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Exploring the Use of The Eight-Step Process in the Area of Third Grade Communication Arts

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by

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Exploring the Use of "The Eight-Step Process" in the Area of Third Grade Communication Arts

by

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Dr. Beth Kania-Gosche, Committee Member	1-22-2010 Date

Declaration of Originality

I do hereby declare and attest to the fact that this is an original study based solely upon my own scholarly work here at Lindenwood University and that I have not submitted it for any other college or university course or degree here or elsewhere.

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Abstract

The Eight-Step Process is a continuous improvement model that focuses on collaboration by disaggregating and analyzing data, developing a common instructional calendar, assessing mastery with common formative and summative assessments, building in time daily for interventions and enrichments for each student on the standards being taught, and monitoring of the process with learning logs and grade level meetings. Previous research demonstrates that this model is effective in raising student academic achievement on standardized tests in other states such as Texas and Florida. This study of four teachers in one elementary school examined their implementation of The Eight-Step Process as a model to examine student achievement growth, teachers' perceptions of their own efficacy, and teachers' perceptions regarding teaching and learning. The study found that student academic achievement growth was not statistically significant from the results of the Missouri Assessment Program tests, in comparison to the previous year. However, the study found that academic achievement growth was apparent from common teacher-created pre and post assessments and data from the online benchmarking tool, Study Island. Also, the study indicated that teachers' perceptions of efficacy, teaching, and learning positively changed because of the implementation of the model.

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Chapter One: Overview of the Study

Introduction

Educators understand the importance of utilizing research-based instructional practices and the need to improve overall student academic success. Currently, as a result of nationwide efforts for school improvement, accountability, and the need to increase student achievement, standardized test scores are becoming more important. Because of this focus, educators are beginning to utilize more data-based structures to plan for instruction in efforts to determine the most effective strategies. Research has indicated that the most important factor in student success is having a high quality, effective teacher (Marzano, Pickering, & Pollock, 2003).

With the passing of the No Child Left Behind Act of 2001, much scrutiny has been placed on standardized test scores and their tie to federal funding. All states are required to give a statewide standardized test to all students annually in the area of communication arts and mathematics from third grade through eighth grade, twice in the area of science between third grade and eighth grade, and at least once between tenth grade and twelfth grade in the areas of reading, math, and science. Based on the previous year's scores, the schools must make Adequate Yearly Progress, otherwise funding could be reduced. This puts a great deal of pressure on public schools and has made schools utilize data from the tests to create grade level and school-wide academic achievement goals. If the school fails to make Adequate Yearly Progress several years in a row, the school faces additional restrictive ramifications which include the following: extending the school day, introducing a new curriculum, replacing staff members, and requiring the state office of education, the Department of Elementary and Secondary Education, to

operate the school. Many times schools do not achieve Adequate Yearly Progress, due to the academic achievement gap that persists between subgroups.

In my role as Administrative Intern / Assistant Principal at Spoede School, I was provided the opportunity from a district initiative to begin the process of moving our school to become more focused on data driven instruction. Schools across the country are moving toward improving this initiative because best practices in education show that this is the most effective way to improve teaching and student achievement. I believed this was an opportunity to utilize the Missouri Assessment Program (MAP) score data which demonstrated obvious achievement gaps within our school, and utilize it as a tool for the third grade teachers to have a starting point in planning for the 2008-2009 school year. Additionally, I thought it would be interesting to explore the use of *The Eight-Step Process* in the areas of not only student achievement, but also teacher efficacy. This would potentially set forth the foundation of implementing the change process within the entire school with the focus on student achievement through The Eight-Step Process. This process offered many components, such as teacher collaboration, data-driven instruction, common assessments, standards-based instruction and interventions and enrichment as needed, that would allow the school's teachers to be less isolated in their classrooms while also helping students achieve. Teaching is often referred to as a profession of isolationism. No longer is this the case with The Eight-Step Process in place. The school's atmosphere shifts along with proper implementation of this model. Teachers work together as teams and assist each other with ideas and analyzing data.

Background

This study was implemented because of my district's initiative to begin a Professional Learning Community (PLC) model with each grade level. Each building administrator could decide how this would look at each grade level. In my independent research examining schools that have successfully implemented continuous improvement models, I came across The Eight-Step Process. This data-driven process is aligned with the PLC model and is more specific in its components.

I developed a new pilot intervention plan focusing on teachers analyzing data to drive instruction to assist in student and teacher learning. The new program was designed to assist in increasing student achievement and teacher learning. The Eight-Step Process was focused to assist in student academic performance in third grade Communication Arts on the MAP test. The Eight-Step Process has been shown to demonstrate a significant amount of progress in students' achievement in many schools. The implementation was modeled after a variety of schools, including Brazosport Independent School District in Houston, Texas (Cook, 2003). The Eight-Step Process was originally developed by Mary Barksdale, a teacher in the Brazosport Independent School District. She utilized this continuous improvement model in her own third grade classroom and had successful student achievement scores for years. She attributed her success as an instructor, and her students' success of high achievement to the model that had eight steps, she simple titled, *The Eight-Step Process*.

The interventions that were already in place to increase student learning at Spoede School during the time of the study included: Reading Recovery, Learning Lab (a remedial reading and math program), Vocabulary Enrichment Program that focuses on

MAP language and Larry Bell's "Power Words," homework clubs focusing on specific Communication Arts concepts, Mentor / Mentee Program for low-achieving minority students, and The Eight-Step Process pilot program implementation with third grade teachers. However, as The Eight-Step Process was more fully implemented, the teacher participants began to utilize these interventions to target specific students based on assessment data.

With the utilization of common assessment data from the third grade teacher team, new modifications were made to increase student achievement and overall effectiveness. With the utilization of the data, the teachers were able to more quickly make recommendations based on current common assessments and focus on more specific skills earlier in the year. The implementation of The Eight-Step Process was the only new program during the 2008-2009 school year.

Steps of The Eight-Step Process

1. Disaggregate and analyze student data, including test results.
2. Develop an instructional calendar in the core subjects.
3. Deliver the instructional focus, based on the calendar.
4. Assess student mastery of the standard taught by using common formative and summative assessments written by teachers.
5. Provide additional instruction for students who did not master the standard.
6. Provide enrichment for students who have mastered the standard.
7. Provide ongoing maintenance of standards taught.
8. Monitor the process by using classroom walk-throughs, learning logs, and grade level meetings.

Note. Adapted from *Doing whatever it takes to close the gap,* Richardson, J., 2004. Retrieved February 1, 2008, from NSDC website: http://www.nsdc.org/news/results/res2-04rich.cfm

For the implementation of The Eight-Step Process third grade teachers participated in utilizing data to inform teaching and learning throughout the school year.

This was a requirement of all of the teachers on the third grade team. The third grade teachers were provided with a scheduled block of common team planning time during the school day. During that scheduled planning time, I facilitated the discussion surrounding current student data and areas of focus. This involvement assisted in maintaining support and focus on the areas of improvement necessary for student achievement.

The third grade team studied Mary Barksdale's The Eight-Step Process, and used this model to discuss and analyze the MAP data from the past five years in Communication Arts. The team disaggregated the data and determined which state-provided Grade Level Expectations (GLEs) needed to have more of a focus instructionally. Teachers took ownership of this process by taking time to meet and disaggregate the data and come to a consensus with the decisions made. This was accomplished by taking the time to gather the data from our only source of common summative assessment thus far, the MAP tests. This was somewhat of a challenging journey, since teachers did not have full independent classroom autonomy of the amount of time being spent on a specific objective. Previously, teachers chose how much time was allotted to each set of objectives and standards based on their own intuition. This was the beginning of authentic team collaboration.

The third grade team started preparing for the The Eight-Step Process in June of 2008. The teachers read numerous articles and research studies about this continuous improvement model, data driven instruction, team collaboration, teacher efficacy, and stories about schools' achievement that had successfully implemented the process. Much of this information appears in the second chapter of this dissertation. The teachers and I met approximately eight times throughout the summer to review articles, MAP data,

express concerns, and plan for the year with this model. During the team training implementation, I facilitated the team's action and guided them to create an instructional calendar. In the instructional calendar, teachers included specific plans to focus their lessons to the Missouri GLEs for Communication Arts in third grade. As another component to the calendar, there were succinct, teacher-created, common assessments that the teachers created to gauge students' progress toward mastering each standard or GLE that they had determined appropriate approximately every three weeks. Through this process, teachers became more invested with common assessments because of our focus and discussion on the importance of team collaboration. Teachers had created these assessments, and thus, efficacy toward their own teaching grew because they had ownership in the common assessments, as opposed to the MAP testing.

Utilizing this procedure, the team was consistent in how teaching and learning is happening in the classroom. The team had a common instructional focus for the week based on the calendar they created. I performed regular walk through observations for the team and was able to observe the instructional processes and how they aligned with the GLE focus. Also, the team had more meaningful collaboration by having deep conversations based upon data and instructional practices.

Terms

Achievement Gap: a disparity between the academic performance between groups of students (Singleton & Linton, 2006).

Collaboration: working together toward a shared goal that includes shared responsibility and accountability (DuFour, DuFour, & Eaker, 2008).

Common Assessments: shared tools for assessing learning that teachers can analyze to

determine academic strengths and weaknesses as a team (Schmoker, 2004b).

Faithfulness: reliability.

Feedback: information and or data used to determine areas for improvement.

SMART Goals: Goals that are Strategic & Specific, Measurable, Attainable, Results-Oriented, and Timebound" (DuFour et al., 2008, pp. 159-160).

Fidelity: accuracy.

Formative Assessments: feedback that is provided in order to better inform learning and teaching (Black, Harrison, Lee, Marshall, & Wiliam, 2004).

Free and Reduced Lunch: students that qualify for free or reduced lunches, based on financial need.

Grade Level Expectations (GLEs): the state of Missouri's expectations for schools that specifically identify achievement targets for the MAP assessments, and are required under the No Child Left Behind Act (Department of Elementary and Secondary Education, 2009).

Learning Lab: a service offered at Spoede School typically for students that need additional support in either reading or math, but do not qualify for Special Education Services.

Missouri Assessment Program (MAP): the standardized state achievement test for the state of Missouri for elementary students (Department of Elementary and Secondary Education, 2009).

No Child Left Behind: a Federal Act passed in 2001 that holds schools accountable for student achievement on standardized tests scores and is tied to federal funding (Department of Elementary and Secondary Education, 2009).

Not Free and Reduced Lunch: students that did not apply for free or reduced lunches, based on financial need.

Professional Learning Communities (PLCs): a group of educators working toward a shared goal in a collaborative manner, and participating in shared decision making (DuFour et al., 2008).

Progress Monitoring: a scientifically based practice that is used to monitor academic growth of an individual student or an entire class based on predetermined learning goals. The effectiveness of instruction and intervention is also evaluated (Pijanowski, 2008).

Response to Intervention (RTI): a three-tiered approach to instruction to monitor student progress to determine educational decisions (Stiggins, Arter, Chappuis, & Chappuis, 2005).

Summative Assessments: evaluation on the accumulation of learning; assessment of learning (Garrison & Ehringhaus, n.d.).

Teacher Efficacy: the extent to which teachers believe that they have the capacity to affect student performance (Ashton, 1984, p. 28).

Walk throughs: an organized observation that requires frequent classroom visits with a focus on specific instructional practices (Schmoker, 2004b).

Research Questions

The major research questions of this study include the following:

1. Will the implementation of The Eight-Step Process increase student achievement?
2. Will the implementation of The Eight-Step Process increase teachers'

perceptions of their own efficacy?

3. Will the implementation of The Eight-Step Process change teachers' perceptions about teaching and learning?

Purpose

The purpose of this study was to identify the specific effects on various components of student achievement and teacher efficacy due to the implementation of The Eight-Step Process. This was accomplished by first addressing the specific process standards, goals, and the GLEs that third grade students were having difficulty meeting in the area of Communication Arts on the MAP test. The study evaluated the trends that have been demonstrated over the past five years based on the MAP test data. Other areas of assessment for descriptive data purposes were analyzed to provide additional perspective.

Additionally, participants of the study were interviewed and surveyed on their perceptions on teaching and learning. This was done to highlight the importance of having efficacious teachers in the classroom and the benefits that students have academically because of this. A highly qualified teacher is more than just credentials. It is my belief that if teachers have a high level of efficacy in instruction, it will relate positively to the students' level of academic achievement.

All schools are constantly looking for additional strategies to improve instruction and learning. I believe that the utilization of a continuous improvement model focused on instruction and achievement, such as The Eight-Step Process will improve both. Other educators could read this study and determine if implementing The Eight-Step Process in their school should be considered.

Hypotheses

For the purposes of this study, the first hypothesis is: Following implementation of The Eight-Step Process, there will be a significant difference in MAP scores for third grade students in the area of Communication Arts. The null hypothesis is: Following implementation of The Eight-Step Process, there will be no significant difference in MAP scores for third grade students in the area of Communication Arts.

For the purposes of this study, the second hypothesis is: Following implementation of The Eight-Step Process, there will be a significant difference in teachers' perceptions of efficacy. The null hypothesis is: Following implementation of The Eight-Step Process, there will be no significant difference in teachers' perceptions of efficacy.

For the purposes of this study, the third hypothesis is: Following implementation of The Eight-Step Process, there will be a significant difference in teachers' perceptions of teaching and learning. The null hypothesis is: Following implementation of The Eight-Step Process, there will be no significant difference in teachers' perceptions of teaching and learning.

Significance of the Study

Much of the literature about improving student achievement in relationship to The Eight-Step Process is from other states than Missouri. Additionally, very little literature analyzed how The Eight-Step Process related to teacher efficacy. Conceptually, this process was considered a type of Professional Learning Community (PLC), with a skeletal structure that was designed to be straightforward in format and implementation.

I developed an implementation of this process for the third grade teachers to improve student and teacher learning. I hoped that improvement would be made in test scores in the areas of Communication Arts on the MAP test, specifically, the areas identified the summer prior where students performed poorest consistently. The participants and I determined from the MAP data to focus more on the following Goals / GLEs in Communication Arts: 1.6 / R3C, 1.6 / R1H, 2.2 W2E, 2.2 W2C, and 3.5 R1H (Appendix A). Generally, these areas included standards focused on discovering and evaluating relationships, revising communications, and inductive and reductive reasoning in the area of reading and writing.

In the fall of 2009, I gathered the data from the team and discussed the benefits of The Eight-Step Process. After the participants and I received the MAP test scores for the 2008-2009 school year, we compared the results in Communication Arts with five previous years. This process was adapted with some modifications from Mary Barksdale's original model.

This study allowed for an additional approaches and strategies to be utilized in a consistent manner by the third grade team in the area of Communication Arts. The area of Communication Arts was selected as a focus because the scores had not been as high as desired in years past. Also, since reading and writing are main components in other additional subject areas, the thought was if improvement was made in Communication Arts, improvements in other subject areas would inevitably follow. Effectiveness of this model was measured in several ways to determine increases in student achievement in Communication Arts. Additionally, through collaboration and sharing of effective

strategies, personal reflection, and topic discussions, teacher learning was measured through this process as well.

The author developed this study to determine the benefits for third grade students and teachers if they were to continue with this process in other subject areas. Positive outcomes have provided opportunities for the fourth grade level at Spoede School to follow the process. With positive outcomes demonstrated, the possibility of other schools in the district, and in the state could follow suit.

Limitations of Study

The Ladue School District is comprised of four elementary schools, one middle school, and on high school. The district serves approximately 3,700 students and serves all or part of ten communities. Spoede School is where the study was conducted. Spoede School served approximately 447 students during the time of the study. Spoede had four third grade classrooms during the 2008-2009 school year (Department of Elementary and Secondary Education, 2009). The third grade team, the participants in the study, had some similarities in teaching experience. One participant was a novice, first-year teacher. Two other participants were in their second year of teaching experience. The fourth participant was in her ninth year of teaching experience.

Some of the limitations of this study include generalizability. There were only four participants who participated in the study. The study was conducted at only one school. It would have been beneficial to have a wider variety of participants. Additional time would have been beneficial to allow teachers to master their skills and the approach.

The survey instrument designed by the primary researcher was not standardized and was conducted online through SureyMonkey.com. Responses were rated on a Likert

Scale system, and participants were not required to add comments to clarify responses. In future study, it would be beneficial to have a comment required for each response to provide pertinent information for a more accurate analysis of their perceptions.

To provide anonymity to the participants, I did not conduct the interviews, although I did write the questions. This was done to ensure that the participants were honest in their feedback and would not feel pressured because the primary researcher was also their evaluator. Because of this, I did not have the ability to probe interviewees more accurately and specifically in their responses. The interviewer was limited because of limited involvement in the study. Additionally, one question was left off of the primary researcher's analysis due to the participants' interpretation. It was not clearly stated, and since the primary researcher was not able to paraphrase or reword the question intended, it was not included in analysis of perceptions because it was deemed invalid.

In order to fully determine success of the implementation of The Eight-Step Process, future research should include multiple years and multiple grade levels utilizing the model. Also, it would be beneficial to have multiple schools with varying demographics to participate to determine the effectiveness comparatively.

Finally, Bernhardt (2009) claimed that in order for schools to truly see significant increases in student achievement, school-wide data must be used. This puts the focus on school-wide change, not just one specific area. This includes looking beyond summative scores, and looking at school-wide processes.

Conclusion

During the second year of The Eight-Step Process, fourth grade teachers were invited to participate in the "Eight-Step Process," and to the third grade team included

mathematics as an additional academic content area in their instructional calendar. An additional benefit of this process of improving student learning and teacher efficacy could also assist in closing the achievement gap. This required a convergence of strategies and an unparalleled level of energy and focus from all involved. In addition to the previous interventions that were in place, the momentum and data could push Spoede toward a school-wide approach to the process.

Chapter Two: Review of the Literature

Introduction

This review of literature explores The Eight-Step Process and related school improvement models that focus on collaboration, data-driven assessment, and instruction. The research will provide a comprehensive examination of the most recent literature regarding the achievement gap and effective strategies to narrow the gap. The literature review aims to support or negate the effects of The Eight-Step Process as an intervention in the area of Communication Arts in third grade. The literature review provides the foundation for the rationale and purpose of this study. This study provides the perspective of utilization of The Eight-Step Process in a high-performing school district and focuses on raising student achievement for all students, not just a particular group of students. This study utilizes the MAP test as one measurement for student achievement with The Eight-Step Process, which has not been done previously. Also, this study examines teachers' perceptions regarding efficacy, and teaching and learning with the implementation of The Eight-Step Process, with the focus on third grade Communication Arts.

Achievement Gap

Unfortunately, it is a fact that, academically, students from various groups achieve much differently. For some schools, this gap in achievement between groups of students can be a socio-economic gap, racial gap, gender gap, or any other type can be identified. Typically, when this term is used it is referring to either the racial achievement gap between students of color (Black or Hispanic) and White students, or between students

who are on the free / reduced lunch program and those that are not. Educators must think critically about race and student achievement when analyzing data and be willing to have difficult conversations about how to overcome the challenges that often come with the two (Singleton & Linton, 2006).

In Schmoker's (2001) research, he determined that despite whatever demographic disadvantages are present, some schools improve significantly and quickly. In addition to this finding, he determined that many low performing schools across the country were noticing increases in student achievement on their standardized test exams. The commonality between the schools is effective implementation of Professional Learning Communities assisted in narrowing the achievement gap.

In order to address the achievement gap, effective, consistent, and proven strategies need to be put in place that help all students succeed. Such strategies are Professional Learning Communities and The Eight-Step Instructional Process. Both have shown considerable and admirable results in improving student academic achievement, regardless of racial barriers or socio-economic inequities (Chin, 2006). It is important that this school imitate these results because the students' academic achievement results from the MAP tests are not making significant year to year progress, as determined by building and district administration.

Professional Learning Communities

The education research community agree that "the right kind of continuous, structured teacher collaboration improves the quality of teaching and pays big, often immediate, dividends in student learning and professional morale in virtually any setting" (Schmoker, 2004b, p. 48). Professional Learning Communities focuses on essential

learning skills, common assessments, analysis of current level of achievement, setting goals to meet those levels, and sharing instructional strategies to make that happen, all through collaboration.

Rick DuFour is the expert in the area of Professional Learning Communities (PLCs). In Lincolnshire, Illinois, as principal he transformed his school by urging his teachers to utilize this method in their instruction (Schmoker, 2004a). Through collaboration, dedication, and initiative to have more students succeed, the school and his name became famous. DuFour later became the superintendent of the same school district. His leadership is admired and well respected in the education community.

In order to properly implement PLCs in a school, teachers must come to a consensus on what they believe students need to know from the curriculum. By doing this, they need to make sure the skills are taught and learned, or "guaranteed and viable curriculum," (Schmoker, 1999, p. 96). Teachers determine the absolutely necessary learning that must happen at the grade level or subject area. They decide to focus their goals on those specific areas for the semester or school year (Schmoker, 1999).

Additionally, teachers or teams develop common formative assessments that are designed around the goals they have set. Then, the teams implement the frequent, common formative assessments to continuously monitor student progress. These teams examine formal and informal assessment data to determine instructional decisions on each child. An example of a formal common formative assessment could be a standards-based quiz. An example of an informal common formative assessment could be exit slips that the teachers give students to complete at the end of the class period assessing a specific concept.

System-wide supports and interventions must be in place to monitor each student's progress. This includes examples such as additional reading support from a specialist, after school academic clubs, differentiated instruction and groupings based on formative assessments, etc. Students who do not meet success standards will need to be identified early on in the process, and have interventions put into place during the school day to meet success in such areas. Killion stated, "continuous monitoring and reflection allow those involved in any innovation to know with a fair degree of certainty where they are along the path toward the goal" (as cited in Crow, 2008, p. 58).

Successful students will also need to be identified and be provided with additional opportunities during the school day to further their learning in the specific content or skills they have mastered. Enrichment activities could be offered for any student who meets the learning expectations set by the teacher. This is important that this is an expectation, not an exception that happens in the classroom. In many classrooms, teachers differentiate instruction on a regular basis but very little is based on formative data. When there is data available to base decisions on enrichment opportunities for students, it should be clear, consistent, and logical. Teachers also need a time to meet, analyze, and discuss this data.

Scheduling teachers a common time to meet and collaborate can be challenging. Also, teachers need to be trained on what true collaboration is and "buy-in" to the concept. DuFour described true collaboration as "teachers focused on a common curriculum, developing common assessments aligned to that curriculum, and then analyzing common assessment data to make instructional changes," (as cited in Graham, 2007, para 10). Typically, the best way to provide teachers with collaboration time is to

do it during the regular school day. Schools can be as creative as they would like to make this happen. Some schools developed early release or late start days to provide teachers with time. Others were able to schedule a common planning period for teams. Another option is to provide teachers with teacher assistants to cover their classrooms for the team collaboration time.

Teams need to develop norms for their meeting times, identify roles and responsibilities as essential first steps in the process. For example, a grade level team may decide their meeting norms to be (a) come prepared to meetings; (b) start on time, end on time; (c) focus on strategies to improve student learning; (d) spend our time attending to the pre-determined goals of each meeting; (e) be open to new ideas and support each other's efforts; and (f) contribute equally to the workload. Also, a team member needs to track each meeting with a log or notes to keep the school leaders informed of the their progress.

Teachers are notoriously great at "co-'blab'-or-ating" versus "collaborating," or "co-laboring" (DuFour et al., 2008, p. 183). It is easy to have long side-conversations about field trips, volunteers, and typical day-to-day school happenings. The ideal collaboration is that on instruction practices and student achievement matters. With the logs, teams can self-monitor to ensure they are utilizing their time effectively.

As DuFour et al. (2008, p. 159-160) indicated, each school should set their own Specific, Measurable, Attainable, Realistic, and Timely (SMART) goals, and then within that, each team should set their own SMART goal to help achieve the school-wide one. This keeps each team and the school focused on results. For example, one SMART goal may be "80% of third-grade Free and Reduced Lunch Students will score in the

Proficient / Advanced range on the 2009 MAP in the area of Communication Arts."

While rewarding, this PLC process produces many challenges to the staff. It requires teachers to make a conscious shift of moving away from isolation to true collaboration to meet the needs of students. When this collaboration happens, teachers understand that the focus is on student learning and meeting their needs. This process can help build a sense of collective efficacy in effectively helping students be successful.

Teachers in the Raymore-Peculiar R-2 School District, or Ray-Pec, began working toward being a PLC district during 2003-2004 school year. The district, consisting of 11 schools, began shifting its teaching and leadership philosophy toward those of a PLC, due to low MAP scores. Ray-Pec, located just outside of Kansas City, Missouri, was accredited with distinction during the past years even while the district's free-and-reduced lunch rates doubled over the past five years. The Ray-Pec administrators attribute much of its success to the PLC model implementation (Raymore Peculiar Middle School, 2009). While the Ray-Pec School District shares similar student demographic populations with race, it has twice the population of Free and Reduced Lunch students than the Ladue School District which is the subject of this study.

Often, teachers in schools are already meeting at a common time to work on school activities, develop school improvement plans discuss discipline and management issues, and participate in curriculum writing committees. This style of planning and meeting often covers several topics and the focus changes from week to week. Typically, the focus of these meetings is not on improved teaching and learning. Ultimately, the purpose of a professional learning team is to develop stronger teachers that have improved practice, which in turn will benefit student learning and success.

Traditionally, schools have been institutes of isolation for teachers. The expectation of teacher collaboration is different from the current norms of the profession. In the past, teachers have not worked together to try to improve instruction, student learning, and share data. Rarely, have teachers been part of teams that meet formally and on a regular asks to have the main focus be on improved instruction and learning.

In another example of successful implementation, Chowan Middle School in Tyner, N.C., in 2000, the school decided to focus on school wide reading. This decision was made due to low reading scores on their assessments. At the beginning, many teachers did not understand the value in this. The school hired a consultant from SERVE Center at the University of Carolina at Greensboro. The purpose of the consultant was to implement the professional learning teams and help all teachers in the school be better-equipped teachers of reading (Jolly, 2003). Some pros of having a consultant available to help the teachers would be that they could model and provide expert feedback on the intended process. This immediate feedback could assist in a more efficient change. A probable con to having an outside consultant come in could be a lack of trust or relationship that the teachers have with the professional. At Spoede School, where the study was conducted, there was not the opportunity of having a consultant to guide the process.

The school provided common planning time for teachers. One day each week was designated as the professional learning time for the one-hour block. During this time, all teachers studied research-based practices in reading and developed lessons and approaches they could pilot in their classrooms. Teachers shared what they were already doing in class to help students in the area of reading. They decided as a group which new

strategies they could implement to help the students. After this, they would reflect on the student responses to the new interventions. They would meet and revise instruction and monitor students learning by sharing data (Jolly, 2003).

The teams were required to keep logs to document what they were discussing in their meetings. These logs were shared with the entire staff. The teams also kept journals of their experiences with the process. Students began showing gains in reading achievement on the North Carolina End-of-Grade test during the first year of implementing the PLC model (Jolly, 2003).

During the second year, teams began to develop better sense of trust with their colleagues and began seeing the importance of continual learning. Collaborating, reflective practice, and being data driven with a focus on student achievement improvement became part of Chowan Middle School's culture (Jolly, 2003). This is what I hoped to accomplish at Spoede School as a result of this study.

The teachers were provided tools to use to reflect upon throughout the year during the professional learning team process. One tool included the following cycle:

- use data to identify student needs
- examine studies and research
- engage in rigorous reflection
- use research and professional wisdom to make good choices
- collaboratively experiment with new teaching practices
- monitor and assess implementation
- communicate information to other stakeholders

The model was meant to reinforce the importance of continually revisiting, reflecting, and revising (Jolly, 2003).

Also included was a meeting overview checklist. This list provided ideas for activities that the professional learning team could engage in over the course of the year. The checklist included the importance of keeping logs of the team meetings and the decisions made for each meeting. It provided a plan for the initial meetings, including team logistics, team norms, and a team goal (Jolly, 2003).

The last tool that was provided was an activity that could be done with the staff to examine the appropriate use of professional learning teams. In this activity, a list of 25 activities was provided that could be appropriate or inappropriate for teams to participate in during the professional learning time. For example, some items on the list might include field trips, unit tests, essential objectives, exit slips, MAP results, classroom parties, behavior plans, etc. This would allow teachers to discuss the suggestion and ensure that the meetings focused on teacher professional learning consistently (Jolly, 2003).

In school districts across the country, much focus has been placed on data and the management of that data. Districts are spending a large amount of money toward data management systems for teachers to access information and generate reports (Jolly, 2003). However, little efforts have been put toward providing teachers the time they need to engage in conversations with their colleagues about that data. Teachers need to be provided with time to have meaningful conversations on a regular basis, and a format to follow to most efficiently utilize that amount of time.

Harrison and Bryan (2008) developed a framework for schools to follow for the type of data dialogue, the data used, who is involved, possibilities of conversation topics, and the frequency of which the conversations occur. This framework provides school leaders with a basis and a reminder of what needs to be discussed within the school year and which data should be used. There are several types of data conversations that are important including: school improvement team conversations, teacher-supervisor or coach conversation, department/grade-level conversation focused on the individual student, department/grade-level conversation around instructional strategies, and individual student goal-setting conversations. Each one of the aforementioned types of conversation is extremely valuable to student achievement and instructional improvement. Effective data conversations have many common characteristics including several under DuFour et al.'s (2008) model: create SMART goals, monitor students' progress directly by participants, agree that the data being used is a good measure, use of various types of common assessments, have a facilitator to stay focused, and take written notes of the team meetings.

In a school improvement team conversation, the purpose is to monitor a plan for continuous improvement by analyzing school trends based on data. Teachers could utilize formative and summative assessments, state tests, disaggregate the data by subgroups, or even survey to learn perceptions of the faculty. This helps the whole school understand how the school is functioning. By having these types of conversations, it identifies goals to be set and drives conversation about best practices that should be used school-wide as an expectation. This also lets teams know where they need to make some adjustments with instruction (Harrison & Bryan, 2008).

Since the supervisor is involved in the process, meaningful, quality conversations can be held that lead to teacher reflection toward growth and help to identify potential weaknesses. In a teacher-supervisor conversation, which can take place either at the meeting time, or at a separate time, conversations can be evaluative or non-evaluative. The purpose is really to identify a classroom's trends in achievement based on data. The same data as stated earlier could be used for discussion. The growth model is utilized here and not "current proficiency" (Harrison & Bryan, 2008).

In individual student goal-setting conversations, the purpose is to inform students where they are currently performing academically and develop a goal with the student to make achievement gains. These conversations should be conducted at the beginning of the school year and after specific units of learning. This is a powerful type of conversation because it gives the students ownership for their learning and the focus is on making successful gains and celebrating those gains. Data walls are often used to help the student visualize how much success they have made on an on-going basis. Data walls are bulletin boards or walls in the teachers' lounge where teachers post specific data. This way, data can be tracked and monitored in relationship to school SMART goals (Harrison & Bryan, 2008).

However, without proper structures in place for what types of conversations are necessary for student growth, many times the data can be presented with little ever happening beyond that point. Specific frameworks for conversations, with examples of topic possibilities and types of data to be used, are necessary for this to be successful. This is a helpful framework for schools to have that are utilizing data and implementing Professional Learning Communities. Often times, teachers have data, discuss the results,

but fail to take action with the data. The Eight-Step Process is an example of this action framework.

History of The Eight-Step Process

The Eight-Step Process began in 1991, when Gerald Anderson became the new superintendent in Brazosport Independent School District, in Texas. Approximately, 50% of the student population was not making progress on state achievement tests (Cook, 2003). The achievement gap between Hispanic and African-American students and Whites was alarmingly poor.

Mary Barksdale, a third grade teacher in the Brazosport Independent School District, created The Eight-Step Process for managing curriculum and instruction. The superintendent at the time, Gerald Anderson, noticed Barksdale's consistency with high state test scores and inquired about her instructional strategies. Barksdale described her methodology, The Eight-Step Process to Anderson. Anderson believed that the instructional practices were practical and were well structured. In 1991, Anderson decided to implement the process school-wide at Valesco Elementary, where Barksdale taught, in efforts to increase student achievement. Anderson stated, "This is about letting student achievement data drive your decision making, instead of the system telling you what to do" (Cook, 2003, p. 25).

In Brazosport, during the 1991-92 school year, more than 50% of the schools in the district were classified as low performing. During the 1997-1998 school year, all 18 schools achieved "recognized" or "exemplary" status from the state using results from the Texas state achievement test. For example, At Valesco Elementary, in the Brazosport Independent School District, there is an 89 % minority population with 88 % eligibility

for free and reduced-price lunch. However, more than 90 % of the students there are achieving at or above grade level (Berkey, 2008).

In only seven years, the Brazosport Independent School District successfully "eliminated the achievement gap between racial groups and between affluent and disadvantaged students in its schools" (Chin, 2006). Since Brazosport's success, many schools across the country have taken steps to adopt The Eight-Step Process initiative to assist in improving academic student achievement and increase teacher efficacy. At least 15 other school districts in Texas have adopted a similar type of model for closing the achievement gap. With the establishment of No Child Left Behind, Brazosport has been a role model district for closing the gap and increasing overall student achievement. Brazosport district staff has trained over 100 Texas districts in implementing the process. These trained districts have reported increased results in student achievement (Anderson, 2000, p. 43). Across the nation, other states, such as Florida, Idaho, California, and Ohio have already begun implementing similar models in their districts, based on The Eight-Step Process. School districts are examining the implementation process that successful districts have used and are trying to imitate it (Cook, 2003).

However, although it is a model, it is necessary for the teachers to believe in the philosophy of the model. Enthusiasm is crucial for teachers to work in a continuous improvement manner. In the researcher's experience, the amount of enthusiasm teachers have in an idea or a movement, determines the level of success (Cook, 2003).

In Texas, Brownsville Independent School District has made great success in increasing student achievement and closing the achievement gap. In 2008, Brownsville Independent School District won the Broad Prize for Urban Education, a prize worth $1

million. The money provided high school students that demonstrated academic success and financial need college scholarships (Khadaroo, 2008).

With the commitment to excellent instruction and with the philosophy in place that all students are capable of learning, districts can turn around their academic achievement growth. In reference to ELL students, Raul Gonzalez, director of legislative affairs National Council of La Raza, said, "over the past four of five years we've made more progress than we did over the past two decades" (Khadaroo, 2008, para. 11). From the perspective of an administrator, The Eight-Step Process is an ideal model for schools to implement. There is an abundant source of literature supporting this approach to raise student achievement, which is why it was chosen for Spoede School.

Formative and Summative Assessments

The use of formative and summative assessments is integral in gathering information about student learning. Assessment encompasses many forms, from accountability required with state tests and No Child Left Behind, district benchmark tests, classroom quizzes and tests. Testing is assessment and that assessment is information for the teacher to determine where the student is in the learning process. The assessment should guide instruction and assist in where gaps are in achievement.

There should be a balanced assessment system in classrooms. Formative and summative assessments are both important types of data gathering for the teacher (Garrison & Ehringhaus, n.d.). Summative assessments are given to determine what a student knows or does not know. Typically, these are state tests, district tests, end of unit tests, semester exams, and are often associated with the grading process.

Summative assessments are common tools used to assess schools' goals for improvement and determine the effectiveness of particular programs. Typically, summative assessments are given after the learning has taken place in the classroom, and it is too late to adjust teaching strategies during the process. For example, a teacher gives a unit on characterization, tests the students at the end of the unit, assigns each student a score from the assessment, and continues to the next unit. This type of practice allows no time for interventions nor enrichments to be put in place during the learning to allow each student opportunities to learn at the appropriate pace and level.

Formative assessment is "any assessment for which the first priority in its design and practice is to serve the purpose of promoting students' learning" (Black, et al., 2004, p. 10). Formative assessments directly align with the instructional process. Formative assessments provide the information needed to adjust the instruction while the learning is happening in the classroom. This provides the opportunities for the instructor to monitor and adjust teaching to best determine students' needs of the students in their learning process and provide appropriate instruction. Typically, formative assessments are not recorded for grading purposes. The assessments are analyzed and used more for "practice" to assist the teacher in determining the next steps to take to ensure the student meets the goals set with the learning objectives. Students should be involved in the formative assessment process. The students should play an integral part in assessing their own learning and participate in peer teaching. Research shows that involvement and ownership of their own work increases students' motivation to learn (Garrison & Ehringhaus, n.d., para 8).

There are numerous strategies that students can use to most effectively engage themselves in the assessment of their own learning. In Marzano's research, it was determined that providing descriptive feedback is the most significant strategy to increase student learning (Marzano, et al., 2003). This provides students with information regarding what areas in which they are doing well, and provides the next step in classroom learning. Marzano's research also shows "that such limited feedback as 'Good Job!' does not lead to improved student learning" (Garrison & Ehringhaus, n.d., para. 9).

Criteria and goal setting is an effective strategy to formatively assess. This engages students with their own learning process and helps develop expectations of what is desired by the teacher. This informs students to their current level of understanding and what is necessary to get to their end goal. Sharing previous examples of exemplary student work of the teacher expectation often does this. Informal observations and collection of anecdotal records is another way to gather evidence of student learning to monitor instruction. This information should be shared with students during conferences and goal setting times.

Questioning strategies should be part of the teachers planning. This allows for more high-level thinking to happen with the students and provides teachers with more information as to where students are in the learning process. This not only acts as a way to determine student learning, but also provides opportunities to expand their learning. Many times, teachers use "exit slips" at the end of a class to gather this quick data. Teachers also use "thumbs up / down" or "red/green" cards to collect immediate information about student learning (Garrison & Ehringhaus, n.d.).

Self and peer assessment are part of building a more positive classroom culture of learners. If students are part of goal setting, then they should be part of self-evaluation as well. Students should view their peers as resources and help with checking for quality of work against the criteria established by the teacher. For example, in class a student has set a goal with the teacher to learn five of the ten items being studied within one week. This was determined after the student took a formative assessment on the ten items. The student knew that all ten items would have to be learned by the end of the two week unit. The student is working with another peer who has mastered the items. The student that demonstrated mastery could share some helpful strategies with the other student to better understand (Garrison & Ehringhaus, n.d.).

Student record keeping assists the students in understanding their own learning by viewing their progress on an ongoing basis. This engages students, and helps them understand and monitor their continuous progress that they are making toward their goal. This strategy is more beneficial to the student than a "grade." With this strategy, they are determining if they have met their own goal and reviewing the learning progress (Garrison & Ehringhaus, n.d.).

Formative assessment cannot be separated from good, effective teaching. Formative assessment needs to be shared with students to engage them in more learning. In order for formative assessments to be effective, teachers must use the assessment and take it to the next level by adjusting the instructional practices. Students need to be active in their learning and teachers need to be reflective on the formative assessment given for learning to determine strategies to meet goals (Stiggins, et al., 2005).

Since monitoring of student learning is a key component in this process, one of the first tasks that schools and districts face with attempting such drastic change is aligning the curriculum. As part of this alignment, common formative tests will be an essential tool for teachers to look at instruction. This does not mean creating formative tests that mimic the state tests. It means developing the essential skills and learning objectives and working back from the assessment (Stiggins, et al., 2005).

When looking at the standards that are implicit, this provides the teacher with more decision-making and designs teaching around more defined skills to be addressed. In order to have sustainable change in academic achievement, this places an emphasis on going deeper within the content of each standard (Herman & Baker, 2005). When appropriately designed and analyzed, these tests can provide very helpful information to teachers to determine where subgroups of students are at any given time. These assessments will only fulfill this promise if teachers monitor them carefully and adjust instruction to continually improve the overall learning quality taking place in the classroom.

Linking formative assessment to scaffolding is basically Vygotsky's zone of proximal development model. When properly linked, the formative assessment drives the scaffolding instruction to produce appropriate learning. When teachers provide scaffolding to students based on data, they are more likely to get authentic student achievement improvement. In 1989, D. Royce Sadler determined that in order for an assessment to be "formative" it must (a) come to hold a concept of quality roughly similar to that of the teacher, (b) be able to compare the current level of performance with the standard, (c) be able to take action to close the gap (Shepard, 2005, p. 2).

Sadler believed that students should be part of this process in order to learn the skills of self-monitoring their own learning to foster intrinsic motivation.

"In classrooms that use assessment to support learning, teachers continually adapt instruction to meet student needs" (Leahy, Lyon, Thompson, & Wiliam, 2005, p. 19). There is significant large amount of research that indicates formative assessments increases student learning. When assessment is used to support learning, teachers allow the data to drive the instruction, allowing each child's needs to be met. Black and Wiliam (1998) found that students that had opportunities to be with a teacher that used formative assessment as an instructional practice learned in approximately six or seven months, instead of a year (Black, et al., 2004).

Often, low achievement is attributed to students having an unclear understanding of teacher expectations (Black & Wiliam, 1998). In utilizing formative assessment for learning, this is demystified and the student and teacher know what areas need improvement before they are given a grade on their learning. With this approach, more time will be spent by teachers designing common assessments, collaborating about teaching, and analyzing students' formative assessments, however, they will know on a regular basis where there students are in their understanding of the concepts being taught. This will provide teachers to tier instruction more regularly and differentiate more effectively to allow all students more opportunities to succeed.

McTighe and O'Connor (2005, p. 10), described seven specific assessment practices that enhance teaching and learning:

•Practice 1: Use summative assessments to frame meaningful performance goals

•Practice 2: Show criteria and models in advance

- Practice 3: Assess before teaching
- Practice 4: Offer appropriate choices
- Practice 5: Provide feedback early and often
- Practice 6: Encourage self-assessment and goal setting
- Practice 7: Allow new evidence of achievement to replace old evidence

"The best teachers recognize the importance of ongoing assessments as the means to achieve maximum performance" (p. 13).

The use of formative assessments have become more of the learning process and guidance for educators as opposed to the actual assessment for students' grades. Educators are learning that engaging in this process leads to greater student achievement. Students are not actually held accountable for their amount of learning with this process; moreover, they are guided to grow academically from where they are in their level of understanding to the next level. In Black and Wiliam's (1998) research, it was determined that using formative assessment raised student achievement.

Formative assessments are used to provide the teacher with information in the decision-making process for student learning. The teacher can take this data derived from the formative assessments to tailor instruction to each individual student to optimize student achievement more appropriately. This approach ties in perfectly with Vygotsky's Zone of Proximal Development. Each student is met with the learning at their level and challenged to proceed to the next level in an appropriate, strategic manner. Additionally, teachers are provided with the necessary information to determine if additional interventions need to be put in place to support student learning through formative assessments. This process not only helps the teacher determine where the students' are,

but also assists the students in their learning by meeting their needs at the appropriate levels. This assessment for learning should provide "information that teachers and their students can use in assessing themselves and one another and in modifying the teaching and learning activities in which they are engaged," (Black et al., 2004, p. 10).

Formative assessments typically focus on standards and that helps teachers determine which specific standards students are not meeting. This individualizes and enhances student instruction to best meet their needs. These assessments typically do not focus on "mastery" and "non-mastery" of each standard, rather a focus on a continuum spectrum of learning in their learning.

Typically, the formative assessments are given frequently and provide students with the opportunity to focus on areas, which need growth immediately, and ample support to make growth. This type of assessment also assists the teacher with classroom practices and provides the opportunities to self-evaluate instructional methodology. When properly implemented, students can easily begin to self-reflect on their learning as modeled by their teacher. Davies (2000) believed it is clear that "involving students in assessment causes assessment to become instruction" (p. 43). Since this approach focuses on high quality achievement, students inevitably increase their learning. According to the Review of Educational Research, when students are provided with feedback about their learning and engage in self-assessment, their achievement gains are profound, especially in lower achieving students (Tschannen-Moran, Hoy, & Hoy, 1998).

Formative assessment directly impacts effective instruction, which produces higher student achievement. Additionally, the practice of formative assessment places the responsibility of learning back onto the child. This aids in the process of helping

them see the importance of becoming life-long learners. By providing students with specific goals for their learning, each child is continuously met and challenged at their level. This process aligns their needs to their goals. By implementing this process, teachers instill in students the learning process and the importance of self-sufficiency (Stiggins & Chappuis, 2008).

Effective Schools / Instructional Strategies Linked to Closing the Achievement Gap

"True brain-compatible education should be an ongoing and flexible process of trying to find the most natural and enjoyable approaches to teaching/learning based on an increased understanding of the brain/mind," (Protheroe, 2002, p. 25). There are many important factors in teaching students effectively. Over the past few years, researchers have begun to focus their attention on "brain-based learning." Key findings in the way humans have created new ways for instructors to present ideas and concepts to students. New studies draw attention to the fact that the brain searches for meaning as well as patterns. Human brains are also complex systems, and so researchers have suggested immersing students into complex thinking opportunities.

These experiences allow for students to maximize their various intelligences and it also promotes self-directed learning as well. Learning is also an emotional and social activity. Strong feelings can be associated with certain ideas and with experiences shared with other people. Research shows that effective learners are able to critique what they have learned on an individual basis. Several studies have concurred that early learning is imperative because extensive brain growth takes place in the first years of life (2002).

Through recent cognitive research findings, many educational practices have been discovered and implemented. Some educational examples suggested to enhance student

learning are a thematic, integrated curriculum, cooperative learning, block scheduling and the learning cycle approach. Studies also included teaching higher-order thinking skills, which parallel the inductive model of teaching, to be an essential attribute that enhances brain-based learning (2002). There are several ways educators can apply the research and implement the theories. Teachers were encouraged to create a classroom that allowed students to take risks and enticed students to explore with plenty of hands-on learning opportunities. Instructors were asked to each life skills, including several intelligences in lessons and incorporate portfolios in assessment measures.

It is well known that everyone learns differently, but do educators teach children to use the right learning strategies? There is a way teachers can allow each student to become a more successful and independent learner, with just a few steps. These steps include getting students to know themselves, teaching content first, and reciprocal teaching within the school (Schon, 2002).

An important factor is for the students to really know themselves. The teacher's role is to help the students develop the ability to plan and evaluate their own learning processes. "Each teacher need to ask himself: 'What can I do at each step to teach my students how to facilitate their own learning?'" (p. 26). Another important factor in helping students become more effective learners is to ask them what strategy they were using when they were unable to be successful at a particular learning task. Then, help the students apply a different strategy that may be more beneficial to their own style of learning.

It is important to continually review data and have meaningful discussions about the findings. The Bay Area School Reform Collaborative conducted a study examining

the effectiveness of utilizing data (Oberman & Symonds, 2005; Reeves, 2008). The study determined that schools that review and analyze data several times per month were more successful in narrowing the academic achievement gap than schools that reviewed data several times throughout the year.

Additionally, when teachers plan out the year based on data and essential learning skills, they then work backward using the desired outcomes. Teachers should be clear with students what they are learning, share the desired outcomes and expectations, and how the activities tie in and relate to those outcomes. Students should be able to explain what they are learning and see the connectivity of the activities to how it is part of the goal. (Wiggins & McTighe, 1998).

Making progress toward narrowing the achievement gap in American public schools is every educator's responsibility. The proper use of data can greatly increase a school's chance of closing the achievement gap. When educators work collaboratively and focus on student learning, analyze data and construct their reasoning as to what needs to be done instructionally to ensure academic success through effective dialogue, learning becomes more rigorous and better outcomes are yielded (Zuman, 2006).

Collaboration

Overall, the focus that schools share across the country has been a shift toward being data-rich. However, all of the data will be meaningless and useless if it is just to be in compliance with regulations such as No Child Left Behind.

In order for school improvement to happen, the school team has to have the moral purpose that looking at the data and learning from it to give each child what is needed in order to make the most academic success. The staff must have a strong understanding of

how to use data and collaborate effectively, as well as having the moral commitment to improving student learning for all students.

In many schools where the data is simply "used," ineffective and questionably unethical practices have been put into place. One school decided to mandate that all African-American students to be in a lunchtime tutorial session, regardless if they failed the test or not. This was the strategy to take action to the data from the standardized tests results (Confrey & Makar, 2005). Obviously, this is not the best way to use data.

Data should be used to improve teaching and learning. In order for this to happen some values need to be established or shared with the school members. There are six basic values that need to be in place for the best results to happen in student learning (Love, Stiles, Mundry, & DiRanna, 2008). These values should be utilized as a catalyst for discussing with colleagues about the importance of data-driven instruction.

> Making significant progress in improving student learning and closing achievement gaps is a moral responsibility and a real possibility in a relatively short amount of time – two to five years. It is not children's poverty or race or ethnic background that stands in the way of achievement. It is school practices and policies and the beliefs that underlie them that pose the biggest obstacles. (2008, p. 11)

I think this is an important place to start. Often times, schools utilize data so ineffectively, and put practices into place without giving them the proper amount of time to determine if they are indeed effective. In this study, only one year is being examined with the use of The Eight-Step Process. In order to better determine success, multiple years of data will need to be analyzed with the model in place.

Love et al. (2008) stated, “Data have no meaning. Meaning is imposed through interpretation. Effective data users become aware of and critically examine their frames of reference and assumptions” (p. 11). Educators need to make sure that their assumptions do not drive beliefs about student learning in the data. If the belief exists that certain groups have a less capabilities than other groups academically, the data will confirm an achievement gap and reinforce those assumptions. If members are open to examine their own personal assumptions and beliefs, data can be used to changing frames of reference and creating new ones. “Collaborative inquiry unleashes the resourcefulness and creativity to continuously improve instruction and student learning” (Love et al., 2008, p. 12). “Every member of a collaborative school community can act as a leader, dramatically impacting the quality of relationships, the school culture, and student learning” (Love et al., 2008, p. 14). This falls into place with the shared or balanced leadership philosophy. All staff members need to act as leaders, utilize each other’s strengths, and use data in a manner continually improves instruction and learning. Through effective collaboration, teachers have the opportunities to share expertise and learn from one another. This, with the use of data, allows teachers to share and utilize strategies that are working to attain higher student learning, allowing more teachers to become more effective in their practice.

“A school culture characterized by collective responsibility for student learning, commitment to equity, and trust is the foundation for collaborative inquiry” (Love et al., 2008, p. 12). Not only does this assumption apply to doing what is morally ‘right’ in education, but also, the ability to respond: “response-ability” (Wellman & Lipton, 2004). Schools with “response-ability” are collaborative cultures where everyone is committed

to improving instruction and student learning. These schools do not leave learning to chance, they make it happen by providing a sense of equity that each student gets exactly what they need in order to make academic achievement.

"Using data itself does not improve teaching. Teachers need to implement sound teaching practices grounded in cultural proficiency and a thorough understanding of the subject matter and how to teach it" (Love et al., 2008, p. 13). Simply looking at data and realizing that fifth grade students perform poorly in the area of comprehension is not enough to change instructional practices or student learning. The focus then should be shifted to professional development in teaching reading comprehension strategies should be put in place while continuously monitoring the progress of student learning in this area.

There need to be some basic values and understanding as to why and how the school team is using data. These values serve to drive and facilitate effective collaboration, knowledge development, support, and equity in improving instructional practices and student learning. The ongoing dialogue enables schools to move toward meeting their goals of increasing student achievement (Pijanowski, 2008). The teachers become the school's instructional leaders through the data driven experiences and dialogues.

In order for schools to be successful, there are four I's of School Leadership. The fours I's are the elements of transformational leadership: "individual consideration, intellectual stimulation, inspirational motivation, and idealized influence," (Brown, 2008, p. 29). With the focus of the principal being on building leadership in teachers, the principal needs to teach, exhibit, and train teachers on the impact of intellectual

stimulation of leadership. This will allow teachers to develop a vision, be reflective, and proactive with new solutions.

Administrators need to build capacity and consensus with the staff in a shared philosophy. If other members share the same philosophy as the administrator, it should be introduced as a capacity-building activity. It is suggested that the initiative be introduced and allow critical conversation on implementation (2008). In order to have effective school improvement, it is essential that every staff member is involved in the decision-making process. In this study, every teacher in the third grade team was able to provide input and examine data to make decisions to improve student learning.

Developing a leadership team is another component that is necessary to have a shared-leadership atmosphere. This is where teachers will work together in implementing research-based practices and are purposeful in their mission. The administrator must put a focus on shared data collection, analysis, shared decision-making, and shared respect among the team. As the administrator for the third grade team, I determined from the literature that it was necessary to provide professional support, ample planning time, consistency in their scheduling for "team time," promote collaboration, be involved with the meetings regarding assessment and data, and provide feedback to each teacher on the process.

Much of this is based upon DuFour's Professional Learning Communities model. He believed that, "harnessing the power of collective intelligence that already resides in the school to solve problems," is the most effective way to increase school improvement (Brown, 2008, p. 29). He also stated that schools with this leadership team model in place "made astonishing progress with existing amounts of time and funding. They did

not wait for someone from the outside to give them a magic formula, the perfect program, or more resources" (p. 29).

Brown (2008) also suggested that principals groom teacher leaders. A team of teachers, representing each grade level and/or content area should be selected based on a leadership traits and instructional qualities. The individuals on this team should have an innate desire to serve, have a commitment to school improvement, and to be altruistic. Other teachers should nominate the individuals. This should result in a team of teachers that want to serve in school improvement process. The team in this study, represented these qualities in many ways. The team of four teachers was energetic and had a positive attitude about challenges. Also, the team members were highly involved with our school and district, from serving on language arts curriculum writing committees, math curriculum committees, the school Professional Development Committee, to the Chess Team sponsor, to name a few. These teachers demonstrated passion for student learning, and were committed to improving our school's MAP scores. They understood how they could play a role as third grade teachers to be the beginning of a change in the school culture on how instruction was done. Ideally, the Leadership Team would have opportunities to have ongoing professional development by the principal, assistant principal, instructional coaches and other experts in areas of standards-based assessment, standards-based planning and delivery. Coverage should be provided to the team members to have this development during the regular school day.

With the focus of the teacher-led leadership including the process of analyzing data, it may "require the school staff to have a central focus on data collection and data analysis," (Brown, 2008, p. 31). Obviously, a natural focus on student achievement data

would be a necessary step to increase student performance. This team of teachers would utilize the data, and begin to ask the difficult "why" questions regarding the facts. Collaboration of teachers and school leaders can reap outstanding results.

> In some of the most challenging districts in the nation, such as Brazosport, Texas, this has been done through this process. To allow this to fully develop, administrators must have an open, responsive and receptive attitude to new ideas, realizing that often the most effective strategies and suggestions come from sources within the school building. (Brown, 2009, p. 32)

Teacher Efficacy

Mahatma Gandhi said, "If I have the belief that I can do it, I shall surely acquire the capacity to do it even if I may not have it at the beginning" (Bowall, 2009). Much of students' perceptions on how well they can perform academically, has to do with their perception of their level of efficacy. When students experience success, their level of efficacy increases (Bandura, 1977). There is much literature to support how teacher efficacy is directly related to how the students will determine their own level of efficacy. If teachers can increase their level of efficacy, perhaps students' efficacy will mirror that.

The importance of teachers believing that they are effective, competent, and successful is integral to improving student achievement. Teacher efficacy was studied in 1976, where teachers had to rate themselves. Based on the studies' results, it was concluded that teacher efficacy was a main predictor of increased student achievement in schools for grades K-8 (Armour, Condry-Oseuera, Cox, McDonnel, Pascal, Pauly, & Zellman, 1976; Berman, McLaughlin, Bass, Pauly, & Zellman, 1977).

This level of efficacy is defined by teachers' beliefs about students' abilities to learn, their ability to teach them well, and the instructional methods best fit to meet the students' needs. Teachers with high efficacy believe that all students can learn and feel a sense of responsibility of making that happen. However, teachers with low efficacy tend to want to surrender to underachieving students with the belief that they are not able to learn due to low intelligence (Tschannen-Moran, Woolfolk Hoy, A., & Hoy W., 1998).

Pang and Sablan (1998) conducted a study, in an urban setting, with 175 teachers assessing their confidence in teaching Black students effectively. The results indicated that the pre-service teachers had a higher level of efficacy than those already in the teaching field. The primary researcher of this study believes that this is related to the fact that the pre-service teachers had a higher level of efficacy with Black students because of their multicultural pedagogical experiences. It was also noted that most of the White participants in the sample had very little understanding of Black students and their culture. The researchers believed that this was also a main contributor to the low levels of efficacy.

Knowing this information, if teachers are cognizant of their levels of efficacy, and proactive in growing professionally, they could change the way they instruct all students more effectively. Teachers that have higher levels of efficacy, have students that are more efficacious, rendering higher achievement scores. Also, high efficacy teachers tend to have stronger relationships with students, share responsibility and spend more time on academic learning. These positive traits perpetuate the high levels of efficacy. A positive set of factors such as school climate, professional development and social

support of colleagues and supervisors all increase the efficacy and are a strong predictor for student achievement (Alderman, 2004).

Summary

This literature review identified components discussed in the literature as important considerations to improving student achievement and teacher efficacy through continuous models that focus on collaboration, achievement gap, Professional Learning Communities, The Eight-Step Process, common assessments, and successful schools that have implemented such models. The literature presented in this study discussed the specific components that are essential to effective practices in improving student achievement and teacher efficacy through continuous improvement models.

A framework for The Eight-Step Process was implemented at Spoede School with the intent to answer the following questions:

1. Will the implementation of The Eight-Step Process increase student achievement?
2. Will the implementation of The Eight-Step Process increase teachers' perceptions of efficacy?
3. Will the implementation of The Eight-Step Process change teachers' perceptions about teaching and learning

Chapter Three: Research Methodology

Introduction

This chapter describes the methodology and procedures used in this study. The research conducted was a blend of quantitative and qualitative data. The first section describes the research design and rationale. The second section describes the participants and sample in the study. The third section explains the data collection method, survey and interview methodology. The fourth section describes the data analysis.

The third-grade team at Spoede School discussed patterns in the results and necessary changes in instruction for the students. The team collected data on pre-tests and summative post-tests to demonstrate the success of student achievement. In between, they met and discussed their formative assessment data and adjusted instruction accordingly. The results from their formative assessments determined which students needed enrichment or intervention instruction with the concept during "Team Time" each school day. The "Team Time" allowed instruction to continually progress while providing additional support to students who did not demonstrate understanding, and enrichment opportunities with students who mastered the concept, during the last thirty minutes of each day. This was simply another way to further differentiate instruction (Richardson, 2004).

Each week, the teachers attended grade level meetings with assessment reports on either the weekly MAP content area that was taught or a three-week assessment. During this time, the process began again with review of the data and developing a plan of action. During these conversations, teachers shared which strategies were working based on their data. Teachers began to use other successful teachers' strategies as a tool to gain

more student success. Powerful conversations about effective strategies emerged from these meetings as teachers who had more successful students in certain objectives were questioned about their instructional practices regarding those areas. This empowered the teachers and they began to collaborate more effectively and with a stronger sense of trust.

Instrumentation

MAP scores.

The secondary data gathered through this study were mostly from the MAP, which is a standardized test that is mandated by the state of Missouri. The scores used were in the area of Communication Arts for third Grade Spoede students. The Department of Elementary and Secondary Education categorizes students in various ways. For this study, the following categories were analyzed to determine academic growth: White (not Hispanic), Black (not Hispanic), MAP Free and Reduced Lunch, Not Free and Reduced Lunch.

Teacher survey.

The surveys were provided to all four participants in the study. The survey consisted of ten questions that focused on the implementation process, student achievement, teacher efficacy and empowerment, reflective practice regarding instruction, and commitment to continuous improvement. The design of the survey included use of the online tool SurveyMonkey.com. A copy of this survey is provided in Appendix D.

Teacher interview.

The participants were interviewed during the regular school day and were provided a substitute to allow for release from job duties. In order to collect the most honest feedback, a well-respected colleague from another school in the Ladue School District conducted the interviews. The interview questions (Appendix N) were designed by the primary researcher. The interviewer was responsible for conducting the interview with the questions that provided by the primary researcher. The interviewer also was responsible for recording the interview, transcribing, and providing pseudonyms to the teachers to ensure anonymity. The teachers were made aware of this prior to the interview, and participant confidentiality was ensured. The purpose of the interview was to gather findings on the participants' perspectives on the effectiveness of the continuous improvement model in relation to student academic achievement.

Study island.

Study Island (2009) is an online benchmarking assessment tool that is an indicator of how students will perform on the MAP tests. It provides state-specific, research-based assessments. The test is multiple choice and the students select answers with a mouse. The Study Island benchmark assessment was utilized three times throughout the year, in September, January, and April, to provide teachers with formative data aligned with Missouri's terms and GLEs. The Study Island program provides instant reports of the students' results. It provides individual reports on each student's progress, as well as whole class data. This allows teachers to verify or reassess their current understanding of where students are academically and continue to have productive, meaningful discussions about the data, instruction and learning. Usually, the results from the tests provide

additional support regarding each teacher's individual data from common formative assessments.

Research Design and Rationale

The subtype of statistical analysis conducted was a comparison study. This was done by performing a z-test for difference between means on the scale scores from the MAP examinations in the area of Communication Arts. The two samples were taken from previous MAP test scores for third graders at Spoede School in Communication Arts and the MAP scores from the spring of 2009. The previous scores are indicative of students' learning without the Eight-Step Process being implemented, and the 2009 scores were compiled following the first year implementation of the continuous improvement model in the area of Communication Arts. The goal of this study was to show by comparison of MAP scores, there is statistical data that demonstrates that the continuous improvement model contributed to the improvement in the scores.

This study was conducted over a time span of approximately one year from beginning to end. The teachers began training for implementation in the summer of 2008 by preparing for common assessments and instruction in the fall. During the 2008-2009 school year, the teachers fully implemented the continuous improvement model with the students in the area of Communication Arts. All topics in Communication Arts for the third grade year were taught prior to the MAP test in the spring of 2009. After the MAP test, the students began learning fourth grade Communication Arts skills that 4^{th} grade students typically need more time learning. For example, if fourth grade students typically performed poorly in making inferences about setting, character traits, etc., then the third grade students would begin learning this skill at the end of third grade. This

provides true year-to-year learning. In the fall of 2009, the school received the data from the MAP tests, and it was analyzed by the third grade teachers to determine if their students had improved scores in Communication Arts compared to the average five year trends determined earlier as areas of focus.

Experts suggest collecting and analyzing a variety of data when examining student achievement (Bernhardt, 2009; Love et al., 2008). Test scores are only considered a piece of the data. Formative assessments, summative assessments, demographics, surveys, walk-throughs, and perceptions are all considered powerful strategies to help schools determine best practices in achieving increased student achievement scores (Easton, 2008). This study was chosen to be mixed methods in design because the collection and analyses of information were very different from each other. In the quantitative aspect, there was a need for specific statistical data to be analyzed from MAP scores to demonstrate changes in academic achievement. In the qualitative aspect, there was a need for teachers to describe their experience with the aspects of the study. A mixed methods approach strengthens the validity of results (Knafi, Pettengili, Bevis & Kirchhoff, 1988). For these reasons, a mixed-methods study is the best way to answer the questions presented in this study. A framework for The Eight-Step Process was implemented at Spoede School with the intent to answer the following questions:

1. Will the implementation of The Eight-Step Process increase student achievement?
2. Will the implementation of The Eight-Step Process increase teachers' perceptions of efficacy?

3. Will the implementation of The Eight-Step Process change teachers' perceptions about teaching and learning?

Participants and Sample

The research study was conducted at Spoede School in the Ladue School District in Missouri, specifically with all four sections of third grade students, which is a sample of approximately 75 students. The four teachers were also participants in the study, as they were the individuals that implemented the process directly with their students instruction. Third grade teachers were selected for this study because it was the first year for their students to take part in the MAP assessment.

The school principal, Dr. Connie Brawley provided a letter of consent for the primary researcher to conduct the study at Spoede School (Appendix B). The third grade team of teachers then received a letter of participation that can be found in Appendix C. As participants in the study, the teachers provided consent for their data collected to be used in the research. Their data will be utilized in the analysis of the study. This data will be in the form of semi-structured interviews, surveys, classroom common assessments, Study Island data results, and MAP scores. While participation in the continuous improvement model was a required part of the grade level's contribution to the district focus of PLCs, the data generated in the study was described as confidential for analysis in this study.

Background of School Demographics

In 2003-04, 17.1% of Spoede students identified as Black. This percentage increased to 20.4% five years later as the percentage of White students decreased from

74.1% to 62%. At the same time, the percentage of students receiving free / reduced lunch remained about the same from 13.4% to 10.3%, only decreasing by one student. Another significant growth in a subgroup was students of Asian decent going from 6.9% to 13.9%. As diversity grew in the school population, the total population went from 363 to 447 students.

Table 1

Spoede School Student Demographics Changes From 2004-2009

Student Enrollment	**2003-2004**	**%**	**2008-2009**	**%**
Total	363		447	
Asian	25	6.9%	62	13.9%
Black	62	17.1%	91	20.4%
Hispanic	5	1.4%	14	3.1%
Indian	2	0.6%	3	.7%
White	269	74.1%	277	62%
Free / Reduced Lunch	49	13.4%	48	10.3%
Not Free / Reduced Lunch	313	86.6%	399	89.7%

(Department of Elementary and Secondary Education, 2009)

Due to the school's growing population and diversity, gathering data from subgroups is an important way to look at student growth to determine which groups are being successful academically. The demographics shown in Table 1 indicate the growing changes in diversity in the past five years.

Spoede School is in the Ladue School District in the suburbs of St. Louis, Missouri. The district has approximately 3,800 students that are enrolled in either one of the four elementary schools, middle school, or high school. The district is comprised of all or part of ten self-governed communities within St. Louis County, Missouri. This mainly residential area encompasses 19 square miles with a population of more than 27,000 residents (Chappelow, 2009**).**

The participants in the study, four third grade teachers are a heterogeneous group consisting of three female teachers and one male teacher. Of the participants, the male teacher was a first year teacher, one female teacher was in her third year of teaching, another female teacher had two years of experience, and the last female teacher had ten years of experience. Three of the four participants were completing coursework for their master's degrees during the time of the study. One participant attained a degree to be certified as an English Language Learner (ELL) teacher during the study, another in technology and special education, and the third teacher was working toward her master's degree in literacy. Three of the teachers had a Missouri Initial Professional Certificate and the fourth teacher held a Missouri Professional Certificate for grades one through six.

The third Grade teachers were selected to be participants in the study for several reasons. Initially, they were chosen to participate because third grade is the first year for students to take the MAP examination. Potentially, if the results from the study were beneficial after the end of the year, the model would continue at third grade and expand into the subject area of Mathematics for the 2009-2010 school year. Finally, the third grade team dynamics were strong. The participants in the team were energetic and demonstrated a high level of initiative.

Confidentiality

While the researcher had access to specific achievement data, no identifiable information of students was included in the study. All achievement data was typically aggregated by class and grade level, never with any personally identifiable information such as name or student number. The general public is allowed access to grade level achievement data from the MAP scores. Several pieces of data collected as part of the

study are considered public information within the confines of the school for achievement assessments. All documents and data gathered from the participants in this study, and their students, were treated with confidentiality and in an anonymous manner. For the interviews, teachers' comments were also kept confidential, as I was only given the transcripts of the interviews with no identifying names or information included.

Hypotheses

For the purposes of this study, the first hypothesis is: Following implementation of The Eight-Step Process, there will be a significant difference in MAP scores for third grade students in the area of Communication Arts. The null hypothesis is: Following implementation of The Eight-Step Process, there will be no significant difference in MAP scores for third grade students in the area of Communication Arts.

For the purposes of this study, the second hypothesis is: Following implementation of The Eight-Step Process, there will be a significant difference in teachers' perceptions of efficacy. The null hypothesis is: Following implementation of The Eight-Step Process, there will be no significant difference in teachers' perceptions of efficacy.

For the purposes of this study, the third hypothesis is: Following implementation of The Eight-Step Process, there will be a significant difference in teachers' perceptions of teaching and learning. The null hypothesis is: Following implementation of The Eight-Step Process, there will be no significant difference in teachers' perceptions of teaching and learning.

Validity of the Data Collection

To ensure faithfulness and fidelity in the implementation of this program for this study, I was in the classroom at least three days of the week observing Communication Arts being taught. This includes the 30-minute "teaming time" at the end of the day. Additionally, the teachers met on an on-going basis throughout the week to discuss lessons, assessments, etc., in this area. In order to facilitate additional collaboration and to provide support as needed, the team and I met once a month. During this time, the teachers had coverage provided by a teacher assistant. This provided on-going discussions and collaboration among team members and allowed time to specifically analyze data and charts that teachers were gathering on common assessments. It was determined through these meetings that the teachers were seeing overall student success in Communication Arts in comparison to previous years. They attributed this to the continuous improvement model, since the classroom characteristics were similar to that of those the previous years in the categories of identified gifted, students with special needs, and demographics.

In order to better align each school curricula, Missouri has explicated its goals and standards to be the GLEs. This created somewhat of a challenge in analyzing the data as precisely as desired because the standards and GLEs have different coding. Due to Missouri's Department of Elementary and Secondary Education's restructure, the data was analyzed and organized by the participants and myself and will be referred to as "goals" and "GLEs." For example, prior to 2006, Goal 2, Standard 2, which had the description of "review and revise communications to improve accuracy and clarity," (Appendix E) corresponds to Goal 2.2 with multiple GLEs within that to be more specific

with the objective (Appendix F). The participants and I analyzed the data by determining strengths and weaknesses and organized the individual goals and GLEs by similarities. The data for the years 2003-2006 were compared to data from 2007-2008.

The data for the years of 2003-2005 lists the goal, the standard, the total number of items per standard tested, the number of total items within the standard that received an overall average at or below 75%, and a description of the standard. For the years of 2006-2008, the data lists the goal, the GLE, the total items within the standard that received an overall average at or below 75%, and a description of the standard (see Appendices E-I). In analyzing the data, it was determined that the overall performance for the areas that were consistently higher than 75% be viewed as successful. The areas demonstrate that the teaching and learning being done is effective for student achievement on the MAP test. However, the data was more closely analyzed for the overall performance for the areas where the average scores were below 75%.

Overall, the data indicates that in the years 2003-2005, 44% of the items in the Communication Arts section scored below 75%, whereas 56% of the items scored above 75% (see Appendix J). In the alignment to GLEs for the years 2006-2007, 38% of the items scored below 75%, whereas 62% scored above 75% (see Appendix K). The GLEs with scores below 75% include 1.5, 1.6, 2.2, 3.1, 3.5, 1.6 R2C, 1.6 R3C, 1.6 R1E, 2.2 W2B, and 3.5 R3C (see Appendices L-M). The GLEs where the overall average scores were below 75% will be the focus of improvement to develop future skills to promote increase in the achievement on the MAP tests. The participants and I chose five priority areas to focus on more deliberately by determining the ones with scores lower than 75% with the highest number of items on the test. These areas included: using details from

text, discovering and evaluating relationships, revising communications in writing (spelling), revising communications (punctuation), reasoning logically (post reading skills). This provided the team with a focused improvement plan with annual goals that could assist in increasing student achievement. Schmoker (2003) believed this is the best way to prevent teachers from being overwhelmed by data and enables the team to establish ownership of the process, and directly apply it to their students.

Quantitative Data Collection Methods

In Bickford's study (2004), where the MAP Results were compared to students in an eMINTS program, similar methodology was used as in this study. The MAP tests change yearly, which presents new variables each year. Since this is the standardized assessment that Missouri uses to provide feedback to each school to determine academic improvement, it is the best tool to use to gather information regarding student success across years and to compare to the state level. Utilizing MAP test scores as an indicator for student achievement is appropriate.

Researchers across the state of Missouri rely on the validity and reliability of the MAP scores. The MAP is a professionally developed, standardized test. Research has been conducted to illustrate the reliability and validity of the MAP test as a tool to effectively measure student learning (CTB / McGraw Hill, 2007). Most of the general, secondary data is available to the general public. MAP test scores are often looked at as reliable data not only because the assessment is standardized, but it also tied directly to financial ramifications for our public schools.

The Study Island (2009) data was also used in this study since it is an indicator for how students will perform on the MAP test and is aligned to the same standards. In this

study, the purpose of looking at this data was to measure academic student achievement growth over the year, not to compare it to MAP results. This allowed teachers to verify or reassess their current understanding of where students are academically and provided an additional resource that categorized students' learning in the following terms: Below Basic, Basic, Proficient, and Advanced.

Qualitative Data Collection Methods

Surveys and semi-structured interviews were used to collect qualitative, descriptive data for this study from the participants. Surveys and interviews allowed participants' insights, experiences, and perceptions to be valuable components in the study. Since two of the three research questions in the study were about teachers' perceptions, this type of data collection was necessary. While the first research question regarding student achievement was mostly analyzed in a quantitative approach, aspects of teachers' perceptions regarding student achievement changes were included with the triangulation of data collected.

Surveys are often used as a major instrument for data collection in research. The use of surveys allows the researcher to gather the thoughts and beliefs of the participants in a structured manner. The design of the survey matched to the goals and main components that the researcher was most interested in analyzing. The purpose of surveys is to describe the characteristics of the participants. In this study, the purpose of the survey was to collect the participants' perceptions regarding student achievement, teacher efficacy, and teaching and learning. The survey in this study was developed by the primary researcher. The questions in the survey and interview were focused on the following areas:

1. Will the implementation of The Eight-Step Process increase student achievement?
2. Will the implementation of The Eight-Step Process increase teachers' perceptions of efficacy?
3. Will the implementation of The Eight-Step Process change teachers' perceptions about teaching and learning?

The online web service, SurveyMonkey.com was used to create the survey. This online service allowed the researcher to gather the results while ensuring anonymity to the participants in the study. Some benefits of conducting online surveys are: the data is collected and organized for the researcher electronically, assistance with data-collection time, anonymity, and ease of standardization of responses. One limitation that was found in this study was the opportunity for follow-up questions is not an option with most online surveys. While the survey had a comment box after each question, none were utilized.

Teachers were interviewed in the fall of 2009 on their perception of the overall effectiveness of The Eight-Step Process related to student achievement and teacher efficacy. In order to protect the teachers' anonymity, a respected colleague in the same school district conducted the interviews with the teachers at school during the regular school day. The interviewer was responsible for conducting, recording, transcribing and providing pseudonyms for the participants. The interviewer conducted semi-structured interviews from the list of interview questions (Appendix N) as a guide. The interviewer modified the questions based on the responses from the participants at her discretion.

A floating substitute teacher provided the participants coverage during the school day. This was to ensure that ample time was allotted for them to express clearly their perspectives during the interview process. The participants were provided more than one week's notice of the interview time and procedures, so they could plan accordingly.

Information from the interviews was transcribed and analyzed for insights to determine the overall success of the study. Additionally, it was determined if participants had received sufficient training and support from administration to fully and effectively implement the new model by identifying patterns in the responses to the questions regarding efficacy relating to the model and training. The interview also attained information regarding participant perception of the fidelity of implementation. All of the aforementioned components will assist in future planning of implementation within additional areas of instruction for third and other grade levels.

The standardized MAP test scores will be addressed statistically to determine if there was a significant difference in Communication Art scores from the spring of 2009 in comparison the previous five years for third grade students at Spoede School. The scores were analyzed in the same manner as previously done, by examining the areas where the highest percentages of items were under the score of 75%. Then, the scores from 2009 were compared against those scores of the previous five years.

Background of the Researcher

In this study, I was in a supervisory role of the participants. This allowed me to know and understand the participants and utilize the relationships previously built to act as positive influence on building trust in the implementation and collaboration piece of the study. While I had relationships with the participants, much consideration and

explanation was provided to the participants on how the data would be used and protective practices put in place to provide anonymity of participants, especially with the surveys and interviews.

I have had over ten years of classroom teaching experience and was in my first year in an administrative role. As a classroom teacher, my last three years were spent in a team-taught multi-age kindergarten and first grade classroom. Due to the unique variety of academic levels in a multi-age classroom, I became familiar with developing assessments to accommodate my instructional practices to keep each child progressing at the appropriate rate.

As a teacher, I always had a passion for gaining a better understanding of the academic achievement gap. I became involved in many activities to better understand a larger concept to the systemic problem that affects students of various socio-economic groups. The more understanding and learning I attained, the more inspired I became to make a difference in systemic educational changes. I began to see outside of my own four classroom walls to what was taking place in the education world. These reasons encouraged me to bring my passion to a new level and pursue attaining an administrative position so that I could have opportunities to lead change.

Fortunately, the Ladue School District places value in sending its staff to high-quality professional development opportunities. The district allowed me to attend numerous workshops in the area in which I had developed professional goals that were related to Professional Learning Communities. In my teacher role, I was a participant in the National Staff Development Council workshops in 2007 in Dallas, Texas. I focused on attending specific workshops related to the academic achievement gap, common

assessments, and the utilization of data from assessments to drive instruction, collaboration, team building, and curriculum design. In my new administrator role, I attended the National Staff Development Council workshops in 2008 in Washington, D.C., again focusing more deeply in the areas of Professional Learning Communities. This time, I was able to bring additional experiences to relate to the information. In 2008, I also attended DuFour's workshop on PLCs in St. Louis, Missouri.

I began investigating effective practices that were attributed to narrowing and closing the academic achievement gap. I came across numerous articles and citations related to The Eight-Step Process. At the administrative level, I began utilizing his passion for eliminating the achievement gap and data-driven instruction by working with the third grade team and developing ideas on how to move toward the PLC philosophy by implementing The Eight-Step Process, which was the beginning of this research.

Chapter Four: Results

Introduction

The purpose of this comparative study was to examine the continuous improvement model called The Eight-Step Process and the specific effects on various components of student and teacher learning specifically, student achievement, teacher efficacy, and teachers' perceptions of the impact of the continuous improvement model. This chapter details the data collected from MAP scores, Department of Elementary and Secondary Education subgroup information, common formative assessments, Study Island scores, interviews, and surveys. The research questions that guided this dissertation were as follows:

1. Will the implementation of The Eight-Step Process increase student achievement?
2. Will the implementation of The Eight-Step Process increase teachers' perceptions of efficacy?
3. Will the implementation of The Eight-Step Process change teachers' perceptions about teaching and learning?

Quantitative Data

Data gathered through this study included scores from the MAP, which is a standardized test that is mandated by the state of Missouri. The scores used were in the area of Communication Arts for third Grade Spoede students. The Department of Education of Secondary and Elementary categorizes students in various ways. For this study, the following categories were analyzed to determine academic growth: White (not

Hispanic), Black (not Hispanic), MAP Free and Reduced Lunch, Not Free and Reduced Lunch.

Additional secondary data gathered in this study were from the Department of Elementary and Secondary Education website and school records. This data is typically used by schools to determine goal setting, identify areas of weaknesses, analyze subgroups' performances, and to assess overall student achievement. From the subgroups mentioned previously, four of them are used comparatively in the study: Black (not Hispanic), White (not Hispanic), Map Free and Reduced Lunch, and Not Free and Reduced Lunch, as well as the total group of third grade students.

From the previous five years of MAP data for third grade Communication Arts that the team of teachers analyzed in the summer of 2008, the participants determined which GLEs to consider as high priorities, while still allowing the data from their common assessments continue to drive the instruction. The participants determined that the Goals and GLEs with a higher number of items below 75% per Goal / GLE would be ranked appropriately as needing more attention.

As shown in Table 2, five process standards were identified by the team to focus upon for growth. The process standards were: 1.6 R3C (using details from text), 1.6 R1H (discovering and evaluating relationships), 2.2 W2E (revising communications in writing in relationship to spelling), 2.2 W2C (revising communications in relationship to punctuation), and 3.5 R1H (reasoning logically in relationship to post reading skills).

Table 2

Top 5 Areas for Improvement Based on 2008 MAP Data

Goal	GLE	Total Number of Items	Number of Items Below 75%
1.5	R2C	8	2 (25%)
1.5	R1H	1	1 (100%)
*1.6	R3C	5	3 (60%)
1.6	R1E	3	1 (33%)
1.6	R2C	5	2 (40%)
*1.6	R1H	3	3 (100%)
*2.2	W2E	3	2 (66%)
*2.2	W2C	3	3 (100%)
2.2	W2D	4	1 (25%)
2.2	W1A	3	2 (66%)
2.2	W2B	2	2 (100%)
*3.5	R1H	8	3 (38%)

Table 3

Areas of Improvement Chart from 2008 With 2009 MAP Data

Goal	GLE	Total Number of Items	Number of Items Below 75%
1.5	R2C	6	3 (50%)
1.5	R1H	1	1 (100%)
*1.6	R3C	2	1 (50%)
1.6	R1E	1	1 (100%)
1.6	R2C	7	3 (43%)
*1.6	R1H	1	1 (100%)
*2.2	W2E	3	2 (66%)
*2.2	W2C	3	1 (33%)
2.2	W2D	5	2 (40%)
2.2	W1A	3	2 (66%)
2.2	W2B	0	0 (0%)
*3.5	R1H	8	4 (50%)

As indicated in Table 3, four out of the five process standards that the third-grade team focused on during the 2008-2009 year as significant areas that needed improvement, increased or remained the same from the previous year. Two process standards, 1.6 R3C

and 2.2 W2C increased in achievement. In 2009, the students' average increased ten percent for the process standard 1.6 R3C compared to 2008. For process standard 2.2 W2C, the students' average showed more than a 66% increase from 2008 to 2009. Two standards, 1.6 R1H and 2.2 W2E, actually remained the same percentage average, showing neither and increase nor decrease in scores.

Hypotheses

For the purposes of this study, the first hypothesis is: Following implementation of The Eight-Step Process, there will be a significant difference in MAP scores for third grade students in the area of Communication Arts. The null hypothesis is: Following implementation of The Eight-Step Process, there will be no significant difference in MAP scores for third grade students in the area of Communication Arts.

For the purposes of this study, the second hypothesis is: Following implementation of The Eight-Step Process, there will be a significant difference in teachers' perceptions of efficacy. The null hypothesis is: Following implementation of The Eight-Step Process, there will be no significant difference in teachers' perceptions of efficacy.

For the purposes of this study, the third hypothesis is: Following implementation of The Eight-Step Process, there will be a significant difference in teachers' perceptions of teaching and learning. The null hypothesis is: Following implementation of The Eight-Step Process, there will be no significant difference in teachers' perceptions of teaching and learning.

Statistical Tests Performed

Z-test for two sample means.

The statistical test performed was a z-test for the difference between two sample means. The z-test was performed on the mean scale scores from the MAP examinations in the area of Communication Arts. The two samples were gathered from previous 2008 MAP test scores for third graders at Spoede School in Communication Arts and the MAP scores from the spring of 2009. The previous scores are indicative of students' learning without The Eight-Step Process being implemented, and the 2009 scores were compiled following the first year implementation of the continuous improvement model in the area of Communication Arts. The goal of this study was to show by comparing MAP scores, that there is statistical data that demonstrates that following the implementation of the continuous improvement model, statistical increase in achievement was measured.

The data was gathered from the MAP scores and the primary researcher developed a random sample from a list of the 2008 and 2009 third grade Communication Arts Mean Scale Scores for each student in the population (Appendices O-P). There were approximately 75 students in the population for both 2008 and 2009. In order to obtain a sample that was representative of the population, a simple random sample was determined to be the most effective. A random sample was collected for 40 students for each year. Then, a statistical z-test was conducted for the study using a 95% Confidence Level comparing the mean scale scores from the two samples.

The descriptive statistics shown in Table 4, indicate the specific data used in this z-Test. As Table 6 shows, the researcher did not reject the null hypothesis in each

category. The fact that the Probability value of .455 is greater than the Alpha value of .05, provides additional support for not rejecting the null hypothesis.

Table 4

Descriptive Statistics for Two Sample Means

2008		**2009**	
Mean	654.525	Mean	648.35
Median	658.5	Median	655
Mode	681	Mode	627
Standard Deviation	42.98359109	Standard Deviation	29.79808116
Sample Variance	1847.589103	Sample Variance	887.925641
Range	237	Range	119
Minimum	496	Minimum	571
Maximum	733	Maximum	690
Sum	26181	Sum	25934
Count	40	Count	40

Table 5

Z-Test: For Two Sample Means

	Variable 1	**Variable 2**
Mean	654.525	648.35
Known Variance	1847	887
Observations	40	40
Hypothesized Mean Difference	0	
z	0.746909017	
P(Z<=z) two-tail	0.455118483	
z Critical two-tail	1.959963985	

Z-test for proportions.

A z-test for proportions was conducted to determine if there was a significant difference between the percentages on the number of items below 75% success from 2008 MAP Data and 2009 MAP data. This information was considered important to this study since it was the strands the third grade team, the participants, had determined to be the most important areas to focus upon in Communication Arts.

The hypothesis is that there will be a difference in proportions in each category from the 2008 MAP data compared to the 2009 MAP data. The null hypothesis is that there will be no difference in proportions in each category from the 2008 MAP data compared to the 2009 MAP data.

The previous scores from 2008 are indicative of students' learning without the Eight-Step Process being implemented, and the 2009 scores were compiled following the first year implementation of the continuous improvement model in the area of Communication Arts. The goal of this study was to show by comparing MAP scores that there is statistical data to demonstrate that following implementation of the continuous improvement model, academic improvement was measured. A Confidence Interval of 95% was used in this analysis set. An analysis was conducted on three of the twelve strands identified as areas of improvement (Appendix Q). The three strands, 1.6 / R3C, 1.6 / R1H, and 2.2 / W2C, were statistically analyzed because the primary researcher observed that there was improvement in the scores.

The researcher did not reject the null hypothesis for the first test on 1.6 / R3C. On this z-test for proportions when compared from the 2008 to the 2009 MAP data specific category strand, the z-test value was .24. This value was less than the Critical Value of

1.96 hence, the null hypothesis was not rejected. This means the hypothesis of having a significant difference for the specific targeted area was not supported.

The second test was conducted on 1.6 / R2C. The z-test value was .10 and was less than the Critical Value of 1.96. Hence, the researcher did not reject the null hypothesis. There was not a statistically significant improvement in the scores.

The third test was conducted on 2.2 / W2C. The z-test value was 1.76 and was less than the Critical Value of 1.96. Hence, the null hypothesis was not rejected. There was not a statistically significant improvement in the scores.

Qualitative Data

The qualitative information gathered through this study's interviewing and surveying process was organized into meaningful units of analysis. Common, interrelated themes provided a better understanding of how the participants in the study viewed the continuous improvement model in relation to student achievement, teacher efficacy, and teachers' perceptions of teaching and learning. These themes included:

1. Attitude
2. Collaboration
3. Data Driven Instruction
4. Consistency

Survey Results

The surveys were provided to all four participants in the study. With such a small participant pool, 100% participation was important. The survey consisted of ten questions that focused on the implementation process, student achievement, teacher

efficacy and empowerment, reflective practice regarding instruction, and commitment to continuous improvement. The design of the survey was through the online tool SurveyMonkey.com to provide participants anonymity. Each question required the participants to answer either (a) Strongly Disagree, (b) Disagree, (c) Agree, or (d) Strongly Agree. For each question, a comment box was available for the participant to add comments if desired. The participants did not make additional comments on the responses. In Table 6, only the most pertinent survey results are shown. The complete results of the survey are in Appendix R.

Table 6

The Eight-Step Process Survey Results

Question	Strongly Disagree	Disagree	Agree	Strongly Agree
1. An appropriate amount of support has been provided throughout the implementation process.	0%	0%	100%	0%
2. This model ties directly to our school-wide improvement ideals in increasing student achievement.	0%	0%	75%	25%
3. The Eight-Step Process has made me a better problem-solver.	0%	0%	75%	25%
4. I have enhanced my decision-making and become more confident in making instructional decisions.	0%	0%	50%	50%
5. This model promotes teacher reflection and self-assessment.	0%	0%	50%	50%
6. The Eight-Step Process instills a commitment to continuous improvement.	0%	0%	25%	75%
7. Teaching and learning are the foremost concerns in my classroom and this process is aligned with that belief.	0%	25%	50%	25%
8. The model has had a direct, positive impact on student achievement.	0%	25%	75%	0%
9. I am empowered by utilizing this process in my teaching practice.	0%	50%	25%	25%

It was unanimous among the participants that sufficient amount of support was provided to implement The Eight-Step Process successfully. The majority of participants strongly agreed that The Eight-Step Process aligned to Spoede School's goals to increase student achievement. The majority of the participants agreed that they became more

effective problem-solvers because of the new process. All of the participants agreed or strongly agreed that their decision-making and confidence had been enhanced over the year. All of the participants in the study agreed or strongly agreed that The Eight-Step Instructional Process promoted teacher reflection and self-assessment.

All of the participants agreed or strongly agreed that the process instilled a belief in continuous improvement. The majority of participants agreed or strongly agreed that The Eight-Step Process focused on teaching and learning in the classroom. The majority of participants agreed that The Eight-Step Process impacted student achievement in a positive manner. The participants were split equally in agreeing or not that they were more empowered in their teaching based on the model.

The results of the survey indicate that the participants believe that they were provided with ample support to implement the process. The participants are in agreement that The Eight-Step Process is aligned with the belief and focus of student achievement. They attribute being better problem-solvers and more confident in instructional decision-making to their experience with the process. All of the participants in the study agreed or strongly agreed that The Eight-Step Process promoted teacher reflection and self-assessment. The majority of participants agreed or strongly agreed that The Eight-Step Instructional Process focused on teaching and learning in the classroom and it had a direct impact on student achievement.

Interview Results

The participants were interviewed during the regular school day and were provided a substitute for the amount of time of the interview. If one of the participants did not like The Eight-Step Process, it may have provided the individual with discomfort

expressing honest views to me, since I advocated the process. In order to collect the most honest feedback, a well-respected colleague from another school in the Ladue School District conducted the interviews. The interviewer was responsible for conducting the interview with the questions that I provided. The interviewer also was responsible for recording the interview, transcribing, and providing pseudonyms to the teachers to ensure anonymity. The teachers were made aware of this prior to the interview and participant confidentiality was ensured.

The purpose of the interview was to gather findings on the participants' perspectives on the effectiveness of the continuous improvement model in relation to student academic achievement. Additionally, feedback was gathered on teacher efficacy, and team collective efficacy. Participants also were asked to determine which components of the process they believed to be most effective and beneficial. Areas of the process where improvement was needed were also gathered.

The responses from the interviews will be quoted, summarized and condensed when referred to throughout this section. The interview responses may be viewed in full text (Appendices S-V). The information gathered through this study's interviewing process was organized by categorizing the questions into conceptual categories.

1. Student Achievement
2. Efficacy
3. Most Beneficial Components
4. Areas of Improvement Needed

To provide a better understanding of how the participants perceived The Eight-Step Process, the interviewer developed four common themes in relation to the four

concepts. From the four concepts presented in the interview questions, the researcher determined four common themes found from analyzing the results of the interviews. From the responses, the common themes found throughout each four concepts were

1. Attitude
2. Collaboration
3. Data-Driven Assessment
4. Consistency

Student achievement.

There were several interview questions that I determined to be included in the concept of "Student Achievement." The following questions were categorized as such:

2. How do you think you perception of teacher self-efficacy influences your students' achievement?
4. How directly do you believe that students' motivation is related to students' achievement?
6. With The Eight-Step Process, how effective was it in relation to overall student achievement throughout the year?

The participants unanimously expressed that variables such as teacher's attitude, positivity, or general attitude determine how students achieve, and to what degree they will achieve. This study found that among the participants at Spoede School, the common theme to how teacher efficacy affects teaching behaviors is that a positive attitude from the teacher provides students with motivation to learn.

Participant A stated the following:

> If I think I can have a positive impact on my students, I will be more motivated to pursue something. If I don't think I can have a positive impact, I won't be motivated to do something or to try it. When I am excited about the learning and when I show enthusiasm that spills over to my students, the students take on that enthusiasm.

Other participants believed commonly that a positive attitude and feelings about a belief will affect the students in their motivation and level of engagement in learning and being more successful. The belief that students' motivation and achievement are directly related is a philosophy that Participant B communicated during the interview. For example, the participant made a connection of the data graphs being collected on the students to real life for the class when teaching about data collection in math class when learning about data collection and graphing. This connection was a way for the participant to motivate the class to connect their learning to real-world experiences.

Participant C expressed that the importance of teacher efficacy is directly related to student achievement in how the teacher believes in the students' abilities. "It is essential that I believe in them. They can tell that. Then, they have more of a drive to be successful," Participant C stated in the interview.

Efficacy.

There were several interview questions that I determined to be included in the concept of "Efficacy." The following questions were categorized as such:

1. How does your perception of teacher self-efficacy affect your teaching behaviors?

2. How do you think your perception of teacher self-efficacy influences your students'
7. How do you feel your instructional practices changes last year due to the implementation of The Eight-Step Process?
8. Do you believe you are better informed in your lesson planning and students' understanding because of The Eight-Step Process?

The participants unanimously expressed that variables such as collaboration, teacher's attitude, positivity, or general attitude determine how students achieve, and to what degree they will achieve. This study found that among the participants at Spoede School, the common themes to how teacher efficacy affects teaching behaviors is collaboration and a positive attitude.

Participant A responded that students will mimic the level of efficacy that is seen from the teacher.

> I'm a firm believer that if I am excited the kids are excited. My passion comes out in everything I do, so if the kids see that, they will react the same way. I think having a positive attitude about everything you do will impact the students in a positive light.

The respondent continued to express this belief by citing examples of how the use of reasoning with compassion versus anger, the students were more willing to try.

The participants unanimously expressed that variables such as collaboration, teacher's attitude, positivity, or general attitude determine how students achieve, and to what degree they will achieve. This study found that among the participants at Spoede School, the common themes to how teacher efficacy affects teaching behaviors is

collaboration and a positive attitude. "While my instructional practices were more thought out last year, I was trying to keep my ahead above water," Participant A stated.

Most beneficial components.

While all of the questions, to some degree, could have been determined to be included in the concept of "Most Beneficial Components," the following question was specifically categorized as such:

3. With The Eight-Step Process, what three components have most likely affected the way you approach your classroom instruction?

The participants consistently expressed three themes to be the most beneficial components in relation to The Eight-Step Process and how they approach classroom instruction. They determined that collaboration, use of assessments to drive instruction, and consistency to be most important components in the process.

The participants confirmed the importance of collaboration in most effectively teaching students. "Collaboration with my team has had the largest influence. It has allowed me to bounce my ideas of other professionals, but also gain new knowledge from my team," Participant A stated. There was a strong sense in the importance of collaboration with accountability within the team. Participant B stated it was important in "...having the team become more comfortable and workable together. You don't want to let any team member down."

Through the process of collaboration, the level of efficacy increased and instructional methods became more creative. Participant D stated, "The amount of collaboration helps me become a better teacher and it lets me think outside the box and

hear other ideas. It builds confidence about your teaching skills. You get reinforcement from your team." Participant C added:

> We feel comfortable about things we need help with. We feel comfortable leaning on each other. I feel like that is a unique bond that we have as a team. It has contributed to the success of our implementation of The Eight-Step Process. We were not such a strong team in August of last year. Maybe the reason we are such a tight team is that we did go through this process together. The daily collaboration helps teachers learn how to compromise and lean on each other. So maybe there is hope that teams could be as successful, especially if it is looked at as a school expectation.

The participants attributed assessment as being another common component that has affected their approach to classroom instruction. "I now have a better understanding of formative and summative assessments," Participant C stated. The participant later added:

> I realize now that everything is a formative assessment. I don't have to feel that they failed. Instead, I can say, 'what else can I try to help them get it in the future? How can I approach this in a different way in the future?' There isn't an end to the teaching and learning. I can continue to implement interventions until the end of the year.

Utilizing assessment as a method to guide instruction and meet individual needs was expressed. "Using assessment to guide instruction was something I thought I did and now I see it in a different way," Participant A stated. The participant then elaborated by adding how assessment and the data it provides assists in the process. "I can actually use

the data and see what I know about my students, not what I think I know. The data has helped me meet individual needs that I did not know was possible before."

The use of assessments in the new way proved to be beneficial by making planning more efficient and practical. Participant D shared an experience regarding assessment use with The Eight-Step Process:

> By using pre-tests, it lets me know ahead of time who needs what instruction. Pre-testing completely guides my planning. With post-tests, it allows me to see what I have taught has been understood, and if not, it leads me to my small groups.

A theme of consistency among the participants was apparent from the interview results. It was expressed that the amount of planning time provided in the process allowed for more consistency and made teaching more efficient. Participant C stated, "Consistency. It doesn't have to be difficult to have consistency between the classrooms, as long as we have planning time together and we use the time wisely. It actually makes teaching easier."

Areas of improvement that are needed.

During the interview, the participants in the study were asked to provide areas of improvement that could be made in the future to improve The Eight-Step Process. Participant A stated:

> Last year, we did pre and post assessments once a week or every two weeks. They were always ten question, multiple-choice assessments. I think we were over testing our students. We weren't using all of the data the right way. Sometimes we were just testing and moving on. This summer, we went to a PLC

> workshop and that opened up new doors for what The Eight-Step Process could look like for us. We all wished that we could have done the workshop before implementing the process last year. For the 2009-2010 school year, we are using unit pre-test and quarterly tests for math, with exit slips in between for our formative assessments that are based on specific skills from the quarterly tests.
>
> This year we have ownership in what we are doing. We are making The Eight-Step Process our own and taking more risks. We have more freedom to find new ways to help and support kids. We have new ways to find out what they need. I am more interested this year to see how this approach will influence our students' achievement.

Participant B stated: "I think every year could be a learning year with new classes and new information. We have started to incorporate our Learning Lab teachers this year in the process as support, so we are already better off than last year."

The Eight-Step Process could be used as an intervention to get the team working together. Participant C stated:

> Beginning the 2009-2010 school year with the plan already in place, I have no doubt that I will see even more growth. I really see this as something effective in working to close the achievement gap. It would be good to have a whole school plan with this.

Descriptive Data

Free and reduced lunch subgroup comparison.

From the 2008 MAP data prior to the study being conducted, data was analyzed and compared to subgroups designated by Department of Elementary and Secondary

Education to the 2009 results. As shown in Figure 1, one particular interesting finding was that in 2008, prior to the implementation of The Eight-Step Process, the percentage of Free and Reduced Lunch Students scoring in the Proficient / Advanced range was 28.6% compared to 60.7% Not Free and Reduced Lunch Students, creating a 32.1% achievement gap in this sub group of students.

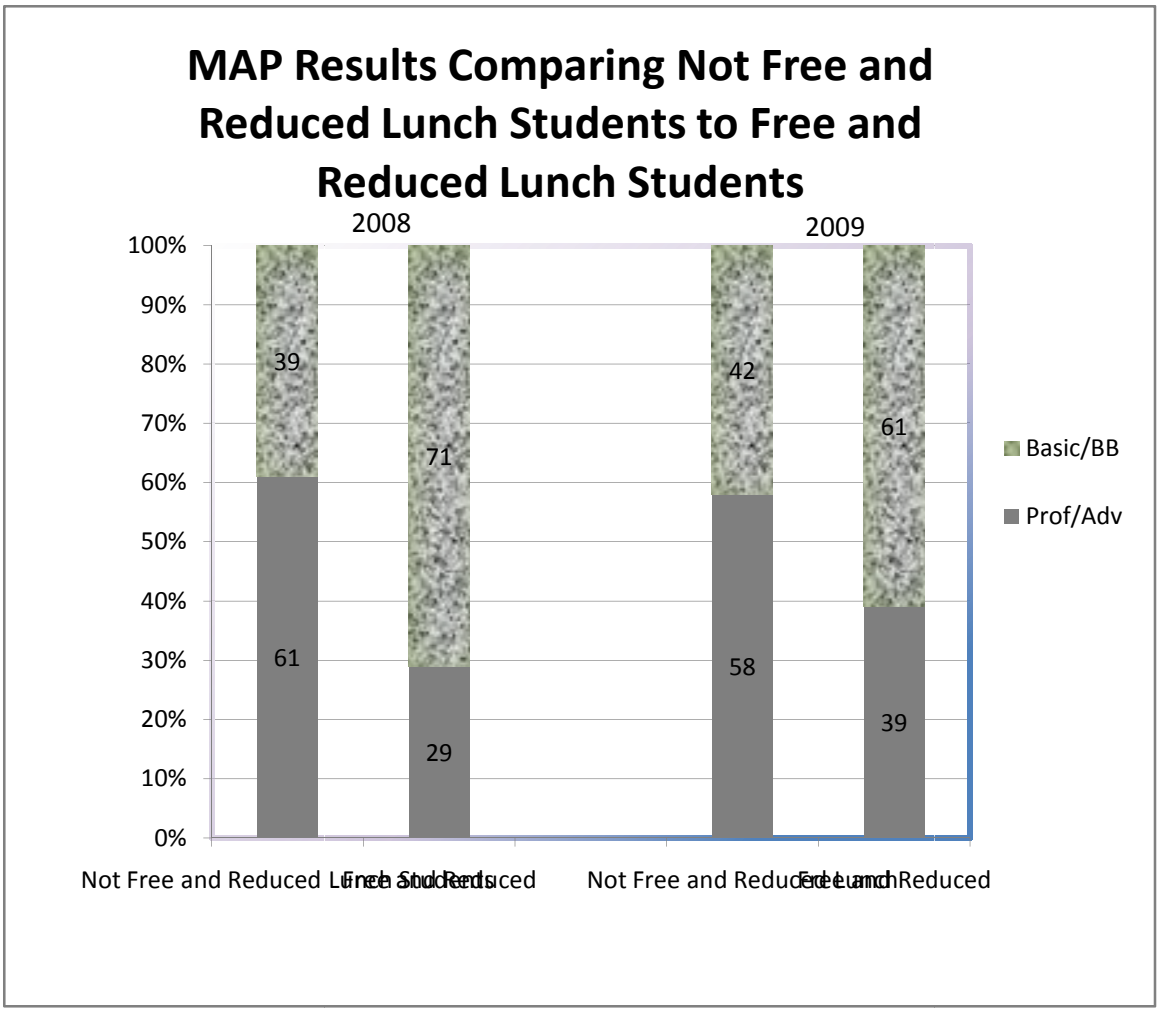

Figure 1

2008 and 2009 Comparison of Not Free and Reduced Lunch Students to Free and Reduced Lunch Students

However, in the 2009 MAP data, after the implementation of The Eight-Step Process, 38.5% of the students in the Free and Reduced Lunch subgroup scored in the Proficient / Advanced range and 58.4% of the Not Free and Reduced Lunch subgroup students scored in the same range, thus, creating only a 19.9% achievement gap between

the students in this category. This information indicates that between 2008 and 2009, the achievement gap narrowed in this area by 12.2%.

Pre and post common assessment data.

The researcher collected each common assessment the team conducted throughout the year. Typically, these were the pre and post-tests on the specific objectives that fell under the broader process standards from the MAP test scores. In a random selection of assessments, four pre and post-tests (each measuring the same objective pre and post instruction) were analyzed and graphed to demonstrate student improvement in academic achievement.

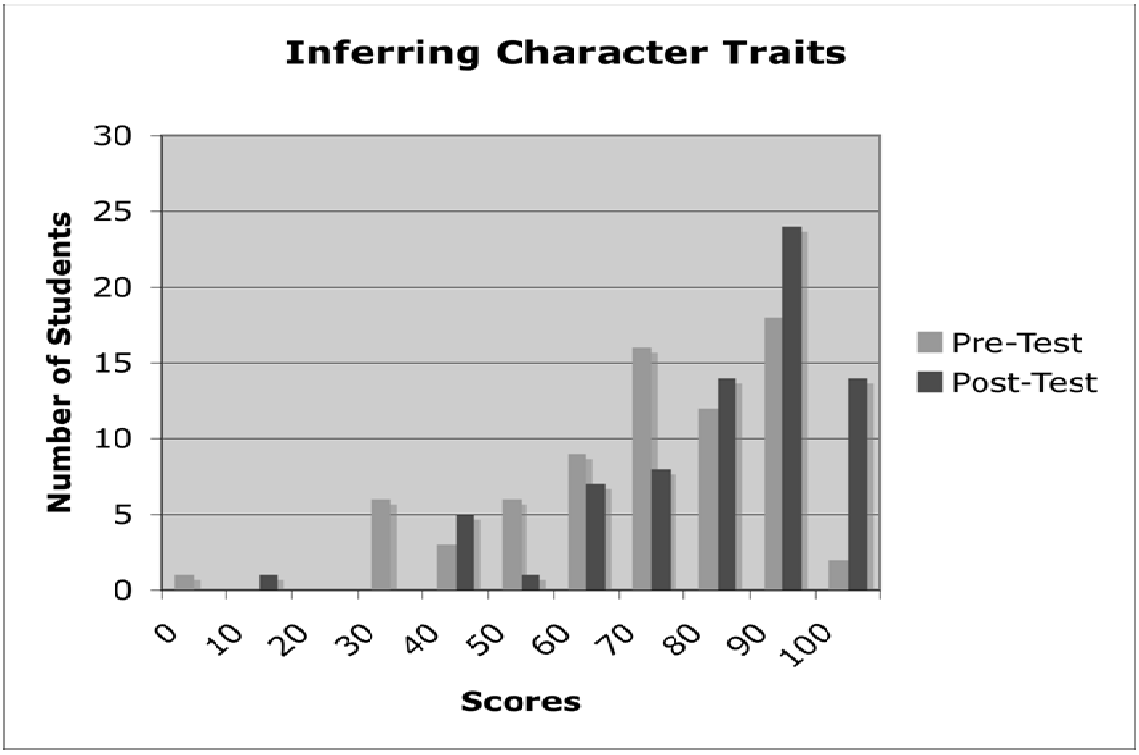

Figure 2

Inferring Character Traits Pre and Post Assessment Scores

The team of teachers determined that scores at 80% or higher would signify that the student had mastered the skill. In Figure 2, the results show that during the pre-assessment, only 43% of third grade students were scoring 80% or above. However, from the post-assessment scores, approximately 69% of the students were demonstrating mastery. This indicates that over the amount of time that this concept was focused on with the whole grade level, there was a 26% increase in mastery of the objective.

In Figure 3, the results show that during the pre-assessment, only 67% of third grade students were scoring 80% or above. However, from the post-assessment scores, approximately 92% of the students were demonstrating mastery. This indicates that over

the amount of time that the whole grade level focused on this concept, there was a 25% increase in mastery of the objective.

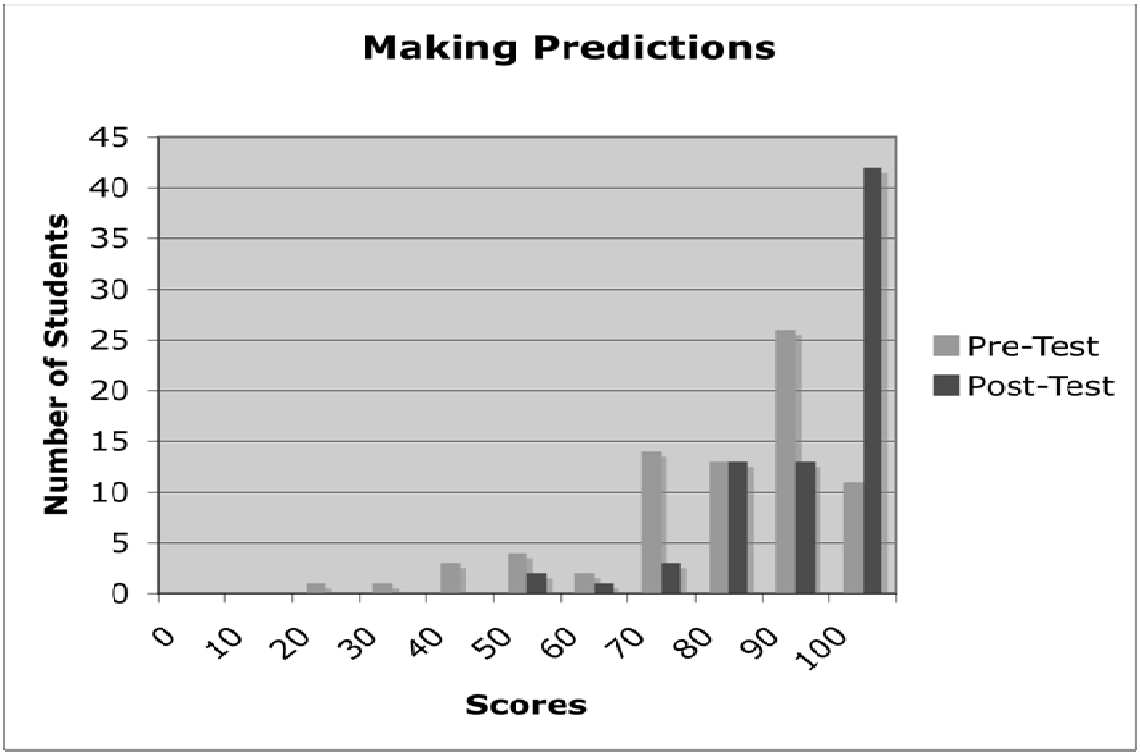

Figure 3

Making Predictions Pre and Post Assessment Scores

In Figure 4, the results show that during the pre-assessment, only 81% of third grade students were scoring 80% or above. However, from the post-assessment scores, approximately 83% of the students were demonstrating mastery. This indicates that over the amount of time that the whole grade level focused on this concept, there was a 2% increase in mastery of the objective. While there was only a 2% increase in mastery of the learning objective for settings, the pretest scores started at much higher level to begin

with. When analyzing the pre and posttest scores for 100% mastery, the number of students went from 26 to 33.

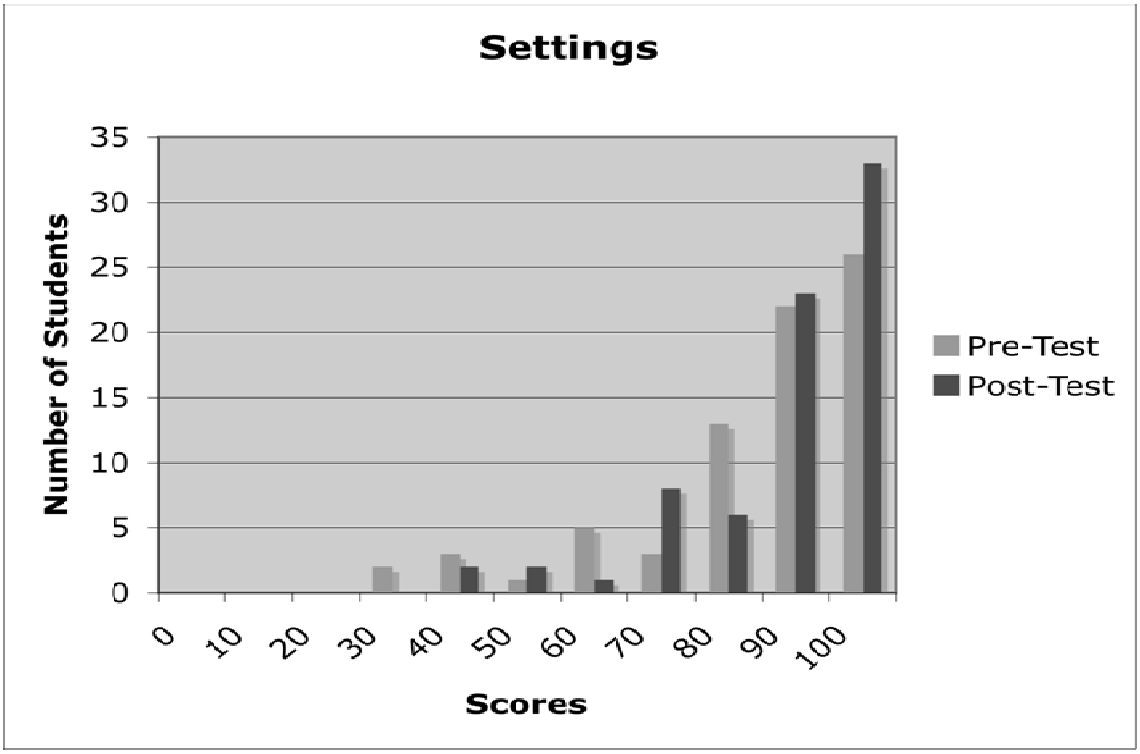

Figure 4

Settings Pre and Post Assessment Scores

In Figure 5, the results show that during the pre-assessment, only 15% of third grade students were scoring 80% or above. However, from the post-assessment scores, approximately 87% of the students were demonstrating mastery. This indicates that over the amount of time that the whole grade level focused on this concept, there was a 72% increase in mastery of the objective.

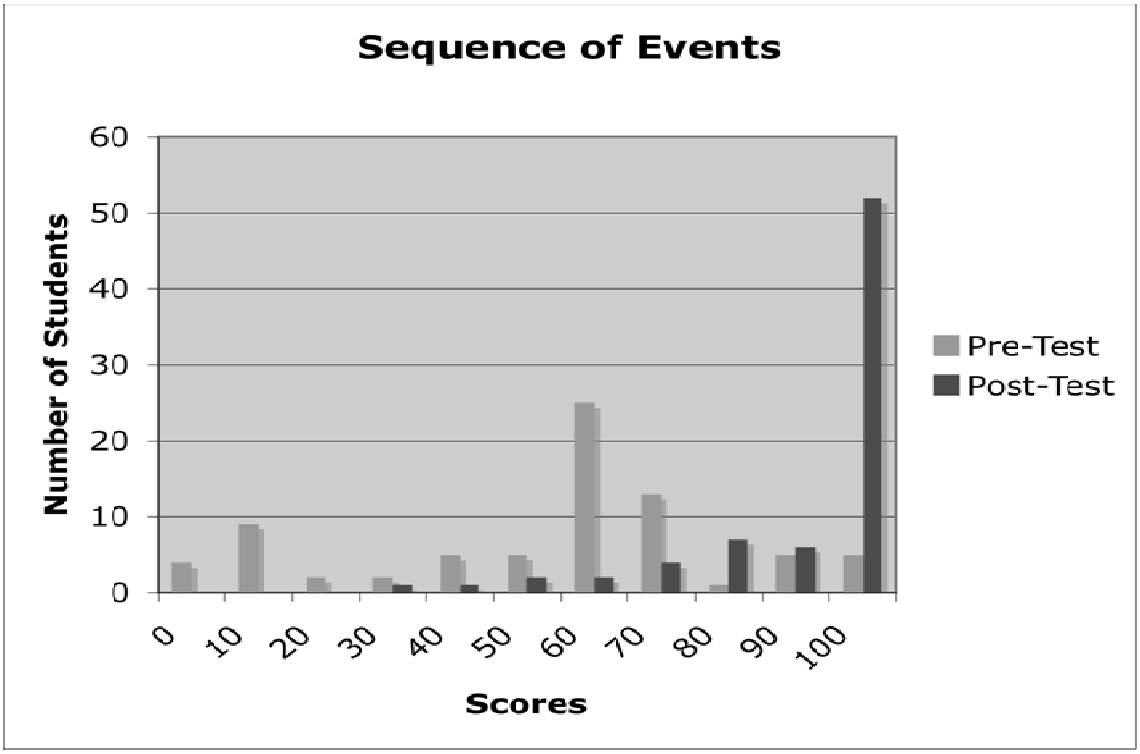

Figure 5

Sequence of Events Pre and Post Assessment Scores

Study Island benchmarking results.

Study Island (2009) is an online benchmarking assessment tool that is an indicator of how students will perform on the MAP scores. It provides state-specific, research-based assessments that helps teachers receive the following information:

•Prediction of proficiency for Communication Arts on the MAP

•Mastery levels for MAP objectives

•Item analysis detailing percent correct, item difficulty level and content measured

•Measurement of the GLEs

•Individual student item answers with total items correct and percentage

The Study Island benchmark assessment was conducted three times throughout the year to provide teachers with formative data aligned with Missouri's terms and GLEs. This allows teachers to verify or reassess their current understanding of where students are academically. In Figure 6, the results are from the first benchmark assessment in the fall and the final benchmark assessment in the spring.

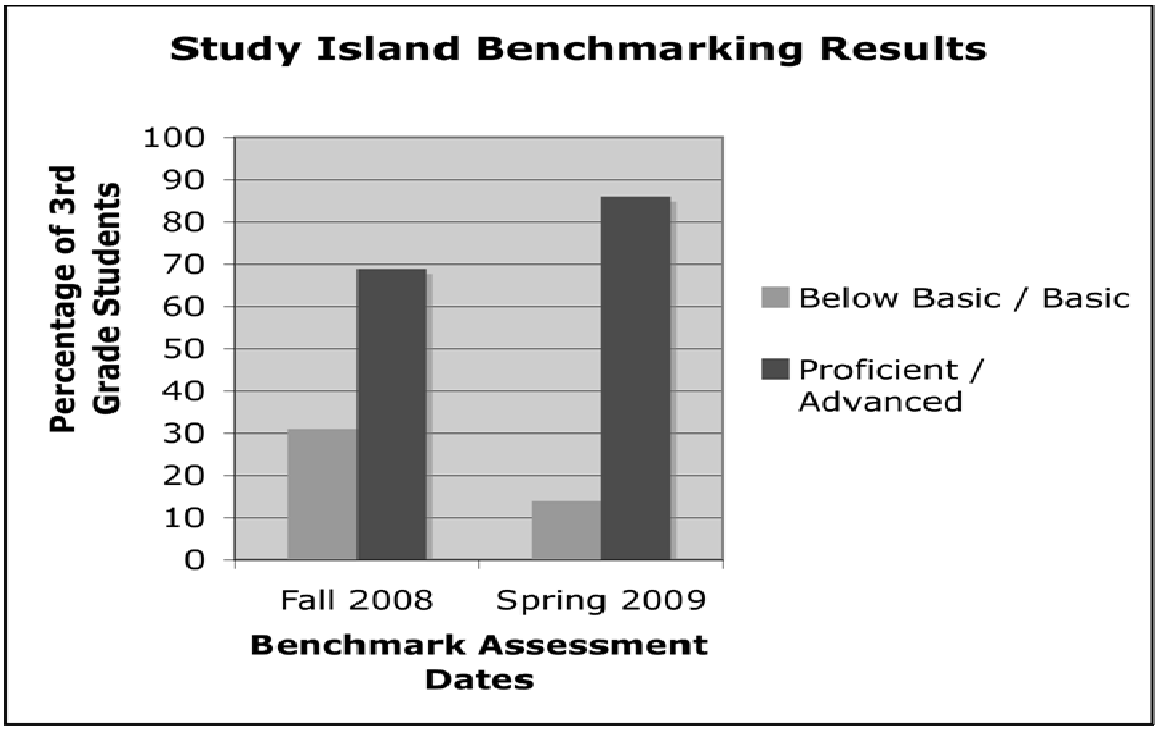

Figure 6

Study Island Benchmarking Results

In the fall, 31% of third grade students scored either Below Basic or Basic, while 69% scored either Proficient or Advanced. However, from the third benchmark assessment in the spring, only 14% of the students scored either Below Basic or Basic, while 86% of the students scored either Proficient or Advanced. This indicates that between the fall and the spring when the first and third benchmarks were conducted with the whole grade level, there was a 17% increase in mastery of the yearlong third grade objectives.

Summary

When reviewing the relationship between student achievement and the implementation of The Eight-Step Process, several analyses conducted in the study yielded the decision not to reject the null hypothesis. A z-test for two sample means was performed on the mean scale scores from the MAP examinations in the area of Communication Arts. The researcher did not reject the null hypothesis because any differences in the MAP mean scale scores were not considered to be statistically significant. The second set of tests conducted were z-Tests for Proportions. These sets of tests were conducted to determine if there was a significant change in scores between the two years. For all three z-Tests for Proportions conducted, the null hypothesis was not rejected because any differences in the MAP scores were not considered to be statistically significant.

The participants were positive in their perceptions about efficacy, teaching, and learning because of the process. The participants' results on the surveys indicated that there was a positive perception of The Eight-Step Process improving teachers' efficacy in the area of decision-making, instructional practices, and impacting student achievement.

The gap between the MAP Free and Reduced Lunch and Not Free and Reduced Lunch subgroups went from 32.1% to 19.9% in one year. The random selection of common pre and post-assessments indicated an average of 31% increase of mastery of objectives. The Study Island benchmarking results indicated a 17% increase in mastery of objectives over the year.

Chapter Five: Discussion, Conclusions and Recommendations

Introduction

This chapter restates the research problem, reviews the methods used in this study, and summarizes the results, provides implications and limitations of the study, and recommendations for future research. My research on The Eight-Step Process is innovative because it brings together the analysis of student achievement relating to the implementation of consistent instructional methods. Often times, large-scale successes stem from when just one team is provided the opportunity to develop an innovative idea (Collins, 2001). For example, if this third grade team determined success with the model and had suggestions to improve it more, they could share this with other grade levels. If other grade levels became successful, the school would become more successful, overall. The school could share with other schools within the district. The pattern could potentially continue to other districts, state wide, etc.

I believe this research can be beneficial to all schools in the United States, children, educators, and state legislators. I am particularly committed to sharing the results of my analysis with the third grade teachers participating, parents of the third grade students in the study, other teachers in the school, and district administration, in the hopes that my work will improve student achievement. I also hope to provide teachers with the information with which they can better implement this strategy in other classrooms effectively to have similar or greater results.

Purpose

The purpose of this study was to identify the specific effects on various components of student and teacher learning due to the implementation of The Eight-Step Process. This was accomplished by first addressing the specific process standards, goals, and / or the Grade Level Expectations (GLEs) that third grade students are having difficulty meeting in the area of Communication Arts on the MAP test. The study evaluated the trends that have been demonstrated over the past five years based on the MAP test data. Other areas of assessment for descriptive data purposes were analyzed to provide additional perspective. Additionally, participants of the study were interviewed and surveyed on their perceptions on teaching and learning.

Research Questions

The major research questions of this study include the following:

1. Will the implementation of The Eight-Step Process increase student achievement?
2. Will the implementation of The Eight-Step Process increase teachers' perceptions of efficacy?
3. Will the implementation of The Eight-Step Process change teachers' perceptions about teaching and learning?

Review of the Methodology

As detailed in chapter three, this research was a mixed methods study utilizing quantitative and qualitative data to measure the changes in student achievement and

teachers' perceptions on efficacy, teaching and learning, specifically related to the implementation of The Eight-Step Process.

This was done by performing a z-test on the mean scale scores from the MAP examinations in the area of Communication Arts. The goal of this study was to show that by comparing MAP scores there is statistical data that demonstrates that the continuous improvement model caused some of the improvement.

Other experts have suggested collecting and analyzing a variety of data when looking at student achievement (Bernhardt, 2009; Love et al., 2008). Test scores are only considered a piece of the data. Formative assessments, summative assessments, demographics, surveys, walk-throughs, and perceptions are all considered powerful strategies to help schools determine best practices in achieving increased student achievement scores (Easton, 2008).

Findings

Quantitative analyses.

When reviewing the relationship between student achievement and the implementation of The Eight-Step Process, several analyses conducted in the study yielded the decision not to reject the null hypothesis. This indicated no statistically significant changes in student achievement where caused by the implementation of The Eight-Step Process. For the quantitative analyses, two different types of statistical analyses were conducted for this study.

The first was a z-test for two sample means. This test was performed on the mean scale scores from the MAP examinations in the area of Communication Arts. The two samples were between previous MAP test scores for third graders at Spoede School in

Communication Arts and the MAP scores from the spring of 2009. The researcher did not reject the null hypothesis because any differences in the MAP mean scale scores were not considered to be statistically significant.

The second set of tests conducted were z-Tests for Proportions. This set of tests utilized the data that the participants had identified as areas of improvement from the 2008 MAP scores to the 2009 MAP scores (Appendices A & Q). This data categorized percentages of items below 75% on the specific GLEs. These sets of tests were conducted to determine if there was a significant change in scores between the two years. For all three z-Tests for Proportions conducted, the null hypothesis was not rejected because any differences in the MAP scores were not considered to be statistically significant.

Qualitative analyses.

This study also investigated factors regarding the participants' perceptions about efficacy, teacher learning, and student achievement, due to the implementation of The Eight-Step Process. Overall, all four of the participants were positive in their perceptions about efficacy, teaching, and learning because of the process. As detailed in Chapter 4, the participants' results on the surveys indicated that there was a positive perception of The Eight-Step Process improving teachers' efficacy in the area of decision-making, instructional practices, and impacting student achievement.

Descriptive analyses.

This study also investigated other sources of descriptive data to support findings. In order to gain a better understanding of how other descriptive data in the study viewed

the continuous improvement model in relation to student achievement, teacher efficacy, collective efficacy across the third grade team of teachers, and teachers' perceptions of teaching and learning. The descriptive data analyzed in the study included MAP score comparison of Free and Reduced Lunch Students and Not Free and Reduced Lunch Students, a random selection of four common pre and post-test results and the Study Island benchmark data, which indicated many more positive results.

Descriptive data comparison from the MAP subgroups Free and Reduced Lunch Students and Not Free and Reduced Lunch Students was pertinent information for the purposes of this study. While the study did not directly look at the academic achievement gap, it was a factor that many other schools and districts utilize during the The Eight-Step Process. In this study, the gap between the aforementioned subgroups went from 32.1% to 19.9% in one year. The random selection of common pre and post-assessments indicated an average of 31% increase of mastery of objectives. Additionally, Study Island benchmarking results were analyzed to determine student growth from the beginning of the year to the end of the year. This data indicated an increase 17% increase mastery of objectives over the year.

Implications

Implementing The Eight-Step Process in the third Grade for Communication Arts during the 2008-2009 school year, was a way to move toward the district initiative of having Professional Learning Communities at all of the schools. Traditionally, the teaching profession has been referred to as one of isolation. With the collaborative structure of The Eight-Step Process, being one that thrives on teamwork and student

improvement, teachers have begun thinking about their teaching in a completely new manner.

A particular challenge encountered was ensuring teachers that freedom of instruction would not be lost with the creation of the team curriculum map. While some teachers feared that they would have a lack of freedom by uniting, they found the complete opposite. Teachers reported feeling more empowered with their teaching and more efficacy in their methods. With the common curriculum map, dates for common assessments, shared planning time and "team time" (30-minute common learning block devoted to creating an intervention or enrichment on a particular skill), teachers found the level accountability was a resource.

In the past, most teachers' formative assessments used were based on observations. While this is a valid form of formative assessment, it is also subjective and difficult to do commonly among the grade level with a certain amount of consistency and validity. Due to the implementation of this process, teachers began utilizing shared common assessments and discussing their data and uniting as a team of problem-solvers.

The team of teachers created their scope and sequence for the 2008-2009 school year based on the small amount of common assessment that was available at the time. The only common third grade assessment data available was the MAP data from 2008. The team took this information, created a list of objectives and GLEs that third grade students performed poorly, and focused on other essential skills for the year. This information was incorporated into the scope and sequence of the year, providing more time on the concepts where students typically perform poorly. In years past, teachers did not use data to determine how to plan out the curriculum for the year.

The Eight-Step Process has some commonalities with Response to Intervention (RTI). With the new direction and shift for the referral process for students to receive special education services being that of RTI, teachers need to have documentation of interventions to help students meet success and sufficient amounts of data. With much of the data that is collected on a regular basis from interventions, common assessments, and types of interventions put in place, teachers are naturally more prepared for the RTI meetings. This is part of their teaching procedures with The Eight-Step Process. In a true collaborative culture, with a focus on student improvement and results, RTI and The Eight-Step Process are both systematic interventions. One truly cannot be done effectively without the other in place. In Figure 7, a pyramid of interventions developed by the Spoede staff describes various interventions at each level.

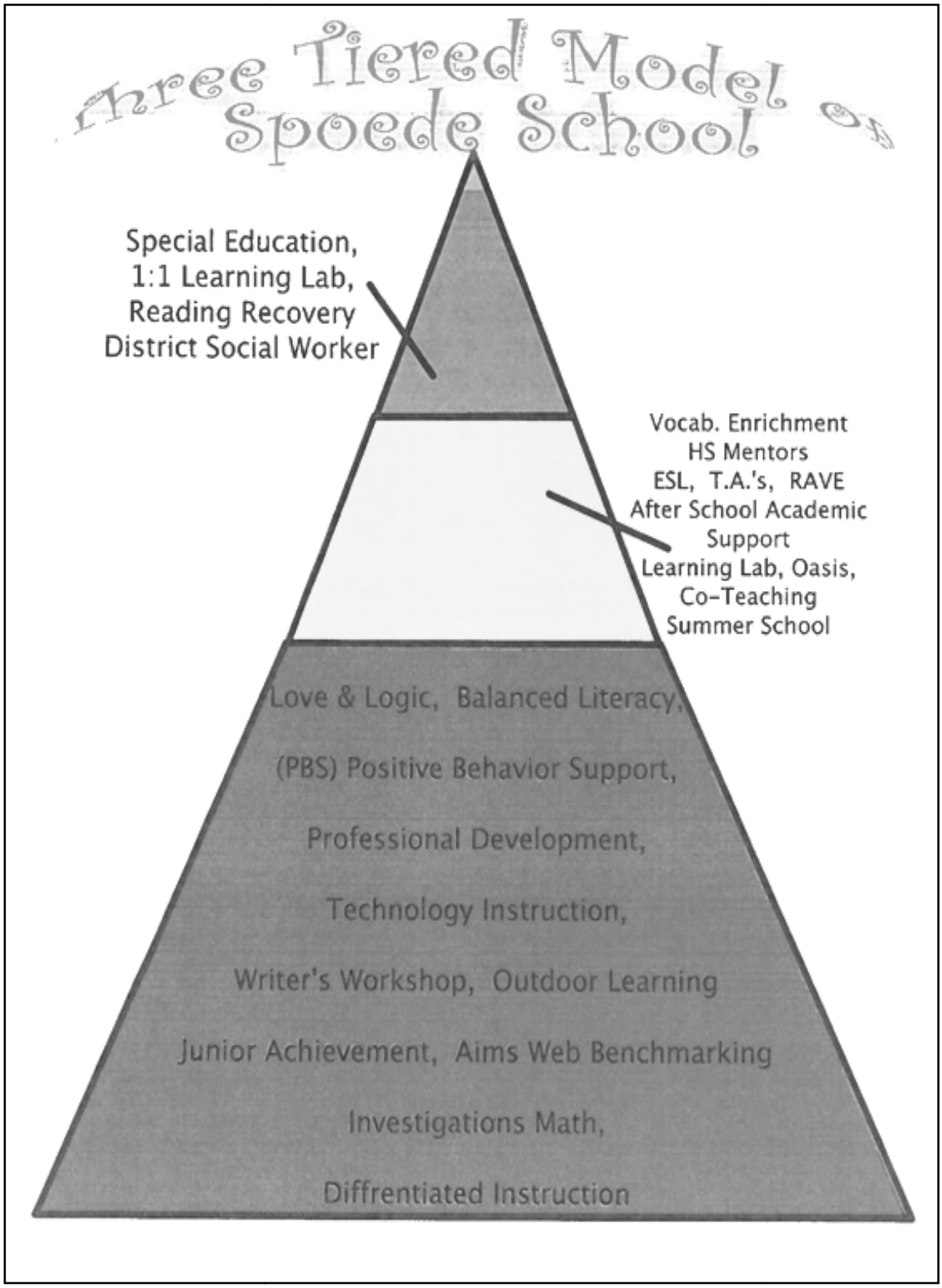

Figure 7

Spoede School's Pyramid of Intervention for RTI

For the 2009-2010 school year, the third grade team decided to make some adjustments to the process to be more beneficial to student learning. One improvement that the team determined to be an important adjustment was utilizing the reading and math specialists as support personnel during intervention and enrichment "team time." In this way, the specialists can pull out small groups to work on the specific skills on which students need additional support. This partnership with the specialists allows a team approach to support all students learning. Traditionally, the specialists work with students that were identified as needing additional support in reading or math, but do not qualify for special education services. Utilizing the instructional specialists in the new way provides additional support for all students, with groups that may change daily based on data. This is true collective responsibility for ensuring all students are succeeding academically.

Because the instructional specialists are such an integral part of The Eight-Step Process, they are on the same page with the classroom teachers the curriculum map, skills being taught, interventions in place, and specific goals for learning. The specialists now join the grade level teachers during their planning time to form a stronger team approach for student success. This approach also is beneficial to the classroom teachers during the RTI process. The specialists are on board with the data, interventions, and often times provide progress-monitoring data because they are usually already working with the students.

Utilizing The Eight-Step Process approach in our school has created a shift in thinking. This has progressed from being originally processed as, "something we have to do," to "this is how we do it." Unfortunately, the process is not a linear one and has to

unfold and modify over time. With the collaborative focus constantly being on learning and results, a cultural shift takes place with the end goal to educate all students.

The third grade team was provided the opportunity to attend DuFour's training on PLCs during the summer of 2009. All of the grade level team members attended the optional conferences. The grade level team then compared and contrasted PLC with Eight-Step Instructional Process. The third grade team presented their work on "The Eight Step Instructional Process" to the staff. In their presentation, they clarified how the process fits within the PLC model.

The participants have become a team of leaders for our school for collecting data, creating common assessments, analyzing data and being creative with developing and implementing intervention and enrichment opportunities with the school's resources. Other grade levels are adjusting their practices based on what has been effective for the third grade team.

The amount of collaboration, team building, efficacy and shared goal of increasing student achievement that the participants have is a model for our school. This success has created a stronger desire for more increases in student achievement and more goal setting to make that happen, not only at the third grade team, but at other grade levels as well.

Limitations

The study conducted had several limitations including: demographics, survey instrumentation, interview, limited professional development, and time duration of the study to gather more specific data to show significant changes in achievement scores.

The demographics were limited in this study. Ideally, the study would be conducted over several schools with varying demographics of both participants and student population. In this study, three of the four participants were less experienced teachers and shared similar student demographics.

The survey instrumentation was designed by the primary researcher and was not a standardized and was conducted online through SureyMonkey.com. It was rated on a Likert Scale system and participants were not required to add comments to clarify responses. It would be beneficial to have a comment required for each response to provide pertinent information for a more accurate analysis of their perceptions.

The primary researcher did not conduct the interview in order to provide anonymity to the participants. This was done to ensure that the participants were honest in their feedback and would not feel pressured because the primary researcher was also their evaluator. Because of this, the primary researcher did not have the ability to probe interviewees more accurately and specifically in their responses. The interviewer was limited because of limited involvement in the study. Additionally, one question was left off of the primary researcher's analysis due to the participants' interpretation. It was not clearly stated, and since the primary researcher was not able to paraphrase or reword the question intended, it was not included in analysis of perceptions because it was deemed invalid.

The study was conducted during the 2008-2009 school year in the area of Communication Arts. To gather more specific and meaningful data, the study could have been conducted over a longer time span. However, due to time constraints and scheduling issues, the study was conducted over only the time span of one year.

The participants were provided with a limited amount of professional development, and mostly by the primary researcher. Ideally, the team of participants would have received additional, high-quality professional development aimed directly at the specific focus including the DuFour training they received after the 2008-2009 school year was completed. It would have benefited the teachers to have the DuFour training earlier in the study to gain a better understanding of the process and its implications.

Recommendations

Supporting individuals to effectively collaborate and become part of a team with shared goals, expectations, and responsibility to school improvement may present its challenges. However, there are components that can be put in to place to support these efforts. The author offers the following recommendations for implementation of The Eight-Step Process.

1. High quality professional development in the area of collaboration, common assessments, data-driven instruction, PLCs.

Teachers need opportunities to have high quality professional development in order to expect real changes in teaching and learning to happen. The participants in this study mentioned that it would have been better to have more training, especially the PLC training prior to the start of the process. Providing teachers with this professional development would allow them to conceptualize the process.

2. Provide professional literature and facilitate meaningful team discussions.

Many successful school leaders have publicized their successes in the area of The Eight-Step Process, and how schools have increased student achievement and teacher

efficacy. Discussions and reflective practice in this manner are essential factors in this process for your school, teachers, and students.

3. Sufficient administrative support in the process.

The administration needs to be a support system for teachers engaged in this process. Without the support and understanding of the challenges teachers face with this change, teachers may perceive the process in an arbitrary manner and minimize its importance. Administrators need to be a part of the process and involve themselves in the team goals and the collaboration necessary for success. By actively monitoring the process, administrators can provide necessary on-going support systems to ensure success.

4. Flexibility in the approach.

While a framework is necessary to start from to have a clear understanding of the process, teachers need to be provided with flexibility in the approach that is meaningful and effective for them. Allowing teachers to be a part of the approach and making adjustments to it, there is more ownership and involvement. There is no "one size fits all" approach that works for all teams and schools.

5. Scheduled time to collaborate.

In developing schedules for the year, administrators must include scheduled time within the school day that allows teachers to have uninterrupted time for collaboration. Additionally, with the "Eight-Step Process," common grade level times must also be factored in for the subject areas to allow the "teaming times" where teachers can utilize flexible groupings and resources.

6. Align team goals to school goals.

Be consistent with the school's goals across the grade levels. If the school has goal to increase student achievement in the area of Communication Arts, each grade level needs to have a specific focus in this area for the year. This provides another "shared goal" that the team is part of and makes their efforts more meaningful in a larger context.

7. Allow shared leadership on the process.

Encourage the teachers to share ideas, strategies, and techniques with other staff members on a regular basis. In this study, the participants had the opportunity to present to the staff and share their data from the year. In doing this, other staff members had opportunities to get clarifications, ideas for implementation, data collection techniques, and concerns from the participants. This provides other teachers to determine what has worked for teachers in their own school, and promotes collaboration across grade levels.

8. Celebrate successes.

In this study, the teachers and administration shared small successes throughout the year. It is important to look at the successes and be reflective of effective strategies that worked. This promotes positivity, collaboration, and an invested interest in the process. Occasionally, successes were celebrated for initiative that was taken by the team and collaboration, not just test scores.

9. Allow sufficient time to see success.

Often times in education, insufficient time is provided to see success. When new initiatives are implemented, they often take three to five years to see change. It is typical in education that initiatives are dropped after only one or two years because of lack of change. The literature reviewed in this study demonstrated that this process is effective and may take several years to see the desired results.

Further Research

Ideally, the study would have been conducted over the time span of three years and at multiple schools to provide a larger sample. Additionally, the participants would have had high-quality professional development in this area prior to the beginning of the school year versus after the year was concluded. In order to have extensive staff development, a private consultant would be ideal to focus the teachers in working together in this manner.

It would be interesting for additional research to be conducted on The Eight-Step Process over the time span of multiple years, in multiple subject areas, multiple grade levels, with varying demographics, populations, and sample size. To conduct the study on a larger scale, with more resources available, such as professional development on The Eight-Step Process, the results of the study could be much more meaningful and significant.

Summary

While the quantitative data results from the study did not show significant changes when comparing 2008 to 2009 MAP data, there were noticeable improvements and areas that did indicate changes in the descriptive data included. The descriptive data in this study, including MAP score comparison of Free and Reduced Lunch Students and Not Free and Reduced Lunch Students, a random selection of four common pre and post-test results and the Study Island benchmark data, indicate many more positive results. Additionally, the qualitative data from the surveys and interviews provide supportive, teacher perceptions on the process that are positive.

One particularly interesting finding was that in 2008, prior to the implementation of The Eight-Step Process, the percentage of Free and Reduced Lunch Students scoring in the Proficient / Advanced range was 28.6% compared to 60.7% Not Free and Reduced Lunch Students, creating a 32.1% achievement gap in this sub group of students. However, in the 2009 MAP data, after the implementation of The Eight-Step Process, 38.5% of the students in the Free and Reduced Lunch subgroup scored in the Proficient / Advanced range and 58.4% of the Not Free and Reduced Lunch subgroup students scored in the same range creating only a 19.9% achievement gap between the students in this category. The gap reduction between these groups is much less than the previous year.

In the random selection of common assessments, the four pre and post-tests (each measuring the same objective pre and post instruction), mentioned in Chapter 4, an average of 31% increase of mastery from the pre tests to the posttests. While there was only a 2% increase in mastery of the learning objective for settings, the pretest scores started at much higher level to begin with. When analyzing the pre and posttest scores for 100% mastery, the number of students went from 26 to 33. This had nearly half of the students demonstrating 100% mastery of the objective.

Finally, with the descriptive data from the Study Island benchmarking results, it indicated that between the fall and the spring when the first and third benchmarks were conducted with the whole grade level, there was a 17% increase in mastery of the objectives. This information is promising in the fact that it demonstrated such a level of mastery. The progress indicated from the Study Island results is something that showed promise and supportive of the qualitative data from the surveys and interviews.

As Chapter 4 stated, the qualitative information gathered through this study's interviewing and surveying process was organized into meaningful units of analysis. Common, interrelated themes provided a better understanding of how the participants in the study viewed the continuous improvement model in relation to student achievement, efficacy, and teachers' perceptions of teaching and learning. These themes included:

1. Attitude
2. Collaboration
3. Data Driven Instruction
4. Consistency

The surveys were provided to all four participants in the study and consisted of ten questions that focused on the implementation process, student achievement, teacher efficacy and empowerment, reflective practice regarding instruction, and commitment to continuous improvement.

From the survey results, the majority or all of the participants agreed that The Eight-Step Process was responsible for the following:

•making teachers become more effective problem-solvers

•enhancing teacher decision-making and confidence over the year

•promoting teacher reflection and self-assessment

•directly impacting student achievement

In the interviews, the participants' shared their perspectives on the effectiveness of the continuous improvement model in relation to student academic achievement. Additionally, feedback was gathered on teacher efficacy, and team collective efficacy.

Participants also were asked to determine which components of the process they believed to be most effective and beneficial.

The participants stated that the teacher's attitude determines how students achieve and to what degree they will achieve. Since the participants confirmed that through the process of collaboration, the level of efficacy increased and more creativity ensued in instructional methods, it is important to provide opportunities for teachers to have this time and utilize it to its fullest potential. School leaders have an obligation as educators to provide the best quality education for students. From the teachers' perceptions in this study, it is indicative that allowing more time for effective collaboration, student achievement will increase. Since the participants attributed assessment as being another common component that has affected their approach to classroom instruction, better understanding of collecting and using data to guide instruction will benefit student learning. Additionally, throughout all of the aforementioned themes, the participants stated the importance of consistency with the process is necessary for success. It is important to provide a shared, common amount of planning time to allow for more consistency and efficiency in teaching.

While the quantitative data did not show statistical significant improvements, the descriptive assessment data indicated improvements of achievement and teachers' perceptions of efficacy. Additionally, participants' responses from the surveys indicate positive perceptions about the process. This information indicated that the third grade level climate within the school changed. This change of climate could potentially affect the climate of the other grade levels and the school. The true way to have effective, sustainable change is to change the school climate.

During the 2009-2010 year, The Eight-Step Process continued to be implemented in third grade Communication Arts, with extending it to the subject of mathematics, and repeated the implementation procedures with the fourth grade team in the area of Communication Arts. The 2009-2010 fourth-grade students will have two full years of receiving instruction in this manner for two consecutive years.

The participants' perceptions of their levels of efficacy have increased through the implementation of The Eight-Step Process. Earlier, the researcher stated that if teachers can increase their level of efficacy, it is likely that students would mirror that. If the participants, the teachers, believed that their levels of efficacy have increased because of The Eight-Step Process, then it is likely that students will begin to increase their levels of efficacy academically as well.

Mahatma Gandhi (cited in Bowall, 2009) said, "If I have the belief that I can do it, I shall surely acquire the capacity to do it even if I may not have it at the beginning." This study is indicative of the beginning. The participants have the belief that they can do it, and surely will acquire the capacity to do it even more so now.

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Appendix A

Top 5 Areas for Improvement Based on 2008 MAP Data

Goal	GLE	Total Number of Items	Number of Items Below 75%
1.5	R2C	8	2 (25%)
1.5	R1H	1	1 (100%)
*1.6	R3C	5	3 (60%)
1.6	R1E	3	1 (33%)
1.6	R2C	5	2 (40%)
*1.6	R1H	3	3 (100%)
*2.2	W2E	3	2 (66%)
*2.2	W2C	3	3 (100%)
2.2	W2D	4	1 (25%)
2.2	W1A	3	2 (66%)
2.2	W2B	2	2 (100%)
*3.5	R1H	8	3 (38%)

Appendix B

Spoede Elementary School
425 N. Spoede Road
Creve Coeur, MO 63141
July 6, 20009

To Whom It May Concern:

I am aware Tony Arnold is using secondary data from Spoede Elementary School for his Capstone Project for Lindenwood University. I support his work with the teachers and have appreciated the progress they have made as a team with his supervision. I give consent for him to work with and use teacher survey information and interviews, MAP scores, student formative assessment information and summative assessment information. I support Tony Arnold's project and look forward to the results he receives through his work.

Sincerely,

Dr. Connie Brawley
Principal, Spoede Elementary School

Appendix C

Dear Teacher,

As you already know, I am currently in the doctoral program at Lindenwood University. I am currently conducting research for my dissertation and will be acting as the principal investigator for this study. The goal of my dissertation is to evaluate how The Eight-Step Process impacts student achievement in Communication Arts at the third grade level teacher efficacy. The information that you provide will provide me with insights that will be used in further development in the future.

As a participant in this study, you will be asked to complete a survey from surveymonkey.com about your thoughts on how the first year went with The Eight-Step Process. Please note that your feedback that you share during this time will be shared in my dissertation. Your names will not be on the surveys, as they are anonymous. Please also note that the Lindenwood University library will house the dissertation so it is available to all students and faculty; the document may also be circulated to others outside of the institution.

Please sign on the lines below to indicate that you grant permission for the information that you provide to be used for the purpose of this study. Thank you for taking the time to share your insights with me. If you have any questions or concerns about the research, please feel free to contact me at tarnold@ladue.k12.mo.us.

Sincerely,

Tony Arnold

_____

I agree to participate in this study.

Name of Participant (please print) _____

Signature_____

Date_____

Appendix D
Teacher Survey on the Eight-Step Process

Directions: Please circle 1-4 to each of the following questions; 1 being Inaccurate, 4 being Accurate.	**Inaccurate**	**Somewhat Inaccurate**	**Somewhat Accurate**	**Accurate**
1. An appropriate amount of support has been provided throughout the implementation process.	**1**	**2**	**3**	**4**
2. This model ties directly to our school-wide improvement ideals in increasing student achievement.	**1**	**2**	**3**	**4**
3. The Eight-Step Process has made me a better problem-solver.	**1**	**2**	**3**	**4**
4. I have enhanced my decision-making and become more confident in making instructional decisions.	**1**	**2**	**3**	**4**
5. This model promotes teacher reflection and self-assessment.	**1**	**2**	**3**	**4**
6. The Eight-Step Process instills a commitment to continuous improvement.	**1**	**2**	**3**	**4**
7. Teaching and learning are the foremost concerns in my classroom.	**1**	**2**	**3**	**4**
8. Classroom / grade level climate is more positive.	**1**	**2**	**3**	**4**
9. The model has a direct impact on student achievement.	**1**	**2**	**3**	**4**
10. I am empowered by utilizing this process in my teaching practice.	**1**	**2**	**3**	**4**

Appendix E

COMMUNICATION ARTS 3RD GRADE 2005

GOAL	STANDARD	TOTAL NUMBER OF ITEMS	NUMBER OF ITEMS BELOW 75%	STANDARD DESCRIPTION
1	1	1	0 (0%)	develop questions and ideas to initiate and refine research
1	5	13	2 (15%)	comprehend and evaluate written, visual and oral presentations and works
1	6	14	11 (79%)	discover and evaluate patterns and relationships in information, ideas and structures
1	8	2	2 (100%)	organize data, information and ideas into useful forms (including charts, graphs, outlines) for analysis or presentation
2	1	2	1 (50%)	plan and make written, oral and visual presentations for a variety of purposes and audiences
2	2	12	3 (40%)	review and revise communications to improve accuracy and clarity
3	1	2	2 (100%)	identify problems and define their scope and elements
3	4	1	1 (100%)	evaluate the processes used in recognizing and solving problems
3	5	10	3 (30%)	reason inductively from a set of specific facts and deductively from general premises
3	7	1	1 (100%)	evaluate the extent to which a strategy addresses the problem
3	8	1	1 (100%)	assess costs, benefits and other consequences of proposes solutions

Appendix F

COMMUNICATION ARTS 3RD GRADE 2006

GOAL	GLE	TOTAL NUMBER OF ITEMS	NUMBER OF ITEMS BELOW 75%	STANDARD DESCRIPTION
1.5	R3C	2	0 (0%)	comprehend and evaluate resources
1.5	R1I	1	0 (0%)	comprehend and evaluate resources
1.5	R2C	3	1 (33%)	comprehend and evaluate resources
1.6	R2C	6	3 (50%)	discover / evaluate relationships
1.6	R3C	5	2 (40%)	discover / evaluate relationships
1.6	R1E	4	2 (50%)	discover / evaluate relationships
2.1	W3E	2	0 (0%)	plan and make presentations
2.1	W2B	1	0 (0%)	plan and make presentations
2.1	W2C	1	0 (0%)	plan and make presentations
2.1	W2D	1	0 (0%)	plan and make presentations
2.1	W2E	1	0 (0%)	plan and make presentations
2.1	W2F	1	0 (0%)	plan and make presentations
2.1	W3A	1	0 (0%)	plan and make presentations
2.2	W2D	4	1 (25%)	revise communications
2.2	W2F	2	1 (50%)	revise communications
2.2	W2B	4	2 (50%)	revise communications
2.2	W2C	1	1 (100%)	revise communications
2.2	W1A	2	1 (50%)	revise communications
2.2	W3E	3	3 (100%)	revise communications
3.1	R2C	2	2 (100%)	identify and define problems
3.5	R2C	9	2 (22%)	reason logically
3.5	R3C	4	1 (25%)	reason logically
3.5	R2B	2	1 (50%)	reason logically

Appendix G
COMMUNICATION ARTS 3RD GRADE 2003

GOAL	STANDARD	TOTAL NUMBER OF ITEMS	NUMBER OF ITEMS BELOW 75%	STANDARD DESCRIPTION
1	1	1	0 (0%)	develop questions and ideas to initiate and refine research
1	5	13	1 (8%)	comprehend and evaluate written, visual and oral presentations and works
1	6	15	11 (73%)	discover and evaluate patterns and relationships in information, ideas and structures
2	1	2	1 (50%)	plan and make written, oral and visual presentations for a variety of purposes and audiences
2	2	12	3 (40%)	review and revise communications to improve accuracy and clarity
3	1	2	2 (50%)	identify problems and define their scope and elements
3	5	12	4 (30%)	reason inductively from a set of specific facts and deductively from general premises

Appendix H

COMMUNICATION ARTS 3RD GRADE 2004

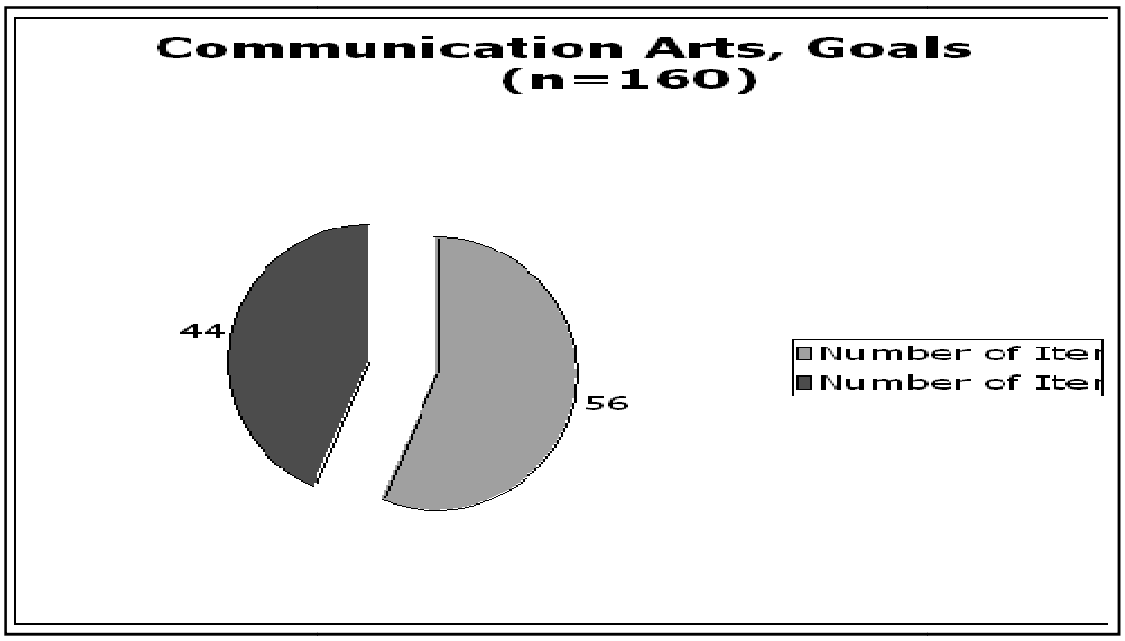
GOAL	STANDARD	TOTAL NUMBER OF ITEMS	NUMBER OF ITEMS BELOW 75%	STANDARD DESCRIPTION
1	1	1	1 (100%)	develop questions and ideas to initiate and refine research
1	5	13	2 (15%)	comprehend and evaluate written, visual and oral presentations and works
1	6	11	6 (55%)	discover and evaluate patterns and relationships in information, ideas and structures
2	1	2	1 (50%)	plan and make written, oral and visual presentations for a variety of purposes and audiences
2	2	12	3 (40%)	review and revise communications to improve accuracy and clarity
2	4	1	1 (100%)	present perceptions and ideas regarding works of the arts, humanities and sciences
3	1	4	3 (75%)	identify problems and define their scope and elements
3	5	12	4 (30%)	reason inductively from a set of specific facts and deductively from general premises
3	7	1	0 (0%)	evaluate the extent to which a strategy addresses the problem

Appendix I

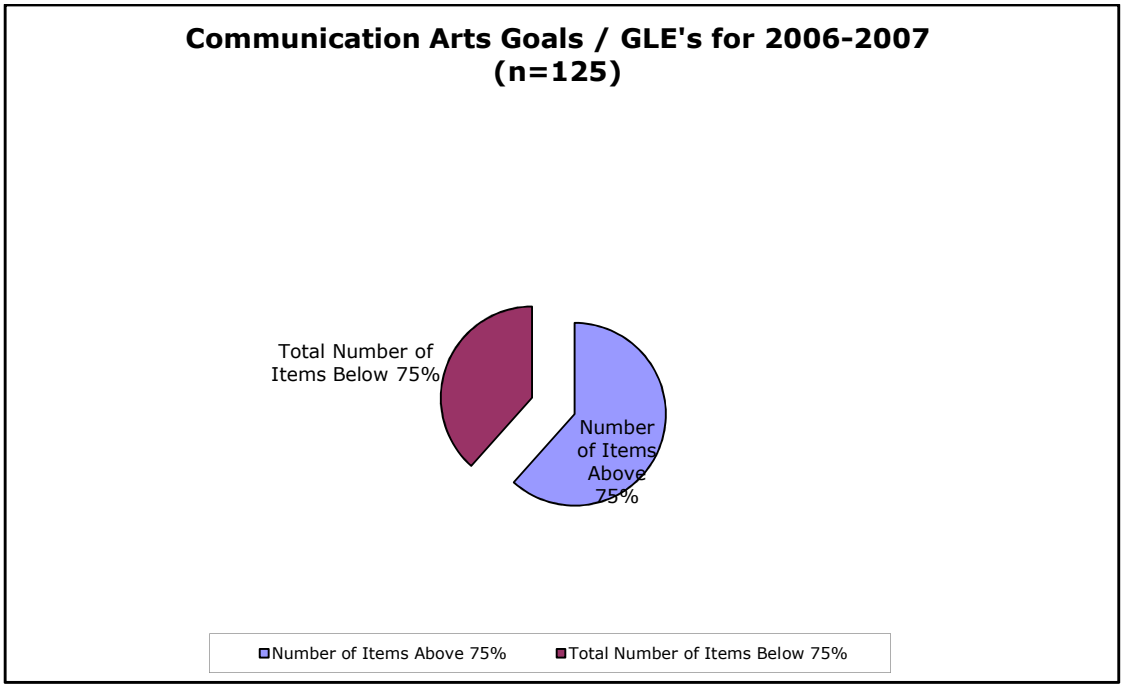
COMMUNICATION ARTS 3RD GRADE 2007

GOAL	GLE	TOTAL NUMBER OF ITEMS	NUMBER OF ITEMS BELOW 75%	STANDARD DESCRIPTION
1.5	R3C	2	0 (0%)	comprehend and evaluate resources
1.5	R1I	1	1 (100%)	comprehend and evaluate resources
1.5	R2C	3	1 (33%)	comprehend and evaluate resources
1.6	R2C	3	2 (66%)	discover / evaluate relationships
1.6	R3C	7	4 (57%)	discover / evaluate relationships
1.6	R1E	4	2 (50%)	discover / evaluate relationships
1.6	R2A	2	0 (0%)	discover / evaluate relationships
1.6	R3A	1	1 (100%)	discover / evaluate relationships
2.1	W3E	2	0 (0%)	plan and make presentations
2.1	W2B	1	0 (0%)	plan and make presentations
2.1	W2C	1	0 (0%)	plan and make presentations
2.1	W2D	1	0 (0%)	plan and make presentations
2.1	W2E	1	0 (0%)	plan and make presentations
2.1	W2F	1	0 (0%)	plan and make presentations
2.1	W3A	1	0 (0%)	plan and make presentations
2.2	W2D	4	1 (25%)	revise communications
2.2	W2F	2	1 (50%)	revise communications
2.2	W2B	4	2 (50%)	revise communications
2.2	W2C	1	1 (100%)	revise communications
2.2	W1A	2	1 (50%)	revise communications
2.2	W3E	0	0 (0%)	revise communications
2.2	W2E	2	2 (100%)	revise communications
3.1	R2C	0	0 (0%0	identify and define problems
3.5	R2C	8	2 (25%)	reason logically
3.5	R3C	7	3 (43%)	reason logically
3.5	R2B	2	1 (50%)	reason logically

Appendix J


Communication Arts, Goals
(n=160)
44
56
Number of Iter
Number of Iter

Appendix K


Communication Arts Goals / GLE's for 2006-2007
(n=125)
Total Number of Items Below 75%
Number of Items Above 75%
Number of Items Above 75%
Total Number of Items Below 75%

Appendix L

Top 5 Areas for Improvement

Based on 2003-2005 MAP Data

Goal	Standard	Total Number of Items	Number of Items Below 75%
1	1	3	2 (66%)
*1	5	39	5 (13%)
*1	6	38	28 (74%)
1	8	2	2 (100%)
2	1	6	3 (50%)
*2	2	36	9 (25%)
2	4	1	1 (100%)
*3	1	8	7 (88%)
3	4	1	1 (100%)
*3	5	34	11 (32%)
3	7	2	1 (50%)

Appendix M

Top 5 Areas for Improvement

Based on 2007 MAP Data

Goal	GLE	Total Number of Items	Number of Items Below 75%
1.5	R3C	4	0 (0%)
1.5	R1I	2	1 (50%)
1.5	R2C	6	2 (33%)
*1.6	R2C	9	5 (55%)
*1.6	R3C	12	6 (50%)
1.6	R2A	2	0 (0%)
1.6	R3A	1	1 (100%)
*1.6	R1E	8	4 (50%)
2.1	W3E	4	0 (0%)
2.1	W2B	2	0 (0%)
2.1	W2C	2	0 (0%)
2.1	W2D	2	0 (0%)
2.1	W2E	2	0 (0%)
2.1	W2F	2	0 (0%)
2.1	W3A	2	0 (0%)
2.2	W2E	2	2 (100%)
2.2	W2D	8	2 (25%)
2.2	W2F	4	2 (50%)
*2.2	W2B	8	4 (50%)
2.2	W2C	2	2 (100%)
2.2	W1A	4	2 (50%)
2.2	W3E	3	3 (100%)
3.1	R2L	2	2 (100%)
*3.5	R3C	11	4 (33%)
3.5	R2B	4	2 (50%)
3.5	R2C	17	4 (24%)

Appendix N
Interview Questions

1. How does your perception of teacher self-efficacy affect your teaching behaviors?

2. How do you think your perception of teacher self-efficacy influences your students' achievement?

3. With the Eight-Step Process, what three components have most likely affected the way you approach your classroom instruction?

4. How directly do you believe that students' motivation is related to students' achievement?

5. How much influence do you believe teachers have over their students' motivation?

6. With The Eight-Step Process, how effective was it in relation to overall student achievement throughout the year?

7. How do you feel your instructional practices changed last year due to the implementation of The Eight-Step Process?

8. Do you believe you are better informed in your lesson planning and students' understanding because of The Eight-Step Process?

Appendix O

2008 Random Sample of 3rd Grade Communication Arts Mean Scale Scores	
4	681
7	688
10	654
11	715
12	666
17	641
18	669
22	681
23	655
25	604
27	661
29	640
30	496
35	674
39	707
41	653
42	682
43	657
44	676
45	675
47	669
49	644
50	660
51	600
53	717
55	655
59	733
61	642
62	549
64	643
65	688
67	661
69	677
72	693
73	623
74	617
75	641
76	614
80	644
82	636

Appendix P

2009 Random Sample of 3rd Grade Communication Arts Mean Scale Scores

Student Number	Score
1	660
2	670
3	659
5	648
6	657
7	636
12	634
15	627
16	609
18	676
20	664
21	681
24	644
25	690
28	642
29	662
32	653
34	627
37	571
39	586
40	650
43	642
44	643
45	663
48	673
49	637
50	688
53	665
55	676
56	652
57	658
58	671
59	662
65	629
67	668
72	683
77	588
78	637
79	572
83	681

Appendix Q

Top 5 Areas for Improvement

Based on 2009 MAP Data

Goal	GLE	Total Number of Items	Number of Items Below 75%
1.5	R2C	6	3 (50%)
1.5	R1H	1	1 (100%)
*1.6	R3C	2	1 (50%)
1.6	R1E	1	1 (100%)
1.6	R2C	7	3 (43%)
*1.6	R1H	1	1 (100%)
*2.2	W2E	3	2 (66%)
*2.2	W2C	3	1 (33%)
2.2	W2D	5	2 (40%)
2.2	W1A	3	2 (66%)
2.2	W2B	0	0 (0%)
*3.5	R1H	8	4 (50%)

Appendix R

Complete Survey Results

Question	Strongly Disagree	Disagree	Agree	Strongly Agree
1. An appropriate amount of support has been provided throughout the implementation process.	0%	0%	100%	0%
2. This model ties directly to our school-wide improvement ideals in increasing student achievement.	0%	0%	75%	25%
3. The Eight-Step Process has made me a better problem-solver.	0%	0%	75%	25%
4. I have enhanced my decision-making and become more confident in making instructional decisions.	0%	0%	50%	50%
5. This model promotes teacher reflection and self-assessment.	0%	0%	50%	50%
6. The Eight-Step Process instills a commitment to continuous improvement.	0%	0%	25%	75%
7. Teaching and learning are the foremost concerns in my classroom and this process is aligned with that belief.	0%	25%	50%	25%
8. My classroom and grade level climates are more positive because of the utilization of The Eight-Step Process.	0%	75%	25%	0%
9. The model has had a direct, positive impact on student achievement.	0%	25%	75%	0%
10. I am empowered by utilizing this process in my teaching practice.	0%	50%	25%	25%

Appendix S

Participant A's Interview

1. How does your perception of teacher self-efficacy affect your teaching behaviors?
If I think I can have a positive impact on students I will be more motivated to pursue something. If I don't think I can have a positive impact I won't be motivated to do something—to try it.

2. How do you think your perception of teacher self-efficacy influences your students' achievement?

When I am excited about the learning and when I show enthusiasm that spills over to my students. Students take on that enthusiasm. Research shows excitement for learning leads to higher student achievement. So my excitement will ultimately lead to higher student achievement.

3. With the Eight-Step Process, what three components have most likely affected the way you approach your classroom instruction?

***Collaboration with my team has had the largest influence. It has allowed me to bounce my ideas off of other professional but also gain new knowledge from my team.**

***Using assessment to guide instruction was something I thought I did and now I see it a different way. I can actually use the data---see what I know about my students not what I think I know. The data has helped me meet individual needs that I did not know was possible.**

***We are all helping to raise each other's students. I know the majority of 3rd graders not know just know them as a person but know them as learner. Instead of just knowing my own students I know how to meet the needs of all students in 3rd grade.**

4. How directly do you believe that students' motivation is related to students' achievement?

I think its extremely direct---there is a huge correlation to the two. When a student is excited they are more likely to be motivated and participate. Example: Math facts---we put together groups with math facts games and they were playing with a partner---they and their partner were working together and we saw a huge increase in student achievement ---it was apparent that this way of practicing was more effective than timed tests because the motivation was there.

5. How much influence do you believe teachers have over their students' motivation?

I think teachers have every bit of influence over their student's motivation. Teachers use that as an excuse that "Oh my students aren't motivated" but we have to think about what is our job? I think motivation is a huge piece of our job---just as students need differentiated learning we have to differentiate to get students motivated.

6. With The Eight-Step Process, how effective was it in relation to overall student achievement throughout the year?

I think it was fairly effective but because it was such a change for the teachers it was a transition year. We were disappointed to find out that our MAP scores had dropped actually. We learned so much last year about the Eight-Step process that has helped us this year. Last year we were doing the Eight-Step process exactly like the article said---this year we are doing the Eight-Step process but more in line with our style.

For example: Lat year pre and post assessments once a week or once every 2 weeks---10 questions multiple choice---we were over testing our kids. We weren't using all of our data the right way we were just testing and then moving on. This summer we went to a PLC workshop and that opened up new doors for what this could look like. We all said we wished we could have gone to that first. We were trying to go off one article and what Tony told us. When we didn't know what to do we just made it up. We had Tony but he was really busy.

This year we are using quarterly test for math and then for CA we start out with just a writing prompt and using that to tailor a months worth of lessons.

7. How do you feel your instructional practices changed last year due to the implementation of The Eight-Step Process?

My instructional practices were a lot more well thought out---the year before was just trying to keep my head above water---my first year. I felt like I was doing that last year too with this new process but I had my team to support. Our team has really gelled---it has helped us be in a better mood. Working on this new process helped us gel. We felt like no one else was going through the same process so we could have pity parties together. This year we even have a new person ---our new person has a big picture. At our first meeting she said let's stop and look at the big picture---what are we asking our students to do and why?

8. Do you believe you are better informed in your lesson planning and students' understanding because of The Eight-Step Process?

If you would have asked me last year I may have said no but this year is a definite yes. Last year I felt like I was doing things because we were being asked to do things. Now this year we have ownership in what we are doing---we are making it

our own and taking risks. We have freedom to find new ways to help support kids and new ways to find out what they need.

Last year I was overwhelmed. This I year I hardly ever say I---I always say we---it is all about the team.

Other thoughts…

Last year I didn't really get it. I got that this is what other schools had done. Tony thought it was a good thing. At the end of the day I thought it was just because Tony e-mailed and said he needed this for his binder. But this year I don't feel like that at all. I'm interested to see how that will influence our student achievement.

Appendix T

Participant B's Interview

1. How does your perception of teacher self-efficacy affect your teaching behaviors?
Just knowing that over time things will lie out the way they should. If things start going the way they shouldn't the team can share ideas. If I took a post test and had a lot of 6s or 7s I could go into her class or have our students go into each other's rooms ---using each other's strengths and bringing them into each other's classrooms.

2. How do you think your perception of teacher self-efficacy influences your students' achievement?
If I am motivated and positive feeling---my belief and my views will affect the students becoming more motivated and engaged in what they are currently learning about.

3. With the Eight-Step Process, what three components have most likely affected the way you approach your classroom instruction?
***Time efficiency---there is only a certain amount of time built into our day---knowing that helped me become a more efficient teacher.**

***Collaboration—having the team become more comfortable and workable together. Knowing that you---I know that last year we put all of eggs into one basket---our team has our back at all times. You don't want to let any team member down**

***Differentiation---knowing that there will be another time that a student can get another opportunity with the Eight-Step process—it is a continuous process-the learning just will not stop**

4. How directly do you believe that students' motivation is related to students' achievement?
I believe they are hand in hand ---once you get a student's motivation and engagement that is when I as a teacher know they are actually willing to have their mind open and learn about what we are currently addressing

Example: I used the graphs I was using for Tony to show the students why we collect data---make it current---tie into real life---show that it is not just a one time thing

5. How much influence do you believe teachers have over their students' motivation?
I would like to think I have more influence-but especially at this age---they know what their likes and dislikes are at this time. So it is bringing in those likes and dislikes and joke or tease them into liking what they are doing. I like to think I am

positive person so more of my motivation should go into them---I can only see the results I get back form them and that is when I can see how much my motivation does come into effect.

6. With The Eight-Step Process, how effective was it in relation to overall student achievement throughout the year?
To be honest at firs it was overwhelming and too much to do. It was my first year---to know what is expected it was hard for me to see. The collaboration with my other teammates helped. It was hard to tell---
I would hear them say, "Oh we have another test---a lot of pre and post tests. I could share the results with my teammates and share the results--- even sharing the results with the students.

7. How do you feel your instructional practices changed last year due to the implementation of The Eight-Step Process?
This was hard---everything was thrown at me and I didn't have a comparison. My team was expected to do the same thing so that helped me. I didn't have a set standard for how my teaching was. I enjoyed it because it forced the collaboration.

As a new teacher I found it to be easy because something was set up and told to us by our administration. It was also harder because I was always hearing my 3 teammates say "This was not like what we did last year ---this is so much work".

8. Do you believe you are better informed in your lesson planning and students' understanding because of The Eight-Step Process?

I think it does to a degree. I have a completely different make up of kids. Doing the pre- assessments on the kids---knowing what they need to work and what to focus on. We have incorporated Learning Lab teachers this year so we are better off than we were last year. This is still a learning year. Every year could be a learning year with new classes and new information.

Other thoughts…
Our team worked really well together---I can see it can go completely wrong if the teachers are not in sync. They were my fall back clutch---it can make or break the system. It deals with a lot of collaboration ---I know some teams aren't like that. It could be used as an intervention to get the team working together.

Appendix U

Participant C's Interviews

1. How does your perception of teacher self-efficacy affect your teaching behaviors?
Because I do have 10 years of experience I can look back at individual students and remember that I helped that child. So when I get frustrated now I know I've helped other students. I have more resources; more confidence and I know that I can't give up because that is essentially giving up on a child.

2. How do you think your perception of teacher self-efficacy influences your students' achievement?
I think by far my students know if I believe in them or not---facial expression, tone of voice, things I day. If I believe in them and they can tell that they have more of a drive to be successful—I think it is essential. It is part of my job to teach them to believe in themselves. I need to believe in them even when they don't believe in themselves

3. With the Eight-Step Process, what three components have most likely affected the way you approach your classroom instruction?
****A better understanding of formative and summative assessments. I realize now that everything is a formative assessment. Another teacher said" A formative assessment is any Dr.'s visit---flu symptoms, yearly visit, cancer treatment, etc. Summative is the autopsy---you're done. So when I look at scores and I see 3 students who received a 58% I don't have to feel they failed instead I can say what else can I try to help them get it in the future---how can I approach this in a different way in the future—there isn't an end to the teaching/learning---I can continue to reteach until the end of the year.**

*****Every 3rd grade student is my student---the whole 3rd grade team is responsible for the success for the 3rd grade. That sounds like it might be a heavy load but it is actually a relief because I always have a team to work with to help solve problems with students. 4 heads are better than one!**

Ex: Team time---when students are grouped according to their learning needs and during that time period will have students from all 4 classrooms.

*****Consistency! It doesn't have to be difficult to have consistency between the classrooms---as long as we have plan time together and we use the time wisely---it actually makes teaching easier.**

Ex: We create rubrics together and we look at each other's papers together. We all sue the same tests and have the same homework each night.
Mon---content---science or social studies
Tues –LA—grammar or writing
Wed—cursive handwriting
Thurs. math

Fri—no homework

Monthly reading log

4. How directly do you believe that students' motivation is related to students' achievement?

I believe student motivation is a huge piece of student achievement. Teachers and parents can help students but ultimately it is the students who own the responsibility to do their best. However I feel like it is part of my job to teach students responsibility and the benefits of doing their best.

5. How much influence do you believe teachers have over their students' motivation?
A lot! However---I think teachers *can* have a lot of influence of their student's motivation the tricky part is all students come to class with different prior experiences and various personalities ----with that being said --- if there is a child who has life experiences that have negatively affected their self esteem could be more difficult to help them become self motivated. But it doesn't mean you give up---it takes more creativity for some students.
EX: To help students see that they can truly meet goals we are setting monthly goal and each student sets their own goals---does not have to be academic---soccer, video games, anything… We post them in the room and talk about what our progress throughout the month. Some of the kids have already accomplished what they set as a goal. I'm hoping that by putting I the effort to achieve any type of goal it will transfer to academics goals as well.

6. With The Eight-Step Process, how effective was it in relation to overall student achievement throughout the year?
Last year it was an experimental year---first year. I feel like we spent the first months just ironing out how to make the 8 step process work effectively/efficiently for us as a 3rd grade team. I did see changes that I felt like if had more time with those students it would have been much more apparent. By the time we got into a groove I was beginning to see great progress from students through reteaching and enrichment---I was seeing it from all levels. If we had begun the year with the plan already in place I have no doubt I would have seen even more growth. I really see this as something effective in working to close the achievement gap

Ex: I was working with a group of students who were really struggling with place value and typically that is not a concept that is covered deeply in 3rd grade---it is a review in 3rd grade. Since I was able to focus in on one area I could tell that the students just within that 30 minutes time period walked away with a deeper understanding. I was able to focus the lesson on the exact level the students needed to understand place value on a deeper level---this was a team time.

7. How do you feel your instructional practices changed last year due to the implementation of The Eight-Step Process?

My instructional practice has changed in the sense that I am focused on all the 3rd grade students not just the students who are assigned to me. So, when my team develops lessons we work together we get the best of each teacher's strengths. When I teach a lesson I feel like I am focusing on the concept I am scheduled to teach—less fluff and more meat.

8. Do you believe you are better informed in your lesson planning and students' understanding because of The Eight-Step Process?
Absolutely---I have a much better understanding of individual student progress---I know what works well for each of my students and which students I need to come up with an alternate way of helping them master a given concept. I truly see my teaching as a cycle teaching, assessing, planning---it makes my daily planning easier.

Assessment driven instruction

Other notes:

***Right now for Team time we are focusing:**
After unit one we gave an assessment---we used the results of that test to make groups for enriching or reteaching while during the scheduled math time we are moving on to unit 2.

Mon--- Speed and accuracy with math facts
Wed---Math concepts
Thurs/Fri---writing---we developed a rubric and broke the students up based on their rubric scores

**** A whole school plan??**

I have been blessed with a team that works well together---our personalities fit nicely and we have a great trust system between us..
We let our guard down with other and we feel comfortable talking about things we need help with. We feel comfortable leaning on each other ---I feel like that is a unique bond we have as a team. I t has contributed to the success of our implementation of the 8 step process.

If there is tension within a team I think tit would be a lot more difficult to have the success we have. I also think it is important for all members of the team to have passion for teaching not just that is just a job.

What came first the chicken or the egg---we were not such a strong team in August last year ---we were a new team—we had just started working together. Maybe the reason we are such a tight team is that we did go through this process together. The daily collaboration helps teachers learn how to compromise and lean on each other.

So maybe there is hope that teams could be as successful ---especially if it is looked at as a school expectation.

Last year wasn't easy it was hard but this year I am so confident—It takes the guess work out of teaching.

It is really important for the administration to provide professional development and planning time needed to make this successful

Ex: We all went to a 3-day PLC meeting—we have the same language—etc..

Appendix V

Participant D's Interview

1. How does your perception of teacher self-efficacy affect your teaching behaviors?

I'm a firm believer that if I am excited the kids are excited. My passion comes out in everything I do so if the kids see that they will react the same way. I think having a positive attitude about everything you do will impact the students in a positive light.

2. How do you think your perception of teacher self-efficacy influences your students' achievement?

I think my positive excitement and how I approach things matters how they respond to it. If I reason with compassion versus anger they are more willing to try. As long as I am continually trying to learn that that teaches them we can all learn from each other and together . To the ultimate goal of being life long learners.

3. With the Eight-Step Process, what three components have most likely affected the way you approach your classroom instruction?

*****Pre testing—It lets me know ahead of time who needs what instruction---if they have all passed it lets move on. If no one has mastered it I can see what we need to address. Pre-testing completely guides my planning.**

*****Collaboration---it helps me become a better teacher---lets me think outside the box and hear other ideas and it builds confidence about your teaching skills---reinforcement from your team.**

*****Post test—Check to see tat what I have taught has been understood and if not leads me to small group**

Without those 3 things the process does not work

4. How directly do you believe that students' motivation is related to students' achievement?

Very related—and it is partly my job to be sure it is my job to be sure they are motivated and make sure they know they can. If they are not motivated they won't complete anything. Students also need to understand I can't make them learn---I can give them tools ,resources, guidance, give them an opportunity to ask questions but I can't make them learn

5. How much influence do you believe teachers have over their students' motivation?

I have about 1/3, they need self-motivation and they need to get it at home. Kids that have a well-rounded sense that I believe in them, their parents believe in them and they believe in themselves

6. With The Eight-Step Process, how effective was it in relation to overall student achievement throughout the year?
I think it was good---it kept close tabs on who needed what. It also allowed me and them to see their small growth. Last year was a tough year—I had a lot of kid who had a lot of needs---the Eight-Step process helped me get through the year to see those small gains. It didn't matter if they were advanced or proficient—their growth was what mattered to me and it mattered to them

7. How do you feel your instructional practices changed last year due to the implementation of The Eight-Step Process?

It moved from more whole group to a lot more a small group to meet individual needs. Before I didn't know who didn't know what. Moved to a lot of whole group—a lot of centers. Most of the time we had 3 teachers so we were able to meet individual needs

8. Do you believe you are better informed in your lesson planning and students' understanding because of The Eight-Step Process?
Yes.
I think that it gives me a whole new sense of who my kids are and where they are academically---my whole planning process changed---everything changed.. Was it obnoxious at first yes! Was it a ton of work yes! but there were a ton of benefits.

Ex of how planning changes---I went to specific objectives and specific concepts instead of big ideas. The year before I planned for a week out but now it is more day-to-day. It is a more reflective practice---great conversations with the team---I'm doing this and it didn't work---what are you doing? It has created a safe place to go to!

Other thoughts…

WE are four close teachers. we don't think we are the best or the worst—we all have something to contribute. Definitely depends on the people PLCs and Eight-Step process overlap and many feel the Eight-Step is too much work and they would not want to do it.

I don't know if I had been with other team members would it have worked out as well as it has.

We would have been friends anyway but I think it caused us to think deeper and reflect together in a safe environment. It helped us grow professionally.

Appendix W

Intervention Implementation Log

Student's Name	Date	Activity Description	GLE / Objective

Appendix X

Enrichment Implementation Log

Student's Name	Date	Activity Description	GLE / Objective

Appendix Y

Walk-Through Checklist

Teacher Being Observed:_____

Observation: Overview	Yes	No	Comments	Date
Is the learning expectation clear?				
Is the lesson at the appropriate level?				
Is there a variety of instructional strategies being used?				
Are the students engaged in the learning process?				
Does the environment support the learning happening?				
Is the teacher following the team's curriculum map?				

Appendix Z

Dear 3rd Grade Team,

If you could, please take a few minutes to complete the survey. All of your responses will be anonymous. It is important I get honest and direct feedback on this process. If you have additional thoughts for the questions, PLEASE use the comment box to share your thinking.

I will utilize this information with moving forward with your grade level in the fall, beginning implementation with 4th grade, and for my doctoral project.

Thanks in advance for taking the time to complete this for me. I will share the results with all of you when they are all completed.

http://www.surveymonkey.com/s.aspx?sm=3fRDYY1r2_2fkxlTkooTduaA_3d_3d

Thank you,
Tony Arnold

Vitae

Anthony Arnold was born in Beaver Dam, Kentucky on May 7, 1976. He moved to Illinois in 1981 where he lived until he graduated from McKendree University in Lebanon, Illinois, in 1998. After earning his Bachelor of Science in Elementary Education with an emphasis in English and Social Studies, Mr. Arnold finished the academic school year as a teacher assistant at Freeburg Grade School. In 1999, he worked as a teacher in the Brooklyn School District. In 2000, Mr. Arnold taught at Ethel Hedgeman Lyle Academy Charter School. From 2001-2004, he taught at The St. Michael School. In 2004, he worked as an elementary teacher at Spoede School for four years. During this time, he received a Master of Education in Administration in 2004 from Lindenwood University. In 2008, Mr. Arnold began his administrative career as Administrative Intern / Assistant Principal at Spoede School. Currently, Mr. Arnold lives in St. Louis, Missouri, and is expecting to complete his Ed.D. in Education Administration from Lindenwood University in January of 2010.