

POSITIVE SUPPORT TEAMS: INTERVENTIONS FOR STUDENTS OF POVERTY  
TO IMPROVE ATTENDANCE, TEST SCORES, AND GRADUATION RATE IN A  
RURAL MISSOURI HIGH SCHOOL

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by

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## POSITIVE SUPPORT TEAMS

The undersigned, appointed by the dean of the Graduate School, have examined the dissertation entitled

Positive support teams: Interventions for students of poverty to improve attendance, test scores and graduation rate in a rural Missouri high school

presented by Keith Matlock, a candidate for the degree of doctor of education and hereby certify that, in their opinion, it is worthy of acceptance.

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## POSITIVE SUPPORT TEAMS

This is for Jenny, Emily, Grant and Lauren. Thanks your love and support.

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**Abstract**

Effects of an intervention system, Positive Support Teams, (PST) were examined in a case study using critical inquiry analysis. The case study analyzed the effect of the PST program on the attendance, End of Course Exam scores, and graduation rate of low-income students in a large rural high school in the Missouri. The test scores decreased for the cohort with access to PST compared to the cohort that did not have access to PST. Attendance improved for students with access to PST but not in a manner statistically significant. Graduation, however, did show a large increase from low-income students without access to PST to students with PST access. In future research, a series of graduating cohorts would show if any trend exists between the existence of the PST program and student outcomes.

## Chapter 1

### Dissertation-in-Practice

A low graduation rate is an issue that constantly plagues educators. The most tangible effect of the student dropout rate is the cost, in dollars, that the high school dropout loses over the course of their career. According to the Alliance for Excellent Education (AFEE, 2009) an average of 7000 students per school day will drop out of high school throughout the United States. Seven thousand dropouts per day each day of a year leads to more than 1.2 million high school students dropping out every school year. The immediate cost to the dropout is an average of \$7840 less in earned income every year (AFEE, 2009). Expanded throughout a 30 year career, that number grows to \$235,200 less earned income for the high school dropout compared to someone who earned a high school diploma. Students from families that are impacted by poverty are hit much harder. In 2009 dropout rate of students from low-income families was 7.4% compared to the 1.4% dropout rate of their peers from high income families (Chapman, Laird, Ifill, and KewalRamani, 2011). Higher dropout rates among low income families contribute to the cycle of poverty that so many people find themselves.

The state of Missouri is dealing with its own dropout issues. The state of Missouri had a projected number of non-graduates for the year of 2011 of 17,962 (AFEE, 2009). This number comes to an estimated loss of \$2,319,000 in lost income alone. At the local level, Battlefield High School, a pseudonym, a rural school district in the midwestern United States, had 111 dropouts in 2008 (DESE). The estimated cost to the school district in lost income using the AFEE formula comes to \$26,107,200. Though that number looks considerable, the dropout rate

for Battlefield High in 2008 is only 4.4% (DESE, 2008) which is only slightly larger than the state of Missouri dropout rate for 2008 of 4.2% according to the state core data report (DESE, 2008).

Further costs accrue as the student moves through the process of failing in school. As a student falls behind their cohort, additional years are added to their educational process. Each year added to the student's tenure in high school adds anywhere from \$4000-\$7000 each year to the total cost of the student's education every time the student is retained (Allington and Wamsley, 1995/2007). The costs of student dropouts to a school district continue to rise from many corners.

Many different factors impact high school students and negatively impact their successful completion of high school. This study will focus on poverty and the negative effect it has on student. Poverty affects student performance in areas that schools use to measure student success. Poverty causes students to miss school at a higher rate than students not affected by poverty (Cheney, Flower, and Templeton, 2008; Fischer and Frey, 2011; Rappaport, Daskalakis and Andrel, 2011). Test scores suffer for students in poverty compared to their counterparts that are not affected by poverty (Reeves 2007; Perie, Grigg, and Donahue, 2005/2007; Havdala, 2010). Students of poverty have a greater chance to drop out of school without earning their diploma (Bridgeland, DiIulio Jr. & Morison, 2006; Hernandez, 2011). This case study will look to the efforts of one rural high school looking to intervene on behalf of its students suffering from poverty.

This rural high school southwest of St. Louis, Missouri, Battlefield High School (a pseudonym) has a four-year graduation rate average of only 87% (MODESE, 2014). The

graduation rate compares favorably to the Missouri average graduation rate for rural schools which is 81.1% (Strange, Johnson, Showalter, and Klein, 2012). In an effort to provide the best educational outcomes, this school, like many schools nationwide, are adopting programs that provide an array of alternatives for students who are struggling. One program to prevent dropouts being utilized in many schools is Response to Intervention (RTI). The RTI system uses a systematic, tiered approach to provide specific interventions to meet each student's specific need. The RTI Pyramid model consists of a series of tiers, usually three, of varying instructional intensity (Appendix 1) (Ockerman, Mason, and Felker-Hollenbeck, 2012; Buffum, Mattos, and Weber, 2009). The first level, Tier 1, consists of a core set of interventions that would benefit 75% of the student body (Buffum, Mattos, and Weber, 2009).

Battlefield high has its own version of the RTI pyramid called the Positive Support Team (PST) (Appendix 2). Battlefield High's interventions at the tier 1 level are kept within the general education classrooms. Teachers track student data to locate areas where students struggle academically. The students receive supports specific to their academic needs ranging from extra assistance from teachers, peer tutoring and academic modifications such as extended time on tests and assignments. These modifications are offered school wide and the bulk are offered during Battlefield's weekly "Academic Lab" period. The Academic Lab is a period of time blocked out every week for the entire school to be offered academic assistance. Students that do not respond to the interventions at this tier are referred to Tier 2 for more specific and intensive instruction (Fuchs and Fuchs, 2006).

Students that do not respond positively to the interventions at the first tier are given more intensive intervention at Tier 2 (Fusch and Fusch, 2006). Tier 2 addresses the needs of non-learners and failed learners by implementing more robust interventions (Buffum, Mattos, and

Weber, 2009). Tier 2 interventions focus more on small group settings that addresses specific content settings or targeted interventions (Hawken, Vincent and Schumann, 2008). Tier 2 interventions are designed to accommodate approximately 15-20% of the student body (Hawken, Vincent, and Schumann, 2008). Tier 3 is the most intensively focused intervention process, specifically tailored to the needs of the individual learner (Buffum, Mattos, and Weber, 2009). Tier 2 interventions in Battlefield High are smaller and more focused academically. These interventions are also offered during the school day. Tier 2 interventions come in the form of specialized study halls that offer a more intensive academic presence by the teacher including student grade checks and specialized lessons where academic skills such as note taking and study skills are taught.

The intense interventions that are grouped into Tier 3 are designed to accommodate the 5% of the student body that found Tier 1 and 2 ineffective (Hawken, Vincent, and Schumann, 2008; Hernandez-Finch, 2012). Battlefield High's Tier 3 interventions consist mainly of special education services and an alternative diploma program.

Timely and focused interventions are essential for a successful high school (Westerberg, 2009). Implementation of RTI interventions has shown success in improving student performance (Buffum, A., Mattos, M., & Weber, C. 2009; Hawken, Vincent and Schumann, 2008; Fusch and Fusch, 2006). A long standing criticism of the special education model is not the services provided by the special educators themselves but that the students had to wait for the process of entering the special education system instead of receiving academic supports from the beginning of their difficulties (Fisher and Frey, 2010). Though, Fisher and Frey (2010) refer to the lack of timely interventions for special education students, regular education students can benefit from interventions.

**Statement of the Problem**

Much has been written about the effectiveness of RTI intervention and student success (Buffum, A., Mattos, M., & Weber, C. 2009; Hawken, Vincent and Schumann, 2008; Fusch and Fusch, 2006). Trends in the literature to date have focused on students in two environments, urban schools and elementary schools. Less literature has been found on the impact of interventions on rural high schools. The author's desire is to accumulate data on RTI interventions in a school that fills that gap in literature, Battlefield High School.

The school chosen to participate in this case study is a large rural Missouri high school. Two years ago, the school incorporated a pyramid intervention model based on the RTI model called the PST. The school uses these interventions to improve the student learning process and to keep students in school.

Students in the class of 2012 were the first graduating class to have had access to the PST intervention program for their entire high school career. This study evaluated the effectiveness of PST intervention on the success of their at-risk students by analyzing data from multiple student cohorts. These classes were divided between the students whose cohort had access to the tiered program for their entire high school career and students whose cohort had no access to the program at all.

Much theoretical discussion has been said on the effectiveness of RTI interventions (Buffum, A., Mattos, M., & Weber, C. 2009; Hawken, Vincent and Schumann, 2008; Fusch and Fusch, 2006). The district that agreed to the case study is looking for data to determine the effectiveness of its intervention programs. This study looked at the intervention program's impact on student performance and determined the effectiveness of the program.

### **Purpose of the Study**

The research looked at the correlation among student poverty and student performance in attendance, test scores and graduation rate. Data was compared between two high school cohorts. The first cohort compared data on the school's attendance, test scores, and graduation rates with no access to PST interventions, while the second cohort looked at the same data, this time from a class that had PST interventions for its entire high school career.

Though the school has become more racially diverse in the last decade, the number of minority students is still a very low proportion of the student body. Taking that into consideration, this researcher felt that these low numbers are not conducive to accurate readings of the collected data but should be considered for future research.

### **Research Questions**

The effect of the school's implementation of the PST intervention system on the school's graduation rate is the focus of the research. Past research acknowledges other factors contributing to graduation rate. These other factors include poverty rate, attendance, and standardized test scores. This research analyzed these other factors by comparing the graduation rates of a cohort of students of poverty that had access to PST interventions for their entire high school experience to a cohort of students of poverty that attended the school prior to the school's accepting the PST program. Four research questions were explored.

Q1. Is there a difference in the graduation rate of high school students of poverty with PST and high school students of poverty without PST.

- H01. There is no difference in the graduation rate of high school students of poverty with PST and high school students of poverty without PST.
- Q2. Is there a difference in the attendance rate of high school students of poverty with PST and high school students of poverty without PST.
- H02. There is no difference in the attendance rate of high school students of poverty with PST and high school students of poverty without PST.
- Q3. Is there a difference in the End of Course Exam scores for Government of high school students of poverty with PST and high school students of poverty without PST.
- H03. There is no difference in the standardized test scores for Government of high school students of poverty with PST and high school students of poverty without PST.
- Q4. Is there a difference in the End of Course Exam scores for English 2 of high school students of poverty with PST and high school students of poverty without PST.
- H04. There is no difference in the standardized test scores for English 2 of high school students of poverty with PST and high school students of poverty without PST.

### **Theoretical Framework**

The framework of this case study used a critical inquiry analysis. Critical inquiry was used for the framework because the school is using a standardized intervention system in order to change the status quo of student failure. Critical theory in research looks to bring about change (Merriam, 2009). This study will make a critical inquiry analysis of the effects of academic interventions on the success of students in poverty.

Up until this point, all of the research gathered for this paper regarding the effects of poverty on student dropout rates as well as the effects of interventions used by schools to combat these effects is from a theoretical frame. The investigation that will build on the research will use the theoretical frame combined with a lens of critical theory. The use of critical theory was chosen for this case study because the purpose of critical theory is to address unequal power structures in society (Merriam, 2009). The high number of students in poverty that attend the school make it likely that the interventions used by the school will benefit students in poverty.

Poverty has a negative effect on education. Students of poverty face an uphill climb academically as their families do not understand the value of formal education (Lacour and Tissington, 2011). Reeves (2008) showed a 75% rate of variation in student performance was related to poverty. Eighth grade students classified as high poverty are 24% less likely to score proficient on reading tests than students that have a higher socioeconomic standing (Perie, Grigg, and Donahue, 2005/2007). The effects are felt beyond high school graduation. Students at a high poverty school are 24% less likely to advance to the college level (Venizia and Jager, 2013). Taking this into consideration, it is in the best interest of schools to address the portion of their population affected by poverty.

Poverty has a crippling effect on the school's standardized test scores. One area of concern is the gap between high and low achieving districts in terms of standardized test scores. Sum and Fogg (cited in Lacour, and Tissington, 2011) found that students in poverty ranked in the 19<sup>th</sup> percentile on standardized tests compared to the 66<sup>th</sup> percentile rank from middle and upper class students. The state of Massachusetts shows a much more rapid decrease in dropouts from its school districts with test scores classified as high achieving than with school districts whose test scores are classified low achieving (Havdala, 2010). Bergeson (cited in Lacour, and

Tissington, 2011) found, in one study, only 13.2% of low income students met all subject area assessments while 43.5% met none of the same assessments. Battlefield High school is implementing the PST system to increase the test scores of their students that are affected by poverty.

Students need to attend school in order to be successful and poverty has a negative effect on attendance (Balfanz and Nai-Lin Chang, 2013; Balfanz and Byrnes, 2012). In poor rural areas, 25% of the students can miss at least a month's worth of school (Balfanz and Byrnes, 2012). Research has shown a correlation between poverty and student attendance, however there are mixed results to the extent of poverty's effect on attendance. Morrissey and Hutchison (2014) showed that students on free/reduced lunches had an attendance rate of only 1% less than students not receiving the program. In a different study, students eligible for free and reduced meals had an absence rate 24% higher than those not eligible (Rappaport, Daskalakis and Andrel, 2011). Though researchers disagree on the level of poverty's effect on student attendance, the researchers do agree that poverty has a negative effect on student attendance.

Schools look to RTI interventions to increase the attendance rate of their students and Battlefield high is looking to PST to achieve a similar goal. The implementation of RTI at an urban high school in the southwestern United States showed an improvement in attendance of 5.2% over a two year period (Fischer and Frey, 2011). Elementary students responded positively to behavioral RTI interventions at a 67% rate (Cheney, Flower, and Templeton, 2008). The implementation of RTI at an urban high school in the southwestern United States showed an increase in GPA of .86, increasing from 2.26 to 3.12 (Fischer and Frey, 2011). Based on these figures, Battlefield High school is implementing the PST system to increase the rate of attendance of their students affected by poverty.

Students affected by poverty suffer higher rates of dropping out of high school altogether. The effects of poverty have a profound effect on student success with 22% of children who have lived in poverty at some point in their lives not graduating from high school, compared to a 6% dropout rate for their classmates who have never experienced poverty (Hernandez, 2011). The dropout rate increases to 32% when a student spends more than half of their childhood in poverty (Hernandez, 2011). The effects of poverty often transcend academic ability with 11% of students who read proficiently in the third grade not completing high school while 9% of subpar third grade readers who have never experienced poverty drop out (Hernandez, 2011). Poverty often forces a student to choose between their academics and other factors. One third of high school dropouts (32%) said they had to get a job and make money (Bridgeland, DiIulio Jr. & Morison, 2006). Battlefield High school is implementing the RTI system to decrease the dropout rate of its students affected by poverty.

### **Design**

The setting for the research is a rural high school in the Midwest United States. The high school in which we observed, Battlefield High, is the only high school serving the entire school district. Battlefield High school serves 2,097 of the 6,820 or 30% of the total student population within the entire district (DESE, 2012).

Graduation rates, attendance and End of Course Exam scores have been identified by the school as an area that needs to be addressed. In order improve these three criteria; the school has adopted a system of interventions based on the RTI Pyramid called the Positive Support Team (PST). The class of 2012 was the first cohort to graduate under the current PST intervention system, data from the class of 2013 was compared to the data from the class of 2011 to

determine improvements, if any, in student outcomes. This data was analyzed to determine the success of the PST program.

This research was a comparative research design. In order to accommodate the needs for a comparison, certain sets of data needed to be gathered. The data gathered was be the student graduation rate as well as attendance, standardized test scores, and poverty, determined by the student having access to nutritional subsidies. As this was a comparative research design, the data was collected on two different student cohorts. One cohort had the current PST system in place for their entire high school experience, while the other cohort did not have access to the same interventions. The data from both groups was compared to determine a correlation between the school's PST system and improvements in student performance.

Student data was analyzed as an entire cohort. There was no need to individually contact the students. Data collected was numerically based and not attached to any individual student. Therefore, the researcher did not need to gather consent from the student's individually. However, the data was protected. When the appropriate amount of time has elapsed, the data will be destroyed to protect the institution from the possibility of future misuse of the data (Cresswell, 2009). Any further requirements will be addressed through recommendations by the IRB board of the University overseeing the researcher.

Participants will be drawn from different graduation cohorts. These participants were chosen as a matter of convenience. One cohort consisting of one graduating class was chosen because they are enrolled in the first cohort to utilize the new program. Another cohort was chosen from one previous graduating class that will not have had access to the school's PST program as this class graduated prior to the district's utilization of the current PST system.

Data was gathered from the school district. The school was excited to hear the researcher's interest in evaluating this program. One of the caveats of the school's cooperation with this study was its access to the data analysis from the dissertation. District administration expected the researcher to give a presentation to the school administration team. Make-up of the administrators that will be present for the presentation will, at minimum, consist of the assistant principal that oversees the at-risk programs as well as a representative of the district's director of academics.

The school district uses the Infinite Campus system to manage the district data. The district's data manager offered to print out a query that would include the data that is needed for the research. The researcher took the data and separated it into two groups, one group consisting of students that are eligible for free and reduced lunches and the second group consisted of students that had no eligibility for free and reduced lunches. This process was done for two cohorts. Cohort A had access to the RTI interventions while Cohort B will not have access to the interventions for their entire high school experience. These are the two groups that I ran a comparison to compare rates of attendance, test scores, and dropout rate to see if there is a correlation between interventions and student performance.

Once the data was gathered, the researcher utilized a t-test and a z-test to run analysis. The t-test is used to determine if a significant difference exists between two different groups (Mertler and Vannatta, 2010). The z-test is used when the data is more qualitative in nature as in this case study analyzing percentage for graduation rate. In the case of this research, the two groups are two different graduating classes, one that has access to the PST program and one without access to the PST program. This study looked at the impact of PST on low income

students as measured by three Missouri School improvement Plan (MSIP) goals. The three goals are attendance, standardized test scores, and graduation rate.

Variables are anything that can change over time or entity (Field, 2013). According to Cresswell (2009), dependent variables are subject to change based on the independent variable. Independent variables are what cause outcomes (Cresswell, 2009). The independent variable will be the PST pyramid as that is what is expected will be the cause of change. The dependent variables are what the research expects to be affected by the independent variable; in this case, attendance, poverty and End of Course test scores in Algebra 1 and English 2.

In this study, I was looking for patterns in the data. The pattern were twofold. Differences between students of poverty in the cohorts that have access to the PST and students of poverty in the cohorts without PST in graduation rate will be analyzed. The different dependent variables will also be analyzed to look at any differences between the two cohorts as well.

### **Limitations**

One of the limitations of this study was its narrow focus. This study was a case study based on one program that is in one high school. The narrowness of the data gathered made it difficult to determine if correlations discovered in the data are limited to this particular building or can be extrapolated over a wider area.

Another limitation was the reliance on student data to determine the effectiveness of the program being studied. Though the researcher will be looking for trends in the student data it will be difficult to determine the exact cause of any improvement in the student data. Poverty affects the entire environment of those affected by it. Often, extra resources provided by a school

will be overwhelmed by the poverty of the home and community (Gamoran, 2007). The research will only be able to determine correlation, not necessarily causation.

The population of the study itself can also be considered a limitation. The researcher is also an employee of the school being studied. This makes the school and the students from which the data will be gathered a population of convenience. Convenience sampling is gathering a sample that is expedient, based on location or accessibility (Merriam, 2009).

### **Key Terms**

**Cohort** – This research will classify a cohort as a graduating class. To be included in the cohort, the students will have enrolled at battlefield high as 9<sup>th</sup> graders and graduated in four years. Students that did not complete all four years at battlefield will not be included in the data.

**End of course exam** – End of course exam (EOC) is a large scale assessment for Missouri secondary schools designed to provide information about student academic performance in particular classrooms (MODESE, 2015). Battlefield assesses its students in Algebra 1, English 2, Biology and Government.

**Graduation rate** – Graduation rate will include students that have enrolled at battlefield high as 9<sup>th</sup> graders and graduated in four years. Students that did not earn their high school diploma will not be included in the data.

**Achievement level descriptors** – Score on the End of Course Exam to determine the level of mastery a student has achieved. The achievement level descriptor ranges from 100 to 250 and is divided into 4 categories, Below Basic, Basic, Proficient and Advanced (MODESE, 2015).

**Infinite campus** – Infinite Campus is the data management system that Battlefield High School uses to manage its student data.

**Poverty** – Poverty will be calculated by the number of students that have enrolled in the Federal Free and Reduced Lunch Program. Students that meet these federal food subsidy requirements will be classified as in poverty for this research.

**PST** – PST stands for positive support team. The PST is a team of teachers and support staff from Battlefield High School that work with teachers, parents and community resources to its students that are considered at-risk to not graduate on time either due to a crisis situation or academic issue (Battlefield, 2016).

**RTI** - RTI stands for response to intervention. RTI is a system of interventions that organizes and expands the intervention system within the school. Under the RTI system, all educators are trained to identify students struggling academically and have a systematic process of gradually intensifying interventions to meet the individual needs of the students (Buffum, Mattos and Weber, 2009).

### **Significance of Study**

This study provides educational leaders data on how successful the RTI Pyramid is in improving the graduation rate at a large rural high school located in the Midwestern United States. The data gathered will look at the effects of RTI on the general graduation rate of the high school. Other factors that classify students at-risk will be analyzed and comparisons between students that have access to RTI and students that do not have access to RTI will be analyzed.

The hosting institution will also benefit from this research. The institution will have access to the data analysis. The institution will incorporate the data collected from this research in their annual cost benefit analysis. This could determine the maintenance or even the growth of the at-risk program at this school.

Contribution to the literature will be the effects of the RTI Pyramid in a large rural school. Much has been written about the effectiveness of RTI intervention and student success. Trends in the literature to date have focused on students in two environments, urban school districts and elementary schools. Not much literature has been found on rural high schools. The author's desire is to accumulate data on RTI interventions in a school that fills that gap in literature, a large high school located in a rural school district.

### **Summary**

Students that are at a high risk of dropping out of school face many challenges. In order to provide an opportunity to stay in school and graduate, many schools are adopting a system of intervention to identify and assist these students before they drop out. Many studies are done at the elementary level and/or in urban districts. The effectiveness of an intervention system in a rural high school has not been researched to a great extent. This would be an excellent opportunity to evaluate the effectiveness of the RTI intervention system within this specific type of organization.

## **Chapter 2**

### **Practitioner Setting for the Study**

Graduation from high school is a banner moment for every student and every school strives to promote the success of its students. Schools are constantly on the lookout for ways to marginalize elements that hinder students from graduating. One element that has a negative effect on student success is poverty. For many years, schools have looked to classroom interventions to help students of poverty succeed academically. Until the recent adoption of a systematic intervention plan, Battlefield High school used interventions in a haphazard way. Different teachers and administrators intervened in different ways. The introduction of the Response to Intervention (RTI) model changed the manner Battlefield High school addressed interventions. The RTI intervention model created a format for Battlefield to create an organized methodology to the interventions that it provided its students. This new methodology that Battlefield calls Positive Support Teams (PST) uses an organized series of interventions to improve student outcomes.

### **History of the Organization**

The school district that was the basis for this case study serves 6,820 students from ten schools. The district building breakdown is six elementary schools, two middle schools, one high school and an early childhood center. This district's high school is the only high school in the district. As of 2012, the high school served 2,097 of the 6,820 students, or 30% of the total student population within the entire district (DESE, 2012).

In order to service over 2000 high school students, the high school has a vast staff of educators. Battlefield High school boasts over 150 teachers. The average teacher has 14.3 years

of experience and 71.2% of teachers have earned a master's degree or higher (DESE, 2012). These teachers have an abundance of information and experience to bring to the educational process.

Battlefield High is a district with a significant percentage of its student population in poverty. The percentage of the student body receiving free and reduced lunches at Battlefield High is 37.2% (Missouri Department of Elementary and Secondary Education, 2015). Over one in three student's academics must compete with the negative effects of their poverty. Battlefield chose a difficult route to address student outcomes in face of a high poverty community. Battlefield will provide its students an opportunity to break free from poverty by addressing academic issues that prevent its students from achieving academic success.

The school that has chosen to participate in this case study, Battlefield High, is a large rural high school in the Midwestern United States. Two years ago, Battlefield High school incorporated a pyramid intervention model based on the RTI system called Positive Support Teams (PST). The school uses the PST model to improve the student learning process.

Students in the class of 2012 were the first graduating class to have had access to the school wide intervention program for their entire high school career. This study will evaluate the effectiveness of this systematic approach of using a specific school's at-risk student intervention policy on the success of their students by analyzing data from multiple student cohorts. These classes will be divided between the students whose cohort had access to the PST program for their entire high school career and a control group that consist of students whose cohort did not have access to the PST program for their entire high school career.

The district that has agreed to the case study is looking for data to determine the effectiveness of its intervention programs. This study will look at the intervention program's impact on student performance and determine the effectiveness of the program.

### **Organizational Analysis,**

The experience of the researcher in organizational analysis was heavily influenced by the four frames of organizational leadership from Bolman and Deal's (2008) writings. Four frames that are the basis for organizational hierarchy are structural, political, symbolic and human resource. Structural framework is based on a strict hierarchy where ideas begin with the leadership of the organization and flow downward throughout the entire organization. The political frame is based on power between groups within the organization. The human resource frame looks to the people that make up the organization as its driving force. These four frames cover four different leadership styles within organizations that are prevalent in both the public and private sector. The high school that is the basis for this case study has elements of all four frames, but the nature of the research will focus on only two frames. The first frame is structural and the second is human resource.

The first frame is structural. The heart and soul of structural frame is based on top down leadership (Bolman and Deal, 2008). Hierarchy is the driving force behind the success of structural leadership. Effective hierarchy looks to ensure the organization progresses in a manner that serves the needs of the people who control the organization (Mintzberg, 1979/2011). The structural framework essentially looks to have the organization thrive through increased efficiency.

The structural frame is focused, within an organization, on creating an efficient workplace where the workers are highly specialized (Bolman and Deal, 2008). Efficiency comes from a situation where leaders set clear performance standards and performance expectations (Northhouse, 2013). Often, efficiency is evaluated criteria based completely on data based on production of product or economic criteria (Walker and Lorsch, 1968/2005). In education, efficiency can be based on what is considered important to the school, such as test scores or graduation rate.

Effective structural management allows group needs to be met while accomplishing the company goals (Northhouse, 2013). By focusing on the needs of the group, the organization can look beyond the individuals that make up the sum of the parts of the organization. Without an effective hierarchy, structural leadership is doomed to fail (Jaques, 1990/2011). Organizational hierarchy is very effective in larger organizations (Jaques, 1990/2011). Large organizations create a potentially overwhelming situation where informal decision making will lead to an inefficient system where the needed information can bog down, creating a potential ripple of inefficiency to flow through the entire organization. In the structural frame, coordination between the hierarchical layers is key.

From an ethical standpoint, structural framework is much like a factory where the raw materials go into the organization and the finished product emerges on the other side (Bolman and Deal, 2008). The description gives the impression of a cold and calculating environment. This is considered necessary due to the desired outcome of a structural organization, excellence. Excellence is a great goal for an organization but it requires more than dedication from the leadership, it requires dedication throughout the entire organization from leadership on down through the ranks (Bolman and Deal, 2008).

Mentioned earlier in the paper, this school is a large entity. Hundreds of teachers are responsible for the education of thousands of students. Managerial hierarchy is the only way that effectively unifies working systems that consist of hundreds or even thousands of employees (Jaques, 1990/2011). This large entity is dependent on a strict adherence to the structural framework for it to function effectively.

Another aspect of the structural framework is the drive for organizational excellence. Adapting strict authority hierarchy allows an organization to use vertical teaming to align the action taken by an organization to the desired goals that the organization is pursuing (Bolman and Deal, 2008). This desire for organizational excellence will affect the analysis of student data from the classroom teacher. The high school is relying heavily on the teachers to effectively identify students that need intervention. Constant analysis of student data by the classroom teachers is necessary to the success of any intervention system. This data analysis comes from classroom teachers who then are expected to make necessary modifications within their classroom. Should that not prove effective, then the data is used to examine more intensive interventions. In a school the size of this high school, the desire for educational excellence must come from the teachers as well.

The second frame of organizational analysis theory discussed by Bolman and Deal (2008) was the political framework. The political frame revolves around power. The term power comes from the conflict that arises between divergent interests, resource allocation and power relations all combining into a situation where people strive to maintain or increase their power within an organization (Bolman and Deal, 2008).

Divergent interests are a common aspect of organizational life. People within the organization place high priority on their own department, classroom, etc. This creates a series of little fiefdoms within a larger organization. In order to accomplish goals, coalitions must be formed, even when the coalition's members have interests that only partly overlap (Bolman and Deal, 2008). This difference in goals will lead to the coalition's dissolving once the immediate issue has been resolved, resulting in a lack of permanency.

Lack of permanency of leadership is itself not permanent. One thing does lead to the creation of long lasting coalitions and resources. Much of the need to form a coalition within the political framework is due to the need for an organization to allocate resources that are often scarce. When listing his five basic tenets of power, Mintzberg's (1983/2011) first three consisted of the resource, the skill and the body of knowledge to make the resource critical to the organization. Mintzberg (1983) stresses the need for the resource to be critical for the organization to succeed. If the resource is not seen as critical, the power attached to it wanes. The more that a resource is seen as important to the organization, the different groups will form coalitions to gain access. This is much like the lesson learned in economics classes stating the law of supply and demand. The group that controls the resource has access to the power that comes with it.

As the critical resource is identified and the coalitions are formed, power relationships are created within a political frame. Power relationships are often difficult to maintain as the power in an organization often comes from having the ability to gain results or influence outcomes (Bolman and Deal, 2008; Northouse, 2013). Much of the influence of outcomes grows from the effective allocation of resources.

Power relationships often result from the allocation of resources, groups that control the resource have power over the groups that do not. Essentially, the groups that control the resources can set the tone for the organization and the groups that have no control over resources have little control. Essentially, the level of dependence between groups changes the power they have over each other (Levi, 2013). Resource control is a factor weighing heavily on that relationship. As the power relationships evolve and one group gains power disproportionately over other groups, ethical issues become more prevalent.

Political frames have ethical issues that must be addressed. The relationship is difficult to maintain due to the fact that certain groups within the organization hold more power over others. As stated earlier, people without power in an organization are often marginalized. The greatest solution to solve the ethical issue facing the political frame is to share power. Giving power to other groups within an organization can free up energy that can revitalize growth (Bolman and Deal, 2008). Delegating power to other groups within the organization leads to an improved performance and increased morale that can be traced to the empowerment of the employees (Levi, 2013).

The political frame affects the intervention program of the school in different ways. Many different groups within the school system will look upon the intervention program as another stretch to district resources that are already stretched thin. Convincing those groups of the effectiveness of the intervention system will rely on careful analysis of the data pertaining to student success. In the case of this particular school district, the measurements of student success are student attendance, scores on state tests also called “end of course exams and graduation rates.

This perceived draw on the already limited resources is potentially a source of conflict within the school. Bolman and Deal (2008) compare conflict within an organization from both structural and political frames in a very different light. Conflict within an organization is considered as a negative when looked upon from a structural lens while the political framework looks upon conflict as an inevitability that may have positive outcomes to the organization. Conflict within the structural framework is perceived as an impediment to the excellence of the organization while, within the political framework, this same conflict is perceived as an opportunity for the organization to evolve by eliminating any apathetic and stagnant traits that may have infiltrated the policies of the organization (Bolman and Deal, 2008).

The high school constantly looks to find methodology to improve the intervention systems. At all levels within the high school, data is being evaluated and shared in order to make modifications that are necessary to provide the best educational experience to the students. Within the last 15 years, many new programs have been added to improve the academic outcomes of the students. Within that same time frame, existing programs have been modified in order to maintain their effectiveness.

The next frame of organizational analysis the high school relying on to further the success of students in poverty through timely interventions is the symbolic frame. The symbolic frame focuses on how humans create meaning from the events of the world that surrounds them (Bolman & Deal, 2008). The emphasis of the symbolic frame is the creation of the meaning within an individual. A symbol is only an image, nothing more and nothing less. Yet the use of symbols can elicit a powerful reaction in an individuals or groups. Symbols resonate on both an intellectual and emotional level in many organizations (Bolman & Deal, 2008). The symbolic

frame focuses on the culture within the organization and how the people within that organization use symbols to help them find meaning within the organization (Bolman and Deal, 2008).

Symbols are important to the creation and maintenance of an organizational culture. Organizational culture is the focal point of the symbolic frame. The first consideration is the power that comes from the symbols themselves. The symbolic frame looks upon an organization as constantly changing. Symbols give people within the organization legitimacy and cohesion (Bolman and Deal, 2008). This cohesion comes from a shared culture. A unified culture bonds individuals to form a greater entity within the overall organization.

Culture plays a significant role in the group dynamics of the organization. Without this unification, the organization can easily break down into a series of individuals, greatly hampering the development of the organization as a whole. A unified culture provided under the symbolic frame gives rise to a series of group norms that benefit cooperation within the organization (Schein, 1993/2011). A standardized series of norms is essential to increasing group productivity and empowerment because it encourages groups to participate in the decisions that affect the organization as a whole (Levi, 2013). Groups that buy in have a stake in the company beyond the paycheck. These groups actively become part of the greater culture of the organization.

Culture becomes part of the organization as the organization learns. Surprisingly, after all the discussion of group norms and culture, method for organizational growth used at Battlefield High comes from the individual. The organization learns as new people enter the organization. As new people enter the organization, they learn what it means to become part of that organization. They learn the significance of the norms and symbols that are a cornerstone of

the company (Cook and Yanow, 1993/2011). But learning is not a one way street. Each individual brings their knowledge and background to the organization. As the organization teaches its culture and values to the individuals that are part of the organization, the individuals also teach the organization their values (Cook and Yanow, 1993/2011). Through the knowledge and respect of the culture and symbols of Battlefield High, both the individuals within the organization as well as the organization itself evolve as new cultures are introduced.

Battlefield High School heavily considers the culture of the school when considering the process of intervention for students at-risk of failing. School culture is constantly looking to evolve from a reactionary system that was created from decades of generational poverty to a forward thinking system that can rapidly evaluate the student performance and quickly assign appropriate interventions to meet the individual academic needs of each student within the school. By creating an organized system of interventions, the school is looking to build upon two aspects of culture based organizational procedure that Bolman and Deal (2008) classify as product and process. The product is the best educational practice that is gathered from the evaluation of decades of wisdom (Bolman and Deal, 2008). The administration of Battlefield High believes that this wisdom, when accurately reinforced with timely data, will allow individual classroom teachers to make timely and effective modifications to the student's academics. The administrators at Battlefield High also believe that this wisdom will give the teachers the knowledge of appropriate program placement for students who need a more intensive intervention that can only be achieved at Tier 2 or higher on the PST scale.

Battlefield High also believes in the process of creating the PST culture within the school. The process will come from the modifications that are introduced by new faculty and staff of the school (Cook and Yanow, 1993/2011). New faculty members will bring new insight

and experience to the school. Battlefield High believes that these new teachers will learn the old process as they are mentored by more experienced teachers. Battlefield believes that the mentoring process is a two way street and as they are integrated into the school, the new teachers will also bring fresh insight to the veteran teachers. Battlefield High believes that the goal for the new teachers is to use their backgrounds to influence the old process and help it evolve into something new. The overall goal of Battlefield High is to keep the old program from stagnating, therefore, becoming something less effective than it was.

The greatest symbol of student success at Battlefield High is the graduation ceremony. The graduation ceremony is considered by many at Battlefield as symbolizing closure and success. Bolman and Deal (2008) mention the power of symbols to provide legitimacy and cohesion within an organization. Legitimacy at Battlefield is represented by the success students earn by graduating and the cohesion from the closure felt by families as an important chapter of their lives comes to a successful conclusion.

The fourth frame of organizational analysis is the human resource frame. The human resource frame of organizational leadership focuses heavily on the relationship between the organization and the people that make up that organization (Bolman and Deal, 2008). Though the frame is called human resource, it does not exclusively focus on the people in expense to the organization. If the human resource frame of organizational leadership is to be successful, the needs of both the people and the organization should be aligned to mutually benefit both groups (Bolman and Deal, 2008).

The human resource frame relies heavily on the fulfillment of higher human needs to increase productivity within the organization. This frame looks to the highest of human needs,

the need of self-esteem. The acknowledgement of self-esteem needs lead to a feeling of self-confidence, self-worth and general adequacy in the person (Maslow, 1943, 2011). Meeting the needs of the human side of the organization does not benefit the people exclusively, the organization itself will also benefit from the human resource frame of leadership. McGregor (1957/2011) points to the application of managerial talents to the human side of the organization will bring “material enhancements” to the organization.

Organizational leaders must have the right people for the right positions for the human resource frame to be successful. Leaders need to hire the right people. It is important to hire employees that fit into the mold as the type of employee that is desired, including the working and interpersonal skills (Bolman and Deal, 2008).

Making the correct hires is not where the human resource frame ends. It is important to keep the employees that are a good fit for the organization within the organization. Keeping good employees is a benefit to the bottom line of the organization because it will save money in the long run. The organization profits by fostering loyalty and trust of the employee, capitalizes on knowledge of veteran employees and avoids costly errors made by newer employees (Bolman and Deal, 2008). Benefitting from those instances increases the overall productivity of the organization.

### **Leadership Support for PST**

The high school that is the basis for the case study relies on the school principals for its educational leadership. Three different principals, the building principal as well as two assistants, were the driving force behind the new intervention system. All three have a different leadership style. All three provided a crucial component to the PST system. The three different

styles are what Northouse (2013) refer to as a focus. The three focuses for these leaders include transformational, servant and authentic leadership. Without these three styles working together, the intervention system might not have been successfully implemented.

The building principal of the high school is an excellent example of authentic leadership. Authentic leadership is heavily influenced by the ethics and values of the leader. There is a moral component to authentic leadership where the leader understands what is the right thing for society and follows through (Northouse, 2013). Much like transformational and servant leadership, authentic leaders never lose sight of their own values and ensure that the needs of others are placed above their own (Northouse, 2013). Authentic leaders often use self-exploration to maintain grounded in their values (George, Simms, McLean and Mayer, 2007/2011). Being grounded in their values, authentic leaders will focus on the positive aspects of their employees (Northouse, 2013).

Authentic leadership is exemplified by the high school principal is what Northouse (2013) refers to as intra-personal. Intra-personal leadership focuses on the principal's personal experiences and values in order to develop as a leader (Northouse, 2013). Northouse (2013) refers to the leader who is in touch with their values as possessing a firm grasp on their sense of direction or purpose in life, also called their "true north."

This principal is an example of true authentic leadership precisely because of the confidence he has in the direction that he is moving. This confidence in the values he brings to his building makes it easy for him to tap into the creativity of the teachers. Authentic leadership has been shown to encourage faculty to use creative solutions to solve difficult problems in higher education institutions (Ahmad, Zafar and Shahzad, 2015).

The building principal is counting on the creativity of the teachers when interventions are considered for the students. The classroom teachers are rewarded for their creativity in their lessons on a weekly basis via the faculty email system. The principal highlights the achievements of the school at the monthly School Board meetings. Every time the school achieves an accolade, the principal immediately turns the spotlight on the teachers or students that are responsible.

By letting the light shine on those responsible for accomplishment, people are more confident and eager to look for different ways to succeed. His authentic leadership has fostered a building wide embracing of creative solutions for the best interest of the students that has convinced the district to adopt the pyramid. His authentic leadership style has fostered an openness to creative solutions that has allowed the PST pyramid to evolve over the last six years. His authentic leadership has fostered a continuous search for alternative programs that can improve the academic outcomes of the students within the high school.

Transformational leadership focuses on the intellectual and emotional growth that leaders experience by engaging others within the organization and making the necessary connections to improve both the leader and the follower (Northouse, 2013). Collins (2001/2011) rates the transformational leader as a “Level 4” on his five tiered system of leadership hierarchy because the transformational leader uses a clear vision to stimulate the group to high standards. The transformative leader uses their vision and plan for the future that benefits both the leaders and the followers (Northouse, 2013). The needs of the followers are important to the transformational leader because the followers are instrumental in the evolution of the organization.

The assistant principal in charge of the at-risk program demonstrates the qualities of a transformational leader. Though overseeing the at-risk program is merely one aspect of her job, she is the principal that will most directly be utilizing the intervention pyramid. As a transformational leader, this principle is constantly evaluating the intervention program. The program is evaluated from two very different standpoints. The first of these is the standpoint of the student. What worked and what did not work are looked at to further modify the program to provide the students with interventions that meet their needs. The other standpoint is from the school's perspective. Are the teachers getting the training they need to identify at-risk student? What resources do we need in place to be able to intervene?

This principal uses transformational leadership to inspire teachers and students to achieve great things. Transformational leaders use inspiration to motivate followers to exceed the expectations that come standard to many programs (Jain and Duggal, 2015). This principal has added a strong focus on character education and college and career programs. The college and career component is considered important to the students of poverty because they hear of the possibilities that come with this extra training along with the students that are not from poverty. The students from poverty will not be singled out of pity and will be spoken to as anyone who has the ability to achieve. The goal is for the students to focus on the opportunity to succeed instead of fail and, ultimately, break the cycle of poverty that many have always known.

The assistant principal inspires the teachers of the school as well. This inspiration comes from the principal's ability to treat those in her charge as individuals. Successful transformational leaders treat those in their charge as individuals by meeting their needs to grow and prosper (Northouse, 2013; Jain and Duggal, 2015). This principal actively encourages her teachers to improve their craft by expanding their knowledge. Learning resources for the

teachers, conferences and pursuing knowledge through advanced degrees are encouraged. Successes and accomplishments are celebrated throughout the organization and this new knowledge is shared throughout the school. Teachers are encouraged to use this knowledge to inspire others as well. Her objective is for a continuous stream of learning to constantly motivate teachers and students to achieve their standards and then look beyond those standards to a new series of achievements.

Similar to transformational leadership is the servant leader. Servant leadership is defined as leadership that ensures that the needs of others are met as a high priority (Northouse, 2013). Servant leadership looks upon the organization as a giant community that works to achieve a greater good. In service leadership successful outcomes are determined by achieving individual growth and empowerment as well as organizational growth (Northouse, 2013). Leadership in a servant approach looks to use their power to influence and direct instead of using coercion to exert control within the organization (Goh and Zhen-Jie, 2014). By using influence instead of coercion, servant leaders create situation that develops trust within an organization leading to a positive impact on the employees (Goh and Zhen-Jie, 2014). The assistant principal uses this trust that she has accumulated over years of servant leadership to cultivate relationships with both teachers and students. The principal uses this trust to build a commitment to achieve academic success for the students at Battlefield High.

Another principal in the building is a prime example of servant leadership. Her main focus is growth and empowerment of the students. The purpose of empowerment is to give people the responsibility and authority for decisions that affect them (Greasley, and Bocârnea, 2014). Her belief in empowerment of the students led her to spearhead the development of the intervention pyramid at its earliest inception. Though she currently has a more limited role in the

oversight of the intervention program due to shifts within the administrative duties, her passion for student empowerment is still felt as the intervention program of her creation is used to improve the educational experience of the students.

Servant leadership is reliant upon the leader empowering those within the organization to grow and evolve. This growth leads to an increase in satisfaction of those within an organization. This principal believes that if the students feel empowered, that will lead to improved satisfaction. This satisfaction will lead to improved student outcomes. A correlation between servant leadership and job satisfaction has been shown with employees in the corporate sector of the economy (Tischler, Giambatista, McKeage and McCormick, 2016). She believes that if this works in the private sector, next logical step would be to utilize servant leadership in a public school.

### **Implications for Research**

This research is looking to determine a correlation between the PST intervention system at Battlefield High School and improvement in student outcomes. Four research questions will be explored. What impact do PST interventions have on the graduation rate of students in poverty and those students not in poverty? What impact do PST interventions have on the attendance rate of students in poverty and those students not in poverty? What impact do PST interventions have on the student scores on Algebra1 End of Course Exams tests of students in poverty and those students not in poverty? What impact do PST interventions have on the student scores on English2 End of Course Exams tests of students in poverty and those students not in poverty?

Poverty has a negative effect on the graduation rate of high school students. Past literature has shown a correlation between poverty and students dropping out of school (Cheney,

Flower, and Templeton, 2008; Fischer and Frey, 2011). Students who drop out of high school face a future of higher unemployment and lower earning potential. The study will also look at any correlation between the availability of PST interventions on the graduation rate of Battlefield High.

Absenteeism is of concern due to it being one of the strongest predictors of course failure. Attendance is shown to be linked to student achievement (Morrissey, Hutchison and Winsler, 2014). Attendance is important for student success. It is, after all, very difficult to succeed when you are not actively participating. Chronic absenteeism greatly increases the negative affects student performance (Morrissey, Hutchison and Winsler, 2014).

The study will look at any correlation between the availability of PST interventions on the attendance of the graduates. A strong correlation has been shown that demographic characteristics of neighborhoods reflect student test scores with neighborhoods of lower economic standing having lower mean test scores (Wilson and Martin, 2000). The study will look at any correlation between the availability of PST interventions on the standardized test scores of the graduates.

### **Summary**

Students of poverty can benefit from a wide variety of interventions. By organizing the available interventions into an organized RTI Pyramid, The PST system, the students of Battlefield High have access to interventions based on their individual needs. The goal of organizing these interventions is to create a culture of success for the students in poverty. When people experience success on a regular basis, it is easier for them to buy into the program, but when people within an organization do buy into the goals of the program, their performance

improved as well (Kantor, 2004). The PST pyramid is the key for the students of Battlefield High to experience success.

As stated earlier, students of poverty tend to fall into a spiral of dropping out of high school, lower employment opportunities and lower earning potential, all of which points down a path of continued poverty. The desire behind the interventions that are provided by the high school are simple, provide an opportunity for these students to experience being academically successful. As the students experience academic success on a repeated basis, they will begin to believe in the concept of their own success. This rise in the student's self-confidence will be the student's opportunity to rise beyond the poverty that many of them have known their entire existence.

All four research questions address the effect that interventions have on the academic success of the high school students of the host institution. The goal is to show the positive effects that PST interventions have on student performance. The research looks to advance scholarship by showing a correlation between PST interventions and academic improvements on students of poverty. The researcher believes that PST based interventions will have a positive effect on the attendance, test scores and graduation rate of all students at Battlefield High school, but the positive effects of PST interventions will be greater on the students of poverty. Battlefield high has many interventions in place. The benefit of PST is that now all of these interventions are now organized.

## **Chapter 3**

### **Literature Review**

The major purpose to the review is to provide an analysis of Positive Support Team (PST) interventions on student success in a case study of a large, rural high school in the Midwestern United States. The analysis will cover three areas pertaining to the intervention of the school. First, the literature will give an analysis of the negative effects poverty has on dropouts. Secondly, a brief background on the three tiers of the RTI intervention system as the model for the PST system utilized by the school. Lastly, the benefits of RTI interventions in areas measured by the school which is hoped will be matched by the PST program; student attendance rates, test scores and dropout rates. I will adopt a critical theoretical approach to understand the effectiveness of interventions of the PST model in a rural high school with a high poverty rate among its students.

#### **Purpose**

High dropout rates have been an issue at the forefront of concern for schools. The number of students dropping out of high school can be as high as 1 one out of 8 (Christenson and Thurlow, 2004). As many as 7000 students drop out of school every day, leading to over 1.3 million students not graduating within 4 years of high school (Pyle and Wexler, 2011). Students that drop out of high school before earning a diploma often suffer negative effects in their career prospects.

Employment prospects for dropouts are bleak. Students who have dropped out of high school suffer higher unemployment rates than students who have earned a diploma (Community Health Systems Resource Group, 2005). A survey from the U.S. Bureau of Labor Statistics

(2015) showed that in 2014, high school dropouts aged 25 years and older averaged an unemployment rate of 9% compared to only 6% unemployment for high school graduates with the same age range.

Dropouts who do find employment are not immune to the negative effects of lacking a diploma. Students who drop out before graduation from high school have lower earning potential than their counterparts who have earned their diplomas (AFEE, 2009; Community Health Systems Resource Group, 2005). The lifetime difference in income between an individual who graduates from high school (but completes no further schooling) and one who does not is likely to be \$260,000 (Rouse, 2005).

Poverty itself is a major contributor to dropout rates. The conditions often associated with environments of poverty are major reasons students achieve lower performance levels, even as far back as their entry into the school system (Foorman, Kalinowski and Sexton, 2001/2007).

### **Conceptual Framework**

Several factors lead to students dropping out of school before earning a diploma. One of these factors is poverty. Literature shows poverty to have a significantly negative effect on students completing high school (Kishore and Shaji, 2007). Student attendance patterns in elementary school are negatively affected by poverty (Morrissey, Hutchison and Winsler, 2014).

Poverty is an issue that affects students throughout the United States. Though poverty has a significant effect on the graduation rate of students, there are limits to what schools can do to alleviate the student's financial situation. Many schools are instead focusing on providing for the academic needs of students in poverty.

The conceptual framework of this case study will use a critical inquiry analysis. Critical inquiry is used because the case school is attempting to change the success rate for its students of poverty. Critical theory in research looks to bring about change (Merriam, 2009). This study will make a critical inquiry analysis of the effects of academic interventions on the success of students in poverty.

The Battlefield School District (a pseudonym) is negatively affected by poverty. The percentage of the student body receiving free and reduced lunches at Battlefield High is 37.2% (Missouri Department of Elementary and Secondary Education, 2015). The poverty rate of Battlefield High seems high, however, it compares favorably to the state of Missouri's rural poverty rate of 41% (Strange, Johnson, Showalter, and Klein, 2012). The school has chosen a path of academic interventions to address the academic struggles of the students of poverty. The goal of these academic interventions is to keep students engaged with their classes and on track to graduate. The school addresses poverty by having the teachers take a greater role in addressing the at-risk students. Students of poverty must have advocates in the school. They need advocates who hold them to high standards and push them to succeed rather than push them aside. The school looks at an organized intervention system to provide its teachers with the skills to intervene on behalf of their students.

Battlefield High uses a version of the Response to Intervention (RTI) that the district has named PST (Positive Support Team) to provide supports for the students that are at-risk of dropping out. The goal for Battlefield High school is to use the PST format to standardize its intervention process throughout the entire high school. The school is uses this intervention process to place all students in a situation where they are in a position to succeed. By providing

all students in the high school access to the same intervention process, the high school administration is expecting to see improvements in areas of student measurement.

Trends in the literature to date have focused on students in two environments, urban school districts and elementary schools. Less literature has been found on rural high schools. The author's desire is to accumulate data on interventions in a school that fills that gap in literature, a large high school located in a rural school district.

### **Design of the Study**

The factors leading to students dropping out that are necessary to address are student poverty, standardized test scores and student attendance. The research will look at the correlation between data from those four criteria and their relation to student graduation rates, attendance and standardized test scores. The data will be compared between two cohorts from a large, rural high school, located in the Midwestern United States. This study will compare data on the graduation rates, attendance and standardized test scores of students in poverty that have no access to PST interventions with students that had access to PST interventions for their high school career.

The study chose graduation rate, attendance and standardized test scores because that data is used by the state of Missouri to determine whether a school is accredited (Missouri Department of Elementary and Secondary Education, 2016). Accreditation is important to Battlefield High because that data is how the state measures continuous improvement in the public schools throughout the state of Missouri (Missouri Department of Elementary and Secondary Education, 2016). Missouri Department of Education chose these goals for schools to focus on because of the impact they have on the school as a whole and believes that they will

provide the focus necessary for schools to achieve positive academic results (Missouri Department of Elementary and Secondary Education, 2014).

## **RTI**

Interventions provide many benefits, both to the students who are at-risk and the school that serves them. Costs to schools for the special education programs are an average of \$9,906 per student in teacher salaries alone compared to only \$2,063 per student using an early reading intervention program (Dyer and Binkney, 2005). In order to counter these costs, Battlefield High school is looking to shift interventions into regular education classrooms.

The RTI model is not a rigid system with a set series of steps to be followed and Battlefield High was able to modify the program (PST) to meet the needs of its students. An RTI system is a systematic series of steps that gradually increase the intensity of intervention to meet the needs of the students (Buffum, Mattos and Weber, 2009). Interventions play a crucial role in the RTI based system and Battlefield's PST is no different. The use of the RTI system enables schools to organize different intervention policies into one cohesive intervention methodology (Mellard and Johnson, 2008). Type and length of the interventions vary and can be offered during school hours as well as after school (Smith, 2008). The main advantage of the RTI system is that it is a systematic system of interventions that span the entire school system not individual schools or even classrooms. The freedom to move a student to different intervention tiers to suit their individual needs is precisely why the RTI system was used as the basis for Battlefield's PST system.

For an RTI based system to be effective, the interventions must be provided by the entire school community. Classroom teachers are often considered generalists that lack specialized

skills necessary to provide specialized instruction for at-risk students (Walmsley and Allington, 1995). All educators within the school need to provide students timely interventions for an RTI system to be effective (Buffum, Mattos and Weber, 2009). Effective utilization of the RTI model broadens the scope of interventions possible for at-risk students by empowering more educators to provide educational supports to the students. The potential for interventions for at-risk students should extend beyond special education teachers, reading specialists and other specialized positions within the school system.

Interventions are a key component to students passing class and keeping up with their cohort. Students who fall behind their cohort due to failing to earn class credits are considered off-track (Allensworth and Easton, 2005). Students that are considered on track were three times as likely to graduate as their off track peers (Allensworth and Easton, 2005). Research shows that early interventions have great promise to help students that are at-risk to fail in areas such as reading and writing (Dyer and Binkney, 2005). Students that have earned enough credits to be considered on track to graduate in 4 years are more than three times more likely to graduate with their cohort class (Allensworth and Easton, 2005). Through the intervention process provided by the PST system, Battlefield seeks to keep these students on track to graduate.

The RTI based intervention system is based on a pyramidal structure consisting with at least three tiers. Battlefield High school's PST program follows the same format and has a three tiered intervention pyramid. The first tier in the intervention process is crucial to the success of the entire intervention program. Tier 1 in an RTI program focuses heavily on the use of data to adapt to the individual needs of the students. Effective use of gathered data should effectively supplement the school's core curriculum enough for 75-85% of the student population to succeed (Fisher and Frey, 2010). Using data to find students that are at-risk of falling behind their peers

early in the education process can provide the school an opportunity to make modifications for the student before they are officially considered at risk.

The data of all students is gathered and analyzed in order for the teachers to locate the students that are at-risk of dropping out. Data collection needs to be accurate and ongoing in order to effectively allocate the school resources to where the at-risk students need them (Pyle and Wexler, 2011). Data that shows students being at-risk includes grades and attendance (Gleason and Dynarski, 2002). Data needs to be analyzed often to maintain effective interventions. Observation of students and analysis of their records are essential to knowing the student's history (Hernandez-Finch, 2012; Payne, 2011). Revisiting data is essential to the best interest of the student. Since the student is likely to be in the school for a long time some interventions will need to be modified or abandoned altogether. Carefully documenting these limitations will provide the student's future teachers the opportunity to draw their own conclusions regarding the modifications necessary for the student to succeed academically (Hernandez-Finch, 2012).

Tier 2 in the school's intervention system is more intense and focused on a narrower segment of the student population. While the first tier of interventions is designed to accommodate 70-85% of the student population, tier 2 is designed to accommodate the 10-15% that need more intensified intervention (Buffum, Mattos and Weber, 2009). Interventions within the RTI system can vary from minor classroom modifications to accommodate different student learning styles to major interventions that target the deficiencies of a particular student (Buffum, Mattos and Weber, 2009). Interventions at the second tier include more time for students to finish their work, specialized study skills classes and mandatory homework help (Buffum, Mattos and Weber, 2009).

Extended time for learning will give students who need more time to grasp new concepts an opportunity to achieve understanding and mastery. The amount of time needed by students to achieve this level will vary due to the individual student's prior knowledge and learning style (Buffum, Mattos and Weber, 2009). Extended learning time provides a student an opportunity to avoid falling too far behind their cohorts when learning difficulties arise. The benefits of providing these extended opportunities to at-risk students is to give them the opportunity to academically recover before their summative test scores are negatively affected (Fisher and Frey, 2010). Students are provided the opportunity to keep up with their cohort instead of catching up when they fall too far behind.

Specialized study skills classes provide schools the opportunity to provide the at-risk student with the skills needed to successfully navigate their learning environment. Many at-risk students fall behind because they lack the organization to track their homework properly to turn it in on time (Buffum, Mattos and Weber, 2009). These classes should continue to challenge students so they are engaged in the learning process (Kennelly and Monrad, 2007).

Tier 3 is the top of the intervention pyramid. The top of the pyramid is represented by the smallest of the tiers. This is represented in this way because Tier 3 affects the smallest number of people (Buffum, Mattos and Weber, 2009). Schools use Tier 3 interventions to enable the teacher to play a critical role in assessment and instruction (Fisher and Frey, 2010). This is possible due to the fact that the third tier is an intensive and sustained series of interventions that target approximately 5% of the student body (Buffum, Mattos and Weber, 2007). The third tier of interventions at this particular school is exclusively the special education department. Upon discussion with the school's special education process coordinator, the researcher was told to include one of the at-risk programs in the third tier of interventions due to the small nature of

class size as well as the highly intensive nature of the interventions available to students in the program.

Lower student to teacher ratios provides other benefits to the interventions of students. Tier 3 gives many opportunities to provide mentors to the students (Buffum, Mattos and Weber, 2007). The importance of mentors for students at-risk is the modeling of good behaviors, being positive role models and setting expectations of and insisting upon successful school behaviors (Payne, 1996).

### **Attendance**

Poverty is a leading cause of students not attending school. Literature shows a correlation between poverty and poor student attendance (Balfanz and Nai-Lin Chang, 2013; Rappaport, Daskalakis and Andrel, 2011). Schools look to using interventions to improve attendance. Chronic absenteeism negatively affects student performance. Absenteeism is of concern due to it being one of the strongest predictors of course failure. Attendance for students is shown to be linked to student achievement (Morrissey, Hutchison and Winsler, 2014). As the number of student absences increases, student scores in areas of reading and math decreases (Gottfried, 2009).

RTI interventions show an improvement in student attendance, increasing attendance in one high school from 90.4% to 95.6% (Fisher and Frey, 2011). Student attendance can be benefitted by timely intervention by school personnel. This school is an urban high school in the southwestern United States, the research looks to find similar data from a high school located in the rural Midwestern United States.

Though data collection is used to track student progress, it can also assist the school with student attendance. Data collected on student attendance should be reported when students are absent for a long period of time allowing the school to prepare any interventions that may be necessary (Engberg and Gill, 2006). Schools use the attendance data to contact others within the system regarding the student's attendance issues.

The Battlefield High school will use data to combat chronic absenteeism. Students at-risk of missing too many school days will be identified and addressed before they can fall through the cracks. Using data to identify these students early is the crucial first step in Battlefield's methodology to successfully intervene with students having attendance issues. This case study will look at any decrease in absenteeism since the teachers at Battlefield High began tracking student data to locate students that are potentially at-risk to become chronically absent.

### **Test scores**

Poverty has affected scores on standardized tests. According to literature, students of poverty score lower on standardized tests (Lacour and Tissington, 2011; Havdala, 2010). Students in poverty have had difficulty with standardized testing. A strong correlation has been shown that demographic characteristics of neighborhoods reflect student test scores with neighborhoods of lower economic standing having lower mean test scores (Wilson and Martin, 2000). Schools are turning to interventions to prevent that trend from continuing.

One unintended consequence of the addition of standardized tests is the increase in students dropping out (Christenson and Thurlow, 2004). In order for standardized tests to effectively measure the ability of the students that are tested, specific requirements, or

“standards” must be created. If standards are to mean anything, they must be unobtainable to some students to signal renewed vigor to the educational system (Allington and McGill-Franzen, 1995). Tests are often designed to measure such a range of a student’s literacy that their effectiveness to students and teachers is often minimal (Stowell and Tierney, 2005).

Interventions have shown success in student achievement on standardized test scores of students of poverty. One high school showed significant improvement with interventions as the student’s scores increased by an overall by 4% on state achievement measures (Fisher and Frey, 2011). This school is an urban high school in the southwestern United States, the research looks to find similar data from a high school located in the rural Midwestern United States.

Specialized study skills classes provide schools the opportunity to provide the at-risk student with the skills needed to successfully navigate their learning environment of the high stakes testing environment (Buffum, Mattos and Weber, 2009). Specific skills will be taught with the state tests in mind. Skills taught can include essay writing or specific reading or math concepts as needed (Fisher and Frey, 2010). Battlefield High school has a specialized study hall class where students are taught skills to help them academically. The skills taught include individual organization, note taking, and others that are intended for students to succeed academically. These interventions will give the at-risk student a baseline of skills that will prove useful for the testing process.

Battlefield High looks to improve the student’s test scores through interventions. Specialized study skills classes are the lynchpin to the school’s successful intervention. By teaching the students these crucial skills, the students have more power over their testing situation. Much data on specialized test preparation classes offered in a school setting is

theoretical. This case study will look at any improvement in test scores since specialized classes have been offered compared to student scores prior to test preparation classes.

### **Dropout rate**

Poverty has a negative effect on the dropout rate of schools. Past literature has shown a correlation between poverty and students dropping out of school (Cheney, Flower, and Templeton, 2008; Fischer and Frey, 2011). Rural schools are hit hard by students dropping out with a dropout rate of 22.5% in 2012 (Strange, Johnson, Showalter, D, and Klein, 2012).

Interventions are important for schools to lower dropout rates. Children who are not reading at grade level as early as grade 9 are 10 times more likely to drop out of school than their counterparts that read at grade level (Buffum, Mattos, and Weber, 2009). Successful interventions utilized by the school that is the focus of this case study is continuing to monitoring student data and lower class size for students that are on the verge of dropping out.

Through the use of data, the school will monitor students to identify the necessary interventions regarding student discipline and attendance. Proper use of data can identify students that are at-risk and provide necessary interventions to prevent students from dropping out (Pyle and Wexler, 2011). Proper use of data will locate students in time for the school to provide the proper intervention to prevent the student from exiting early from school.

Student discipline will also have a negative effect on the dropout rate of a school. One significant factor of school discipline that has a major impact on dropout rates is zero tolerance discipline policies. Zero-tolerance discipline policies use suspension as a consequence for discipline infractions ranging from severe to minor (Berwick, 2015; Skiba and Knesting, 2001). Research has found that many adolescents feel that disciplinary practices are unfairly weighted

against poor students (Skiba and Knesting, 2001). Research has shown a correlation between out of school suspension and negative effects on students such as dropping out of school (Paulson, 2015). The proportion of schools that had zero tolerance discipline policies ranged from 79 to 94 percent depending on the type of infraction.

Zero tolerance discipline policies have a stronger negative impact on students that have been repeatedly suspended at younger ages (Stearns and Glennie, 2006). The state of Missouri has the highest suspension rate among African American elementary students with four districts suspending 1 in 5 of their students (Paulson, 2015). One of the five districts with the high suspension is the St. Louis City Schools. In the St Louis Metropolitan School District, nearly one third of all students are suspended annually (Berwick, 2015). St. Louis City school district has a dropout rate over 12% for 2014 (Missouri Department of Elementary and Secondary Education, 2014). When the school data for the St. Louis Public Schools is analyzed, 50.3% of the students are eligible for free or reduced lunch (Missouri Department of Elementary and Secondary Education, 2014). By those numbers, there could be a correlation between poverty and discipline and, eventually, dropout rates. The St. Louis City school district's dropout rate is chilling to this study as Battlefield High school is in close proximity (50 miles) of downtown St. Louis, Missouri.

The problem the school faces with a zero tolerance policy is the student missing class time during their punishment. To address this combination of the student losing time in the classroom, and addressing the behavioral needs of the students, the school will move to Tier 3 of the RTI pyramid, specialized placement. The lower student to teacher ratio of Tier 3 interventions provide the student opportunities to learn behavior management skills to decrease time away from class time (Buffum, Mattos and Weber, 2009).

Students with chronic discipline issues are not the only beneficiaries of Tier 3 supports. For truly challenged school districts with a very high incidence of dropout, an array of second-chance options for off track young adults is appropriate for many students (Kennelley and Monrad, 2007). An effective system of credit recovery, second-chance schools, and alternative paths to graduation are important strategies to stem the dropout of students in 11th and 12th grade (Kennelley and Monrad, 2007). The high school of the case study looks to its own alternative diploma program to lower its own dropout rate.

Interventions have shown to be successful with student achievement on the graduation rate of students of poverty. In one study, 2 schools in Philadelphia with a large percentage of students affected by poverty, had increased the percentage of students on path to graduate from 52% to 57% of the student body (Mac Iver and Mac Iver, 2009). A study of five high schools in California showed an improvement in the graduation rate of low income students of 7.6% after district level strategies to improve graduation rates were adopted (Duffy, Poland, Blum, and Sublett, 2015). Battlefield School District looks to its PST program to provide the interventions its students need in order to improve its graduation rate.

Battlefield High is using interventions to lower its dropout rate. Constant analysis of data will trigger interventions to keep students in school. Battlefield high's tier three interventions include the special education system as well as an alternative diploma program. Both programs provide students with lower class sizes and teach students academic and behavioral skills to prevent discipline issues from removing the student from school for extended time due to discipline issues. And alternative diploma programs will provide a last ditch opportunity for the student to earn a diploma instead of dropping out of school with no diploma. To this point, data on alternative diploma classes offered in a school setting is theoretical. This case study will

compare the dropout rate of the school in the case study before and after the school instigated alternative diploma programs.

### **Conclusion**

All of the research gathered up to this point regarding the effects of poverty on student attendance, test scores and dropout rates as well as the effects of interventions used by schools to combat the effects of poverty is from a theoretical frame. This investigation will build on the research and will use the theoretical frame that has been built through a lens of critical theory. Critical theory has been chosen for this case study because the purpose of critical theory is to address unequal power structures in society. Though the school is using interventions to improve performance for all students that need educational assistance; the high rate of students in poverty that attend the school make it likely that the interventions used by the school will benefit students in poverty.

The body of evidence reviewed in this paper shows a strong theoretical correlation between the effects of poverty on student success. The literature also shows theoretical correlation between interventions such as data collection, specialized study classes and alternative diploma programs benefitting student outcomes in terms of attendance, standardized test scores and graduation rate. The outcome of the research of this case study is the effect that those interventions will have on student outcomes for students experiencing poverty.

Students of poverty must have advocates in the school. They need advocates who hold them to standards and push them to succeed. The school's organized system of interventions will provide the teachers the opportunity to advocate for students that need an ally.

The school in the case study is taking the opportunity to bring about change in the outcomes of its students. The outcomes that are the school needs to address are student attendance, test scores and dropout rate. The school has enacted an intervention system based on the RTI pyramid to address these outcomes. The data gathered in this research will help the school determine whether or not this intervention system is effective in improving student outcomes in a high poverty, rural school.

## **Chapter 4**

### **Contribution to Scholarship**

Positive support teams: Interventions for students of poverty to improve attendance, test scores and graduation rate in a rural Missouri high school

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**Abstract**

Effects of an intervention system, Positive Support Teams, (PST) were examined in a case study using critical inquiry analysis. The case study analyzed the effect of the PST program on the attendance, End of Course Exam scores, and graduation rate of low-income students in a large rural high school in the Missouri. The test scores decreased for the cohort with access to PST compared to the cohort that did not have access to PST. Attendance improved for students with access to PST but not in a manner statistically significant. Graduation, however, did show a large increase from low-income students without access to PST to students with PST access. In future research, a series of graduating cohorts would show if any trend exists between the existence of the PST program and student outcomes.

**Key Terms**

Cohort, End of Course Exam, Graduation Rate, Achievement Level Descriptors, Infinite Campus, Poverty PST, RTI

A low graduation rate is an issue that constantly plagues educators. The most tangible effect of the student dropout rate is the cost, in dollars, that high school dropouts lose over the course of his or her career. According to the Alliance for Excellent Education (AFEE, 2009) an average of 7000 students per school day will drop out of high school throughout the United States. Seven thousand dropouts per day each day of a year leads to more than 1.2 million high school students dropping out every school year. The immediate cost to the dropout is an average of \$7840 less in earned income every year (AFEE, 2009). Expanded throughout a 30 year career, that number grows to \$235,200 less earned income for the high school dropout compared to someone who earned a high school diploma.

Students from families impacted by poverty are hit much harder. In 2009, the dropout rate of students from low-income families was 7.4% compared to the 1.4% dropout rate of their peers from high income families (Chapman, Laird, Ifill, and KewalRamani, 2011). Higher dropout rates among low income families contribute to the cycle of poverty in which so many people find themselves.

Though the negative effect of poverty on academics is a national problem, the state of Missouri is dealing with dropout issues as well. Missouri had a projected number of non-graduates for the year of 2011 of 17,962 (AFEE, 2009). At the local level, Battlefield High School, a pseudonym, a rural school district in Missouri, had 111 dropouts out of over 2000 students in 2008 (Missouri Department of Elementary and Secondary Education, 2012). Though

that number looks considerable, the dropout rate for Battlefield High in 2008 is only 4.4% (MODESE, 2012) which is only slightly larger than the state of Missouri's 2008 dropout rate of 4.2% according to the state core data report (MODESE, 2012).

Poverty affects student performance in areas that Missouri schools use to measure student achievement, attendance, test scores, and graduation rate. Students of poverty miss school at a higher rate than students not affected by poverty (Cheney, Flower, and Templeton, 2008; Fischer and Frey, 2011; Rappaport, Daskalakis and Andrej, 2011). Test scores suffer for students in poverty compared to their counterparts not affected (Reeves 2007; Perie, Grigg, and Donahue, 2005/2007; Havdala, 2010). Students of poverty have a greater chance to drop out of school without earning their diploma (Bridgeland, DiIulio Jr. & Morison, 2006; Hernandez, 2011). This case study analyzed the effectiveness of one rural Missouri high school's intervention program in improving academic outcomes in attendance, test scores, and graduation rate for students suffering from poverty.

### **Legislation History**

The focus on attendance, test scores and graduation rate is not new to Missouri schools. This focus is the end result of educational legislation dating back to the No Child Left Behind Act (2002). No Child Left Behind or NCLB was an attempt to meet the academic needs of low-achieving students. A key component of the No Child Left Behind Act (2002) were supports for the high-poverty schools that taught many low achieving students.

Standardized testing has a heavy focus on student accountability. Missouri's End of Course (EOC) exams came from an attempt to provide system to measure the student's learning

and a school's accountability by using a statewide assessment system to ensure that students are meeting statewide academic content standards (No Child Left Behind Act, 2002).

The legislation changed after 2009 when NCLB received a facelift in the form of Race to the Top. Race to the Top was a component of a larger bill called the American Recovery and Reinvestment Act or ARRA (2009). Race to the Top consisted of a 4.35 billion dollar grant for schools to create the conditions for education innovation and reform in low achieving, high poverty schools with standardized testing in reading and math specifically listed as one measure of student learning (American Recovery and Reinvestment Act, 2009).

The focus on attendance and graduation rate comes from the state of Missouri. Both NCLB and ARRA left provisions for the individual states to use its own criteria to determine the effectiveness of schools. Missouri, like many other states, set up a series of criteria that is used to gauge the effectiveness of its schools. The state of Missouri uses a system of criteria called the Missouri School Improvement Program (MSIP). MSIP was created in 1990 and has formed the basis of accreditation for schools throughout the state (Missouri Department of Elementary and Secondary Education, 2015). The MSIP standards place graduation rate, attendance and standardized test scores (EOC) high on the list of requirements for a high school to be accredited in Missouri (MODESE 2015).

### **Literature Review**

Students of poverty have many issues that make success in school difficult. Battlefield High School implemented its PST program to provide supports to these students. Battlefield High School focuses on three components to measure student success: attendance, test scores, and graduation rate. This literature considers the negative effects of poverty on three crucial

elements of student learning, attendance, test scores and graduation rate. The literature also analyzes the effectiveness of academic interventions on attendance, test scores and graduation rate.

Research shows a link between student attendance and student achievement (Morrissey, Hutchison and Winsler, 2014). Poverty is a leading cause of students not attending school. Literature shows a correlation between poverty and poor student attendance (Balfanz and Nai-Lin Chang, 2013; Rappaport, Daskalakis and Andrei, 2011). A correlation has been found between the number of student absences and student test scores in areas of reading and math (Gottfried, 2009). Given this information, Battlefield High created the PST program to provide students of poverty the necessary interventions to attend classes daily.

Interventions have shown to be effective in improving student attendance. A study in an urban high school showed how interventions based on the RTI system led to an improvement in student attendance by 5.2% (Fisher and Frey, 2011). Interventions improved attendance for 39% of chronically absent students in two Philadelphia middle schools (Mac Iver and Mac Iver, 2009). Though this number was achieved in an urban setting, Battlefield High School looks to achieve similar results in a rural setting.

Students of poverty have difficulty with standardized testing. According to past research, students of poverty score lower on standardized tests (Lacour and Tissington, 2011; Havdala, 2010). Demographic characteristics of neighborhoods have been shown to be reflected in student test scores with neighborhoods of lower economic standing having lower mean test scores (Wilson and Martin, 2000). Battlefield High is turning to the interventions from its PST program to prevent this trend from continuing.

Interventions have improved student achievement on standardized test scores of students of poverty. In one study, one high school showed academic interventions providing a significant improvement as the student's test scores increased overall by 4% on state achievement measures (Fisher and Frey, 2011). Interventions in two Philadelphia middle schools improved the number of students classified off-path to graduate in mathematics by 62% and in literacy by 74% (Mac Iver and Mac Iver, 2009). The schools in those two studies were urban middle and high schools in the southwestern and northeastern United States. This research looks to find similar data from a rural Missouri high school.

Poverty negatively affects the dropout rate of schools. Past literature has shown a correlation between poverty and students dropping out of school (Cheney, Flower, and Templeton, 2008; Fischer and Frey, 2011). Rural schools are hit especially hard by students dropping out with a dropout rate of 22.5% in 2012 (Strange, Johnson, Showalter, D, and Klein, 2012). Interventions are crucial for schools to lower dropout rates. Children who are not reading at grade level as early as grade 9 are statistically, 10 times more likely to drop out of school than their counterparts that read at grade level (Buffum, Mattos, and Weber, 2009). Interventions are crucial for schools to lower dropout rates.

Interventions have shown success with student achievement on the graduation rate of students of poverty. In one study, two Philadelphia schools with a high percentage of students in poverty, increased the percentage of students on path to graduate from 52 % to 57 % of the student body (Mac Iver and Mac Iver, 2009). A study of five high schools in California showed an improvement in the graduation rate of low income students of 7.6 percent after district level strategies to improve graduation rates were adopted (Duffy, Poland, Blum, and Sublett, 2015).

Battlefield School District looks to its PST program to provide the interventions its students need in order to improve its graduation rate.

### **Purpose**

Several factors lead to students dropping out of school before earning a diploma. One of these factors is poverty. Literature shows poverty to have a significantly negative effect on students completing high school (Kishore and Shaji, 2007) and elementary school (Morrissey, Hutchison and Winsler, 2014). Poverty causes students to score poorly on the statewide tests that are used to evaluate their performance (Reeves 2008; Perie, Grigg, and Donahue, 2005/2007; Havdala, 2010). Though poverty has a significant effect on student success, there are limits to what schools can do to alleviate the financial situation of its students. Many schools are instead focusing on providing for the academic needs of students in poverty.

One district negatively affected by student poverty is Battlefield School District. The percentage of the student body receiving free and reduced lunches at Battlefield is 37.2% (Missouri Department of Elementary and Secondary Education, 2015). Though the poverty rate of Battlefield School District seems high, it compares favorably to the state of Missouri's rural poverty rate of 41% (Strange, Johnson, Showalter, and Klein, 2012). The school chose a path of academic interventions to address the struggles of the students of poverty. The goal of these academic interventions is to keep students engaged with their classes and on track to graduate.

Battlefield addresses poverty by having the teachers take a greater role in addressing the at-risk students. Students of poverty must have advocates in the school. They need advocates who hold them to high standards and push them to succeed rather than push them aside. The

school implements an organized intervention system to provide its teachers with the skills to intervene on behalf of their students.

Research shows academic interventions have positively affected student outcomes. Student attendance has been improved by interventions (Cheney, Flower and Templeton, 2008). Test scores improved with academic interventions (Fisher and Frey, 2011). Student dropout rates improved when students had access to academic resources (Pyle and Wexler, 2011). Based on this research, Battlefield High School created an intervention system to help its students improve in the above criteria.

Battlefield High uses a version of the RTI (Response to Intervention) that the district has named PST (Positive Support Teams) to provide supports for the students that are at risk of dropping out. Though Battlefield used the RTI method as the template for its intervention system, some changes were made to suit the needs of the district. The district also changed the name of the program away from the more clinical sounding Response to Intervention to Positive Support Teams so the students served by the program find it more appealing.

The goal for Battlefield High School is to use the PST format to standardize its intervention process throughout the entire high school. The school uses this intervention process to place all students in a situation where they are in a position to succeed. By providing all students in the high school access to the same intervention process, the high school administration is expecting to see improvements in areas of student measurement.

This study makes a critical inquiry analysis of the effects of academic interventions on the success of students in poverty. By basing the PST program on the RTI intervention method, Battlefield is using a teamwork approach to support struggling students. The end result for the

PST program is to lift these students from potential dropout to high school graduate and contributing member of society.

Trends in the literature to date focused on students in two environments, urban school districts and elementary schools (Duffy, Poland, Blum, and Sublett, 2015; Mac Iver and Mac Iver, 2009). Less literature has been found on rural high schools. The author's desire is to accumulate data on interventions in a school that fills that gap in literature, a large high school located in a rural school district.

The effect of the school's implementation of the PST intervention system on the academic success of students of poverty is the focus of this research. Battlefield High School acknowledges factors contributing to overall student success to be graduation rate, attendance, and standardized test scores. Battlefield also acknowledges the negative affect poverty has on those factors. This research analyzed these factors by comparing one cohort of students with access to PST interventions to another cohort without PST. Four research questions were explored.

Q1. Is there a difference in the graduation rate of high school students of poverty with PST and high school students of poverty without PST.

H01. There is no difference in the graduation rate of high school students of poverty with PST and high school students of poverty without PST.

Q2. Is there a difference in the attendance rate of high school students of poverty with PST and high school students of poverty without PST.

H02. There is no difference in the attendance rate of high school students of poverty with PST and high school students of poverty without PST.

Q3. Is there a difference in the End of Course Exam scores for Government of high school students of poverty with PST and high school students of poverty without PST.

H03. There is no difference in the standardized test scores for Government of high school students of poverty with PST and high school students of poverty without PST.

Q4. Is there a difference in the End of Course Exam scores for English 2 of high school students of poverty with PST and high school students of poverty without PST.

H04. There is no difference in the standardized test scores for English 2 of high school students of poverty with PST and high school students of poverty without PST.

### **History of the Organization**

The school chosen to participate in the study, Battlefield High, is a large rural high school in Missouri. In 2012, Battlefield High School fully incorporated a pyramid intervention model based on the Response to Intervention (RTI) system called Positive Support Teams (PST).

Battlefield High created the PST program to benefit the academic success of all its students, especially those who come from disadvantaged backgrounds such as poverty.

Students in the class of 2012 were the first graduating class to have access to the school wide intervention program for their entire high school career. The class of 2012 will serve as the division point for the study. The 2011 cohort will represent the class without access to PST for their entire high school experience and the class of 2013 will represent the class with PST for their entire high school experience.

**Data Source**

This is a comparative design analyzing variables for two graduating classes. Data was collected for the class of 2011 and the class of 2013. The class of 2013 was chosen because they had the current PST system in place for their entire high school experience, while the class of 2011 did not have access to the same interventions for their entire high school career. The data from both groups was compared to determine a correlation between the school's PST system and improvements in student performance in attendance, EOC test scores, and graduation rate.

The data was limited to students of the graduating class who entered Battlefield High as 9th graders and completed their high school career in four years. Graduates will be included in the data when their cohort year and graduation year match. Students who graduated after their cohort year will be classified as dropout for the purpose of this research. There was one student in the class of 2011 and 2 in the class of 2013 that dropped out in previous years but re-enrolled in time to graduate on time with their cohort. Those students were counted as graduates instead of dropouts as they successfully graduated within a four year time period. One other concern regarding student data was found. Two students in the 2011 cohort had corrupted data for their attendance. Those students were not included in the sample.

Data was gathered from the electronic archives of the school. The school district uses the Infinite Campus system to manage the district data. Based on the specifics of the data requested by the researcher, the school data manager ran a query that gathered the necessary data. The researcher took the data and separated it into two groups, one group consisting of students eligible for free and reduced lunches and the second group with no eligibility for free and reduced lunches. This process was done for two cohorts. Only the data from students eligible for

nutritional subsidies was used for this study. A comparison was run between the cohorts to compare rates of attendance, test scores and dropout rate to see if there is a correlation between interventions and performance of students of poverty.

Once the data was gathered, the researcher utilized a t-test and a z-test to run analysis. This study looked at the impact of PST on low income students as measured by three Missouri School improvement Plan (MSIP) goals. The data analyzed by the t-test were attendance, Government EOC scores and English 2 EOC scores. A z-test was used for graduation rate. The z-test was used because the data of graduation rate is more categorical in nature.

### **Methodology**

Two graduating classes were chosen to provide data for this case study, 2011 and 2013. The class of 2011 was chosen because the class graduated one year before the PST program was fully implemented. The students graduating from that class would not have had access to the PST program for their entire high school career. The other graduating class chosen to provide data for this case study was the class of 2013. The class of 2013 was chosen because the PST program was implemented in time for the class of 2012 to have access to the PST interventions. Using data for the class of 2013 gave the PST program a full year to be implemented. The time period also provided a period of time between the two classes being evaluated.

### **Study Design**

Standardized test scores, attendance and graduation rate are factors crucial to student success. Poverty affects all three. The research looked at the correlation between data from those three criteria the effect poverty has on their outcomes. The data was compared between two cohorts from a large, rural high school, located in the Midwest. This study compared data on the

graduation rates, attendance, and standardized test scores of students in poverty that have no access to PST interventions with students that had access to PST interventions for their high school career.

The study chose graduation rate, attendance, and standardized test scores because that data is used by the state of Missouri to determine whether a school is accredited (Missouri Department of Elementary and Secondary Education, 2016). Accreditation is important to Battlefield High because student data is how the state measures continuous improvement in public schools throughout the state of Missouri (Missouri Department of Elementary and Secondary Education, 2016). Missouri Department of Education chose a set of goals including attendance, EOC scores and graduation rate for schools to focus on. These goals were chosen so the state can measure student performance and assess the impact schools have on student learning while providing the focus necessary for schools to achieve positive academic results (Missouri Department of Elementary and Secondary Education, 2014). Because of the importance the state places on these goals, Battlefield also places importance on these goals.

Two limitations to the research must be factored in. The first limitation was the sample being too narrow to accurately reflect the PST program. The second limitation was the disparity in number of low income students between the two cohorts.

The sample was of low income students of two graduating cohorts. Using only two cohorts gave a snapshot of the PST program instead of establishing a trend. Multiple cohorts would give a longitudinal study on the effectiveness of PST. The second limitation is the disparity between the low income students of the two different cohorts. The cohort of 2011 had 82 students who were classified as low income. For the class of 2013, the number of low income

students in the graduating class increased to 215. To counter that disparity in low income students, a series of graduating cohorts will show if either of the cohorts chosen for this research is an outlier. More years will give a more accurate count of the number of low income students at Battlefield High.

**Results**

A single tailed t-test was used on attendance, Government EOC scores and English 2 EOC scores. A z-test was used on the graduation rate due to that data being categorical or qualitative instead of the quantitative data used for attendance and test scores.

**Table 1.**

*Attendance, Government EOC Score and English 2 EOC Score for Cohorts 2011 and 2013*

Low SES Student Outcomes	2011			2013			t	sig	95 CI
	N	M	(SD)	N	M	(SD)			
Attendance	36	91.23	(6.79)	185	92.22	(6.15)	-.81	.21	[-.03, .01]
Government EOC	36	198.81	(16.97)	185	193.19	(36.59)	1.44	.92	[-.02, .13]
English II EOC	36	206.58	(16.7)	185	204.22	(39.62)	.58	.72	[-.06, .1]

n = number of graduates on Free and Reduced Lunch

\*p < .05

The first research question addressed was the difference in the graduation rate of high school students of poverty with PST access and high school students of poverty without PST access. Table 1 shows no significant difference in the attendance rates of low income students

without access to PST ( $M=91.23$ ,  $SD=6.79$ ) and low income students with access to PST ( $M=92.22$ ,  $SD=6.15$ );  $t=-.81$ ,  $p=.21$ . Though the attendance rate rose by .99%, the p score of .21 is outside the .05 range of statistical significance. The null hypothesis has not been disproven.

The research question addressing the difference in the Government EOC scores for high school students of poverty with PST access and high school students of poverty without PST access had similar results. The results from Table 1 show no significant difference in the Government EOC scores of low income students without access to PST ( $M=198.81$ ,  $SD=16.97$ ) and low income students with access to PST ( $M=193.19$ ,  $SD=36.59$ );  $t= 1.44$ ,  $p=.92$ . The p score of .92 is outside the .05 range of statistical significance. The null hypothesis has not been disproven. Though the Government EOC scores rate decreased by 5.62 % from 2011 and 2013, the 95% confidence interval shows the EOC scores deviated between dropping 2 points and gaining 13 points.

The research question addressing the difference in the English 2 EOC scores of high school students of poverty with PST access and high school students of poverty without PST access had a similar outcome to the previous two data sets. The results from Table 1 show no significant difference in the English 2 EOC scores of low income students without access to PST ( $M=206.58$ ,  $SD=16.7$ ) and low income students with access to PST ( $M=204.22$ ,  $SD=39.62$ );  $t=.58$ ,  $p=.72$ . The p score of .21 is outside the .05 range of statistical significance. The null hypothesis has not been disproven. Though the Government EOC scores rate decreased by 2.36% from 2011 and 2013, the 95% confidence interval shows the EOC scores deviated between dropping 6 points and gaining 10 points.

**Table 2.**

*Graduation Rate for Cohort 2011 and Cohort 2013*

Low SES Student Outcomes	2011			2013			Z	Significance
	On Time Grad	Low SES Seniors	%	On Time Grad	Low SES Seniors	%		
Graduation Rate	36	82	.43	186	215	.87	5.67	.000000073

n = number of graduates on Free and Reduced Lunch

\*p < .05

The research question addressing the difference in the graduation rate of high school students of poverty with PST access and high school students of poverty without PST access did find an interesting statistical correlation. The results from Table 2 show a significant difference in the graduation rate of low income students with access to and low income students without access to PST. The graduation rate between the 2011 cohort and the 2013 cohort increased from 43% to 87% for an overall increase of 44%. The significance of .000000073 is well inside the .05 range of statistical significance. The null hypothesis has been disproven.

**Conclusions**

The findings in this research were mixed with most of the data not supporting past research Of interventions positively affecting students of poverty. The effect of PST on the academic success of low-income students at Battlefield High was not able to be proven within the level of significance that was required in two of the three categories analyzed. Instead of finding

improvement with EOC test scores of the graduating cohort having access to the PST program for the entirety of its high school career; the scores came in lower than the cohort without PST access. The effect of PST on attendance of low income students could not be proven with significance, leaving uncertainty as to what was the cause of the improvement. Only improvements in graduation rate were proven with significance.

Research shows attendance positively affected by academic interventions. Fisher and Frey (2011) showed an improvement of 5.2 % in the attendance of their subjects that was attributed to RTI based interventions. Mac Iver and Mac Iver, (2009) showed a decreased absentee rate by 39% in their study of interventions. Battlefield High showed less than 1% increase in attendance between the cohort with PST interventions and the cohort without. Even then, the data was not proven with any significance therefore the improvement may or may not be attributed to the PST interventions. These results are discouraging due to the lack of statistical significance to tie the gains in attendance to the PST program while past research showed a correlation between interventions and attendance (Fisher and Frey, 2011; Mac Iver and Mac Iver (2009).

Studies have shown an increase in standardized test scores due to academic interventions. Mac Iver and Mac Iver (2009) improved the number of students classified as on path to graduate in literacy based classes by 74% while Fisher and Frey (2011) showed an improvement of 4% in standardized tests. The EOC scores for English 2 were not nearly as impressive. Battlefield's English 2 scored actually decreased by 2.36% from 2011 and 2013. Battlefield's Government EOC test scores also decreased between the two cohorts with a drop of 5.62 % from 2011 and 2013. Even then, the significance level for each test variable was too far from .05 to be able to show what contributed to the drop in scores. The results are discouraging, not only in that the

statistical significance of the findings was not able to tie the EOC test scores to the PST interventions, but past research has shown interventions to increase test scores of students of poverty (Fisher and Frey, 2011; Mac Iver and Mac Iver (2009), while the scores of the cohort with PST actually decreased.

The effect of the PST program on the graduation rate was able to be proven statistically significant. Mac Iver and Mac Iver showed an improvement of 5% while five high schools in California showed an improvement in the graduation rate of low income students of 7.6 % after district level intervention strategies were adopted (Duffy, Poland, Blum and Sublett, 2015). Battlefield High has shown an improvement of 44%. The significance of the data was shown to be a highly significant correlation between the PST program and graduation rate of low income students. The results of Table 2 are encouraging in that the research reinforces literature from previous reports showing a correlation between interventions and increased graduation rate (Mac Iver and Mac Iver, 2009; Duffy, Poland, Blum and Sublett, 2015).

### **Further Research**

Battlefield High has implemented a program to benefit its at-risk students, many of which are suffering from poverty. Two paths of future research would benefit to the district. The first would analyze the methodology Battlefield uses to sign students up for free and reduced lunches. The gap between 2011 and 2013 was a difference of 150 students. The question to address is, “is the PST more effective in identifying students in poverty or was their an economic event that turned the data from one of the cohorts into an outlier?” If so, is that an unintended consequence of the PST program?

The second research path would run a longitudinal study on the PST program. Analysis of future cohorts would allow more consistency in the variables such as methods of identifying students of poverty. Longitudinal analysis will show the effects of PST over a period of time, allowing analysis on the progress of PST on students of poverty while further limiting any outliers to the data.

## **Chapter 5**

### **Contribution to Practice**

#### **Executive Summary**

Students from an underprivileged background face many obstacles in school. Too often, they fall behind their wealthier peers. Without sufficient academic support; these students fall behind academically and many eventually leave school. The intervention system within their school is often the student's only lifeline to graduation.

When faced with the prospect of students of poverty dropping out of school, many schools establish intervention systems to give these students an opportunity to academically succeed. Schools base student success on attendance, test scores and graduation rate to determine the academic success of their students. A case study of Battlefield High School's intervention program named Positive Support Teams (PST) includes these determinants to analyze the effectiveness of the PST program the success of students of poverty.

Effects of an intervention system (PST) will be examined in a case study using critical inquiry analysis. The case study will analyze the effect of the PST program on the attendance, EOC test scores, and graduation rate of low income students in a large rural high school in the midwestern United States.

The test scores for the cohort with access to PST decreased from the cohort that did not have access to PST. Attendance did improve for students with access to PST but not in a manner with enough statistical significance to conclude the intervention program was the reason for the increase. Graduation, however, did show a large increase for low income students without to

PST to students with PST. In future research, a series of graduating cohorts would show if any trend exists between the existence of the PST program and student outcomes.

### **Key Terms**

Cohort, End of course exam, Graduation rate, Achievement level descriptors, Infinite campus, Poverty PST, RTI

### **Statement of the Problem**

Much has been written about the effectiveness of RTI intervention and student success (Buffum, A., Mattos, M., & Weber, C. 2009; Hawken, Vincent and Schumann, 2008; Fusch and Fusch, 2006). Trends in the literature to date have focused on students in two environments, urban schools and elementary schools. Less literature has been found on the impact of interventions on rural high schools. The author's desire is to accumulate data on RTI interventions in a school that fills that gap in literature, Battlefield High School.

The school chosen to participate in this case study is a large rural Missouri high school. Two years ago, the school incorporated a pyramid intervention model based on the RTI model called the PST. The school uses these interventions to improve the student learning process and to keep students in school.

Students in the class of 2012 will be the first graduating class to have access to the PST intervention program for their entire high school career. This study will evaluate the effectiveness of PST intervention on the success of their at risk students by analyzing data from multiple student cohorts. These classes will be divided between the students of poverty whose

cohort had access to the tiered program for their entire high school career and students of poverty whose cohort had no access to the program at all.

Much theoretical discussion has been said on the effectiveness of RTI interventions (Buffum, A., Mattos, M., & Weber, C. 2009; Hawken, Vincent and Schumann, 2008; Fusch and Fusch, 2006). The district is looking for data to determine the effectiveness of its intervention programs. This study will look at the intervention program's impact on student performance and determine the effectiveness of the program.

### **Poverty**

The framework of this case study will use a critical inquiry analysis. Critical inquiry was chosen for the framework because the school is using a standardized intervention system in order to change the status quo of student failure. Critical theory looks to bring about change (Merriam, 2009). This study makes a critical inquiry analysis of the effects of academic interventions on the success of students suffering from poverty.

Up until this point, all of the research gathered for this paper regarding the effects of poverty on student dropout rates as well as the effects of interventions used by schools to combat these effects is from a theoretical frame. The investigation that will build on the research will use the theoretical frame combined with a lens of critical theory. The use of critical theory was chosen for this case study because the purpose of critical theory is to address unequal power structures in society (Merriam, 2009). The high number of students in poverty that attend the school make it likely that the interventions used by the school will benefit students in poverty.

Poverty has a negative effect on education. Students living in poverty face an uphill climb academically as their families do not understand the value of formal education (Lacour and

Tissington, 2011). Reeves (2008) showed a 75% rate of variation in student performance was related to poverty. Eighth grade students classified as high poverty are 24% less likely to score proficient on reading tests than students that have a higher socioeconomic standing (Perie, Grigg, and Donahue, 2005/2007). The effects are felt beyond high school graduation. Students at a high poverty school are 24% less likely to advance to the college level (Venizia and Jager, 2013). Taking this into consideration, it is in the best interest of schools to address the portion of their population suffering from poverty.

One area of concern for schools is the gap between high and low achieving districts in terms of standardized test scores. Poverty can have a crippling effect on these scores. Sum and Fogg (cited in Lacour, and Tissington, 2011) found that students in poverty ranked in the 19th percentile on standardized tests compared to the 66th percentile rank from middle and upper class students. The state of Massachusetts shows a much more rapid decrease in dropouts from its school districts with test scores classified as high achieving than with school districts whose test scores are classified low achieving (Havdala, 2010). Bergeson (cited in Lacour, and Tissington, 2011) found, in one study, only 13.2% of low income students met all subject area assessments while 43.5% met none of the same assessments. Battlefield High school is implementing the PST system to increase the test scores of their students that are affected by poverty.

Students need to attend school in order to be successful and poverty has a negative effect on attendance (Balfanz and Nai-Lin Chang, 2013; Balfanz and Byrnes, 2012). In poor rural areas, 25% of the students can miss at least a month's worth of school (Balfanz and Byrnes, 2012). Research has shown a correlation between poverty and student attendance, however there are mixed results to the extent of poverty's effect on attendance. Morrissey, Hutchison and

Winsler (2014) showed that students on free/reduced lunches had an attendance rate of only 1% less than students not receiving the program. In a different study, students eligible for free and reduced meals had an absence rate 24% higher than those not eligible (Rappaport, Daskalakis and Andrel, 2011). Though researchers disagree on the level of poverty's effect on student attendance, the researchers do agree that poverty has a negative effect on student attendance.

### **Positive Support Teams (PST)**

Schools look to RTI interventions to increase the attendance rate of their students and Battlefield high is looking to PST to achieve a similar goal. The implementation of RTI at an urban high school in the southwestern United States showed an improvement in attendance of 5.2% over a two year period (Fischer and Frey, 2011). Elementary students responded positively to behavioral RTI interventions at a 67% rate (Cheney, Flower, and Templeton, 2008). The implementation of RTI at an urban high school in the southwestern United States showed an increase in GPA of .86, increasing from 2.26 to 3.12 (Fischer and Frey, 2011). Based on these figures, Battlefield High school is implementing the PST system to increase the rate of attendance of their students affected by poverty.

Students affected by poverty suffer higher rates of dropping out of high school altogether. The effects of poverty have a profound effect on student success with 22% of children who have lived in poverty at some point in their lives not graduating from high school, compared to a 6% dropout rate for their classmates who have never experienced poverty (Hernandez, 2011). The dropout rate increases to 32% when a student spends more than half of their childhood in poverty (Hernandez, 2011). The effects of poverty often transcend academic ability with 11% of students who read proficiently in the third grade not completing high school while 9% of subpar

third grade readers who have never experienced poverty drop out (Hernandez, 2011). Poverty often forces a student to choose between their academics and other factors. One third of high school dropouts (32%) said they had to get a job and make money (Bridgeland, DiIulio Jr. & Morison, 2006). Battlefield High school is implementing the RTI system to decrease the dropout rate of its students affected by poverty.

Interventions have shown to be successful with student achievement on the graduation rate of students of poverty. In one study, two schools in Philadelphia with a high percentage of students suffering from poverty increased the percentage of students on path to graduate from 52% to 57% of the student body (Mac Iver and Mac Iver, 2009). A study of five high schools in California showed an improvement in the graduation rate of low income students of 7.6% after district level strategies to improve graduation rates were adopted (Duffy, Poland, Blum, and Sublett, 2015). Battlefield School District looks to its PST program to provide the interventions its students need in order to improve its graduation rate.

### **RTI interventions**

Battlefield High School has a four-year graduation rate average of only 87% (MODESE, 2014). The graduation rate compares favorably to the Missouri average graduation rate for rural schools which is 81.1% (Strange, Johnson, Showalter, and Klein, 2012). In an effort to provide the best educational outcomes, this school, like many schools nationwide, are adopting programs that provide an array of alternatives for students who are struggling. One program to prevent dropouts being utilized in many schools is Response to Intervention (RTI). The RTI system uses a systematic, tiered approach to provide specific interventions to meet each student's specific need. The RTI Pyramid model consists of a series of tiers, usually three, of varying instructional

intensity (Ockerman, Mason, and Felker-Hollenbeck, 2012; Buffum, Mattos, and Weber, 2009). The first level, Tier 1, consists of a core set of interventions that would benefit 75% of the student body (Buffum, Mattos, and Weber, 2009).

Battlefield high has its own version of the RTI pyramid called the Positive Support Team (PST). Battlefield High's interventions at the tier 1 level are kept within the general education classrooms. Teachers track student data to locate areas where students struggle academically. The students receive supports specific to their academic needs ranging from extra assistance from teachers, peer tutoring and academic modifications such as extended time on tests and assignments. These modifications are offered school wide and the bulk of these are offered during Battlefield's weekly "Academic Lab" period. The Academic Lab is a period of time blocked out every week for the entire school to be offered academic assistance. Students that do not respond to the interventions at this tier are referred to Tier 2 for more specific and intensive instruction (Fuchs and Fuchs, 2006).

Students that do not respond positively to the interventions at the first tier are given more intensive intervention at Tier 2 (Fusch and Fusch, 2006). Tier 2 addresses the needs of non-learners and failed learners by implementing more robust interventions (Buffum, Mattos, and Weber, 2009). Tier 2 interventions focus more on small group settings that addresses specific content settings or targeted interventions (Hawken, Vincent and Schumann, 2008). Tier 2 interventions are designed to accommodate approximately 15-20% of the student body (Hawken, Vincent, and Schumann, 2008). Tier 3 is the most intensively focused intervention process, specifically tailored to the needs of the individual learner (Buffum, Mattos, and Weber, 2009). Tier 2 interventions in Battlefield High are smaller and more focused academically. These interventions are also offered during the school day. Tier 2 interventions come in the form of

specialized study halls that offer a more intensive academic presence by the teacher including student grade checks and specialized lessons where academic skills such as note taking and study skills are taught.

The intense interventions that are grouped into Tier 3 are designed to accommodate the 5% of the student body that found Tier 1 and 2 ineffective (Hawken, Vincent, and Schumann, 2008; Hernandez-Finch, 2012). Battlefield High's Tier 3 interventions consist mainly of special education services and an alternative diploma program.

Timely and focused interventions are essential for a successful high school (Westerberg, 2009). Implementation of RTI interventions has been successful in improving student performance (Buffum, A., Mattos, M., & Weber, C. 2009; Hawken, Vincent and Schumann, 2008; Fusch and Fusch, 2006). A long standing criticism of the special education model is not the services provided by the special educators themselves but that the students had to wait for the process of entering the special education system instead of receiving academic supports from the beginning of their difficulties (Fisher and Frey, 2010). Though, Fisher and Frey (2010) refer to the lack of timely interventions for special education students, regular education students can benefit from interventions.

### **Conceptual Framework**

Several factors lead to students dropping out of school before earning a diploma. One of these is poverty. Literature shows poverty to have a negative effect on students completing high school (Kishore and Shaji, 2007). Student attendance patterns in elementary school are also negatively affected by poverty (Morrissey, Hutchison and Winsler, 2014). Though poverty has a significant effect on the graduation rate of students, there are limits to what schools can do to alleviate the

student's financial situation. Many schools are instead focusing on providing for the academic needs of students in poverty.

The conceptual framework of this case study will use a critical inquiry analysis. Critical inquiry is used because the case school is attempting to change the success rate for its students of poverty. Critical theory in research looks to bring about change (Merriam, 2009). This study will make a critical inquiry analysis of the effects of academic interventions on the success of students in poverty.

The Battlefield School District (a pseudonym) is negatively affected by poverty. The percentage of the student body receiving free and reduced lunches at Battlefield High is 37.2% (Missouri Department of Elementary and Secondary Education, 2015). The poverty rate of Battlefield High seems high, however, it compares favorably to the state of Missouri's rural poverty rate of 41% (Strange, Johnson, Showalter, and Klein, 2012). The school has chosen a path of academic interventions to address the academic struggles of the students of poverty. The goal of these academic interventions is to keep students engaged with their classes and on track to graduate. The school addresses poverty by having the teachers take a greater role in addressing the at-risk students. Students of poverty must have advocates in the school. They need advocates who hold them to high standards and push them to succeed rather than push them aside. The school looks at an organized intervention system to provide its teachers with the skills to intervene on behalf of their students.

Battlefield High uses a version of the Response to Intervention (RTI) that the district has named PST (Positive Support Team) to provide supports for the students that are at-risk of dropping out. The goal for Battlefield High school is to use the PST format to standardize its

intervention process throughout the entire high school. The school is uses this intervention process to place all students in a situation where they are in a position to succeed. By providing all students in the high school access to the same intervention process, the high school administration is expecting to see improvements in areas of student measurement.

Trends in the literature to date have focused on students in two environments, urban school districts and elementary schools. Less literature has been found on rural high schools. The author's desire is to accumulate data on interventions in a school that fills that gap in literature, a large high school located in a rural school district.

### **History of the Organization**

The school district that is the basis for this case study serves 6,820 students from ten schools. The district building breakdown is six elementary schools, two middle schools, one high school and an early childhood center. This district's high school is the only high school in the district. As of 2012, the high school served 2,097 of the 6,820 students, or 30% of the total student population within the entire district (DESE, 2012).

In order to service over 2000 high school students, the high school has a vast staff of educators. Battlefield High school boasts over 150 teachers. The average teacher has 14.3 years of experience and 71.2% of teachers have earned a master's degree or higher (DESE, 2012). These teachers have an abundance of information and experience to bring to the educational process.

Battlefield High is a district with a significant percentage of its student population in poverty. The percentage of the student body receiving free and reduced lunches at Battlefield High is 37.2% (Missouri Department of Elementary and Secondary Education, 2015). Over one

in three student's academics must compete with the negative effects of their poverty. Battlefield chose a difficult route to address student outcomes in face of a high poverty community by creating a systematic intervention program for its students. With this system, Battlefield hopes to provide its students an opportunity to break free from poverty by addressing academic issues that prevent its students from achieving academic success.

Battlefield High, is a large rural high school in the midwestern United States. Battlefield High School incorporated a pyramid intervention model based on the Response to Intervention (RTI) system called Positive Support Teams (PST). The school uses the PST model to improve the student learning process.

Students in the class of 2012 were the first graduating class to have had access to the school wide intervention program for their entire high school career. This study will evaluate the effectiveness of this systematic approach of using a specific school's at-risk student intervention policy on the success of their students by analyzing data from two student cohorts. These two graduating classes will be divided between the students of poverty whose cohort had access to the PST program for their entire high school career and a control group that consist of students of poverty whose cohort did not have access to the PST program for their entire high school career.

The district that has agreed to the case study is looking for data to determine the effectiveness of its intervention programs. This study will look at the intervention program's impact on student performance and determine the effectiveness of the program.

### **Design of the Study**

The factors leading to students dropping out that are necessary to address are student poverty, standardized test scores and student attendance. The research will look at the correlation

between data from those four criteria and their relation to student graduation rates, attendance and standardized test scores. The data will be compared between two cohorts from a large, rural high school, located in the Midwestern United States. This study will compare data on the graduation rates, attendance, and standardized test scores of students in poverty that have no access to PST interventions with students that had access to PST interventions for their high school career.

The study chose graduation rate, attendance, and standardized test scores because that data is used by the state of Missouri to determine whether a school is accredited (Missouri Department of Elementary and Secondary Education, 2016). Accreditation is important to Battlefield High because that data is how the state measures continuous improvement in the public schools throughout the state of Missouri (Missouri Department of Elementary and Secondary Education, 2016). Missouri Department of Education chose these goals for schools to focus on because of the impact they have on the school as a whole and believes that they will provide the focus necessary for schools to achieve positive academic results (Missouri Department of Elementary and Secondary Education, 2014).

### **Research Questions**

The effect of the school's implementation of the PST intervention system on the school's graduation rate is the focus of the research. Past research acknowledges other factors contributing to graduation rate. These other factors include student gender, poverty rate, and attendance and standardized test scores. This research looks to analyze these other factors by comparing the graduation rates of a cohort of students that have access to PST interventions for

their entire high school experience to a different cohort that attended the school prior to the school's accepting the PST program. Four research questions that will be explored.

Q1. Is there a difference in the graduation rate of high school students of poverty with PST and high school students of poverty without PST.

H01. There is no difference in the graduation rate of high school students of poverty with PST and high school students of poverty without PST.

Q2. Is there a difference in the attendance rate of high school students of poverty with PST and high school students of poverty without PST.

H02. There is no difference in the attendance rate of high school students of poverty with PST and high school students of poverty without PST.

Q3. Is there a difference in the End of Course Exam scores for Government of high school students of poverty with PST and high school students of poverty without PST.

H03. There is no difference in the standardized test scores for Government of high school students of poverty with PST and high school students of poverty without PST.

Q4. Is there a difference in the End of Course Exam scores for language arts of high school students of poverty with PST and high school students of poverty without PST.

H04. There is no difference in the standardized test scores for language arts of high school students of poverty with PST and high school students of poverty without PST.

**Data Collection**

This research is a comparative research design. In order to accommodate the needs for a comparison, certain sets of data need to be gathered. The data to be gathered will be the student graduation rate as well as attendance, standardized test scores, and poverty. As this is a comparative research design, the data will be collected on two different student cohorts. One cohort will have had the current PST system in place for their entire high school experience, while the other cohort did not have access to the same interventions. The data from both groups will be compared to determine a correlation between the school's PST system and improvements in student performance.

Student data was analyzed as an entire cohort. There was no need to individually contact the students. Data collected will be numerically based and not be attached to any individual student. Therefore, the researcher will not need to gather consent from the student's individually. However, the data will be protected. When the appropriate amount of time has elapsed, the data will be destroyed to protect the institution from the possibility of future misuse of the data (Cresswell, 2009). Any further requirements will be addressed through recommendations by the IRB board of the University overseeing the researcher.

Participants were drawn from different graduation cohorts. These participants will be chosen as a matter of convenience. One cohort consisting of one graduating class (2013) was chosen because they had access to the PST program for their entire high school career. The other cohort (2011) was chosen because, as this class graduated prior to the district's utilization of the current PST system, they did not have had access to the school's full intervention program for their entire high school career.

Data will be gathered from the district. Since the school is always looking to improve its programs, Battlefield High was excited to hear the researcher's interest in evaluating its PST program. One of the caveats of the school's cooperation with this study was its access to the data analysis from the dissertation. District administration expects the researcher to give a presentation to the school administration team. The administrators present for the presentation will, at minimum, consist of the assistant principal that oversees the at-risk programs as well as a representative of the district's director of academics.

The school district uses the Infinite Campus system to manage the district data. The district's data manager offered to print out a query that included the data that is needed for the research. Based on the specifics of the data needed by the researcher, the school data manager ran a query that gathered the necessary data in minutes.

This process was done for two cohorts. Class of 2013 had access to the PST program, while the class of 2011 did not have access to the PST program for their entire high school experience. I will run a comparison between the cohorts to compare rates of attendance, test scores, and dropout rate to see if there was a correlation between interventions and student performance of students of poverty.

In order to get the most accurate data, the researcher took both graduating cohorts and cross referenced it with a list of students who dropped out in previous years. There was one student in the class of 2011 and 2 in the class of 2013 that dropped out in previous years but re-enrolled in time to graduate on time with their cohort. Those students were counted as graduates instead of dropouts. One other concern regarding student data was found. Two students in the

2011 cohort had corrupted data for their attendance. Those students were not included in the sample.

Variables are anything that can change over time or entity (Field, 2013). According to Cresswell (2009), dependent variables are subject to change based on the independent variable. Independent variables are what cause outcomes (Cresswell, 2009). The independent variable will be the PST pyramid as that is what is expected will be the cause of change. The dependent variables are what the research expects to be affected by the independent variable; in this case, attendance, poverty and End of Course test scores in Government and English 2.

In this study, I will be looking for patterns in the data. The pattern will be twofold. Differences between students of poverty in the cohorts that have access to the PST and students of poverty in the cohorts without PST in graduation rate will be analyzed. The different dependent variables will also be analyzed to look at any differences between the two cohorts as well.

### **Data Sets and Analytic Tools**

Students in the class of 2012 were the first graduating class to have had access to the school wide intervention program for their entire high school career. The class of 2012 will serve as the division point for the study. The 2011 cohort will represent the class without access to PST for their entire high school experience and the class of 2013 will represent the class with PST for their entire high school experience.

Once the data was gathered, the researcher utilized a t-test to run analysis. The t-test is used to determine if a significant difference exists between two different groups (Mertler and Vannatta, 2010). In the case of this research, the two groups are two different graduating classes, one that

has access to the PST program and one without access to the PST program. This study looked at the impact of PST on low income students as measured by three Missouri School improvement Plan (MSIP) goals. The three goals are attendance, Government EOC scores, and English 2 EOC scores.

A z-test was used to analyze the data for graduation rate. The z-test was used because the data is more categorical in nature.

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In this study, I looked for patterns in the data. Differences between students of poverty in the cohorts that had access to PST and in the cohorts without PST were analyzed. The different dependent variables will also be analyzed to look at any differences between the two cohorts as well.

## **Results**

A single tailed t-test was used on attendance, Government EOC scores and English 2 EOC scores. A z-test was used on the graduation rate due to that data being categorical or qualitative instead of the quantitative data used for attendance and test scores.

Table 1.

*Attendance, Government EOC Score and English 2 EOC Score for Cohorts 2011 and 2013*

Low SES Student Outcomes	2011			2013			t	sig	95 CI
	N	M	(SD)	N	M	(SD)			
Attendance	36	91.23	(6.79)	185	92.22	(6.15)	-.81	.21	[-.03, .01]
Government EOC	36	198.81	(16.97)	185	193.19	(36.59)	1.44	.92	[-.02, .13]
English II EOC	36	206.58	(16.7)	185	204.22	(39.62)	.58	.72	[-.06, .1]

n = number of graduates on Free and Reduced Lunch

\*p < .05

The first research question addressed was the difference in the graduation rate of high school students of poverty with PST access and high school students of poverty without PST access. There was no significant difference in the attendance rates of low income students without access to PST (M=91.23, SD=6.79) and low income students with access to PST (M=92.22, SD=6.15); t=-.81, p=.21. Though the attendance rate rose by .99%, the p score of .21 is outside the .05 range of statistical significance. The null hypothesis has not been disproven.

The research question addressing the difference in the Government EOC scores for high school students of poverty with PST access and high school students of poverty without PST access had similar results. There was no significant difference in the Government EOC scores of low income students without access to PST (M=198.81, SD=16.97) and low income students with access to PST (M=193.19, SD=36.59); t= 1.44, p=.92. The p score of .92 is outside the .05 range of statistical significance. The null hypothesis has not been disproven. Though the Government EOC scores rate decreased by 5.62 % from 2011 and 2013, the 95% confidence interval shows the EOC scores deviated between dropping 2 points and gaining 13 points.

The research question addressing the difference in the English 2 EOC scores of high school students of poverty with PST access and high school students of poverty without PST access had a similar outcome to the previous two data sets. There was no significant difference in the English 2 EOC scores of low income students without access to PST (M=206.58, SD=16.7) and low income students with access to PST (M=204.22, SD=39.62);  $t = .58, p = .72$ . The p score of .21 is outside the .05 range of statistical significance. The null hypothesis has not been disproven. Though the Government EOC scores rate decreased by 2.36% from 2011 and 2013, the 95% confidence interval shows the EOC scores deviated between dropping 6 points and gaining 10 points.

Table 2.

*Graduation Rate for Cohort 2011 and Cohort 2013*

Low SES Student Outcomes	2011			2013			Z	Significance
	On Time Grad	Low SES Seniors	%	On Time Grad	Low SES Seniors	%		
Graduation Rate	36	82	.43	186	215	.87	5.67	.000000073

n = number of graduates on Free and Reduced Lunch

\*p < .05

The research question addressing the difference in the graduation rate of high school students of poverty with PST access and high school students of poverty without PST access did find an interesting statistical correlation. There was a significant difference in the graduation rate of low income students with access to and low income students without access to PST. The graduation rate between the 2011 cohort and the 2013 cohort increased from 43% to 87% for an

overall increase of 44%. The significance of .000000073 is well inside the .05 range of statistical significance. The null hypothesis has been disproven.

### **Conclusion and Recommendation**

The effect of PST on the academic success of low income students at Battlefield High was not able to be proven within the level of significance that was required. Instead of finding improvement with EOC test scores of the graduating cohort having access to the PST program for the entirety of its high school career, the scores came in lower than the cohort without PST access. The effect of PST on attendance of low income students could not be proven with significance, leaving uncertainty as to what was the cause of the improvement. Only improvements in graduation rate were proven with significance.

Attendance has been shown to be positively affected by academic interventions. Fisher and Frey (2011) showed an improvement of 5.2 % in the attendance of their subjects that was attributed to RTI based interventions. Battlefield High showed less than 1% attendance increase between the cohort with PST interventions and the cohort without. Even then, the data was not proven with any significance therefore the improvement may or may not be attributed to the PST interventions.

Studies have shown an increase in standardized test scores due to academic interventions. Mac Iver and Mac Iver (2009) improved the number of students classified as on path to graduate in literacy based classes by 74% while Fisher and Frey (2011) showed an improvement of 4% in standardized tests. The EOC scores for English 2 were not nearly as impressive. Battlefield's English 2 scored actually decreased by 2.36% from 2011 and 2013. Battlefield's Government EOC test scores also decreased between the two cohorts with a drop of 5.62 % from 2011 and

2013. Even then, the significance level for each test variable was too far from .05 to be able to show what contributed to the drop in scores.

The effect of the PST program on the graduation rate was able to be proven statistically significant. Mac Iver and Mac Iver (2009) showed an improvement of 5% while five high schools in California showed an improvement in the graduation rate of low income students of 7.6% after district level intervention strategies were adopted (Duffy, Poland, Blum, and Sublett, 2015). Battlefield High has shown an improvement of 44%. The significance of the data was shown to be a highly significant correlation between the PST program and graduation rate of low income students.

It is the recommendation of the researcher to continue with the PST system. According to the findings of this study, PST has shown to have little effect on the EOC test scores that Battlefield High gives its students to evaluate their learning. This study has also not been able to connect attendance with the PST program with any statistical significance. What draws the attention of the researcher is the level of statistical significance that was drawn connecting graduation rate and the existence of the PST program.

### **Limitations and Future Research.**

There are two limitations to the research that should be factored in to any future research. The first limitation that must be considered for future research is the sample being too narrow to accurately reflect the PST program. The second limitation was the disparity in number of low income students between the two cohorts.

The sample was of low income students of two graduating cohorts. The goal was to determine if interventions from the PST program at Battlefield High School would positively affect the

student outcomes measured by attendance, EOC test scores in Government and English 2, and graduation rate. The sample of two cohorts only gave a snapshot of the PST program instead of establishing a trend. In future research, a series of graduating cohorts would show if any trend exists between the existence of the PST program and student outcomes. Five graduating cohorts should be sufficient to provide enough data. Another positive aspect to using five graduating cohorts would be that with the class of 2017, there will be five cohorts excluding the pilot year (2012) that have had access to the PST program for their entire high school career.

The second limitation is the disparity between the low income students of the two different cohorts. The cohort of 2011 had 82 students who were classified as low income. For the class of 2013, the number of low income students in the graduating class increased to 215. To counter that disparity in low income students, a series of graduating cohorts will show if either of the cohorts chosen for this research is an outlier. More years will give a more accurate count of the number of low income students at Battlefield High.

## **Chapter 6**

### **Reflection**

This chapter is the conclusion of my journey through the Educational Leadership and Policy Analysis. When I began this program, I was overwhelmed by the concept of being a member of a cohort in a doctoral program. Now, as I near the completion of my degree, I am amazed at the accomplishment. Nothing summarizes my learning experience more effectively than the dissertation itself.

The dissertation tended to flow from easy to difficult throughout the entire process. Unbeknownst to me, the dissertation began during the third summer of the cohort. This period was the time I worked on my comprehensive exams. The comprehensive exams or comps took up a portion of nearly every day during that summer.

The comps forced me to look deep inside of myself to determine my leadership style, critical reading strategies and research organization skills. As far as leadership skills, I learned that I am a servant leader. Servant leadership is defined as leadership that ensures that the needs of others are met as a high priority (Northouse, 2013). I have always focused on the people within my organization. The goal was always to make them better as teachers and scholars. Leadership in a servant approach uses influence to provide direction instead of using coercion to exert control within the organization (Goh and Zhen-Jie, 2014). As a leader in my classroom as well as the leader of my district's professional organization, coercion often leads to conflict that has no long lasting effect. While influencing the direction a conversation goes will often have long lasting positive effects.

My comprehensive exams helped me to become a critical reader. The vast amount of literature that was available to support my claims in the comprehensive exams was

overwhelming at first. Reading quickly has never been an issue for me. However, the need to quickly disseminate information from multiple sources forced me to increase the accuracy of content reading while still maintaining the speed necessary to read multiple texts and articles.

My organization skills were greatly improved during my comprehensive exams. Never before had I undertaken writing at this magnitude, but the comprehensive exams, having three completely different sections, multiplied that magnitude threefold. Though there were three distinctly different writings that were assigned, my desire was to maintain an overarching theme for all three so I could incorporate each into my final dissertation writings. To achieve this, I was forced to balance keeping each writing compartmentalized so one paper would not bleed over into another, but still blend enough similarities together through all three writings in order to maintain the overall theme that I had hoped to achieve.

The comprehensive exams took an entire summer to complete. The process took hours upon hours each day. Multiple writings and re-writings were necessary to achieve this goal. A few sleepless nights were also needed when inspiration woke me from a sound sleep. All of this was necessary, but it turns out that the comprehensive exams were the easy part.

As my skills as a researcher developed over the course of the dissertation process, my skills at finding relevant literature improved. Relevant literature tends to be difficult to find until you do find something, then it comes at you in droves. This is a blessing as well as a curse. It is a blessing in that good literature uses past research as a foundation to build upon. This can be a curse in that researchers can begin to feel safe with this past research and not dive too deeply into their own research questions. As a researcher, my desire is to continue to ask further questions

and push the limits of research. I hope to continually ask the next question and take my research to the next level.

During my statistics class I struggled mightily with data. Part of me wanted to never use data again and embark upon a career of qualitative research. Yet, something kept nagging away at me regarding using data for my research questions for my dissertation. Deep down, I knew that if I was going to do a case study that would not only earn me my Doctorate, but provide a service the school district that was willing to give me access to their data, I was going to need to give them something quantifiable.

I learned quite a bit about using data from the dissertation experience. Data to a researcher is like fire to early humans; it has the ability to uncover wonderful possibilities if it is used correctly but can quickly spread uncontrollably if not handled with care. This data grew exponentially as I considered different avenues of research. Had that continued, I would still be adrift in a sea of data.

What is more, I learned a lot about myself as a researcher from the data experience. I learned to listen to the guidance of others who have similar experiences. My circle of people who have earned their doctorate is limited but growing. These people all gave me sage advice. From my advisor, I learned to stick within the limits of my research questions. From him I learned to focus my attention on the specific issue. Very often, I would find myself thinking about embarking on an interesting tangent only to hear the wise words of my advisor reminding me to focus on the research questions. From this I learned to maintain a single focus. By keeping this focus, I was able to fulfill both of my goals of earning my degree to provide a service to the school district whose program I evaluated.

The other bit of advice I received from one of my doctoral colleagues came from one of my building's assistant principals. She stressed the importance of keeping my language simple. At first I was confused by this statement, after all, I am earning this tremendous degree and I need to live up to the mystique. She reminded me to be considerate of my audience. I was writing a program evaluation for a school district. Though there were members in my reading audience that were well versed in educational jargon, there were others who were not. Her example was of the school board. The district school board has a wide range of educational background. She reminded me that I needed to measure the language of my writing so the entire audience understood my findings. To her, my job was to provide the best data for those who carried the burden of responsibility were able to make the best informed policy decision possible.

I have learned another lesson from data during the dissertation process. I have learned that there is a certain amount of grit that goes with the dissertation. This realization came from my attempt to process the data for the findings section of my article. Statistics was one of the classes required for this degree. A large portion of the statistics class was dedicated to learning about statistical software. Though there was no requirement regarding the type of software used to translate data, much time was given to learning one particular software brand.

In order to mitigate some of the cost of the program, the university issued, to me, a laptop with the software installed. However, what was forgotten was the user name and password required to unlock the computer. No one was available to provide the information to unlock the laptop for several days. The research threatened to come to a screeching halt.

Instead of succumbing to despair, there was a time when that would have happened, I searched google for data software and found the very program that was installed on the laptop.

In fact, it was a free trial. The situation just improved dramatically. Unfortunately, that was not to be. The desktop computer used to download the free trial was not compatible with the data software. It would not load.

Forced back to relying on the software from the laptop, I needed to gain access to continue the research. Out of the blue, help arrived in the form of an email containing the codes to allow access to the laptop. As the laptop began the process of opening software, another glitch hit. The free trial of the data software had expired. Avenues were opening and shutting too quickly to keep up. Very unlike me, I pressed forward. A phone call was made, a meeting time was set up and I met with a high school statistics teacher who showed me how to run the necessary tests to complete my research. Many different opportunities presented themselves for me to call it quits but this time I showed a toughness that usually does not come from me. Whether it was the grit I mentioned earlier or just being too stubborn to know when to quit, I may never know. All that matters was the data was delivered and the paper moved forward.

Another area that took more getting used to than I anticipated was the wait. As busy as the writing process is, there were times where I was forced to wait. After comprehensive exams, wait for weeks to have them graded. Submit your work; wait a few days for feedback. Logically, I understand that it is part of the writing process but that does not make the wait easier.

Throughout my academic history, I truly enjoyed my down time. College at all levels was a leisurely experience. That is not to say that the classes were not difficult, in fact, they were. On my end, there was no desire to finish other than being finished. The dissertation, on the other hand, has been a completely different experience. My desire to finish this research paper has become all encompassing. When I am waiting for feedback, I am anxious. I need to

be moving toward the goal. When I have down time, I am thinking about the research. Everything leads me back to the dissertation.

The solution to the wait was the feedback from the professor. Emotions ran high when the feedback was returned. Excitement was the initial feeling. Excitement was felt because dissertation process was finally moving forward. I felt excitement that this journey was a step closer to its end. Excitement that I was one step closer to being awarded the title of “Doctor of Education” that had seemed inconceivable during the first classes of the program.

The excitement ended abruptly once I read the feedback from the professor. So much with the paper was out of place, too much or just plain wrong. Now the wave of emotion turned from excitement to dejection. So much of the paper needed to be changed. I was not sure how to proceed. Then it dawned on me, I needed to trust in the feedback that I was given.

Trust was a new experience that the dissertation process has taught me. From my past experiences, professors were there to give you the knowledge to pass their class. Once that was accomplished, the path of the professor and the student diverged, often never to cross again. The dissertation, much like the cohort program itself, is different. In my case, my first class was taught by the same professor who will guide me through the dissertation process. The professor was able to witness my transformation as a scholar.

Because the professor was able to witness the student’s transformation, the professor now had a vested interest in the dissertation process. The professor was able to use his vast experience in writing and publishing to give guidance during the process. That guidance led to dual outcomes. One outcome was for me to make the changes necessary to the writing. After all, the professor was the expert in the field. The second outcome came from my decision to not

make certain changes to the writing. I was forced to justify why things were not changed. By justifying my decision, I was able to hone my argument. That too made me a better researcher.

The last thing that I learned from the dissertation is the calendar is an ally and an enemy. The calendar constantly moves forward and with it, deadlines. Deadlines are imposing. Deadlines are intimidating. Most of all, deadlines are the last hurdle for the ultimate goal. On the opposite end of this deadline, the end of a long journey lies. The journey where I have climbed the highest academic mountain that can be climbed, others can equal the achievement but none can surpass.

Future deadlines hold similar promise. Future deadlines hold journal publication where I can add to the scholarship of our society. Future deadlines exist for me as a possible peer editor for other scholars. This provides me an opportunity to help others to contribute to scholarship. Lastly, maybe another deadline will give me an opportunity to sit on a committee for another scholar to defend their dissertation. Opening a door for another to dream about the possibilities their future holds.

As I near the end of my dissertation process, I realize that the academic skills that I learned are extremely valuable to my contribution to education whether I teach, become an administrator, or move to the university level. Those are not the skills that I leave this process with that are truly helpful. I learned the value of persistence in finding relevant research for the dissertation. I learned the value of finding experts to mitigate my weaknesses. I learned the value of patience when events slow down. Lastly, I learned the value of grit when events take an unexpected turn.

These skills are not academic in nature, but are valuable to the character of the scholar. Perhaps character was the goal all along. If that is the case, I look forward to being a scholar of character, striving to improve those around me. The dissertation was merely the mechanism that brought that out of me.

**Appendix 1**

**Figure 1. RTI Pyramid**

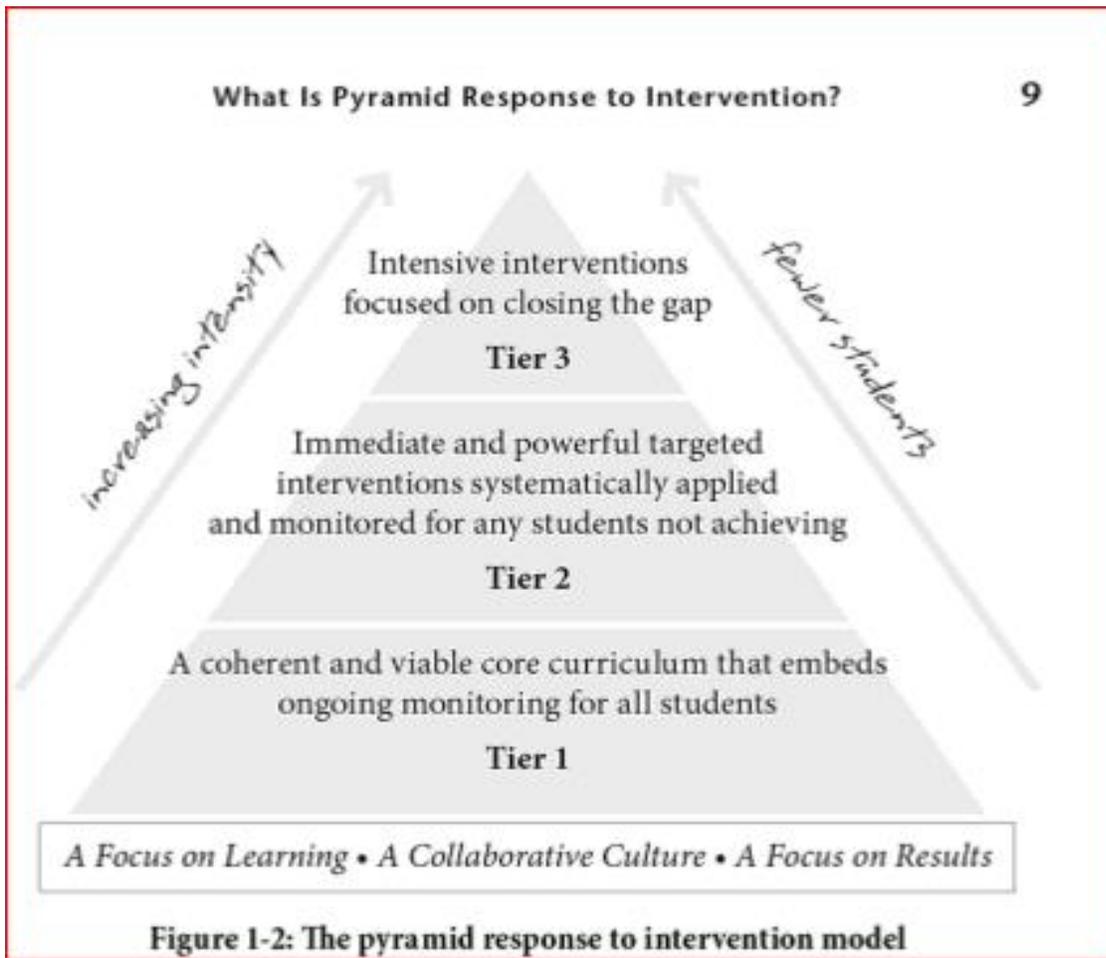


Figure 1. Pyramid Response to intervention model. Adapted from *Pyramid response to intervention: RTI, professional learning communities, and how to respond when kids don't learn.* By, A. Buffum, M. Mattos, & C. Weber, 2009, p.9. Copyright 2008 by Solution Tree Press.

Appendix 2

Figure 2. RTI Pyramid for Battlefield High school.

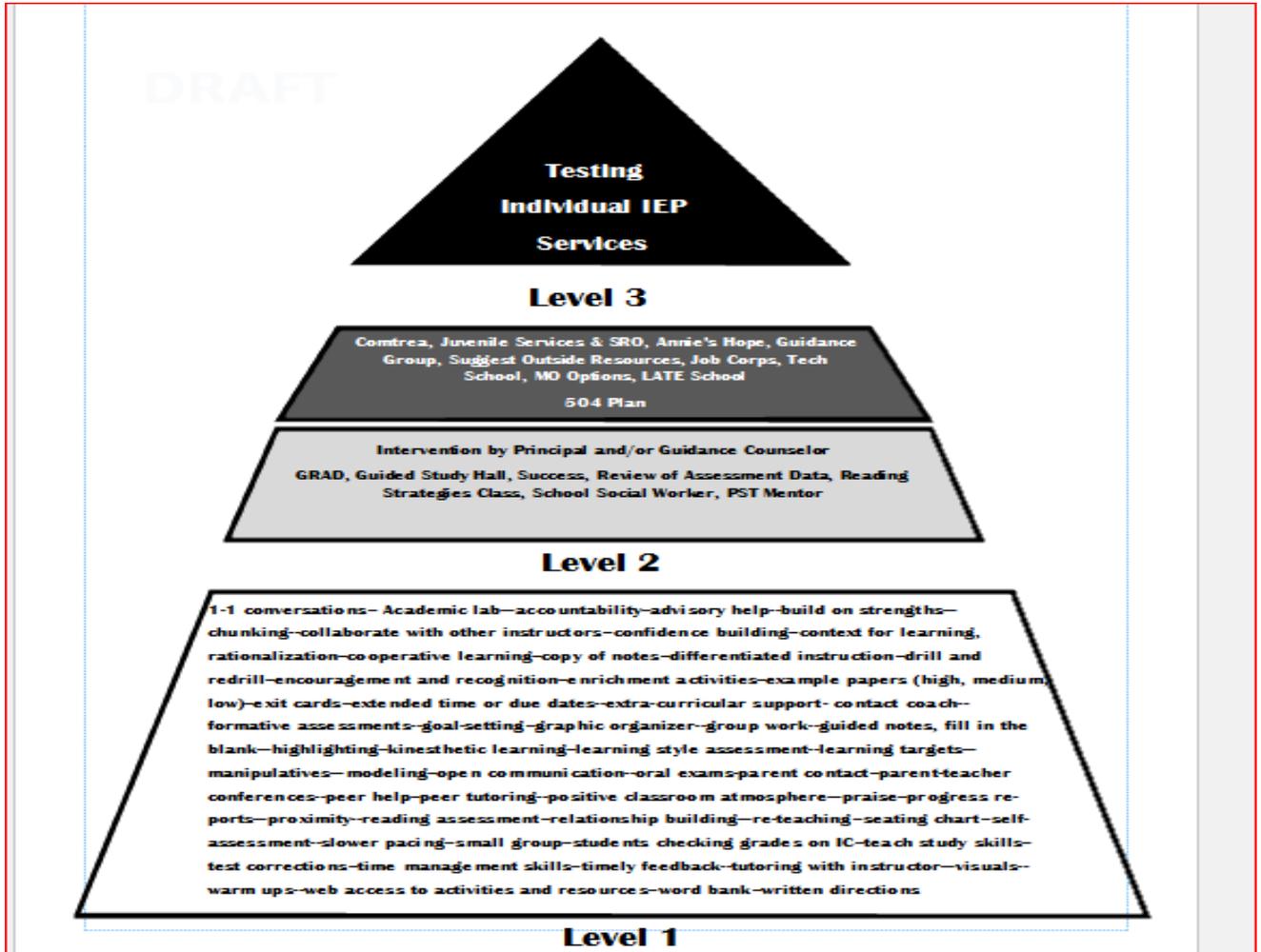


Figure 2. RTI Pyramid for Battlefield High school. Each box constitutes a tier of interventions that Battlefield high uses for its students. As the pyramid gets smaller the intensity of the interventions increases, including but not limited to smaller class size etc. Adapted from Battlefield High school. Reprinted with permission.

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### **Vita**

Keith Matlock earned his B.A. in History from Northeast Missouri (Truman) State in 1993. He earned his teaching certificate from the University of Missouri St. Louis in 1995. He earned his M.S. in Educational Administration from Southwest Baptist University in 2000. He earned his Ed.S. in Educational Administration from Missouri Baptist University in 2006. This dissertation is the capstone to his Ed.D. from the University of Missouri Columbia.

He has taught in the Northwest R1 school district for 20 years, all of which were at the high school level. He taught Social Studies Classes for five years and spent the last fifteen years teaching a class for at-risk students called the Missouri Option.