increasing the amount of time a particular concept is taught or changing the sequence in which it is taught" (Love et. al., 2008, p. 130). Overall, it is important to understand that "… formative assessment works best when the teacher avoids grading practices and comments that show students how their performance compares to other students and uses informative comments instead" (Cauley & McMillan, 2010, p. 4)

It is the assumption that this study will provide insight as to whether there is evidence to show that teachers are or are not utilizing their data. There is also the focus of those who were, originally, unfamiliar with or not possessing confidence in analyzing assessment data and whether those behaviors may have since changed. Additionally, it is also the assumption that this study will provide insight on the actual implementation of the strategies that were taught during the professional development training. The analysis of the data will be a key factor in determining this. The analysis of the data will be based on reviewing and charting the data based on several factors, which correlate to the Data Wise Improvement Process.

The last chapter will focus on the findings of the study regarding whether there is evidence that the Data Wise Improvement Process is still being utilized. The findings will be presented in an organized narrative that will help to substantiate the findings. Additionally, the conclusion will highlight the process of the data collection and key factors that were observed during the data collection process. As well, recommendations for future research will be included as a means for additional studies regarding the Data Wise Improvement Process.

CHAPTER III

RESEARCH METHODOLOGY

Introduction

The method that will be used for this process is that of a qualitative case study methodology. Within this study, the researcher is focused on utilizing this method to guide an effect means with collecting accurate data. In fact, "as more researchers pursue this methodology, it is important to recognize that numerous methodological strategies related to implementing such research can enhance the reliability and validity of the findings" (Kohn, 1997, p. 2).

The focus of this study is to determine whether there is evidence of the Data Wise Improvement Process after the initial training held in 2009. The school that is identified as the case study school is one that was part of a pilot program implemented by the Logan County School District located within a southern state. This chapter will introduce to you the protocols initiated to collect the data to be analyzed. This will include the types of data that will be collected including participant observations, participant interviews, planning session observations, and the analysis of instructional artifacts.

Citing Inui (1996), Knight, Carrese, and Wright (2007), their focus is that through the utilization of this methodology, "qualitative study designs may better identify the breadth and depth of subjects' perspectives on a particular topic" (p. 592). The National

Staff Development Council also is a supporter of this methodology in that it helps "… to answer evaluation questions in professional development and emphasizes that evaluators should choose the methods that will best answer evaluation questions" (Rademaker, 2008, p. 206). Through this process, one concept that is very interesting to the researcher is that of what the teachers acquired through the professional development that had a lasting impact on them. It is important when looking at what teachers learn, what is just as important is determining "… how our teachers learn" (Ross et. al., 2011, p. 330). The research questions that will drive this research are:

1) After the initial training, what evidence supports that professional development led to the Data Wise Improvement Process being implemented and utilized?

2) How structured are the conversations and what is the context of these conversations during the instructional planning sessions?

3) How are the design and structure of the Data Wise Improvement Process being used within the classrooms?

4) How has the pedagogy been impacted by the professional development provided to prepare for the Data Wise Improvement Process at the school?

5) What are the perceptions of professional development training the participants received in the Data Wise Improvement Process?

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Purpose of the Study

The purpose of this qualitative case study is to assess whether educators, who were trained in the Data Wise Improvement Process, are continuing to utilize the skills learned after completing the professional development. The primary focus is centered on analyzing data and how it informs instructional designs. In fact, the premise of the Data Wise Improvement Process is for instructional staff to, "…think creatively about how you can organize your school's time, people, and other resources in ways that permit teachers and administrators to engage regularly in meaningful discussions about student data" (Bourdett et. al., 2005, p. 12). While analyzing data can be a tedious process, being able to understand the data comes from the discussions surrounding it. However, there are teachers within the profession that have a concern with analyzing data. While principals, in the past, were the ones who received the data and analyzed it for the teachers, teachers are now being required to do it for themselves. One of the reasons why data are no longer restricted to the eyesight of administration is due to the fact that, "today many schools rely on the results from standardized state tests to assess student learning" (Marzano, 2003, p. 38).

Within this qualitative case study, I investigated whether the instructional practices of the classroom teachers exhibit strategies and skills garnered from the professional development of the Data Wise Improvement Process. The initial training focused on being able to interpret data, which was new for many teachers. They have never been exposed to various data reports nor had they been required to interpret data. Furthermore, many never took the opportunity to discuss the data reports with their

colleagues in addition to using the reports as a guide for improving instruction. There are

even teachers who viewed analyzing data as something that was of no use to them.

However it was the goal of the trainer to help teachers understand that using data and

working together to because "… when teachers collaborate to pose and answer questions

informed by data from their own students, their knowledge grows and their practice

changes" (David, 2008, p. 87)

Through this investigation, I focused on a group of Data Wise Improvement

Process trained classroom teachers. The participants, within this study, are educators

who are staff members of the pilot schools who were selected based on their voluntary

participation. From the group of participants, I focused on collecting information, from a

randomly selected number within the group that helped determine if, in fact, the Data

Wise Improvement Process is still being implemented years after the training. When

analyzing professional development and its effectiveness, it is important to understand

that teachers attend sessions but sometimes do not bring the information back to share

with their colleagues. Blasé and Kirby (2009) understood that:

> Perhaps as important as the specific topics chosen for staff development
> is the discretion afforded teachers in selecting which components to
> implement and which to ignore. The teachers felt that they could reflect
> on newly acquired information and choose those pieces most beneficial
> to them and their students… (p. 86).

The general focus for the length of the case study is close to the equivalent

timeframe of six months. During the initial approval process, contact was made with the

principal of the selected schools to garner support. During this time, the approved letter

of request to participate was shared with the principals of the schools. All signed confidential statements collected are stored in my home office in a locked file cabinet for a minimum of three years. At the end of the three-year period, the artifacts pertaining to this investigation will be destroyed.

Research Methodology and Procedures

A qualitative case study approach was used in the design of this research. This method was selected because "qualitative research allows the subjects being studied to give much 'richer' answers to questions put to them by the researcher, and may give valuable insights which might have been missed by any other method" (RDSU, 1996, p. 1). This was the logical choice due to the design with the collection of the data. Through the design of this study, it was my goal to have contact with the participants. This method provided me the opportunity to incorporate various data points regarding the collection of the data for this study.

Through my focus, "I collected qualitative data through observations, interviews, surveys, and documents" (Clarke, 2012, p. 67). While, through quantitative studies would provide the opportunity for surveys, the qualitative case study allowed for this researcher to use open-ended questions as well as the possibility of the participants to expand upon their responses.   Additionally it allowed me the opportunity to continuing questioning until I was clear as to what the participant was communicating from the interviews. Moreover "qualitative study designs may better identify the breadth and depth of subjects' perspectives on a particular topic" (Knight, Carrese & Wright, 2007, p. 592).

Importantly the qualitative case study method provides for various forms of data collection to conduct the research. Once the data has been collected, "qualitative researchers usually transcribe their data…" (Johnson, 2006, p. 1). Due to the fact that much of the data is through interviewing, the recording of the data was through the actual transcribing of notes based upon the responses rendered by the participants. While transcribing the responses of the interview questions by the case study participants, the investigator also included personal notes which highlighted the participants' body language or tone.

Additionally, qualitative case study method is "…a form of qualitative and descriptive research; it looks intensely at an individual, a group, or event and draws conclusions in a specific context" (Tripathy, 2009, p. 660). This research targeted one group during the study of the staff's perception to professional development of the Data Wise Improvement Process. During the collection and analyzing of data, it was important to stay focused on what was clearly evident from the interviews as well as the other data points. This provided me the opportunity to not only develop an understanding of the perceptions shared by the interviewees but also the design of pedagogical practices that were reviewed as well as instructional design of implemented lessons during classroom observations.

Participant Selection

Upon the commencing of this study, there were two schools which were initially a part of this study. Both schools were part of the pilot program of the first schools going through the Data Wise Improvement Process 3 years ago. Based upon the geographical make-up of this metropolitan school district, it was divided into seven learning communities originally. Each learning community was structured in a format of a miniature school district with an area superintendent and staff within the learning community's office. Encompassed within the learning community were a total of 29 schools.

During my initial training and exposure of the Data Wise Improvement Process, I was a member of the staff of one of the learning communities. I served as the support coordinator. My responsibilities not only consisted of serving as an assistant to the area superintendent and area director, but I was also responsible for supporting the schools. The support ranged from board policy research, serving in interim administrative positions, and providing professional development training. Additionally, one of my assignments, at the time, was to serve as the Data Wise Improvement Process Liaison.

As the Data Wise Improvement Process Liaison for the learning community, it was my responsibility to assist the district hired trainer when she was working with our schools. My assistance included but was not limited to training new data teams in her absence as well as providing support to the data teams which had already been trained. Within this learning community, there were 5 schools that had been selected to

participate in this pilot study. Both of the schools, slated to participate within this research, were part of that group of schools.

The two schools targeted to participate in this study met three requirements. During this process, these two schools were selected, in particular, due to the fact that one of the schools was a Title I school and the other school was not. Another factor for selecting these schools to participate was due to the relationship I had established with the principals of the school. I believed that, from my professional relationships with the principals that I would be able to conduct my research with unlimited access to all of the data I needed. In the process, I had the opportunity to officially submit their names to the district's research office for permission to conduct the study within these two schools.

Upon finally receiving permission to conduct the study within the two schools of focus, I contacted the principals to schedule the opportunity to meet with them, individually, to explain the study and to answer any questions they may have. Having met with both principals, they were very supportive of the research and enthusiastic about wanting to learn the results. From here, I planned with them the dates and times I would be able to come out and discuss the study and research methods with their instructional staff members. It was decided that I would meet with each grade level selected for each school during their planning periods.

For each school, there were two grade levels selected: Grades 2 and 4 were selected for one school and Grades 3 and 5 were selected for the other school. These grades were selected due to three of the grade levels having standardized tests that the students were required to take at the end of the school year. The second grade does not

have a summative assessment currently in existence by the state to where this case study school is located.

During the planning sessions for one of the schools, I had the opportunity to sit in during the planning session and speak with the teachers of each grade level. The principal accompanied me to both of the grade level planning sessions where I had the opportunity to discuss the study and the process for collecting data. As well I also distributed the voluntary consent form to review with the instructional staff members. The principal contributed to both discussions sharing how beneficial the results of the study would be to the staff as the administrative team focused on implementing additional professional development for the staff. After my presentation, the staff members posed questions ranging from how long would the study take, would they be notified when I was coming to observe them, would they be able to receive feedback from the observations, would their names be used in the study and were they required to participate in the study? I answered each question thoroughly and even provided my email address and phone number in the event that individuals have additional questions or felt the need to speak with me one-on-one.

Regarding the answers to the questions posed, it was shared that it was my estimation that the study would take no longer than two months to collect the data. Unfortunately due to the need of scheduling the observations as unannounced, they would not be notified of the day the observations would take place. As well, feedback would not be provided from the observation because the observation would not be used for evaluative purposes but for my research. It was also shared that their names would

not be used at all; that each participant would be assigned a pseudonym to protect their privacy. It was also shared that it was not mandatory for them to participate in the study but that I would greatly appreciate their assistance with the research study. The teachers were satisfied with my responses and every teacher completed the consent form.

The following week I had the opportunity to schedule the meetings with the second school. The meetings were scheduled in the same format with meeting with the instructional staff during their planning periods. For the first meeting, the principal was able to attend the meeting. During the meeting I went through the study and reviewed the voluntary consent form with the members of the grade level. Upon opening the floor for questions, there were similar questions posed as from the other school. In addition to similar questions, the instructional staff members also wanted to know who the other school was, would the results be shared with the Superintendent of Schools, would the observations impact their end-of-year evaluations, would they lose their jobs over evaluations reflecting poor performance.

I answered each question as thoroughly as I could and provided my email address and phone number to the group as before. Regarding the questions, I shared that the name of the other school participating could not be revealed to protect their identity. It was also communicated that the results of the study would be filed with the Office of Accountability with the school district and that the Superintendent would have access to it. Lastly, it was communicated that the observations completed during this research study would not be used for evaluative purposes and thus, would not affect their end-of-year summative evaluation. Upon the completion of my presentation, I had one teacher

who shared that she did not wish to participate. Before the end of the day, another teacher emailed me and requested that I destroy her consent form because she did not wish to participate.

The second meeting was just as interesting as the first. The principal was not able to attend the second meeting. Instead the principal had the assistant principal to attend the meeting. During which it became evident that some of the teachers had spoken with teachers from the other grade level who had attended the first meeting. Their questions were similar as well as their concerns. One teacher who took the consent form shared that she needed to think about it some more and would contact me later. Shortly, thereafter, I received an email from the principal apologizing for the fact that the decision was being made to withdraw the use of their school from participating in this study. The principal shared that the instructional staff many responsibilities and with new initiatives they were to implement there was the need to protect the staff from any additional interruptions within their instructional day. I received this email prior to starting the collection of data at the school.

I had already started collecting data at the other school when I received this email. After much discussion and considering all factors that were in place, a meeting was held to discuss with the principal of the first school the possibility of expanding the study to include two additional grade levels. The principal consented and scheduled the dates when I could come in to meet with the other two grade levels. The principal attended these two meetings as well and I was able to continue with my study utilizing this school

to determine whether there was evidence of the Data Wise Improvement Process within

the instructional practices throughout the schools.

The school that was the focus of this qualitative case study is one which is a large

elementary school located in the South. Based upon the school's School Improvement

Plan profile section, the staff demographics include 56 instructional staff members, where

100% are currently certified. Within the certified staff, 34% hold advanced degrees and

25% are national board certified. The school currently has, registered, nearly 900

students where nearly 82% are minority students.

Within this study, there were a total of 33 staff members who participated in this

study. Utilizing the data coding process, as exhibited by the chart, the first column

reflects the range of professional experience of the case study participants. The second

column represents the percentage of the case study participants with the number of years

of experience. Of the staff members participating, the statistics regarding their years of

experience within this profession are coded as follows:

Table 1.

Professional Experience of Study Participants

Years of Professional Experience	Percentage of Participants
0 – 1	37%
2 – 5	12%
6 – 10	33%
11 – 15	3%
16 – 20	15%
21 – 25	0%
26 – 30	0%
31+	0%

Utilizing the data coding process, as exhibited by the chart, the first column reflects the

range in years of professional experience of the case study participants at the school. The

second column represents the percentage of the case study participants with the number

of years of experience at the case study school. Of the staff members participating, the

statistics regarding their years of experience at the school are coded as follows:

Table 2.

Professional Experience At The School of Study Participants

Years of Professional Experience at the School	Percentage of Participants
0 – 1	37%
2 – 5	12%
6 – 10	33%
11 – 15	3%
16 – 20	15%
21 – 25	0%
26 – 30	0%
31+	0%

Data Collection

The first form of data collection targeted demographic information. The

demographic information was collected during each of the grade-level planning sessions.

Within the collection, the questions focused on determining what grade level the

participant teaches and for how long within their assigned school. The investigator also

asked the question as to the total years of experience within this profession. Additionally,

the investigator asked the questions that were geared toward the participants' gender and

nationality.

The second form of data collection was through classroom observations. There

were a total of 10 observations conducted from a randomly selected group of classrooms.

Classrooms where the observations took place were randomly selected and spanned

across the four grade levels. The classroom observations were scheduled in a manner

where all observations were unannounced. During each of the observations, there was no

contact with the teacher or students. However, during the observations, the investigator focused on the lesson presentation and the content of the lesson. The investigator utilized the script-taping format as the structure for collecting the field notes during each observation.

During each observation, the investigator circulated throughout the room to observe the students' participation within the instructional activities assigned. Another focus of the investigator was that of student engagement. The investigator circulated throughout the classroom to observe the level of comprehension of the students to the lesson being presented. Lastly, while in the classroom, the investigator also focused on the educational environment. This included recording what was displayed throughout the classroom, design of the classroom layout, student movement, teacher location during his or her instructional presentation, and any posted student artifacts.

Another focus was to determine if there was any evidence of the Data Wise Improvement Process being utilized in the classroom. Through the observations, notes were taken as to whether teachers were utilizing assessment tools such as anecdotal notes, student-teacher conferences, journal entries, and common assessments, to measure the level of student comprehension. Attention was also geared toward the instruction and whether it was designed based upon a learner-centered problem, which is a problem where a gap of a common skill is evident among the students in the classroom or even within the grade level that was evident from common assessment data. In fact, "drilling down into student-learning data is the process of looking more and more deeply at one student-learning data source to derive the greatest possible amount of information" (Love

et. al., 2008, p. 131). Also the observation would focus on determining if there was evidence of the teacher utilizing responses from the students to ascertain if there was a need to adjust the presentation.

The third form of data collection consisted of lesson plans from the teachers. The request was made through the principal of each school to request a minimum of three lesson plans from each grade level. Each grade-level, grades 2-5, were given the opportunity of deciding which lesson plans they would submit. While a few of the lesson plans were sealed in an envelope and submitted to the investigator, other lesson plans were emailed to the investigator.

The lesson plans were reviewed to evaluate their contents. Specifically, the lesson plans were analyzed to determine if data were used to drive the design of the lesson. Additionally, the plan was analyzed to determine if strategies were used for addressing the needs of those students who are not successful after the initial introduction of the lesson, whether common assessments were utilized and for what purposes, and whether any other measuring tools were used in the continual assessing within the classroom. Kariuki (2009) realized this as well in the context that whether they realize it or not, "a teacher's impact on student learning and success can be enormous" (p. 3). He or she must be willing to utilize all available resources to help students excel academically.

The fourth form of data collection was through the observance of the grade level planning sessions. Five team-planning sessions were observed regarding different grade levels which are Grades 2-5. During the planning session, the investigator focused on the

collaboration of the team and the structure of the lesson designs. The primary focus was to observe the dialogues that the investigator did not participate. Field notes were collected which reflected the dialogues observed, the format used to determine the design of the instructional planning and all of the resources that are to be utilized as well as the strategies that are to be implemented.

During the lesson planning session, the observation was used to determine if data were being utilized to inform instruction. The researcher also observed the conversations held during the session. It was also important to observe the collaboration between the teachers when selecting activities to utilize in the classroom. Lastly the researcher focused on the structure of the planning session to ascertain the organization.

The fifth form of data collection consisted of teacher interviews. There are a total of eleven questions which are questions pertaining to their perception of the Data Wise Improvement Process professional development. The questions are all open-ended questions which have been designed for the participants to answer based on their feelings and interpretations. These are not the only questions that were asked. Based on the information that was shared by the participants, additional clarifying questions that were asked were generated during the interview in the attempts of making sure that the information communicated by the participant is clearly understood by the researcher.

Interview Procedures

One data point within this qualitative case study was that of interviews. These interviews were conducted within participants from the group who consented to participate within this study. The general context is that there was a representation of

each grade level regarding the collection of this data point. Those who were interviewed were randomly selected with no particular focus or order. One benefit to the selection process is that I personally know less than 1% of the teachers, and there was no preferential decision made regarding selecting a teacher to interview.

Once a teacher was randomly selected to be interview, an email went out from me to the teacher informing them of my requesting for wanting to interview them. A brief overview was shared with the teacher regarding the focus of the study and how their insight would be of great benefit to the research. It was also made clear that participation within the interview was strictly voluntary and if they chose to assist me in this process, I wanted to schedule a time which was most convenient for them to be interviewed. It was crucial that I remained very flexible with my schedule in the attempts of being able to meet with the teacher at his or her most available moment.

During the scheduling of the interview, it was crucial that the interview was scheduled during a non-instructional time for the teacher. Most of the interviews were held either before-school, after-school, or during the teacher's instructional planning period. The instructional planning periods were also times which had to be closely monitored. Interviews were not scheduled during the days when grade level planning meetings were schedule. Once I heard from the teacher, I sent an email to confirm the date and time.

All interviews were held at the school in the teacher's classroom. This provided the opportunity for the teacher to be able to speak freely during the interview as well as have access to any artifacts the teacher may require during the interview. The interview

questions that were used during the sessions were not shared with the participants prior to

the interview itself. During the interview, I transcribed the notes based on the responses

to the question. As I shared with all participants during the initial grade level meeting

when I shared the information regarding the study, I would not use any recording device

during the interview. I would transcribe the interview on my laptop computer as well as

a note pad for any additional notes.

Data Analysis Procedures

Analyzing the data collected within a qualitative case study can derive into

different forms. It is understood that "most qualitative researchers analyze their own

data" (Basit, 2003, p. 143).   For this research, I did analyze my own data. Within the

data analyzing process, I relied upon the coding method. Coding is defined as the

"…marking the segments of data with symbols, descriptive words, or category names"

(Johnson, 2006, p. 1). While reviewing the data points collected within this research, I

made sure that I targeted the key foci within each of the data points. Additionally, "a

code in qualitative inquiry is most often a word or short phrase that symbolically assigns

a summative, salient, essence-capturing, and/or evocative attribute for a portion of

language-based or visual data" (Saldana, 2008, p. 3). Through this process, I organized a

set of codes that would be used to code the data points collected through the observations

and interviews. This provided me the opportunity of being able to stay focused on

informational points which were in alignment with, not only the Data Wise Improvement

Process, but with identifying whether teachers were using data to drive instruction. Of

the data points collected during the classroom observations as well as the planning

session observations, the statistics regarding the observable occurrences are coded as

follows:

Table 3.

List of Coding Categories to Organize Collected Data Points from Observations.

Code	Observation Coding Category
LD	Lesson Design
TR	Teacher Resources
AI	Agenda Item
PS	Pedagogy Skills
AD	Assessment Design
TC	Team Collaboration
T	Technology
TF	Teacher Feedback
QS	Questioning Stems
UD	Use of Data
PK	Prior Knowledge
CA	Common Assessment

Of the data points collected during the interviews, the statistics regarding the observable

occurrences are coded as follows:

Table 4.

List of Coding Categories to Organize Collected Data Points from Interviews.

Code	Interview Coding Category
UD	Use of Data
TC	Teacher Collaboration
DI	Data Infusion
PR	Personal Reflection
PD	Professional Development
CA	Common Assessments
PS	Pedagogical Skills
AD	Assessment Design
SD	Students Use of Data
PM	Progress Monitoring
FA	Formative Assessments
OD	Overwhelmed with Data

As the researcher focuses on the various data points collected during their research, Saldana (2008) shared that "the data can consist of interview transcripts, participant observation field notes, journals, documents, literature, artifacts, photographs, video, websites, e-mail correspondence, and so on" (p. 3). The data points within my research came in the form of teacher classroom observations, teacher lesson plans, grade level lesson plans, transcribed interview notes, and instructional artifacts.

For each of the interviews as well as the classroom observations, I read through each of the notes to make sure that I fully understood what was being communicated within the responses given by the participants. While reading through the notes, I started labeling the information that was shared. This involved me also reviewing any side notes that I may have transcribed during the collection of the data point. I found this to be an

important part of the entire process because, "throughout analysis, researchers attempt to gain a deeper understanding of what they have studied and to continually refine their interpretations" (Basit, 2003, p. 143). It was important to make sure that, as I reread through the notes and reviewed my coding that the organization of the coded data clearly reflected my interpretation of the information collected.

Indeed, as I worked to code the transcribed notes from the teacher lesson plans, I utilized the same process. I focused on the design of the lesson plan and the various components. I highlighted certain features such as data inclusion, evidence of teacher collaboration, addressing student progress as well as student assessment.

Procedures for Maintaining Integrity

During this study, the highest level of integrity throughout the process was maintained. It was imperative that all participants had signed the voluntary consent form. Upon receiving the consent forms, I made a copy of each form to return to the participant. The original copies, within my possession, were placed in a locked filing cabinet and will remain in the locked cabinet until the completion of this study.

The lesson plans that have been collected are ones which have also been placed within the designated locked filing cabinet. It is especially crucial that this is done due to the fact that the lesson plans contains the names of the teachers who were implementing the lessons. Due to this identifying information on the lesson plans, they are available for public review. Before being locked in the filing cabinet, the lesson plans are placed in a labeled sealed envelope.

Additionally, all transcribed notes from the interviews conducted with the selected participants must also be secured. Once the interview was completed, the researcher reviewed the notes for accuracy. The interview was printed and prepared for the data analysis process. Next, all information from each of the interviews were analyzed as part of the coding process. Once the interview notes were coded, they were placed in a sealed envelope. The sealed envelope was placed in the filing cabinet which has been locked for security reasons.

Another data point that required a high level of security was that of the conducted observations. The classroom observations as well as the planning session observations all contained the names of the participants as well as the grade level. Due to the identifying information contained within these transcribed notes, they also must be secured. Once the observations were completed, the information was coded as part of the data analysis process. Upon completion of the coding process, the observations were labeled and placed in the locked file cabinet. These steps were completed to ensure that the integrity of the study was held in the highest regard and that participants within the study could not be identified outside of the individual contacts.

Limitations of the Study

When one focuses on qualitative research, "the analysis of qualitative data is usually seen as arduous. The reason why it is found to be difficult is that it is not fundamentally a mechanical or technical exercise" (Basit, 2003, p. 143). It is understood that qualitative case studies are ones where the researcher is much of the control. In the process, this method of research is deemed as one where the descriptions are relied

heavily upon the researcher's interpretation. This may not be viewed favorably by some because there are scholars who believe that those who focus on qualitative methodology, "… belittle research that involves what they may refer to as 'no more than number crunching' which they feel oversimplifies complex causes, dehumanizes evidence, and fails to recognize individual differences among people, among environments, and among events" (Thomas & Brubaker, 2000, p. 12).

Understanding that this methodology allows for interpretation of data by the researcher, it is also important that through the analysis the information is not overly analyzed. One of the limitations to this study is focusing on the interpretation of the information gathered during the interviews. Due to human fallacies it is easy to automatically assume what someone means when sharing their response to a question. However, with focusing on the integrity of the analyzing of data, always ask follow-up questions until it was clearly evident as to the stance of the participant. These tie into the next limitation.

When focusing on qualitative methodology, this research "… makes no claim of the generalizability of findings to a specified larger population in a probabilistic sense" (Fossey et. al., 2002, p. 717). It is not the researcher's claim to generalize any of the data points that were collected during this study. Additionally, it is also not the researcher's claim to state that there is a definitive answer to the questions posed within the study. Instead, it is focus that the responses shared and the data points collected are accurately shared within the findings of the study.

One addition limitation to this study is that of the sample size. While the original design of the study encompassed two schools, one school eventually requested to be pulled from the research. Due to the retraction of the agreement from the other school, the study restricted its research to the one remaining school within the study. This restriction limited the number of participants within this study. Future research designs could include addition participants.

Conclusion

This qualitative case study is one which focused on determining whether is evidence of the Data Wise Improvement Process in a school that completed the professional development 3 years ago. This study is unique in that it focuses on determining if there is evidence that staff members who participated in the initial professional development returned to their schools and shared the strategies they were trained. Utilizing the case methodology, the data points collected provided the opportunity for participants to share their interpretations of the effectiveness of the Data Wise Improvement Process and how it is being utilized within the classroom.

CHAPTER IV

RESEARCH RESULTS

Introduction

The purpose of this qualitative case study was to determine, through the collection of data, as to whether there is evidence to support that the Data Wise Improvement Process is still being implemented after the professional development training. The Data Wise Improvement Process professional development was first introduced to a group of eight pilot schools within the urban school district of focus. This process was originally introduced to representatives from the pilot schools four years ago. Within the design of this qualitative case study, the two schools, identified to participate, were part of the group of pilot schools.

Proceeding with the implementation of this qualitative case study, both principals were contacted to organize how the information would be presented to the instructional staff members of the grade levels that had been selected at their schools. A schedule was set and the informational sessions were held. During the data collection process, the principal from one of the two schools decided to withdraw her school from participation. This resulted in a change within the structure of this qualitative case study where the focus was one school instead of two.

Presented within this chapter, will be the research findings stemming from the data collected. The focus for the data collection was through the research questions introduced in Chapter 1. The research questions are:

1. After the initial training, what evidence supports that professional development led to the Data Wise Improvement Process being implemented and utilized?

2. How structured are the conversations and what is the context of these conversations during the instructional planning sessions?

3. How are the design and structure of Data Wise Improvement Process being used within the classrooms?

4. How has the pedagogy been impacted by the professional development to prepare for the Data Wise Improvement Process at the school?

5. What are the perceptions of professional development training the participants received on the Data Wise Improvement Process?

The results, organized within a qualitative framework, consisted of teacher observations, classroom observations, grade level lesson plan reviews, instructional planning session observations, and teacher interviews. This chapter will highlight the triangulation of the data as each research question is addressed.

Case Study School

The case study school that is the focus of this qualitative research is one considered by the state's Department of Public Instruction as being a School of Progress. Additionally, the school was also identified as one making high growth during the 2011-

2012 school year based upon the ABC's School Progress Report. Originally constructed

in the 1990's, this school is as a Pre-K through 5th Grade public school which serves

more than 900 students. 69% of the student population is African-American, 10.5% are

white, 11.5% are Hispanic, and 9% of the student population consists of other ethnic

subgroups including Asian, American Indian, and Multi-Racial. This case study school is

not identified as a Title I school due in part to the student population's poverty index is

below 75%.

Another descriptor of this school is that it is a Professional Development School.

It currently partners with a local public university in a large metropolitan city within a

southern state. Through this partnership, the certified teachers are able to work closely

with professors and students within the college's School of Education. The university

professors participate in professional development on the campus and provide the

opportunity for the staff to attend college courses taught at the school. Additionally,

student-teacher practitioners are able to complete internships at this case study school.

Of the 71 instructional staff members employed at this school, 56 are certified

teachers and 15 are instructional assistants. All teachers currently hold their full license

certification with 34% of them having obtained advanced degrees and 25% are national

board certified. Analyzing the educational experience of the licensed staff, more than

80% have four years or more teaching experience. The case study participants are

instructional staff members who represent grades 2-5 as well as the Literacy and

Mathematics facilitators. Of the case study participants, 91% are female and 9% are

male. Regarding the demographic information of the case study participants, 64% are

White, 30% are African-American and 6% are Asian-American. Additionally, 55% of

the participants consisted of White females, 6% were Asian-American females, 30%

were African-American females, and 9% were White males.

Data Collection Methodology

The collection of data for this case study was that of a qualitative research

approach. The protocol for the collection of data stemmed from the confidentiality of the

case study participants. All data collected consisted of teachers being randomly selected

and with the participants forwarding requested information as well as the response to

interview questions. Included, as well, was the information collected from the various

forms of observations. Based upon the collection of data, all information was analyzed to

triangulate all data points which represented the data collected.

Interviews were conducted to collect as detailed qualitative data as possible. Each

teacher, randomly selected, was contacted by email to schedule the date and time of the

interview (Appendix A). The interviews followed the protocol of questions designed

specifically for the teachers (Appendix B). The researcher transcribed the notes during

the interview process. A recording device was not used to provide the case study

participants the opportunity of speaking with a high level of comfortability. Additional

anecdotal notes were transcribed during impromptu conversations with case study

participants to clarify information collected. There were a total of ten interviews

conducted utilizing the interview question protocol.

The observations that were completed were conducted over a span of five months.

During the observations, both the classroom observations and the instructional planning

session observations, the researcher made sure that he did not participate in the discussion. For the classroom observations, the teachers were contacted, through email, once they were randomly selected (Appendix C). Next, after the researcher decided on the date and time for the observation and upon arrival to the school on that date, the researcher entered the room and work diligently at not disturbing the instructional session. A seat in the back of the classroom was located that provided a clear view of the entire classroom and the opportunity to take notes observing all that took place. All observations, both classroom and instructional planning sessions, lasted no more than forty-five minutes. There were a total of seventeen classroom observations conducted.

Lesson plans collected as part of this qualitative case study were initially requested through the two facilitators. Additionally lesson plan requests were also made to a teacher on each of the grade levels. There were a total of twenty-one lesson plans collected. All information within the lesson plans were coded and categorized.

Data Collection Alignment to the Research Questions

The triangulation of data from the analyzing of all data collected for this qualitative case study will be described within this section. The investigation data presented is in alignment with the research question to which guided the data collection.

After the initial training, what evidence supports that professional development led to the Data Wise Improvement Process being implemented and utilized? (question 1) The purpose of this study was to determine whether there was evidence to determine if information contained from the professional development was shared with staff members when the participants returned to the school. Based upon the qualitative data

collected within this research, there are data points to highlight case study participants'

contributed to the implementation of this improvement process. Some of the case study

participants reminisced that when the process started they were required to start keeping

data notebooks. Some of the participants also shared how they started receiving so much

data that they did not know where to start.

One participant believed that the implementation of the program was a smooth

process due to the principal working at the school during this period. As the case study

participant, Mr. Cliff, shared, "We were way ahead of the game with pretest and posttest

because (our principal) was ahead of that. When people came here, they were wowed by

what we were doing."

Another data point, embedded within the qualitative research, reflected upon what

the primary focus was as the implementation of the improvement process proceeded. She

shared how there were three questions which were used to guide the discussions grade

levels had within the process. The three questions were:

1. What are you going to teach?

2. How are you going to teach it?

3. What are you going to do for the kids who don't get it?

How structured are the conversations and what is the context of these

conversations during the instructional planning sessions? (question 2) Within the case

study school, there is a former classroom that has been redesigned as the instructional

planning room. Located inside this instructional planning room are various resources that

teachers have access to utilize within their classroom. The room is divided into two

sections. One section is for the Mathematics and Science instructional planning sessions

and the other section is designated for Literacy and Social Studies instructional planning

sessions. There is a facilitator who guides the team through the process during each

planning session.

Guiding the instructional planning sessions are the Common Core State Standards

and the pacing guides provided by the school district. The teachers are required to review

the standards and the topics to be covered for the upcoming instructional week. The

teachers are also encouraged to bring any activity they may have which aligns with the

topic of discussion that can be utilized by the grade level. Additionally the teachers are

also expected to bring enough copies for their colleagues.

Based on the research data collected, the teachers are responsible for bringing

their instructional notebooks with them to each session. There are three questions which

were the guiding questions for the instructional planning sessions. They are:

1. Where are we?

2. Where are we going?

3. What do we need?

These questions helped maintain the instructional conversations that took place

surrounding the instructional planning.

As the instructional planning session starts, the lesson template, utilized by the

grade level, is posted on the LCD projector. Within this template are key instructional

points which must be completed. The template also serves as a guide for the instructional

planning session as well. As information is shared which contributes to the design of the

lesson plans, this information is recorded onto the template. The primary focus for the

planning sessions centers upon:

1. Common Core State Standard (to be addressed)

2. Student Friendly Objective

3. Materials Needed

4. Key Vocabulary

5. Key Questions

6. Teacher Input

7. Homework

8. Reflection

Flexibility is provided to the grade levels regarding the lesson plan matrix. While

the grade levels share the same format and the key instructional steps, the teachers have

the flexibility to alter the template to fit the needs of the grade level. Some additional

lines have been added to provide for the inclusion of:

1. Word Work

2. Shared Reading

3. Assessment

4. Differentiation

5. Workshop and Practice Assessment

The qualitative data also shows that during the instructional planning sessions, the teachers hold an open dialogue to collaborate as a team on designing the lessons. The data shows that during each of the observations, there were teachers who were sharing various activities with their grade level colleagues as well as modeling various activities that would be used to enhance the lesson. As observed, each teacher was given an opportunity to share out and to participate in the discussion. Before the instructional lesson session ends, the grade level is given the opportunity to review what has been decided upon and what their next steps will be as they prepare for the next planning session.

It has become noticeable, by the teachers, as to the evolving structure of the instructional planning sessions. One case study participate, Ms. Avenue (a pseudonym), has more than ten years of experience working at this case study school shared her reflection. This participant remarked as to how she could recall when there was no structure to the planning sessions. Ms. Avenue also recalls that as the grade level came together to plan:

> We would plan our units and themes and we would bring handouts to share what we were doing and that was basically it…. we didn't share lesson plans; we shared what we were going to teach but then we would go back to our classrooms and we would teach on our own.

How are the design and structure of the Data Wise Improvement Process being used within the classrooms? (question 3) During the professional development of the Data Wise Improvement Process, the objective was to make sure that the schools understood that this process was just that; a process and not a new program. In fact,

during the training, it was shared that was:

- A process

- A way to structure improvement

- Grounded in multiple forms of data

- Collaborative

The premise for this improvement process stems from the conversations the staff members are having surrounding data and what are they doing with the data once they receive it. Additionally it was also instrumental for schools to understand that it was not just the fact that the principal had access to the data but that the data was also being shared with the instructional staff.

The qualitative data collected during this period identified some key components being utilized within the school. Essential points, embedded within the data, identified how the Data Wise Improvement Process is being utilized within the classroom. One aspect of the process is that of exploring data. Specifically how is data being utilized within the classroom?

The research shows, from the qualitative observation notes, that in the classrooms, data is guiding instruction. The school has started using a formative assessment this year identified as the MAP assessment. This assessment, Measures of Academic Progress, is administered to ascertain how well a student is progressing within their grade level. The assessment is administered three times a year. This data is used, during planning, to help guide the instructional practices of the teacher. This is especially important to the

teachers when identifying which topics to address based on the areas of weakness identified within the assessment.

The qualitative data also shows that each grade level is implementing a POD. This is the acronym for Problem of the Day. The students are given a problem of the day that they are to complete which is in alignment with the current topic being taught in class. Upon completion of the PODs for the week, the teachers are to record the students' results and forward the information to the facilitators. The facilitators will compile the data and produce a grade level data analysis regarding the students' performance. This information is used to organize the FLEX groups.

FLEX groups are groups that the students are placed in regarding their ability. Based on the range that each student falls within, the students' results from the POD weekly activities determine if they are placed in the high, middle, or low group. During their FLEX group activity, the students are able to complete various activities targeting their area of weakness as well as receive additional individualized assistance with the Instructional Assistants assigned to the class during the FLEX group time. It is also important to note that, through their conversations surrounding data within their planning sessions, the teachers work to utilize a schedule which will best maximize the Instructional Assistants help with an assigned group.

The qualitative data also shows that the teachers have an active role in the assessing of students through their use of common assessments. During the instructional planning sessions, the designing of common assessments was observed. Working along with the facilitator, the teachers were given the opportunity to plan the next common

assessment to be administered by the grade level. Specifically, the facilitator led the grade level through the process of selecting questions that went into the design of the common assessments. Each teacher is given the opportunity to recommend a question and participate in the discussion of whether the question will assess the information teachers need to determine the students' mastery level of the curriculum being taught.

The team spent part of one instructional planning session reviewing formative assessment questions that were used last year. The formative assessment data was identified as a data point included within the dialogue. A discussion was held regarding which questions used were valid questions that could be utilized this year. As well, the teachers also focused on using some of the questions as a guide for designing questions of their own for the common assessments in development.

How has the pedagogy been impacted by the professional development provided to prepare for the Data Wise Improvement Process at the school? (question 4) Determining the impact of the pedagogy of the teachers through the Data Wise Improvement Process became was another point evident through the collected qualitative data. Specifically this data point was identified through the case study participant interviews. The reflections that the teachers shared were also determining factors which pinpointed the change in how the teachers approached their instructional practices. One of the key data points that were interesting was that of data conversations with the students.

One case study participant, Mr. Cliff (a pseudonym), commented on how it is important to share the data, not only with colleagues and parents but also with the

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students as well. He has found that the students are aware of what data is and what it represents. Reflecting upon this process he believes that it is important to share the data with the students so that they know where they are, academically, as well as what they need to focus on in preparation for the next test. Mr. Cliff even reflected how eager the students are regarding the data due to a progress monitoring chart posted in the classroom. The chart is color coordinated which not only benefits the students when analyzing their own data but the teacher as well. He even shared at how the progress monitoring chart helps him pick up on which students need immediate remediation as well as those students who are performing at or above grade level.

Realizing that data is becoming a fixture within the instructional practices of teachers, another case study participant, Ms. Bank (a pseudonym), had to go through a paradigm shift. This paradigm shift has afforded her the understanding of the use of data and how it plays a key role in instructional success within the classroom. As Ms. Bank shared:

> I can admit that I am not a data person. The numbers is just that…all of these numbers—I just want to know if my kids grew … now I wouldn't say that I am a dataholic—I am not—it is more now that I look at data differently because I am gauging the growth and progress of my students—it has forced me to make some necessary changes …

Through the qualitative research data, another data point highlighted the teachers' instructional practice with motivating students. Utilizing data within the classroom to guide students into holding themselves accountable for the academic success is proving to be essential. As evident within the data points collected through this qualitative data

research, one teacher shared how this is proving to be beneficial. The case study participant, Ms. Snow (a pseudonym), believes that student motivation is helping with improving how students are approaching their academic studies.

The participant's belief is that student motivation is most beneficial. Ms. Snow (a pseudonym) currently utilizes data charts in her classroom which reflects common assessment data. When she finds herself walking to the chart with the highlighter, the students will stop and see how the class did. If they did well, they cheer and if they didn't then they want to know why and what they can do to improve. What has really encouraged her has been how they have made the connection on their own of how the individual scores contribute to the overall score of the class as a whole. When the class scores decrease, the students eagerly work with their classmates, utilizing the peer tutoring method, to make sure everyone will be successful during the next test administration.

What are the perceptions of professional development training the participants received on the Data Wise Improvement Process? (question 5) Through the analyzing of qualitative data, it was interesting concerning the case study participants' perceptions of the Data Wise Improvement Process. Of the 33 participants, 64% of them shared that they could recall the Data Wise Improvement Process. The research data collected consisted of interviews conducted with a total of ten participants. Of the qualitative demographic data regarding the ten case study participants who were interviewed, 50% could recall receiving the Data Wise Improvement Process professional development. What is interesting is that of the case study participants who recall receiving professional

development (50%), 40% of them received professional development at another pilot study school.

Accounting for the professional development occurring four years ago, the qualitative data reflects that there was a mixture of perceptions regarding the professional development. One case study participant, Ms. Turn (a pseudonym) who has been at the school for more than five years, shared that while the Data Wise Improvement Process is a great process which has been beneficial there were still some who didn't buy into the process. "The challenge is when everyone is not on the same page and everyone was not on the same page because some didn't understand and I am not sure if it is because they didn't want to or …. " Another case study participant, Ms. Sunny (a pseudonym) shared her perception regarding the professional development which was completed at another location. As stated, "I think that we had about five to eight staff members who had been trained; they came back and they trained us technically and it was broken into several different professional development days . . . ."

The qualitative data also highlighted the focus of one participant, Ms. Lane (a pseudonym) who shared her understanding of the data team. Based upon her responses within the qualitative research data, she explained the composition of the data team and their responsibilities. This included having the member of the team, representing each grade level, coming back and sharing out, with the others, the information communicated. Ms. Lane also reflected that while she is currently not serving on the team, she has come to rely on the data that is shared from the team as she continues to work to improve her instructional practice while also working to help her students succeed academically.

CHAPTER V

FINDNGS, RECOMMENDATIONS, AND FUTURE RESEARCH

Introduction

The Data Wise Improvement Process was first introduced to a group of pilot schools in 2009. This school district saw the need for implementing a new process which would guide teachers through a structured process to conduct discussions of data. Through the discussions of data, the information collected could be used by teachers to inform their instructional practices. Originally introduced through the learning communities of the Logan County School District, located in the South, the District expanded their plan to include a training schedule that included every school within the District over the course of the following year.

As the district was preparing to start the initial phase of the Data Wise Improvement Process professional development training, members of the different area offices were selected to help lead the process. Professional Development trainers who had been hired by the district were responsible for facilitating the actual training sessions but there was the need to have district personnel involved in the process as well. The initial introduction of the Data Wise Improvement Process was one of apprehension. The apprehension was due to the fact that this was a new program and no one really knew what to expect. However, during the first meeting, the apprehension subsided.

The training facilitators were very friendly and were very knowledgeable about the district and its expectations. Additionally, the facilitators shared that the Data Wise Improvement Process was just that, a process. It was not a program. Even more interesting was the fact that the training facilitators also shared that with the process, they would be guiding the participants through a practice which would help them structure some of their current instructional practices surrounding data.

The purpose of this study was to determine whether there is evidence that the Data Wise Improvement Process is being implemented after the professional development training. This research was completed through a qualitative case study. Guiding the collection of data, within this case study, were case study participant interviews, classroom observations, instructional planning observations, and a review of submitted lesson plans. All qualitative case study notes were transcribed, analyzed, and utilized to identify the themes contained within the study.

This research method was used because it "… enables the researcher to answer "how" and "why" type questions, while taking into consideration how a phenomenon is influenced by the context within which it is situated" (Baxter & Jack, 2008, p. 556). Through this study, there were three themes which evolved. Through the collection of data, including the artifacts, observations, and interviews, the themes became very apparent. Additionally, these themes provided evidence to support the fact that the Data Wise Improvement Process is still being utilized by the instructional staff within the case study school.

Findings

This chapter will focus on how the themes directly impact the results of the research questions. Specifically, data use, progress monitoring, and teacher collaboration are the three themes that highlight the findings for each research question. Through the review of the research questions "the researcher needs to be able to define the uniqueness of this phenomenon which distinguishes it from all others; possibly based on a collection of features or the sequence of events" (Harling, 2002, p. 2).

Discussion of Research Questions

After the initial training, what evidence supports that professional development led to the Data Wise Improvement Process being implemented and utilized? (question 1) The main themes within this qualitative research became apparent through the reviewing and analyzing of the collected data. The use of data was evident through the qualitative data points that were collected through this process. It was evident that teachers had data that were retrieved through results shared from summative data or tests administered within their own classes, but the structure regarding how data were reviewed, and how data were used to drive instruction was not embodied within the planning sessions prior to the start of the professional development. Now, it is clearly evident that data are driving the teachers' instruction through the use of formative assessment data. This includes the use of Measures of Academic Progress (MAP) data, data from assessments that are designed by the school district's accountability department, common assessment data resulting from assessments designed by the grade level teachers, anecdotal data collected within

the classroom, and also through the data discussions being held during the informational planning sessions.

Teacher collaboration and how the case study participants were impacted gave evidence to the implementation of this process. This was evident through the data points gathered from the participant interviews. It was shared how before the implementation of the Data Wise Improvement Process that teacher collaboration was structured succinctly different. While there were scheduled times when teachers came together to review the curriculum to determine what the next steps would be, it was evident through the collected data that after the meetings teachers returned to their classrooms and taught in isolation. Teachers focused on what they thought, individually, to be important at the time and there was no evidence of common planning.

Today it is evident that common planning is crucial as each of the grade-level teams, Grades 2-5, come together to focus on instructional lesson designs. From the case study participant interviews, it was discovered that activities are shared and discussions held to determine how to approach the topics embedded within the assigned curriculum. Additionally strategies which have proven effective from past experiences are also discussed. Through the collection of data from the analyzed lesson plans, it is evident that lesson plans are designed by the entire team and implemented once teachers return to their classrooms.

Progress monitoring was also a theme which originated from the data. Prior to the professional development, progress monitoring primarily focused on assigned homework as well as various forms of assessments administered in the classroom. Based

on the qualitative research data, teachers' use of progress monitoring within the classroom has also evolved after the professional development. Today, in addition to the practices that were in place before, the teachers within this case study school are utilizing common assessment data, anecdotal notes, and student responses to monitor the students' progress in the curriculum lessons being taught. Through the classroom observations, the data analysis showed that instructional practices are revised based on the data collected through progress monitoring conducted by the teachers.

How structured are the conversations and what is the context of these conversations during the instructional planning sessions? (question 2) Observing the instructional planning session was an avenue to clearly see what processes are currently in place concerning how the grade level teachers design their lessons. The grade levels have specific days and times when they are to report to the instructional planning room to complete the process of designing their lessons for the upcoming week. Teachers are encouraged to bring activities they believe will prove beneficial to the topics of focus. The facilitators guide the grade levels through the process of the instructional designs providing every ample opportunity for each member of the team contribute to the discussion. It was clearly evident that the facilitators have developed strong working relationships with the teachers within this case study school and that their knowledge and expertise of the curriculum program implemented within this school assists in the instructional practices of the teachers.

Assisting the administrative team with the analysis of data, the facilitators provided instructional insight through interpreting the academic performance of the

students. Once the data are analyzed by the administrative team it is incorporated into the instructional planning sessions. Additionally, teachers utilized their common assessment data to design their FLEX groups. The FLEX groups are groups which are ability-based and help drive the reteaching activities embedded within the daily instructional time. Additionally, the data are utilized to design the common assessments that are incorporated into the instructional designs.

Progress monitoring is also included within the context of the instructional planning sessions. For one it was evident within the qualitative data analysis, the lesson plans reflected how the teachers implemented various activities to guide their understanding of the students' level of comprehension. The lesson plans reflected the implementation of conversation questions the teachers utilized to guide discussions with the students. As well, based on the data collected from the participant interviews, the teachers utilized data charts which provide a visual as to how well the students are performing. Students are able to review this data and determine how well they are doing in comparison to their classmates and the classroom as a whole. One teacher noted the motivation this practice has encouraged because students were becoming more accountable for their academic success.

The research data also showed that teacher collaboration is prevalent within the context of the instructional planning sessions. As the teachers came together as a team, they worked diligently in designing lessons that included all input contributed during the teacher team conversations. Additionally, activities that were contributed by teammates were infused into the structure of the lesson plans to be utilized within the classrooms.

Again, this finding is based upon the structure established by the facilitators as they

designed the agendas for the instructional planning sessions.

   How are the design and structure of the Data Wise Improvement Process being

used within the classroom? (question 3) The Data Wise Improvement Process, itself, is

a process not a program. Within this premise, there is not a set of instructions that

teachers must adhere to as they implement their instructional practices. However, there

are processes which embed the Data Wise Improvement Process that teachers can utilize

when working with their students, designing their instructional plan, and completing

assessment practices to determine the levels of academic success of all students involved.

   The qualitative research data collected shows the use of data in the classroom

which is part of the Data Wise Improvement Process. One focus of the structure within

the Data Wise Improvement Process is being able to dig deeper into the data to determine

the actual story being told. The data reflected that as the teachers received their data,

they were able to determine what is evident through the analysis of the data. The analysis

indicates the overall performance of the students, which students scored well, and which

students did not. As well teachers are also able to determine from the list of identified

students who did not do well, what were their areas of weakness were, which helps

determine what it is that needs to be readdressed.

   Progress monitoring is enhanced based upon the Data Wise Improvement Process.

Looking at the data allowed the teachers to utilize this information to determine the next

steps to assist students to becoming successful learners. The case study classroom

observations data show that teachers were not waiting for formative assessment data to

help identify students needing assistance. Teachers were incorporating into their instructional practice the focus of identifying checkpoints, within the lesson, to assess the level of comprehension of the students and if there was a need to readdress any context of the lesson.

Another aspect of the process which was evident in the data collected is the teacher collaboration component. This is clearly evident through the lesson plan design and the template used which guides the lessons to be implemented in the classroom. The lessons designed are ones constructed by teachers working together and incorporating data from administered common assessments which is part of the Data Wise Improvement Process.

How has the pedagogy been impacted by the professional development provided to prepare for the Data Wise Improvement Process at the school? (question 4) During the collection of the qualitative data within this study, it was apparent that, the instructional practices of the teachers were based on the primary focus of the basic steps of implementing a lesson. Specifically, the teacher would start with a review of the previous lesson introduced to address questions or concerns. Next, the focus was to proceed with an introduction of the lesson that was to be presented for the instructional period. Once the lesson was introduced, the teacher would proceed with the guided practice. Through this teacher modeling phase of the instructional presentation, teachers would walk through the steps students should complete to solve the problem, formulate their sentence structure or answer what questions posed to them based on the examples used.

Following from this step, the next step would be the independent practice of giving students the opportunity to practice their newly acquired skills. Teachers would wrap up the lesson with a review and then close the instructional lesson with a summary of the day's instructional presentation. Based upon the qualitative research data of the case study participant interview, the basic fundamentals of teacher presentations were constructed from this format. However, the data shows that the instructional practices of the teachers have expanded to address the student population within the classrooms.

This process encourages teachers to understand that in order to enhance their instructional effectiveness they must be able to address the different learning styles represented within their classrooms. Through the classroom observations and from the analysis of the submitted lesson plans, the impact of the Data Wise Improvement Process has been valuable. For one, teachers were incorporating the usage of available visual resources within their instructional practices. Technology has been a valued resource including with the use of the Smart Board or Promethean Board to help with enhancing the lesson presentations. Interactive boards were also used to provide students the opportunity to become involved with the lessons which provide for higher levels of student engagement.

The teachers also utilized various instructional strategies which include the usage of manipulatives for the kinesthetic learner. There were students who, through classroom observations, comprehended lessons more effectively when given an opportunity to incorporate manipulates with the process of solving the problem. Utilizing manipulatives to address this learning style, helped increase the comprehension level of the students.

Through the classroom observations, it was also evident of teachers utilizing other instructional strategies that assisted with the process of increasing student academic success. These strategies included the use of cooperative groups, peer tutoring, and one-on-one method, all observed during the classroom observations.

What are the perceptions of professional development training the participants received on the Data Wise Improvement Process? (question 5) The perceptions of the professional development training were revealed during the case study participant interviews. Some participants shared that they could not recall being trained on the Data Wise Improvement Process. I found this interesting especially for those case study participants who had been at the study site during the time the process was being implemented. However, what was evident was that during the classroom observations, the case study participants had been exposed to the Data Wise Improvement Process due to the evidence exhibited within their instructional practices. This included how data were being used in the classroom, how the instructional strategies were being implemented and the design of the assessment tools being utilized.

The case study participant interviews also revealed the perceptions of the participants who did recall completing the Data Wise Improvement Process professional development. Describing this concept, the process was first introduced to a team of representatives who came back and started working with their colleagues at the school. From the case study participant interviews, it was shared that the process was one where the professional development was stretched over a period of days to make sure teachers had a clear understanding of the process. What provided a great opportunity for the

implementation of this process was that the principal in place, at the time of the implementation of the professional development, was a strong supporter of the process and was part of the training.

Another aspect of the Data Wise Improvement Process that was discovered during the analysis of the qualitative data consisted of the data points from case study participants who completed the professional development at another school. Comparing the data points received, it was evident that what was the overarching support of the professional development, with fidelity was the principal. The principal, of the case study school, believed in the process, encouraged the staff to contribute its full attention during the training, and the case study principal even participated in the training as well. Supporting the principal on the administrative team in this process were the facilitators. Incorporating the Data Wise Improvement Process within the structure of the instructional planning sessions, today, is another way which continues to stress the value of the process.

<div align="center">**Summary**</div>

This section summarizes the findings of this qualitative case study. The data points collected as well as the literature review provided the guide for discovering the primary themes of this research study. Specifically the data points collected were based on the analysis of the lesson plans, interviews, classroom observations, and instructional planning observations. Resulting from the analysis of the data points were the primary themes of this qualitative study which consisted of the use of data, progress monitoring, and teacher collaboration.

Recommendations

The researcher of this qualitative case study provides the following recommendations:

1. When conducting the Data Wise Improvement Process professional development, within the school, it would be beneficial to reserve documents from the original professional development. These documents would be available for training for new staff members to the school throughout the year.

2. When completing the professional development, training notes are compiled and made available for future trainings. This would prove especially beneficial as original trainers, at the school, transition to other schools and as new staff members complete the professional development.

Future Research

As the researcher reflected upon the recommendations for future research, there are some focuses which would provide a greater insight into the data collection and analysis.

1. More than one school site should be selected for involvement in the qualitative case study. This extended process would provide the opportunity for more data to determine if the actual process was similar from one case study school to the next involved in the professional development of the Data Wise Improvement Process.

2.   Another consideration would be to include the actual trainers within the group of participants to interview. This would provide the opportunity for being able to garner the understanding of the trainers' perceptions as well as a more in-depth consideration of the process that went into the design of the professional development.

3.   Interviewing the administrative team would provide an insight into the goals that were established for the staff and their perceptions of the Data Wise Improvement Process professional development upon its completion.

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APPENDIX A

EMAIL REQUEST FOR PARTICIPANT INTERVIEW

Good morning _____:

 I hope this email finds you well. I also hope that your new year has
 started off smoothly and will continue as such for the entire year.

 As I continue with my research, I have to share how appreciative I am
 to the staff for their support. You all have shared your time and expertise with me as I
continue my studies. I am emailing today to ask for your continued support as I work to
finalize my collection of data.

 I would like to interview you. The interview would be very casual and should last from
fifteen to twenty minutes. I will transcribe the discussion and will not use any recording
devices. By chance, would you be available for an interview either _____ or
_____ of this week? I would be able to meet with you before school, after school, or
during your planning period if there is any time remaining after you meet with your team.
I will adjust my calendar according to your availability. I am just looking forward to the
 opportunity of being able to speak with you.

 I look forward to hearing from you once you have had the opportunity to review your
calendar.

 Have a great rest of the week!
 Tyrone Freeman, Jr.

 _____
 Tyrone S. Freeman, Jr.
 Doctoral Candidate
 UNC - Greensboro

APPENDIX B

TEACHER INTERVIEW QUESTIONS

TEACHER:

DATE:

1. Before the Data Wise Improvement Process professional development, explain the practice that was in place regarding the grade level planning?

2. Explain the professional development you received regarding the Data Wise Improvement Process.

3. What challenges were evident as your grade level proceeded with the implementation of the Data Wise Improvement Process?

4. As you reflect upon the Data Wise Improvement Process professional development, which aspect did you find most beneficial and why?

5. Continuing your reflection, which aspect did you find not as beneficial and why?

6. In what ways has the Data Wise Improvement Process enhanced your instructional practice?

7. In what ways has the Data Wise Improvement Process enhanced your grade level's instructional planning practices?

8. Explain how data is utilized within your instructional practice.

9. Explain how the students have benefited from the Data Wise Improvement Process.

10. Explain the different forms of student assessing which are utilized within your instructional practices.

11. Explain how members new to the staff/grade level are acclimated into the instructional practice process that has not completed the Data Wise professional development?

APPENDIX C

EMAIL REQUEST FOR CLASSROOM OBSERVATION

Good afternoon_____:

I hope your day was an enjoyable one.

I would like to take this opportunity to first, thank you, for agreeing to participate in my research study. Having the opportunity to meet with your grade level team, I was able to share with you the structure of the study as well as my commitment in making sure that I maintain the highest level of confidentiality of the identity of all participants. I would like to reiterate my commitment and I look forward to your participation.

I have started the process of collecting the data for my research and as I enter your classroom, my focus has been and will continue to be to move to an area that will allow me to collect data and not disturb your instructional environment. As shared my visit will last between 30 - 45 minutes.

As I focus on this process, I want to also thank you, in advance, for your help with the lesson plans. In focusing on the lesson plans, I will only need lesson plans that cover a two-week time frame.

Again, Thank you for your patience and assistance. You just don't know how much I do appreciate your help. Thank you also for all that you do.

Have a great rest of the week!
Tyrone Freeman, Jr.

_____
Tyrone S. Freeman, Jr.
Doctoral Candidate
UNC - Greensboro