

Setting the Stage: An Evaluation of PBIS implementation in Elementary Schools:

A Mixed Methods Study

by

Joseph Sanfelippo

A Dissertation presented in partial fulfillment of the requirements for the

Doctor of Philosophy degree in

Leadership for the Advancement of Learning and Service

College of Education and Leadership

Cardinal Stritch University

May, 2012

## **Dissertation Approval**

As members of the dissertation committee for Joseph Sanfelippo, and on behalf of the Doctoral Program at Cardinal Stritch University, we affirm that this report meets the expectations and academic requirements for the Ph.D. degree in Leadership for the Advancement of Learning and Service.

---

Peter M. Jonas, Ph.D., Chairperson

Approval Date

---

Laurie Hittman, Ph.D.

Approval Date

---

Darnell Bradley, Ed.D.

Approval Date

As the Dean of the College of Education and Leadership, and on behalf of the Doctoral Program at Cardinal Stritch University, I affirm that this report meets the expectations and academic requirements for the Ph.D. degree in Leadership for the Advancement of Learning and Service.

---

Freda Russell, Ph.D.

Approval Date

Copyright by Joseph Sanfelippo, 2012

All Rights Reserved

## **Acknowledgements**

This is for everyone who has helped the “survive and advance mode” I have been in for 5 years, but especially for my wife. Andrea...we did it.

## **Abstract**

The goal of improving student academic and behavior outcomes is to ensure that all students have access to the most effective and accurately implemented instructional and behavioral practices and interventions possible. Positive Behavior Intervention and Supports (PBIS) provides an operational framework for achieving these outcomes. Sugain and Horner, the architects of the PBIS framework, emphasize four integrated elements:

1. Data for decision making
2. Measurable outcomes supported and evaluated by data
3. Practices with evidence that these outcomes are achievable
4. Systems that efficiently and effectively support implementation of these practices (Sugai, 2002).

The purpose of this study was to identify what factors impact the successful Tier I implementation of PBIS in order to assist schools in the future planning of the PBIS rollout at the elementary level. The research question was: what are the factors that impact the positive Tier I Implementation of Positive Behavior Intervention Supports in two Midwestern suburban elementary schools? The research identified the factors that led to the sustainability of Tier I implementation in two elementary schools. Survey data identified the overall perception of the program by staff members. Focus groups identified the connection or disconnection between members of the staff who had been trained in the PBIS framework and those who had not been trained. The development of the trained team and untrained team, the communication systems set up to disseminate

information, and follow through on those instructions had a profound impact on the ability to get the desired buy-in from staff. Data concluded that the four main components to the successful implementation at the two schools were knowledge, the importance of a connector, school environment, and communication.

A significant difference was found in the perception of the program by those members of the organization who had gone through district level training and those who had not received training. Survey data indicated the most significant difference between trained and untrained teams were in the areas of continuous ongoing support, making a positive impact on school culture, and maintaining a safe school environment.

## Table of Contents

	Page
Approval Page	
Copyright Page	
Acknowledgements.....	ii
Abstract.....	iii
Table of Contents.....	i
List of Tables.....	viii
List of Figures.....	ix
CHAPTER ONE: INTRODUCTION.....	1
Background of the Study .....	1
Statement of the Problem.....	1
History of the Problem.....	5
The National Perspective.....	6
The State Level Perspective.....	7
The Local Perspective.....	8
Explanation of Tier System.....	14
Current Status of the Problem.....	18
Need for Further Study of the Problem.....	20
Purpose of the Study.....	22
Approach of the Study.....	23
Significance of the Study.....	26
Uniqueness and Compatibility of the Research.....	26
Contribution to Knowledge, Theory and Practice.....	27
Delimitations and Limitations of the Study.....	27
Assumptions.....	28
Parameters.....	28
Timeframe.....	29
Vocabulary of the Study.....	29
Summary and Forecast.....	33
CHAPTER TWO: LITERATURE REVIEW.....	35
Organization of Review.....	35
Theoretical Framework.....	36
Innovation Theory.....	36

Team Design-Schlechty.....	44
Positive Behavior Intervention Supports.....	49
PBIS Measures of Fidelity.....	56
Program Evaluation.....	60
Program Implementation.....	62
Summary of Themes/Finding About Innovation Change.....	63
Theme/Finding on Staff Placement.....	63
Summary of Themes and Findings.....	63
Theme/Finding on Positive Behavioral Intervention Supports.....	63
Theme/Finding on School Culture.....	63
Theme/Finding on Training Impact.....	64
Forecast of Chapter Three.....	65
 CHAPTER THREE: RESEARCH DESIGN.....	 66
Research Rationale.....	66
Research Purpose.....	67
Research Approach.....	70
Research Design.....	71
Nature of Mixed Methods.....	71
Appropriateness of Mixed Methods to the Research.....	73
Research Plan.....	74
Timeline.....	76
Timespan.....	76
Chronology of Events.....	76
Site and Sample.....	77
Communication with Site.....	78
Selection and Description of Site.....	78
School 1.....	79
School 2.....	80
Communication with Sample.....	82
Selection and Description of Sample.....	84
Data Analysis.....	84
Quantitative Analysis.....	85
Qualitative Analysis.....	87
Nature of Survey.....	89
Appropriateness of Technique.....	91
Development of Reliable/Valid/Trustworthy Survey.....	92
Validity/Trustworthiness.....	94
Pilot Study Survey.....	94
Nature of Focus Group.....	100
Appropriateness of the Technique.....	101
Coding and Analyzing Data.....	103
Procedure.....	104
Role of the Researcher.....	108
Qualifications.....	108



Biases.....	108
Responsibilities.....	109
Summary/Coherency of Design.....	109
Validity/Trustworthiness.....	109
Triangulation.....	110
Limitations.....	110
Forecast Chapter Four.....	111
 CHAPTER FOUR: RESEARCH RESULTS.....	 112
Presentation and Summary of Data.....	112
Quantitative Findings Related to Research Question.....	112
Descriptive Statistics of Survey Sample.....	112
Summary of descriptive statistics.....	114
Findings between School 1 and School 2 Perceptions.....	116
Comparison of School 1 Perception overall.....	118
Comparison of School 1 Perception by training.....	119
Comparison of School 2 Perception overall.....	120
Comparison of School 2 Perception by training.....	121
Comparison of School 1 and School 2 by all participants.....	122
Comparison of School 1 and School 2 by trained team.....	123
Comparison of School 1 and School 2 by untrained team.....	125
Qualitative Findings Related to Research Question.....	128
Description of Site and Sample of Focus Groups.....	129
Findings Related to Focus Group Discussions.....	130
Findings about Knowledge.....	133
Trained vs. Untrained Perspective.....	134
Quality of the Training.....	134
Materials.....	135
Tools for Advancement.....	136
Consistency of Delivery.....	137
Findings about Connector.....	137
Importance of Communication.....	137
Administration Connection.....	138
Meeting Effectiveness.....	139
Findings about School Environment.....	140
Willingness to Accept Change.....	140
Connection to Previous Programming.....	141
Trust of Decision Making Team.....	142
Findings about Communication.....	142
Overall perspective of communication structure.....	142
Communication Tools.....	143
Consistency in Communication.....	144
Summary of Focus Group Themes.....	145
Summary of Results.....	146
Forecast Chapter Five.....	147

CHAPTER FIVE: DISCUSSION.....	148
Overview.....	148
Review of Study.....	148
Conclusions Related to Research Purpose.....	150
Study Findings/Conclusions about Research Question .....	150
School Environment Comparisons.....	151
Connector Comparisons.....	153
Knowledge Comparisons.....	153
Communication Comparisons.....	156
Conclusions Compared to Related Literature.....	158
Review of Findings Related to Literature.....	158
Conclusions Related to Findings.....	160
Implication for Public Elementary Schools.....	160
Implication for School Environment.....	160
Implication for School Readiness for Change.....	161
Implications for State Training Agencies.....	163
Implications for Leadership, Learning, and Service.....	165
Implication for Educational Leadership.....	165
Implication for Educational Learning.....	166
Implication for Educational Service.....	168
Concluding Remarks and Future Research.....	168
 Bibliography.....	 171

## List of Tables

Table	Page
1. District WKCE Scores of Fourth Grade Students.....	78
2. School 1 WKCE Scores of Fourth Grade Students.....	80
3. School 2 WKCE Scores of Fourth Grade Students.....	81
4. Pilot Study Survey Participant.....	95
5. Reliability of Survey.....	97
6. Pilot Sample Results.....	99
7. School 1 Tenure by Role.....	113
8. School 2 Tenure by Role.....	113
9. PBIS Team Membership by Role.....	114
10. PBIS Team Non-Membership by Role.....	114
11. Differences in Demographic and Descriptive Data.....	116
12. All mean scores from School 1 and School 2.....	118
13. School 1 All Scores and Standard Deviation.....	119
14. School 2 All Scores and Standard Deviation.....	121
15. P value Results from School 1 and School 2 All Scores.....	123
16. T-test results for Trained Teams.....	125
17. School Untrained Teams means and t-tests for Significant Difference.....	127
18. School Readiness Installation.....	155
19. Trained and Untrained Team Response by Question.....	167

Figure	List of Figures	Page
1.	Four PBS elements.....	3
2.	Continuum of school-wide instructional and positive behavior support.....	12
3.	Learning time gained by reducing discipline time.....	22
4.	Rogers model of five stages in innovation-decision process.....	38
5.	Adopter categorization on basis of innovativeness.....	42
6.	Interpreting a correlation coefficient.....	87
7.	Focus group model impacting success factors.....	131
8.	Rogers model of five stages in innovation-decision process.....	154
9.	Guiding questions across phases of implementation.....	162

## **CHAPTER ONE: INTRODUCTION**

### **Statement of the Problem**

The goal of improving student academic and behavior outcomes is to ensure that all students have access to the most effective and accurately implemented instructional and behavioral practices and interventions possible. Positive Behavior Intervention and Supports (PBIS) provides an operational framework for achieving these outcomes. PBIS is a decision making framework that guides implementation of the best practice and evidence-based behavioral practices for improving behavior outcomes for all students (Sugai, 2002). It is also referenced as School-Wide PBIS or SWPBS. The PBIS framework emphasizes four integrated elements:

1. Data for decision making
2. Measurable outcomes supported and evaluated by data
3. Practices with evidence that these outcomes are achievable
4. Systems that efficiently and effectively support implementation of these practices (Sugai, 2002).

The purpose of this study was to identify what school building factors impact the successful Tier I implementation of PBIS in order to assist schools in the future planning of the PBIS rollout at the elementary level. The research question was: what are the factors that impact the positive Tier I Implementation of Positive Behavior Intervention Supports in two Midwestern suburban elementary schools? The contention is that high achieving schools, conducting a systematic approach to PBIS, benefited both the staff implementation process and student achievement of their populations. The research attempted to identify the factors that led to the sustainability of Tier I implementation in two elementary schools related to the perception of the program by trained and untrained

staff throughout the process. The development of the trained team and untrained team, the communication systems set up to disseminate information, and follow through on those instructions have a profound impact on the ability to get the desired buy-in from staff will be addressed through survey and focus group data evaluated by the researcher. The framework is currently in place in the two schools.

Positive Behavior Intervention Supports (PBIS) is defined as “a general term that refers to the application of positive behavioral interventions and systems to achieve socially important behavior change” (Sugai et al., 1999, p. 6). Traditional approaches to punishment and exclusion are ineffective when used alone. Behavior support needs to occur at the school level for all students and teaching these behaviors is the most powerful behavior support strategy available (Sugai, 2002). Positive behaviors refer to those skills that increase the chance of being successful. Supports refer to the variety of strategies that can be used to reinforce the positive behaviors. PBIS is a broad range of proactive, systematic, and individualized strategies for achieving important social and learning outcomes in safe and effective environments while preventing problem behavior with all students (Sugai, 2002). It is based on three guiding tenets: prevention, theoretically sound and evidence based practice, and systems implementation (Sugai et al., 2000).

**Figure 1 : PBS Elements-Supporting Social Competence and Academic Achievement**

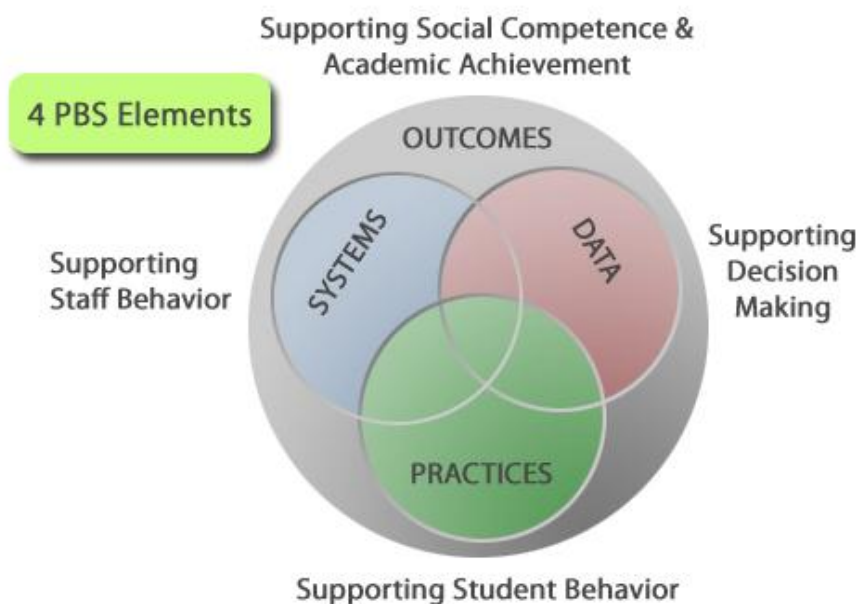


Figure 1. Supporting Social Competence and Academic Achievement, Supporting Staff Behavior, Supporting Decision making, and Supporting Student behavior drive the umbrella by which PBIS is implemented in school settings. The outcomes, as indicated in Figure 1, are the direct result of systems, data, and practice. Source: Sugai, 2002

Systems refer to how things are done. It is a team based problem solving method using data to drive decision making. Through the data, the system can address needs in specific areas as well as those that impact the entire school. The systems address needs and expectations on both a short term and long term level. Short term refers to daily, weekly, and monthly data and long term refers to year at a glance and future planning. Data refer to how decisions are made. The on-going data collection and use of data in daily practice are essential to the outcome of the program. Behavior data are collected through Office Discipline Referrals (ODR), attendance, tardies, and suspensions or expulsions. Data are disseminated to staff and addresses the needs of students by problem behavior, number of ODR per day, location of the problems, time, and student.

Practices refer to how staff members interact with students. Specifically, practices identify direct teaching of the behavior expectations, on-going reinforcement of expected behaviors, and assessment of those behaviors through data. A behavior matrix developed by the trained team drives the instruction of those practices. The matrix defines expectations that are taught in the classroom, what behaviors are teachers managed, and what behaviors are managed by the principal.

The outcomes of these elements are guided by six important principles as defined by Sugai and Horner (2002):

- Develop a continuum of scientifically based behavior and academic interventions and supports.
- Use data to make decisions and solve problems.
- Arrange the environment to prevent the development and occurrence of problem behavior.
- Teach and encourage pro-social skills and behaviors.
- Implement evidence-based behavioral practices with fidelity and accountability.
- Screen universally and monitor student performance & progress continuously.

According to Sugai, schools that establish systems with the capacity to implement PBIS with integrity and durability have teaching and learning environments that:

- Are less reactive, aversive, dangerous, and exclusionary
- Are more engaging, responsive, preventive, and productive
- Address classroom management and disciplinary issues



- Improve supports for students whose behaviors require more specialized assistance
- Maximize academic engagement and achievement for all students ((Sugai et al., 2000).

PBIS schools organize their evidence-based behavioral practices and systems into practice in which students experience supports based on their behavioral expectations. A three-tiered framework allows all students receive supports at the universal or primary tier. If the behavior of some students does not meet the universal expectations, more intensive behavioral supports are provided, in multiple the forms in the second tier or a highly individualized plan in the third tier (Sugai 2002).

### **History of the Problem**

The Division of Teaching and Learning in the Mid West Area School District (MWASD) was developed in 2008-2009. In previous years, the curriculum department, student services department, and special education department were separate entities. The Division of Teaching and Learning brought those departments together in a more coherent manner which afforded the division the opportunity to engage stakeholders on a more consistent basis. It also allowed the school district to identify any services that were duplicated throughout the system and become more effective and efficient in that manner. It was identified that the school district was operating as a system of schools rather than a school system. That is to say, each separate school identified, and addressed, the needs of the school only. With the number of district employees traveling between buildings at the elementary level (32 Full Time Equivalent staff in 2008-2009) the need to develop some consistency to the district's delivery of social emotional education became apparent.

The district was also identified by the State of Wisconsin as being disproportionate in its identification of specialized programming. The identification of disproportionality, as indicated by the Wisconsin Department of Instruction (DPI), states that districts with disproportionate representation of racial and ethnic groups in special education and related services are there as a result of inappropriate identification (Wisconsin State Performance Plan Disproportionality in Education, November, 2009). Specifically, students in racial minority groups were more likely to be placed in special education programs than those students in the racial majority. The need for more consistency in how the district identified students became readily apparent through these factors. As the Division of Teaching and Learning began to research how all schools could benefit under a concept or program it turned to other states to see what was working. PBIS had been used in a number of different states including Illinois, Missouri, and Connecticut. Thousands of schools had adopted the PBIS framework, but those states had made it part of the social emotional framework used in developing state standards (Sugai, 2008). The model used in Illinois became a viable option because of the success it had seen in terms of keeping students engaged in learning and the reduction in discipline referrals state wide. That connection brought about the interest in PBIS and the eventual adoption of PBIS in the Mid West School System.

### **The National Perspective**

In 2009, there were over 10,000 schools nationwide implementing or sustaining PBIS (Positive Behavioral Interventions and Supports, November, 2009). U.S. Secretary of Education, Arne Duncan, promoted the implementation of PBIS nationally (K. Smith, 2010). Additional national discussions about PBIS have been linked to the reauthorization process for the Elementary and Secondary Education Act also known as

No Child Left Behind (NCLB), the Individuals with Disabilities Education Act (IDEA), and the proposed national legislation, H.R. 2597 – Positive Behavior for Safe and Effective Schools Act, which was re-introduced in May, 2009 Finally, the Collaborative for Academic, Social and Emotional Learning (CASEL) which provides the research for the Social Emotional Learning framework, supports PBIS (Collaborative for Academic, Social, and Emotional Learning, November, 2009).

### **The State Level Perspective**

There are significant efforts being made in the state of Wisconsin, with regards to PBIS implementation and framework. The Wisconsin Department of Public Instruction (DPI) contracted with the Illinois PBIS Network to develop the Wisconsin PBIS Network. The Mid West Area School District is a part of this network as well. The goal of the State network is to develop the coordination and training infrastructure within the state, to support the implementation and sustainability of PBIS efforts statewide. The need for a framework that brought consistency to schools was evident as the MWASD was not the only school district dealing with disproportionate identification in the area of special education. The framework was chosen due to successful implementation efforts in over 10,000 school districts (Positive Behavior Intervention and Supports, December, 2010).

Within this state framework, the Wisconsin Cooperative Educational Services Agency (CESA) has been given the charge by the state superintendent to help develop consistency among the districts in regard to PBIS. CESAs serve educational needs in all areas of Wisconsin by serving as a link between school districts and the state. Cooperative Educational Service Agencies may facilitate communication and cooperation among all public and private schools, agencies, and organizations that provide services to

pupils (Wisconsin State Statute, Chapter 116, 1983). There are currently 12 CESA organizations in the state of Wisconsin.

The Wisconsin PBIS network has developed a resource site and plan for those individuals seeking to implement the framework with fidelity. According to the state PBIS coordinator, the issues that the state of Wisconsin has in implementation are the fidelity of the districts during the implementation process. Those following the process used by the MWASD are five times more likely to reach full implementation than those attempting other methods (Nicole Beier, personal communication, October 22, 2010).

### **The Local Perspective**

The district involved in the research study researched national and state perspective before developing a strategic plan to meet the needs of Mid West Area School District students. The identification of a data driven program and how the process could be used by the district led to configuration of the MWASD's strategic plan for improvement in the area of social development of students. The alignment identified areas of focus specific to the MWASD. The two areas included "Identification and Implementation of Universal Screeners" and "Develop and Implement School Wide PBIS." Both areas also address a focus on the disproportionate representation of certain groups in special education.

The framework can be used at the elementary, middle school, and high school levels. The primary prevention tier of the figure indicates the school wide systems that are in place for all students in all places. These are practices and policies that are applicable to all students and are taught in the same way to all students. According to (Sugai 2002), 80% of the school population should be able to function within the primary prevention tier. This means that with 80% of the population should be able to function in

a productive and safe environment based on consistent expectations that are understood and taught by adults in the learning setting.

The establishment of positive behavior expectations for both students and staff is paramount in securing the 80% buy-in needed for sustainability and ensuring that the majority of the population, 80% of students, is able to function in the school environment with no additional interventions. Schools attain these numbers by involving staff and students in the development stages of the program and gaining ownership of the school for all of its participants.

An initial team of educators, comprised of teachers, administrators, support staff members, and in some cases, parents, is trained in the implementation of PBIS at a Tier I level. In this training staff members are coached on developing common expectations, developing reliable measures to accrue data used to make decisions, and identify ways to roll the program out to the population with the highest rate of success. A school statement that encompasses the ideals of the community as well as a common understanding is determined by the group, i.e. At School A we will be Responsible, Respectful, and Safe. Teams choose areas in which they need to establish common expectations. These include, but are not limited to classroom, hallway, lunchroom, playground and bathrooms. At this point teams decide what those common expectations mean in those areas. For example, what does it mean to be responsible in the hallway? The team comes up with 2-3 expectation statements for each area and affixes them to a visual that can be rolled out to the school.

Prior to rolling the plan out to the school population, the team works with the school staff to teach the expectations, how the misbehaviors and positive behaviors will

be tracked, and how the expectations will be brought to the student population as well as the parent population. A schedule is set up for the school to “kickoff” the PBIS initiative.

Positive behaviors are enforced a number of different ways throughout the year. After the kickoff, the team determines what area of focus (hallway, playground, classroom, etc.) will be enforced throughout a certain period of time. With the emphasis on one area the group can reinforce positive behaviors and be cognizant of those areas to develop student growth and understanding. Rewards are given to students adhering to the rules. For example, a school may choose to give out “caught being good” cards. If a student is exhibiting a positive behavior they are given a card. The school determines the number of cards they would like to set as their goal for the month and when a student gets a card they bring it to a central location for display. At the end of the designated time, usually a month, the cards are tallied and if the goal is achieved the school gets a reward for their behavior. All school awards could include, but are not limited to, extra recess time, all school BINGO, a homework pass, or a field trip.

Misbehaviors need to be tracked in order to make decisions for the school based on data, rather than what the perception of a certain area could be throughout the process. For example, many staff members may feel that the playground is an issue in the school because of what they hear from kids, particular staff members or parents. The data for misbehaviors are used to determine whether or not that is a valid concern. Misbehaviors are tracked by a system called Office Discipline Referrals (Sugai, 2002). Those students who do not adhere to the behavioral expectations will receive an Office Discipline Referral (ODR). An Office Discipline Referral (appendix) is a documented incident of non compliance based on the expectations put forth by the school or classroom. The documentation of ODRs is essential to the data collection process. It affords the data

team to analyze where non-compliance is most prevalent and how the school can work to adjust what it controls to better meet the needs of all students. If the data represent more ODRs coming from the playground, the school leadership team can identify that space as a need for improvement and ensure future success by working with supervisors and addressing environmental needs.

The management of ODRs will be done through a system called the School Wide Information System (SWIS). SWIS is an electronic system that allows staff members to quickly document non-compliance in a systematic way. When a student receives an ODR for non-compliance of school rules the data is placed into the SWIS program and can be accessed readily by members of the team. Staff members are trained to input the ODR data into SWIS. The SWIS program is tailored to the needs of the school by allowing administrators the ability to set up the electronic form with specific expectations of the school and its personnel. Coaches and administrators use staff development opportunities with all staff at the location to ensure fidelity of the system. SWIS data can be aggregated by a number of different categories including location, activity, and time. The system also affords staff members the opportunity to view the ODRs by student demographics. With the emphasis on culturally congruent pedagogy in the district it is important to collect data on the representation of race in the ODRs. If a disproportionate amount of ODRs are received for students of color or socioeconomic status the district needs to address the practices going on in those areas. An example would be the number of times a student is to be sent to the principal's office for misbehavior on the playground. The system allows the team to analyze the content and placement of the misbehavior and address the needs of that particular area, student, or staff member issuing the office discipline referral. Disproportionate representation of ODRs will be

monitored through the SWIS data reviewed on a monthly basis by the PBIS Team and action was taken immediately if issues of disproportionality begin to surface. Similarly, ODR and race data was reviewed by the District PBIS Leadership Team on a quarterly basis.

Figure 2 addresses the three tiers of the PBIS framework. Universal prevention programs, or Primary Tier, when applied to children's behavioral health, are considered to be effective in preventing behavior problems for 80-90 percent of students (Sugai et al., 2008).

**Figure 2: Continuum of School-Wide Instructional & Positive Behavior Support**

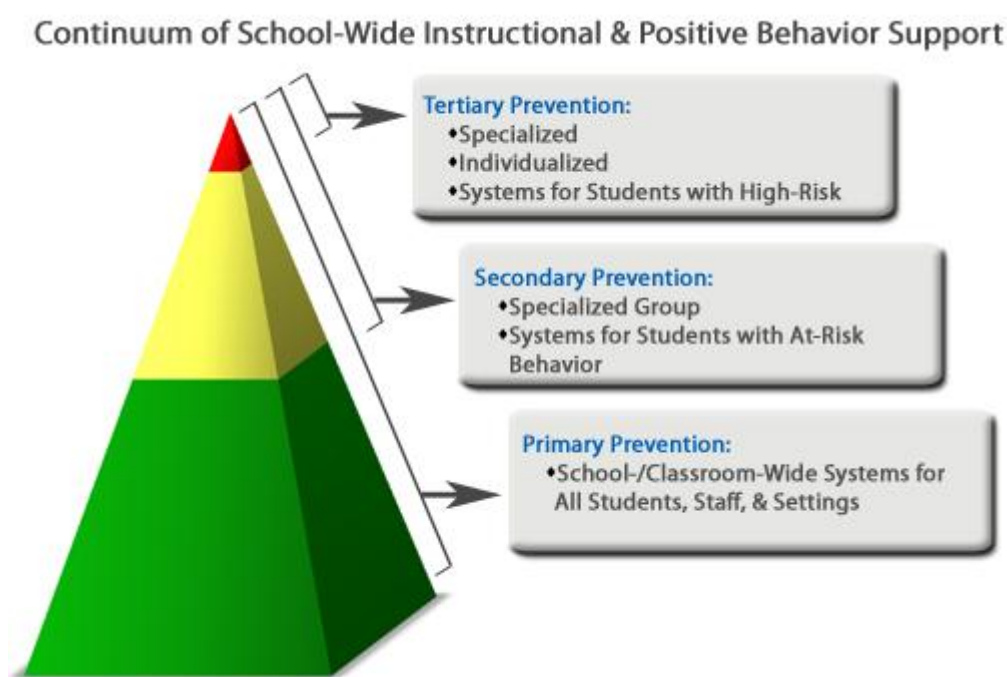


Figure 2. The continuum of school wide instructional positive behavior support is comprised of a primary, secondary, and tertiary prevention tier. Source: Wisconsin Positive Behavior Support Network, December, 2010

The Primary prevention tier, or Tier 1, would be effective for 80% of the school population. Students in this tier work well within the rules, are able to attain success with teaching expectations, and generally do not have any social issues within the context of



the school. The primary prevention tier is taught to everyone in the school. Expectation are delivered consistently to all students. Schools would like students to be able to perform well in Tier 1.

The Secondary prevention tier, or Tier 2, would encompass approximately 15% of the population (Positive Behavior Interventions and Supports, November, 2009). This is an intervention tier that puts the emphasis on more, and different, practices to impact the behavior of students in the school. These students receive the primary prevention tier, as well as, the more and different secondary prevention tier to enable success throughout their school experience. The phrase “more and different” is important because the secondary tier offers a student the opportunity that the primary tier does not but it is in addition to what the student already receives in being part of the primary or universal tier. This means that the student receives the training and social education that all other students receive, but gets an additional “boost” in the area of social education to address a certain need. It is important to note that the additional education is additional and supports, but does not supplant the primary intervention tier.

The tertiary prevention tier, or Tier 3, encompasses 5% of the population. This is a specialized and individualized system for students who have high risk behaviors in schools. These students would get the primary prevention tier, the secondary prevention tier, and the tertiary prevention tier to aide in their success through their school experience. It is important to reiterate the idea of “more and different” with the tertiary tier. This tier does not replace tiers one and two, but enhances the experience in that an individualized system is put in place to ensure the success of the student. The student receives the same social or behavioral prevention tiers as the other 95% of students in the school setting, but is afforded the opportunity to succeed through an individual system.

PBIS schools organize their evidence-based behavioral practices and systems into practice in which students experience supports based on their behavioral expectations. A three-tiered framework allows all students receive supports at the universal or primary tier. If the behavior of some students does not meet the universal expectations, more intensive behavioral supports are provided, in multiple the forms in the second tier or a highly individualized plan in the third tier (Sugai 2002).

### **Explanation of Tier System**

Academic areas use student data to drive decision making throughout the curriculum. The concept is a response to where the student is, during a particular place in time, and developing a plan that will give each student and school the best opportunity to succeed. This is called Response to Intervention. The idea of using the same approach to address social needs is becoming more apparent throughout the country with the No Child Left Behind stipulations. The MWASD has placed a tremendous emphasis on Response to Intervention (RtI) over the past several years in academic content areas and the introduction of the PBIS framework into the discussion fits the plan of the district.

Response to Intervention is a framework that provides early interventions to students in need before the achievement gap is large enough that the student cannot catch up to the regular curriculum or is identified with a disability that may have been addressed at an earlier stage in their career. According to the RTI Network, "...identifying, and placing students 'in' a special education program was no longer sufficient. What needed to be addressed was the creation of a service delivery system that was more oriented around how a student responded to research-based interventions delivered with integrity" (<http://www.rtinetwork.org/learn/why/whyrti>, paragraph 8). The concept is early intervention, as well as, data driven decision making to ensure the

success of all students. Individual students are monitored consistently and given interventions that are additional and different than those they already RtI employs a universal tier for all students. According to the National Center on Response to Intervention, RtI integrates assessment and intervention to maximize student achievement. The framework affords schools the opportunity to identify students at risk in the areas of achievement and behavior, and monitor progress through evidence-based interventions. An example of this would be when a school sees that there are a number of Office Discipline Referrals (ODRs) occurring in a particular place in the school. ODRs are a way to document misbehaviors. When the school PBIS team reviews the data to show that students in a particular area, the lunchroom for example, are exhibiting more misbehaviors than other areas of the school, the team uses the data to drive the decision making moving forward. This may include more staff designated to the lunchroom during a certain time of the day, more training to staff, additional training for students, or rearranging schedules to limit the number of students in an area at one time. The interventions used are adjusted to the need of the students. Where it is assumed that RtI is academic in nature, PBIS represents the “right side” of the RtI triangle while academics is the “left side” as seen in Figure 2. When behavior is responding to interventions, attention to academic areas increases within the classroom.

The implementation of PBIS uses the principals of behavioral best practice in the educational setting. The framework is delivered objectively using pre-defined data and has numerous fidelity measures to ensure the consistent roll out of the program. This allows the framework to be used in multiple areas as it helps to prevent the over identification of particular groups. In the MWASD, this is essential to address issues in the area of disproportionality.

PBIS has been developed, researched, and implemented in many other states and districts across the country. The reauthorization of Individuals with Disabilities Education Act in 2006 defined preventative and early intervening services. PBIS fits the framework for early identification and preventative services. In September of 2008, the National Center for Education Evaluation and Regional Assistance released an Institute of Educational Sciences practice guide entitled “Reducing Behavior Problems in the Elementary School Classroom”. The authors recommended five approaches to address behaviors and offered levels of evidence to support them. They evaluate the areas based on a Likert scale that moves from weak, to moderate, to strong. These areas and their levels of support include:

1. Identify the specifics of the problem behavior and the conditions that prompt and reinforce it. Level of evidence is MODERATE.
2. Modify the classroom learning environment to decrease problem behaviors. Level of evidence is STRONG.
3. Teach and reinforce skills to increase appropriate behavior and preserve a positive classroom climate. Level of evidence is STRONG.
4. Draw on relationships with colleagues and student families for continued guidance and support. Level of evidence is MODERATE.
5. Assess if school wide behavior problems warrant adopting school-wide strategies or problems and if so, implement ones shown to reduce negative and foster positive interactions. Level of evidence is MODERATE (Institute for Educational Sciences December, 2010).

The universal tier (Tier I) should be an adequate measure for 80% of the school population. The universal tier of intervention is about defining what appropriate behavior

is in measurable terms, teaching it, and reinforcing it. The universal tier should be taught in schools by all members of the school community. The focus of the universal tier is to assume nothing and teach everything. This gives a clear and consistent message to staff, students, and parents. The evidence is deemed to be moderate based on research by Ingram, Lewis-Palmer, and Sugai (2005); Newcomer and Lewis (2004); Payne, Scott and Conroy (2007); Kamps, Wendland, and Culpepper (2006); and many more.

The secondary tier (Tier II) addresses the needs for the 10%-15% of students who cannot work successfully in the universal tier. These are students who need additional supports teaching styles to learn behaviors. It is essential that those involved in Tier II interventions are given opportunities that are additional and different to the universal practices being implemented by the entire school. Common practice in the past has been to remove students from areas due to their behavior. Students then never learned how to act or perform in those areas because when they displayed a maladaptive behavior they were removed. Tier II interventions put students back in the areas where they have been unsuccessful and teach appropriate behaviors in those areas. Moving back to the lunchroom example, if the data show that a particular student's struggles come in the lunchroom area the adults need to re-teach prosocial behaviors in that area to that student. This may include an adult reviewing the rules with the student or addressing the area of concern with the student through discussion and modeling. It is important to note that the education of the student should take place in the environment in which they struggle. If the student struggles in the lunchroom and is simply removed from the area they will never need to address the misbehavior because it is no longer in front of them everyday. This only prolongs the inevitable fall of the student in that at some point they will need to engage in prosocial behavior in those areas and if they are not taught it will not happen.

The idea that students can be taught behaviors in isolation and then transfer those to general areas with more students is no longer a viable option. Teaching Tier II interventions that are data based and consistent will afford those students the opportunity to be successful with their peers.

The Tier III intervention system is for the 5% of students that have not had any success with Tier I and Tier II interventions. These students need specialized and individual instruction to be successful in schools. They will still receive Tier I and Tier II interventions, but in addition they will need individual and specialized instruction. Past practice has been to apply the Tier III concept to students who show minimal issues in schools. Removing students for the productivity of the masses was applied in many classrooms. The tiered system, specifically addressing the needs of those students who need Tier III interventions requires that staff members document the struggles, address those needs prior to student needing said intervention, and connect with PBIS coaches to ensure that all steps have been taken for the child to be successful.

### **Current Status of the Problem**

In the spring of 2009, Positive Behavior Interventions and Supports (PBIS) framework was adopted by the Mid West Area School District. This decision authorized the implementation of PBIS in the district and moving this development to district wide from the initial demonstration projects. The preliminary work that was done at the district level to assemble teams moved into buildings throughout the district through a systematic approach.

As of June 22, 2009 the MWASD had six teams trained in Tier I, or Universal Level, and one team in Tier II or Secondary Level implementation through the Illinois PBIS Network. As of February 2010, the Mid West Area School District (MWASD) was

in the process of implementing PBIS district wide and was one of only a few districts in the position of universal Tier I implementation within the State of Wisconsin.

In August of 2009, MWASD had eight staff members trained as trainers in Tier I implementation. The training was coordinated by the MWASD with a coalition of four other school districts forming to advance and implement PBIS in western Wisconsin. This coalition resulted in 22 schools in northwestern Wisconsin being trained in various stages of PBIS Tier I implementation. The connection to other school districts yielded a greater number of staff involved. This aided with the roll out of information in that the breadth and depth of the discussions afforded coalition members to address multiple angles of an implementation through discussion with other school districts.

Eight MWASD buildings and two buildings from an adjacent school district were trained at the Tier I level in December, 2009 and started the self assessment and team implementation process. There were other 21 pre-Kindergarten sites preparing to be trained at the Tier I level in February, 2010 and the remaining MWASD buildings were targeted for training and implementation in the spring of 2010. Its efforts for implementation within the MWASD have focused on the pre-Kindergarten through middle school levels, to establish that system first before focusing on the secondary levels, as has been national practice.

There have been significant efforts to develop the MWASD infrastructure to support the implementation of PBIS. A District PBIS Leadership team, consisting of district staff, administrators, and building team representatives, was developed to focus on items identified within the District PBIS plan. In 2009, the district designated four staff members to the PBIS implementation in some capacity. The positions identified were PBIS External Coach/Coordinator, External Coach for Early Childhood, and two

School Wide Information System (SWIS) Coordinators. SWIS are the data capture and analysis tools used by the district to assess the behavior management of students and focus areas. The PBIS and SWIS coordinators were responsible for staff development of the PBIS framework and implementation during professional development sessions, facilitated district wide coach meetings for technical assistance and implemented a resource website for information regarding the framework. .

At the building level, each team in the implementation process has identified an internal coach. This individual coordinates with the external coach on a monthly basis throughout the year. They are also responsible for leading the representative team from their building in the PBIS efforts. The coach coordinates meetings, data collection, and roll out of the framework with staff members in the building.

### **Need for Further Study of the Problem**

As of November 10, 2009, the Mid West Area School District Board of Education endorsed the integration and implementation plan of PBIS Implementation in conjunction with Response to Intervention. The endorsement, in effect, has made these efforts a priority for the district. The decision by the district to support an emphasis on a social, emotional framework affords administrators the opportunity for continued implementation and ongoing sustainability of these efforts. The district team worked to develop a Social Emotional Learning framework (SEL) establishing PreK-12 standards and learning targets based on principles as articulated by CASEL (Collaborative for Academic and Social Emotional Learning). The SEL framework connects the 2 sides of the triangle outlined in Figure 2 as the social emotional component of RtI. It allows schools to identify and address behavioral needs with the same RtI framework used on



the academic side of the triangle. This affords school district personnel a familiarity with the framework from both an academic and behavior perspective.

All pre-K through 8<sup>th</sup> grade MWASD buildings completed Tier I training by the end of the 2009-2010 school year. The MWASD had a number of staff complete the Tier I Training of Trainers sponsored by the Wisconsin Department of Public Instruction in August of 2009. This commitment to the development of infrastructure within the MWASD represented one third of the core trainings completed considering the number of schools required for full implementation of PBIS at the district level.

Staff development and ongoing training play a vital role in the implementation of PBIS at the district level. Staff development days are budgeted by the MWASD. These days occur throughout the school year and during summer months. District PBIS Leadership Team planned for staff development offerings to be conducted by staff and coaches based on data reviewed by the team. This team meets quarterly to review the data and plan for upcoming staff development offerings. These staff development opportunities include ongoing trainings on multiple topics from culturally congruent pedagogy, data analysis, PBIS lesson plans or cool tools creation, and building action plan development for team members. New staff members were also trained on the PBIS framework within their buildings (Smith, 2010).

The PBIS community, nationally and internationally, provides continuing education opportunities in a number of different ways. In 2009, only a small number of DPI sponsored PBIS conferences were available. Through 2009, there is the National PBIS Leadership Conference in Chicago every October which is beneficial in terms of developing a coherent process of implementation and planning for staff members. MWASD has sent 65 staff to the Chicago conference in multiple years (Smith, 2010).

### Purpose of the Study

The purpose of this study was to identify what school building factors impact the successful Tier I implementation of PBIS at two elementary schools in Mid West, Wisconsin. The purpose of the research was to determine what factors impact the positive implementation of PBIS in two suburban elementary schools in order to evaluate the PBIS process and help schools address student behavior. With so many schools using the PBIS framework, the intent of the study was to identify practice and procedure to help the implementation process. An effective behavior management framework allows for students to know and understand the expectations, and gain valuable academic time in the classroom. In a 2002 study done by Barrett and Swindell, students at West Elementary in Alton, Il regained 637 hours or 144 days, staff regained 66 hours or 11 days, and administration regained 155 hours or nearly 26 days.

**Figure 3: Learning Time Gained by Reducing Discipline Time**

West Elementary, Alton, IL Office Referrals (-719)   Detentions (-47)   Suspensions (-27)				
	Office Disciplinary Referral	Detentions	Suspensions	Total Time Gained Back
Administration	119.8 Hours	15.7 Hours	20.3 Hours	155.8 Hours (25.9 Days)
Students	239.7 Hours	282 Hours	162 Hours	683.7 Hours (144 Days)
Staff	59.99 Hours	3.9 Hours	2.3 Hours	66.1 Hours (11 Days)

Figure 3. Addresses the learning time gained by reducing discipline time at West Elementary. Hours related to office disciplinary referrals, detentions, and suspensions are calculated to determine total time gained back in the classroom. Source: Wisconsin Positive Behavior Support Network, November, 2009

In a school district of twelve elementary schools, three middle schools, and two high schools, consistency in developing a strategic plan is essential to the success of the PBIS plan. It was the intention of the school district to involve all schools in the PBIS training process while allowing some autonomy due to the fact that all schools came into that process with a different level of expertise in the area. Two elementary schools were

chosen for the study based on where they were in the implementation process. At the time of the study, School 1 had been involved in the PBIS training process for two years. School 2 had been involved in the PBIS training process for 1 year. The intent was to review the process by which an evidenced based framework is implemented and how it translated to higher achievement both academically and socially for students. In using an evidence based program with internal measures of validity and reliability, the researcher dismissed several variables that would otherwise be brought forward as road blocks to the implementation process.

### **Approach of the Study**

The purpose of this study was to identify what school building factors impact the successful Tier I implementation of PBIS in order to assist schools in the future planning of the PBIS rollout at the elementary level. The approach of this study was to identify what building system factors impact the successful Tier I implementation of PBIS at two elementary schools in Mid West, Wisconsin. The use of program evaluation methodology, employing the methods of quantitative survey data analysis and qualitative focus group data was used as the research approach. The survey data determined the overall satisfaction with the PBIS framework as well as who best represented the school in terms of job role the school for the focus group phase. In this data collection, the researcher attempted to identify the factors that led to the successful implementation of PBIS through a discussion of the process. Using Everett Rogers' Theory of Diffusion of Innovation as a framework, the process prior to implementation was analyzed.

Rogers defines diffusion as “the process by which an innovation is communicated through certain channels over time among the members of a social system” (Rogers p. 5) Rogers' definition contains four elements that are present in the diffusion of innovation

process: innovation, communication, time, and social systems. He defines the innovation-decision process “as the process through which an individual passes from first knowledge of an innovation to forming an attitude toward the innovation, to a decision to adopt or reject, to implementation and use of the new idea, and to confirmation of this decision”(Rogers p. 216).

The quantitative data analysis is derived from two sources. The implementation process of the program was measured by the Team Implementation Checklist (TIC). Successful implementation of PBIS is defined as a score of 80 or better on the TIC. This is the on-line tool that all teams use to measure and report and monitor their building team development of necessary infrastructure necessary to implement PBIS in their building. It measures the importance of team meetings, data review, expectations, recognition system, etc. It is administered and reviewed quarterly to measure progress and fidelity of the system. Both schools met the required score of 80 on the TIC prior to the research. The second source of quantitative data is derived from a staff survey that addresses the perceptions of the PBIS implementation process. The survey was given to two schools at an all staff meeting. Individuals identified from the survey will then take place in the qualitative phase of the study.

The focus group analysis helped determine the factors that impact the successful implementation of a school wide PBIS framework. Each school had two focus groups. The first focus group was considered the Trained Team. This focus group includes staff members that have gone through PBIS Tier 1 training. The second focus group, or Untrained Team, was comprised of individuals in the school who have not gone through the PBIS Tier 1 training but are expected to implement the program in their classrooms, lunchroom, hallways, playground, and bathrooms. These data could be used to determine

what the next steps need to be addressed for implementation across the school district and identify best practices when working with staff members.

The timeline of the data collection is as follows:

1. Contacted MWASD Internal Coach to determine what schools meet the 80% TIC score.
2. Determined which schools best represent the school district in the implementation process of PBIS.
3. Determined which schools are similar in socio economic status, student population, and staff experience.
4. Chose two schools.
5. Made appropriate contacts with school administrators and developed a timeline acceptable to each school.
6. Visited school to discuss the process.
7. Administered survey to staff members.
8. Collected and analyzed survey data to determine best fit for the focus groups.
9. Conducted focus groups. One focus group consisting of the PBIS team and one focus group consisting of a representative group of staff members who did not take part in the training.
10. Compiled and coded data to determine established themes throughout the focus group.
11. Coded and determined themes and results.
12. Member checking through shared data.

### **Significance of the Study**

## **Uniqueness and Compatibility of the Research**

Essentially, schools need to do a better job of providing a safe and encouraging environment that meets the needs of all students. Typically, parents have tried to get students ready for schools, but it is the schools that need to get ready for students. It is imperative that schools find ways to create consistent and productive areas for all students. Those who do not do well in the regular population don't need to be pulled out of that situation, they need to be taught in that situation. PBIS as a framework is a tool that has been proven to help provide the environment for student success.

Many successful initiatives have derailed due to the process by which they are implemented. PBIS research addressed the need to have certain school employment roles involved in the implementation process. These employment roles included teachers, support staff, administration, community and parents (Sugai, 2002). The research will go deeper into these jobs and address the social roles of the staff population. The stakeholders brought to the table to implement the program may not be the ones needed to ensure a successful implementation. Roger's work in understanding the roles in the organization and what opinion leadership can do for innovation will be discussed in Chapter 2 and were used as the framework for developing committees that have the best chance of getting innovation moved throughout the school.

At the District level, the District Leadership Team reviews the The Implementation Checklist (TIC) data four times every school year and annually reviews the School Wide Evaluation Tool (SET), Benchmarks of Quality (BoQ), and self assessment data. The Benchmarks of Quality is an on-line tool used yearly by a building to measure the fidelity of their PBIS team and intervention. It measures the infrastructure of a building system but on a yearly basis but is not completed by the building level team

as is done with TIC. The School Wide Evaluation Tool is similar to the BoQ in that it measures the fidelity of a building PBIS team infrastructure and interventions from year to year. Contrary to the BoQ, it is completed by the external coach through interviews with staff members and artifact collection with the designated building team. It can be used in place of, or with, the BoQ. At the building level, building teams review SWIS data monthly as a group with opportunities for staff members to review the data as well. TIC is taken quarterly by members of the school community, and the BoQ is conducted annually (Kent Smith, personal communication, October 21, 2010)

Building teams are required to complete a data-based action plan on a monthly basis. This data is important to the current study because it ensures the fidelity of the implementation process. The teams, trained or untrained, take part in activities that are evaluated with fidelity measures. This allows the researcher to eliminate the fidelity variable that derails a number of school implementation processes in the area of PBIS. The compatibility of the research, though not generalizable, may help other school districts in the implementation process of PBIS or any framework where a faction of the organization holds more knowledge on a subject than another.

### **Contribution to Knowledge, Theory and Practice**

#### **Delimitations and Limitations of the Study**

This researcher worked with two non-urban public elementary schools in Wisconsin. Therefore, the study is not generalizable to other suburban or urban school districts. However, the research is a starting point for other suburban school districts to gain a better understanding of the implementation process of PBIS and what factors need to be considered during the roll out. This study is a snapshot of one point in time. It is a onetime assessment rather than over time. Moreover, the study assesses only the Tier 1

implementation of PBIS. The first Tier is only the initial component to PBIS. Another limitation may be the social desirability factor which inhibit participants from reporting negative information to present a positive view of themselves or the school to the researcher. Finally, the researcher is familiar with the schools having previously worked in the same school district. Even though many measures were taken to reduce the influence of assumptions and biases, it may not have been possible to completely eliminate them.

### **Assumptions**

In order to discover the factors that impact the positive implementation of PBIS in two suburban elementary schools, certain assumptions exist within this research.

1. School accessibility, resource materials, interview time, and facility issues were available when needed.
2. The survey responses are truthful in their account and represent their own perceptions.
3. The focus groups were truthful in their account and represent their individual stories.
4. PBIS is an effective framework for behavior management in schools.

### **Parameters**

The parameters of this research project are:

1. The school district was a public school district in the Midwest with a middle class socioeconomic status.
2. The participants were in the initial stages of implementing PBIS in their schools.
3. The two schools were similar in terms of academic, social, and emotional factors and that these can be measured.



4. Both principals have taken a leadership role in the rollout of the PBIS framework in the schools.
5. The data is disaggregated for certain topic areas and aggregated for others as relevant and appropriate to the research questions and findings.
6. The area researched is the implementation process in both schools.
7. Descriptive and statistical analysis were conducted on the questionnaire survey.
8. The use of a mixed methods approach provides a holistic knowledge-base the factors that impact the implementation process.

### **Timeframe**

The data collection time frame consisted of a three month window from February, 2011 to May, 2011. Proposal and IRB approval through Cardinal Stritch University took place in February, 2011. Survey data collection and data from focus groups at both sites were conducted in March, 2011. Observations at both sites were conducted in April, 2011. The review of the data and coding took place in the spring of 2011. The information was presented to the Midwest Area School District administrative team in the fall of the 2011-2012 school year.

### **Vocabulary of the Study**

**BoQ – Benchmark of Quality:** This on-line survey is used yearly by a school building to measure the fidelity of their PBIS team and intervention. Similar to the TIC, it measures the infrastructure of a building system but on a yearly basis. Unlike the TIC, it is completed by not only the building team, but the internal coach and external coach increasing its validity, measuring framework implementation growth from year to year (Positive Behavior Intervention and Supports, November, 2009).

**CASEL – Collaborative for Academic, Social and Emotional Learning:** CASEL is a 501(c)(3) not-for-profit organization that works to advance the science and evidence-based practice of social and emotional learning (SEL). The organization writes books, articles, and briefs that synthesize scientific advances in SEL and explain their implications for practice. Their priorities focus on the benefits of preschool through high school SEL programming; how SEL coordinates with other educational movements; research and training in implementation; assessment; school and district leadership development; educational policies; and communications (Collaborative for Academic, Social and Emotional Learning December, 2010).

**CICO – Check In Check Out:** The initial supplemental intervention that a student receives when they do not respond to the universal behavior instruction that happens at the Tier I or Universal level. It is a systemic intervention that is ongoing which collects and monitors data around meeting the expectations, helps identify trends and issues and guides supplemental intervention. It begins within 48 hours of a child meeting data rules that initiate such intervention (Positive Behavior Intervention and Supports, November, 2009).

**EBS – Educational Behavioral Survey (Renamed to the Self Assessment Survey in October 2009):** This survey is completed yearly by as many stakeholders in a school building as are willing to complete it. This instrument measures the respondent's perception of the degree of development and the priority for development of various support systems within a school. It is used to measure growth as well as goal setting and action planning (Positive Behavior Intervention and Supports, November, 2009).

**FBA – Functional Behavioral Assessment:** This is the organized and systematic examination of maladaptive behavior a student presents as a behavior set. FBA analysis addresses what happened immediately before the behavior occurred, what the behavior was in measurable terms and what the consequence of the behavior was, or what the behavior provided the student. This tool leads to the designing of behavior intervention or support plans to teach a replacement behavior (the functional equivalent) and designs a reinforcement schedule to help a student learn and generalize the replacement behavior and extinguish the maladaptive behavior set (Positive Behavior Intervention and Supports, November, 2009).

**MWASD:** Mid West Area School District. The MWASD is located in northwest Wisconsin and was the school district selected for this study.

**ODR – Office Discipline Referral:** This is the basic unit of data collection at the Universal level of behavior instruction. It is the fundamental measure that tells a PBIS team that a student is not meeting the established behavior expectation, leading to re-teaching and review or supplemental interventions and supports based on the number of office discipline referrals (Positive Behavior Intervention and Supports, November, 2009).

**PBIS – Positive Behavior Intervention and Supports:** The decision making framework guides selection, integration, and implementation of the best evidence-based academic and behavioral practices for improving important academic and behavior outcomes for all students. It is also referenced as School-Wide PBIS or SWPBS (Positive Behavior Intervention and Supports, November, 2009).

**RtI – Response to Intervention:** Response to Intervention refers to a process that emphasizes how well students respond to changes in instruction. The essential elements of an RTI approach are: the provision of scientific, research-based instruction and interventions in general education; monitoring and measurement of student progress in response to the instruction and interventions; and use of these measures of student progress to shape instruction and make educational decisions (National Association of School Psychologists, November, 2009).

**SEL – Social Emotional Learning (standards):** The educational process that leads to the development of emotional intelligence - that is, the process by which schools become better at understanding and managing emotions AND learning how they impact the choices people make, the relationships people have and connected to their outlook in life. It refers to the acquisition of the understandings and specific skills that are at the heart of a child's academic, personal, social and civic development. Social and emotional learning is critical not only for success in school, but also in life (Excellence in Social and Emotional Learning, November, 2009).

**SET – School-wide Evaluation Tool:** This on-line survey is similar to the BoQ in that it measures the fidelity of a building PBIS team infrastructure and interventions from year to year. However, unlike the BoQ, it is done primarily by the external coach through interviews and artifact collection with a building team. It can be used in place of, or with, the BoQ (Wisconsin Positive Behavior Support Network, December, 2010).

**SWIS – School Wide Information System:** The online behavior reporting and monitoring database maintained by the University of Oregon. It is used by building teams to review their data and make selection, integration, and implementation decisions

for academic and behavior practices. Also used for progress monitoring for supplemental interventions. Security is monitored and maintained by not only the University of Oregon but through regular security audits. In 2009, SWIS was utilized by approximately 7,000 schools of the 10,000 who have adopted PBIS (Positive Behavior Intervention and Supports, November, 2009).

**TIC – Team Implementation Checklist:** This is the on-line survey that is used to measure, report, and monitor the building team development of framework components necessary to implement PBIS in their building. It measures such things as team development, team meetings, expectations, recognition system, etc. It is administered and reviewed quarterly to measure progress and fidelity of system (Wisconsin Positive Behavior Support Network, December, 2010).

### **Summary and Forecast**

This introductory chapter presented an overview of the study through description of the background, purpose, approach, significance, delimitations and limitations, and vocabulary of the research. Chapter Two constructs the theoretical framework of the study through a review of literature related to the research questions. Chapter Three describes the research design employed to conduct the study, with particular attention to methodology and technique applied to data collection and analysis. Chapter Four presents the study results in the form of data generated and analyzed through application of the research design. Chapter Five presents a discussion of study findings related to the research questions and reviewed literature. This concluding chapter also addresses the implications of the findings for practice and research, as well as leadership, learning, and service.

## **CHAPTER TWO: LITERATURE REVIEW**

### **Organization of Literature Review**

The purpose of this study was to identify what building system factors impact the successful Tier I implementation of PBIS at two elementary schools in Mid West, Wisconsin. The research question was: what factors that impact the positive Tier I Implementation of Positive Behavior Intervention Supports in two Midwestern suburban elementary schools? The contention is that high achieving schools conducting a systematic approach to PBIS that was beneficial to both the staff implementation process and student achievement of their populations. The research sets out to identify the factors that led to the sustainability of Tier I implementation in two elementary schools related to the perception of the program by trained and untrained staff throughout the process. The hypothesis that the makeup of the trained team and untrained team, the communication systems set up to disseminate information, and follow through on those instructions have a profound impact on the ability to get the desired buy-in by staff will be addressed through survey and focus group data. The framework that is currently in place in two schools were evaluated by the researcher.

In addressing the current structure of trained and untrained teams, the researcher addressed how initiatives or innovations get proposed and implemented in organizational settings. Roger's Diffusion of Innovation Theory was used as the Theoretical framework in regards to how information is disseminated within the culture of the organization. The research attempts to recognize the tools or process used to develop teams in order to

have the best success relaying information from a small group to a larger one in the organization.

This chapter reviews literature addressing research and theory related to the study in the areas of Diffusion of Innovation theory, the theory behind Positive Behavior Intervention Supports, program evaluation, and implementation and change theory. A summary analysis of prominent themes and findings within the reviewed literature is presented at the end of the chapter.

## **Theoretical Framework**

### **Review of Research and Theory about Innovation Theory**

It seems that the United States public education system is in constant fluctuation. From the advent of Bloom's Taxonomy in schools in the 1950's to the development of Individual Education Plans in the 1970's to open concept classrooms in the 1980's to the No Child Left Behind Act of 2001, schools have adopted and dissolved a number of different programs that were developed to fix the process.

The diffusion of programs over time has contributed to a lack of trust when new processes and procedures are brought into the school system. Administrators, teachers, parents, and students get the feeling that they just have to wait out another movement or buzz word and continue to do what they have always done. This has turned into a prominent issue in today's educational world. Educators cannot continue to teach today's students as they were educated twenty years ago. Today's generation needs a new approach to learning. It needs to address the individual needs of students. According to Lindsay Hutton, a study conducted by the Kaiser Family Foundation suggests that in just five years, media use has increased from 6.5 to nearly 7.5 hours a day in children

between the ages of 8 and 18. The innovations of today can be very useful resources for the current education system, and finding a way to implement those initiatives is the role of the education system.

To get a better understanding of why certain initiatives fail and some succeed, it is important to research why innovations diffuse over time. Everett Rogers provides a theoretical framework of why innovations diffuse and what can be done at certain points within the context of the implementation process to ensure sustainability with the process.

Figure 4 indicates the communication channels by which innovation is dispersed. Rogers defines diffusion as the process by which an innovation is communicated through certain channels over time among the members of a social system (Rogers, 1962, p. 5). Each member of the social system faces an innovation decision that follows a five step process:

1. Knowledge
2. Persuasion
3. Decision
4. Implementation
5. Confirmation.



**Figure 4: Rogers Model of Five Stages in the Innovation-Decision Process**

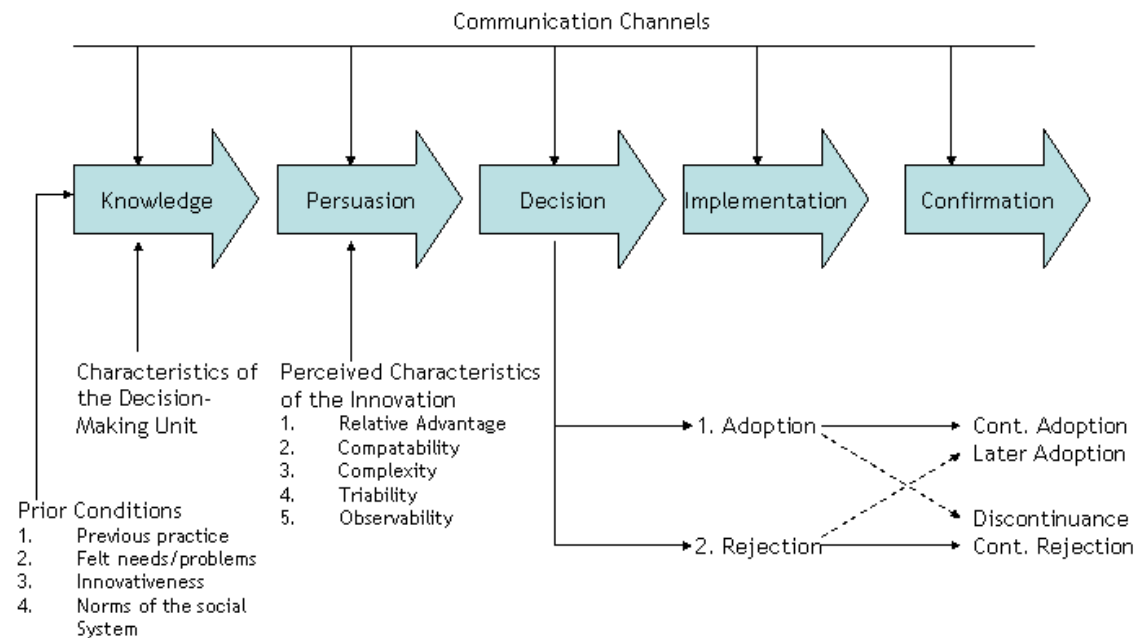


Figure 4. Identifies Rogers communication channels. These five stages make up the innovation and decision process. Diffusion of Innovations, Fifth Edition by Everett M. Rogers (2003).

Knowledge is the stage where the information starts. The individual becomes aware of the innovation and how it functions. During this stage, the individual has not been inspired to learn more about the innovation. It is information gathering, but only what is presented as opposed to actively seeking it out. In the absence of this step in schools, people tend to make up their own knowledge based on their own experience. Rogers relates knowledge to both new and prior information that moves the channel to the second state, persuasion.

Rogers defines persuasion as the stage in which a general interest in the innovation begins to cultivate. The individual wants to gain more knowledge regarding

the innovation and begins to form a favorable, or unfavorable, attitude regarding the innovation. It is in this stage that the individual will actively seek the information. Persuasion is a key component in this study. The knowledge base of PBIS is well documented, and discussed later in the chapter, but the persuasion to influence the decision is where schools veer one way or another. The make up of the current team responsible for the delivery said knowledge is important to the implementation process and the suggested 80% buy in from staff for full implementation. The figure notes that within the persuasion channel members of the organization decide whether or not the new innovation will provide a relative advantage to their current way of doing things, a compatibility to the current system, the level of complexity in understanding the knowledge, whether or not it has triability, and the observability of the innovation.

Decision is the third stage. At this time, the individual takes the concept of the innovation and addresses the advantages and disadvantages of it. They then decide to accept or reject the innovation. This piece of the process tends to be the one in organizations that takes the longest time. The decision making process is where the organization adopts or rejects the innovation. A number of innovations end at this channel. Many times it has to do with a lack of one of the previous two channels in that the organization lacks knowledge or persuasion to get the decision made. Informed decision making, even if it rejects the innovation is important for both the culture and sustainability of the organization.

The fourth stage of the communication channel is the implementation. In this channel the innovation is implemented into the structure of the organization. Implementation of the innovation depends on the previous stage. The acceptance of the

innovation will be on varying levels depending on how much information the individual has and the perception of what their personal usefulness of the innovation will be over time.

Confirmation of the innovation is the stage where an individual finalizes the decision to use the innovation and to what level they will continue with said program, process, or utility.

Within the context of this process, it is important to note that most members of the social system make decisions based on other members of the system. People tend to adopt an innovation if they see personal value of some kind within the process. Cell phone use is an example. The initial response to cellular phones was not adopted by the masses until each person saw value in being able to connect to anyone at anytime. They must believe that the innovation better their situation in some capacity. Individuals take into account the risk related to a new innovation and whether or not the benefits on the other end are worth the time it will take to implement the new process or procedure. It is this thought that leads to postponement of an innovation. Many individuals will take their time in making a decision until further evidence is gathered by others.

In a quantitative research study conducted by Less (2003), Rogers' Diffusion of Innovation theory was used to investigate the adoption of computer technology at a community college system in North Carolina. She identified the members based on Rogers five categories and also took into account age, gender, race/ethnicity, level taught, curriculum area, and teaching expertise. Her results found a significant relationship between adopter categories and years of experience and highest degree attained. She did not find a significant relationship between age, gender and race, or ethnicity.

Surendra (2001) addressed Rogers diffusion factors to predict the acceptance of Web technology by professors and administrators of a college. He found training and access in general to be the best predictors of success. He also found a relationship between computer experience and adoption of the innovation that suggests prior knowledge as an essential factor in the diffusion process.

Opinion leadership, or those with influence and specific content knowledge, tend to veer followers in a direction based on that knowledge and skill set within the social system. The social system that they impact can be considered heterophilous or homophilous. Heterophilous systems elicit change from system norms. These systems allow for more interaction from different backgrounds and bring about new ideas. Opinion leaders in this system are more influential because their actions will influence the non elite members. Opinion leaders in the homophilous system are regarded as suspicious so change needs to happen on a broader scale.

The rate at which individuals adopt a certain innovation varies and is defined by Rogers as “the relative speed with which members of a social systems adopt an innovation” (Rogers, 1962, p. 134). These speeds are determined by the adopter category. Rogers divides these groups into five categories. They are innovators, early adopters, early majority, late majority, and laggards (Rogers, 1983, p. 262).

Figure 5 indicates the adopter categorization of the basis of innovativeness. In this Figure the adopter sequence is broken into a bell curve indicating 2.5% of the organization’s population considered to be innovators, 13.5% early adopters, 34% in the early majority, 34% in the late majority, and 16% in the laggards. This indicates that 81.5% of the organization falls into the early adopters, early majority, and late majority.

For an initiative that seeks to gain the buy in of 80% for the best success rate at implementation it is important to know where those groups commit to or do not commit to innovations.

**Figure 5: Adopter Categorization on the Basis of Innovativeness**

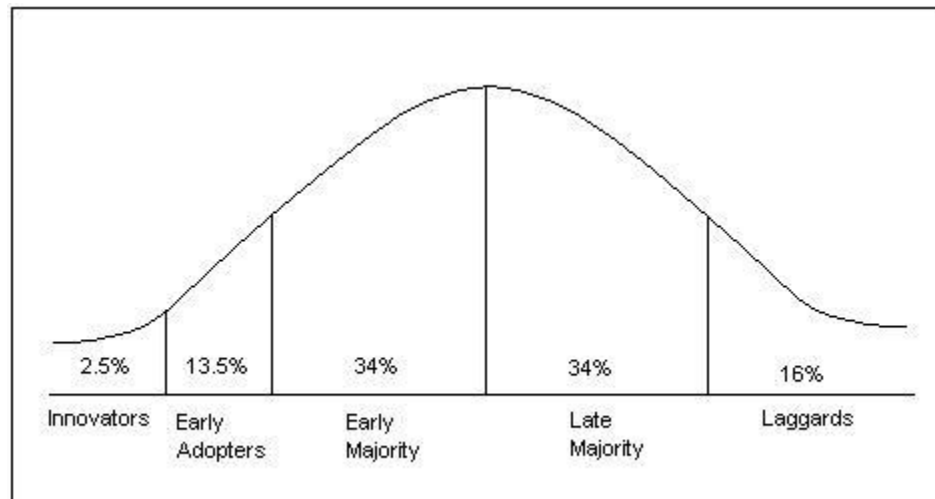


Figure 5. Addresses the categories of innovation individuals fall into when adopting something new. Innovators are the first to adopt, followed by Early Adopters, Early Majority, Late Majority, and Laggards. The majority of the individuals in the innovation process fall into the Early Majority and Late Majority category. Source: Diffusion of Innovations, (Fifth Edition) by Everett M. Rogers (1995).

Innovators are the risk takers. This group tends to be younger in age, have the highest social class, classified as very social, and have the closest interaction with other innovators. The benefits of the innovation are exciting to innovators. Innovators like the uncharted course and are willing to “dive in” without a net. This group sets the stage for the other groups to follow.

The Early Adopters use the information gathered and implemented by the innovators to determine whether or not they are willing to adopt the innovation. If the opinion leaders of this group are interested in the innovation, it will carry a great deal of weight with the subsequent groups. The group earns a great deal of respect from the

other groups based on the idea that they make a concerted effort to gather information and weigh the pros and cons before implementing the innovation as opposed to the innovators who may be perceived to run without thinking the idea through. Most opinion leaders reside within the early adopters group. These individuals tend to have a higher social status, advanced education and are more socially forward than the late adopters (Rogers, 1962). These individuals are not as risky, but understand the vision.

The Early Majority take their time in making a decision regarding the innovation. The group is significantly, in terms of numbers, longer than innovators and early adopters. This group has an above average social status, some contact with early adopters, and do show some opinion leadership. This group does tend to follow suit with the opinion leaders. They trust that the opinion leaders are making decisions based on recent information about the innovation. If the opinion leaders in the Early Adopters group feel it is a good idea, so do the early majority.

The Late Majority individuals adopt the innovation after the average individual. They are very skeptical and do not like change. They are below average social status, in contact with other late majority individuals and a few early majority individuals and show very little opinion leadership.

The Laggards are very isolated or very traditional in their approach to adopting new innovation. From a traditional standpoint, they are unwilling to move away from things they have always done. If they are isolated from the process of implementing the innovation, they tend to lack the social interaction to become more abreast regarding the information of the innovation with other groups in the social system. This isolation decreases their awareness of the viability of the innovation.

Opinion leaders in these areas tend to be the key to whether or not an innovation is accepted or rejected. From an educational perspective, it is important to know the roles and responsibilities of individuals in all systems when developing, implementing, and sustaining an initiative. Once known, a systematic approach to the implementation process can be used to sustain progress over time.

Rogers' Theory is relative to the research because there is no magic bullet to what ails the public education system. Failed initiatives throughout time may have more to do with the implementation and delivery than whether or not they are best practice. It is the role of the leadership team, consisting of members of all groups, to find a way to sustain productive programming for the betterment of student achievement.

### **Team Design-Schlechty**

Schlechty's work with innovation and organizational structure runs concurrent with the findings of Rogers. His book, *Working on the Work* book presents an outline, field-tested in schools across the country, for improving student performance by improving the quality of schoolwork designed for students. He poses the following questions to schools as they approach a new innovation or framework:

1. What is the new circumstance or system we are trying to create?
2. Can it be done?
3. Should we do it?
4. How do we do it?

These questions serve as the foundation of whether or not change can happen in schools. He contends that anyone involved in the change process of schools needs to be aware and address the organizational makeup of the school. His work categorized the

members of the school into five distinctions. They are trailblazers, pioneers, settlers, stay-at-homes, and saboteurs. Each of these social roles is a major factor in the diffusion of new ideas or framework (Schlechty 1993).

Trailblazers tend to be the group that moves forward without needing the knowledge base of an innovation. They are excited by change and risk. They want to know that there is somewhere to go that is different. Schlechty refers to this as “monomaniacs with a mission” (p. 47). They may not be egotistical, but they know they have skills of influence. They may not need the knowledge behind the innovation, but they do need a clear vision of where the organization is going. Trailblazers tend to be the ones that always want to be part of teams to move the organization forward. It is important to note that this can be a hindrance as well. If schools are to devise groups that are made up of only trailblazers their influence wanes. They can be seen as the proverbial “teacher’s pet” and other groups in the organization will yield to them when it comes to being part of a team or committee because they are always willing to do it. Furthermore, if schools are to use only trailblazers for their committees, the individuals will wear down at some point and cease to be involved as much due to the physical and emotional commitment to the organization.

Pioneers follow the trailblazers closely. They are also willing to take risks. They tend to have some of the same needs as the trailblazers. They are not egotistical, but want people to know they are involved. They want to have their story told. Fiske addresses a connection between pioneers and trailblazers in that trailblazers can clearly influence the pioneers outlook (Fiske, 1991). However, unlike trailblazers, pioneers need to know that the trip they are taking is worth the effort put forth. They are willing to be



an integral part of the journey, but they need assurance that there will be something at the end (Sizer 1992).

The third group designated by Schlechty are the settlers. This group needs to know the specific directions and where the organization is going. Settlers want to know that the task they are undertaking is going to happen and need a road map to get there. They want concrete data. They want to hear from the trailblazers and pioneers, but they also want to read articles, take site visits, and talk to others involved in the process before they buy into change. They also want to be heard. Schlechty believes that schools need to provide the data and road map to settlers, but also allow them to voice their opinion and critique the process. At some point in the process, settlers may feel the voyage is not worth the reward. The most important part in dealing with settlers is to provide constant reassurance and leadership at a time when they want to turn back.

The next group identified by Schlechty is the stay-at-homes. This is a group that does not get a great deal of attention prior to change. However, when change is in process, they receive a great deal of attention. When leaders need the approval of those they lead and don't get it, the individuals are seen as problems in the organization. A multitude of time can be spent by leaders, and often in vain, as they try to get the approval of the stay-at-homes. In fact, the leaders have little to no chance of making this happen until the stay-at-homes see substantial change from the innovation and board the proverbial band wagon. When these individuals are recruited to be active members of the change process and the innovation is met with some resistance, they slide into the next phase of the organization, the saboteurs. The goal of leadership in schools is to keep these two groups small, but the negative impact of having the stay-at-homes involved in

the process can be detrimental to the organization. If this group falls to the saboteur group, the organization has just strengthened the portion of the organization it wants to deal with least during the change process.

The saboteurs have a number of the same qualities that trailblazers do when it comes to leadership. Both groups organize those around them for a common purpose. These individuals are committed to stopping the change process and employ a number of strategies to ensure that the journey never takes place. Like trailblazers, they are not afraid to take risks. Often they are on their own, but they gain strength with any hindrance in the innovation movement. The struggle for leaders is that to keep the organization moving forward sometimes the saboteurs need to be involved. As mentioned in the Diffusion of Innovation summary, in the absence of knowledge people tend to develop their own. Having saboteurs involved in the knowledge piece of the innovation process eliminates one of the variables that they may take to the masses in trying to stop the innovation.

All five members play a role in the organization. Some play a more key role than others, but all have influence. When developing teams or committees to work new innovations into the culture of the organization the need to identify where staff is located in this framework is important. Rogers' referred to a certain group of the organization as opinion leaders. Schlechty's perspective puts the emphasis on the opinion leadership of the different groups. In this concept, each group is influenced by the other. However, the largest influence for each group comes from the one that resides prior to or after it. For example, the pioneers are influenced by the trailblazers and the settlers but not as much by the saboteurs. The stay-at homes are influenced by the settlers and saboteurs, but do

not connect with the trailblazers. Defining the influential group is important to understand the development of the committee designed to persuade the masses. Having a group of trailblazers who have not developed a relationship with other members of the staff may hinder the implementation. Concurrently, having a group of stay-at-homes will be difficult to get buy-in from the committee, which could be translated to the larger group. Understanding the concept of social roles in the organization helps in addressing change (Schlechty, 2003).

When organizations connect the understanding of social roles in the development of teams to the personnel within their walls they can ease what Fullan refers to as the implementation dip and move forward with the innovation (Fullan 1991). Most changes in schools endure this dip because of the unfamiliarity with the new concept, but using the influential people in the organization to help persuade and motivate those who struggle with the buy in of a new innovation.

Rogers' contention that innovations that offer constituents a relative advantage will be adopted earlier than other innovations is relevant to the educational setting. The comparison factor of a new innovation also helps to determine the relative rate of speed of the innovation process. Rogers insists that adopting new ideas are difficult even if they have advantages (Rogers, 2003). The relative advantages to a new innovation are often motivated by the group in which you reside. Prior knowledge to the innovation also plays a role in the adoption of any innovation.

The adoption of new or refurbished innovations in school is relevant to its school culture. The contention found by Rogers and Schlechty addressed the need for constancy and sustainability in organizations. Within the framework of the organization both

researchers found a social role that is played by staff members. Schlechty's categorization of trailblazers, pioneers, settlers, stay-at-homes, and saboteurs is concurrent with Roger's categorical distinction of innovators, early adopters, early majority, late majority, and laggards. Their findings address the concept that organizations work with people who fill these roles.

### **Review of Research and Theory about Positive Behavior Intervention Supports**

School based management styles have changed substantially over the last 20 years (Dwyer, Osher, & Hoffman, 2000). Effective classroom management and school wide supports are being used to enhance school culture and provide safe environments for students. A systematic approach to being proactive with behaviors not only had an impact on the school social culture, but was also linked to academic gains (Biglan 1995).

The Safe Schools Initiative as well as the No Child Left Behind and Individuals with Disabilities Education Act (1993), addressed the need for schools to create safer learning environments. The initiatives came with limited funding but high expectations in regards to the documentation of how safer environments would be met. When those initiatives happened, school districts created top down mandates that were less than productive and often dismissed after only a few years (Skiba and Peterson, 1999, 2000). The reactive approaches garnered the same results that schools had seen in the past. The same students referred for the same offenses with the same results once they left the administrators office (Sugai, 2002). Organizations were finding out students continued to fail and staff continued to be discouraged. Thinking the student would react differently to a similar situation was not working. McCord found that students with the most severe behaviors were the least likely to respond to the reactive measures and in many cases got

worse with the initiatives. Educators recommended a shift in how environments were structured. Schools wanted to move away from the punitive nature of behaviors that had been accepted and move to a new positive and proactive approach (Carr, Dunlap, Horner, Koegel, Turnbull, Sailor, et al., 2002).

At its core, PBIS is developed from Applied Behavior Analysis (Sugai 2002). Applied Behavior Analysis (ABA) has its roots grounded in behaviorism, a term developed by John Watson (Kendler, 1987). ABA was developed from the foundation put forth by Ivan Pavlov, E. L. Thorndike, and B. F. Skinner. Ivan Pavlov's dog experiment is one of the most famous experiments in history. Pavlov demonstrated respondent behavior could be manipulated by adjusting the variable. The eventual unconditioned response from the dog confirmed the impact of behavior change. The work of E. L. Thorndike and his Stimulus-Response theory also is relevant to the development of PBIS. Thorndike's Law of Effect stating "an act followed by a favorable effect is more likely to be repeated in similar situations" (Slavin, 2003, p. 141) speaks to the reinforcement of positive behaviors. That response from stimuli encourages future positive behaviors. Finally, the B. F. Skinner's work on reinforcement is used in multiple examples of behavior management. Skinner states that the most important piece of behavior management is to arranging contingent reinforcement contingencies in the environment (Slavin 2003). According to Dunlap (2006), ABA uses data to drive intervention and time designs developed to evaluate the success of the intervention. Positive Behavior Intervention Supports uses evidence based data driven decision making as one of its guiding tenets.

Positive Behavior Intervention Supports (PBIS) is defined as “a general term that refers to the application of positive behavioral interventions and systems to achieve socially important behavior change” (Sugai et al., 2000). Positive behaviors refer to those skills that increase the chance of being successful. Supports refer to the variety of strategies that can be used to reinforce the positive behaviors. PBIS is a broad range of proactive, systematic, and individualized strategies for achieving important social and learning outcomes in safe and effective environments while preventing problem behavior with all students (Sugai, 2002). It is based on three guiding main tenets: prevention, theoretically sound and evidence based practice, and systems implementation (Sugai et al., 2000).

Sugai and Horner identify six components that are effective in PBIS. They are:

1. Statement of Purpose that expresses the explicit objective and rationale for a school-wide discipline structure. This statement should be positively phrased, focus on all staff, all students, and all school settings, and link academic and behavior outcomes.
2. Clearly defined expectations and behavioral examples that permit consistent communications and establish an effective verbal community for all staff and students and across all settings.
3. Procedures for teaching expectations and expected behaviors that staff can use to ensure students know and understand school-wide rules, expectations, routines, and positive and negative consequences.
4. Procedures for encouraging expected behaviors that are organized and provided along a continuum of tangible to social forms of feedback, staff to

student administered, high to low frequency, and predictable to unpredictable presentations.

5. Procedures for preventing problem behavior that are organized and provided along a continuum of minor to major rule violations, increasing intensity and aversiveness of responses.

6. Procedures for record keeping and decision making that allow for regular (weekly and monthly) feedback to staff about the status of school-wide discipline implementation efforts (Sugai & Horner, 2002, p. 33).

Studies conducted suggest a strong level of evidence that modifying the classroom environment decreases behavior problems. This is an essential tenet of the PBIS framework in utilizing behavior data to address concerns. According to Dolan, et al., (1993), Ialongo et al., (2001), Lohrmann and Talerico (2004), three randomized controlled trials and one single-subject study demonstrated that schools where teachers have clear behavioral goals are effective in preventing maladaptive behaviors within classroom setting. This corroborated the work done by Evertson (1989); Webster-Stratton, Reid, and Hammond (2004) in which participants in two programs were trained to create and maintain well-organized classrooms through the use of classroom behavioral instruction and management strategies. Investigators were able to demonstrate that students significantly increased their task and reduce maladaptive behaviors as a result of participation in a structured positive behavior framework.

A study conducted by Warren, Edmonson, Griggs, Lassen, McCart, Turnbull, et al. (2003), found that certain considerations were needed to ensure the successful implementation of PBIS in an urban setting. Establishing support from administration,

faculty, and students was essential for the success of the program. They also found that establishing cultural examples of pro social behavior were positively correlated to school culture, social, and academic outcomes for students.

McCurdy, Kunsch, and Reibstein (2007) implemented a prevention model of PBIS in an urban school for students who had severe behavior issues. These students went beyond the Tier I support that is effective for 80% of the student population. Eight students participated in the study. The intervention included multiple alternate strategies to encourage positive behavior. The interventions included daily progress reports documenting positive behaviors, check in and check out with the program facilitator, and rewards. All students showed a decrease in office discipline referrals (McCurdy, Kunsch, Reibstein, 2007).

A research study by Bradley, et al., in 2007 found that school-wide positive behavior intervention programs and strategies were effective. Bradley notes that, as of 2007, over 7,400 schools nationwide are using school-wide positive behavior interventions and supports. Classrooms using the interventions and supports were able to recoup up to 20 hours of instruction per week for those students who were frequently sent out of class for behavior management issues. Luiselli, Putnam, Handler, and Feinberg (2005) further found that these practices also increased student achievement academically, in the areas of reading and math.

According to Liaupsin, Jolivet, and Scott (2004), “school-wide systems of behavior support are well suited to meet the current and future challenges faced by schools in providing a successful educational experience for all students” (p. 498). In a Lehigh study conducted by George et al. a school wide model combined with best



practices in behavior support produced a substantial reduction in anti social behavior as indicated by Office Discipline Referrals (ODRs) at Centennial School of Lehigh University. This study revealed a reduction in the antisocial physical behavior. During the first 20 days of the school year, prior to the implementation, there were 122 episodes where an ODR was utilized. In the final 20 days, that number reduced to 0 incidents. Interviews with staff indicated a high degree of satisfaction with the interventions (George, et al., 2007).

In another case study at Northwest Elementary school, discipline problems were at a high level as indicated by 1,717 ODRs prior to the implementation of PBIS. School wide intervention addressed clearly defined rules, direct teaching of rules, a gradation of consequences for rule violating behavior, heightened recognition of student's appropriate behaviors by staff members, special incentives, using data for decision making, and consistent follow through from school staff. The results indicated that ODRs reduced from 1,717 to 702 at the end of the first year of implementation, and by the end of year 2 the number of ODRs reduced to 619 (Schlaffer, 2003). The research found school wide agreements, class-wide interventions, clear rationale and shared vision, leadership, resources, and organizational restructuring as agents of successful change.

In a four year longitudinal study, Luiselli, Putnam, and Sunderland (2002) evaluated school wide PBIS in a an urban middle school. They coded the schools disciplinary action into 3 areas, Disruptive-Anti Social Behavior, Vandalism, and Substance Use. The authors reported a reduction in all categories from year one to year four.

A study conducted by Lassen, et al. in 2006 contributed to the literature on reduction of anti-social behaviors using the PBIS framework. Their three year longitudinal study involved multiple schools in a low income, inner city area. They targeted a middle school in the Midwest where the enrollment was 623; with 80% of the entire school population economically disadvantaged based on eligibility for free or reduced lunch. Comparative data in the state indicated a economically disadvantaged number lower at 32%. The SET was used prior to the intervention and at the end of year three. The results indicated that the components of PBIS implemented at the school increased from 25% at the end of year one to 70% at the end of year three. Consistent with previous research, the number of ODRs significantly reduced over the course of three years. Sugai and Horner indicate that a student loses 45 minutes for each ODR received (Sugai and Horner, 2003). Taking that number into account, the middle school recovered 659 instructional hours every year during the study (Lassen, Steele, Sailor, 2006).

The direct teaching of behavior expectations to preserve and promote positive school climate, as a strongly identified intervention, is based on four randomized controlled trials and a single-subject study. Direct teaching includes taking the assumptions out of what is taught in schools. For example, when students arrive in Kindergarten, school staff tend to assume that the children know how to sit quietly, walk in the hallways, and play with others on the playground. Teaching these behaviors directly eliminates that assumption and ensures that each student in the school is hearing the same expectations and can then be held to a similar standard. The data have demonstrated that early intervention in the classroom setting has been successful in these

studies across multiple schools. These prevention and intervention programs are named by researchers as being *First Step to Success*, *Promoting Alternative Thinking Strategies*, and *Second Step*. These researchers have included Conducting Problems Prevention Research Group (1999), Frey, et al., (2005), Grossman, et al., (1997) and Walker, et al., (1998).

Professional and colleague collaboration and involvement of student families have received moderate evidentiary support. Creating an environment where colleagues are willing to trust their peers and are more likely to engage in new innovations and programs (Bryk and Schneider, 2002). This concept then permeates the thread of the organization and promotes student and staff success by the ability of those in the environment to model positive interactions with others. The opportunity to connect with staff through a common language is a feature of PBIS that makes it successful. PBIS empowers staff to attempt their own interventions based on experience and collaboration. The traditional seeking of an expert in the field to inspire does not allow the members of the school community to develop a framework that suits the needs of the individual school. PBIS affords schools the opportunity to work together toward a common language that is identifiable by the members of the school community (Bryk and Schneider, 2002).

### **Review and Research Regarding Measures of Fidelity in PBIS**

Chapter One of this dissertation addressed the research and history of PBIS with many states and school districts across the country. It addressed the efficacy and validity of this framework within public instruction and in improving school climate, as well as,

behavior and academic achievement. The PBIS framework assists schools and districts meet many mandates in place.

The PBIS framework uses a number of tools in assessing the effectiveness of the framework. Some are used to enhance the structure, while others are used to maintain the fidelity of the framework. Two of the main tools used to mandate the fidelity of the program are the School Evaluation Tool (SET) and the Benchmarks of Quality (BOQ).

The Benchmarks of Quality (BoQ), and School wide Evaluation Tool (SET) are used to examine the program and identify whether or not the implementation of the PBIS framework is successful. These tools are used as an examination of the fidelity of the implementation of that program. The question really asks whether or not the sites are doing what they think they are doing. The SET and BoQ help document the effectiveness of the implementation and can then determine the success of the program.

The BoQ provides a level of analysis that goes beyond initial implementation. It addresses the factors that impact sustainability through observable, evidence based standards that schools strive to meet. The measure includes 53 benchmarks of quality in school wide PBIS that address 10 critical elements. It is completed by school teams annually to identify areas of strength and weakness. The 53 items align with PBIS training address the following areas:

- Faculty Commitment
- Effective procedures for dealing with discipline
- Data entry and analysis plan
- Expectations and lesson plans developed
- School wide recognition system established

- Implementation plan
- Crisis Plan
- Evaluation (Sugai, 2006).

The developers of PBIS created the School-wide Evaluation tool (SET) as a measure of the degree to which schools are implementing certain features of PBIS (Sugai, Lewis-Palmer, Todd, & Horner, 2001). Validity and reliability of the SET were found to be within acceptable limits (Homer et al., 2003). The researchers found internal consistency reliability of the SET at an overall alpha level of .96 with a test-retest level of 97.3%. The validity of the SET was evaluated within Messick's (1998) unified construct validity framework. The SET is given annually by a trained external observer. This tool is comprised of 29 questions. Each item of the SET is scored on a three point scale with 0=Not implemented, 1=Partial Implementation, and 2=Full Implementation. The 29 questions are organized into seven subscales. The subscales are categorized as follows:

- Expectations Defined (three to five positive behavior expectations)
- Behavior Expectations Taught (behaviors taught to all students)
- Systems for Rewarding Behavioral Expectations (rewards are provided for expectations that are taught to all members of the school)
- System for responding to behavioral violations (consistently implemented continuum of consequences)
- Monitoring and Evaluation (behavioral patterns are monitored and the information is used for decision-making)
- Management (active support from administration)

- District Level Support (school district provides support to the school in various forms)

From this information an overall summary score is computed averaging all seven key features. It is referred to as the overall SET score and ranges from 0%-100%.

Higher SET scores indicate a greater rate of program fidelity. Sugai and Horner contend that benefits of the program occur when PBIS is implemented with at least 80% fidelity (Horner et al., 2004). Specific research completed by Sugai and Horner indicate the School-wide Evaluation Tool was internally consistent with a Cronbach's alpha =.96. The test-re-test reliability averaged 97.3% (Horner et al., 2004).

A randomized trial by Bradshaw examined the progression between school districts participating part in PBIS Tier I implementation training and those that did not. The study addressed the progression of the implementation process over a three year period. Twenty-one trained schools and 16 non-trained schools made up the trial. The trained schools showed significantly higher SET scores than the 16 non-trained schools. The SET consists of 29 items organized into seven subscales. The subscales are:

1. Expectations Defined
2. Behavioral Expectations Taught
3. System for Rewarding Behavioral Expectations
4. System for Responding to Behavioral Violations
5. Monitoring and Evaluation
6. Management
7. District Level Support

Chronbach's Alpha was used for the 29 item set on the sample of 37 schools. The baseline was .85 in the first year, .90 in the second year, and .95 in the third year. The interrater reliability of the SET scoring guide was significant ( $r=.99$ ,  $p < .0001$ ). The research did show that non-trained schools scored lower on all subscales of the SET except Systems for Responding to Behavioral Violations. Therefore, over a three year study, the trained schools outperformed the non-trained schools in program fidelity in six of the seven subscales. The research also found that trained schools made a drastic improvement in year 1 and leveled off in years 2 and 3.

The Benchmarks of Quality and School-wide Evaluation tool address two components of triangulation in the study. These two measures are used to identify the fidelity of the PBIS framework. These measures allow the researcher to create consistency between the two institutions while attempting to identify what factors impact that implementation.

### **Review of Research and Theory about Program Evaluation**

The depth to which the MWASD is being evaluated by the researcher is apparent and considered program evaluation. To that end, it is important to review the literature related to program evaluation.

Interactive evaluation provides input and support and is strongly influenced by those within the organization (Huberman and Cox 1990). It can be used to address the current program as well as the implementation of future programming options.

Empirically based case studies on interactive evaluations are difficult to find at this point in the literature (Owen, 2007). However, the interactive, or participatory evaluation, assists in the planning and implementation of self evaluation and empowers providers and

participants in the process of developing future direction for a program underway. It has substantial use in that the findings are often used to contribute to the program improvement. According to Owen, Interactive evaluation can be used as a means of organizational learning.

Organizational learning is defined as a continuous process of growth and improvement that uses internal feedback and is integrated into work activities within the organization. Some of these activities can include culture, systems and structures, and leadership and communication mechanisms (Owen, 2007).

An Interactive Evaluation is used due to the fact that the program is in the middle of its implementation. Over the course of the next three to five years the MWASD is prepared to implement the PBIS framework in each of its 21 schools. The interactive evaluation affords the organization the opportunity to evaluate the implementation process with schools that are involved in the process and use that data to plan for future schools as they enter the process. Through this process, the district will be able to identify where schools are succeeding in the implementation process as well as areas of concern. The identification of those concerns can be addressed before they become a barrier to implementation. The research will also indicate the different groups within the school and which of those groups have the largest influential impact on the implementation of PBIS. The evaluation will also identify key elements to the implementation process. When analyzing the process from start to implementation, Rogers' Theory of Diffusion of Innovation can be used to determine what factors are the most influential for successful implementation of PBIS in these schools.



## **Review of Research and Theory about Program Implementation**

Implementation is a process that involves carrying out basic policy which is converted into practice. It was originally derived from the classic top down model where an edict was given from someone high in the organization and those under that individual were to carry out said order (Nakumura and Smallwood, 1980). Over time this model was criticized because the policies that were being implemented tended to be too complicated for that implementation process. During the 1970s, a link between policy design and implementation took place. There were new ways to address the need for policy makers to connect human and psychological factors to the implementation process (VanMeter and VanHorn, 1975). Their work stressed a close relationship between the design of policy and the implementation of the policy. They found a connection between the personal and psychological complexities that influence the implementation process. This work influenced the work in the 1980s. Bolman and Deal's research in that decade has become the framework by which organizations are formed.

Specific to PBIS, implementation has been a recent topic of discussion. The impact of implemented PBIS programs has been documented earlier in the literature in terms of gaining more academic time in the classroom and building school culture. Recent issues have been brought to light in states that are just beginning the statewide initiative of PBIS. Wisconsin in particular is exploring the process in which it can train school districts in the Tier I implementation of PBIS. According to Wisconsin's PBIS network state coordinator, over half of the school districts that have implemented PBIS have done so without fidelity. The majority of these districts took on the PBIS initiative with little to no training. Training in PBIS Tier I implementation has been known to lead

to sustained changes in schools' internal discipline systems (Nersesian, Todd, Lehmann, & Watson, 2000; Taylor-Green & Kartub, 2000).

### **Summary of Themes/Findings About Innovation Change**

#### **Theme/Finding: Staff Placement.**

The change in an organization has an impact on its membership. The change can be viewed as positive, negative, or somewhere in the middle, but it seems most people have an opinion on how the change will impact their world in the organizational culture. It seems that the identification of staff members and their social role is important in forming committees and teams. School leaders tend to take volunteers for these committees and teams and the same individuals tend to commit. Organizations need to analyze the influence of others in the culture of the school as they develop the leadership that will initiate a new innovation. Using the influence of some individuals will allow the innovation a chance to move forward as the strategically placed individuals will have the ability and venue to do so throughout the process.

### **Summary of Themes/Findings About Positive Behavior Intervention Supports**

#### **Theme/Finding: Impact on School Culture.**

The summary findings of PBIS as it relates to school culture are that an evidenced based program impacts the social and academic environments in schools. The time regained from a proactive approach leads to hours of academic time. During this time all students are able to work in an environment that is conducive to learning. The research helps identify the implementation impact on the schools and how the development of systems is integral to the success of the program. The research also identifies using multiple means to get the systems in place. High visibility and student input allows both

staff and student buy in when it comes to the development of school wide PBIS. The transparent approach to the implementation affords staff members and students to ask questions and be part of the process, which in turn helps to develop a consistent message to all participants.

It is important to note the research regarding change in school behavior and its impact on school culture. When a school goes through systems changes the implementation dip as noted by Fullan (1991). It is essential that the school culture allows the staff and students the opportunity to express concern or questions at this time in order for the implementation dip to be eliminated. If the culture of the school does not allow those questions to be asked staff may see the initiative as the next best thing that they only need to take hold of for a year until something different comes along. Opening up the discussion to those participating in the program and a commitment from the administrators in the school to answer candidly in support of the program will yield a higher opportunity of success.

**Theme/Finding: Training Impact.**

Training is a key success to any initiative. Rogers' and Schlechty's work reflected the importance of identifying social roles in the organization and what their participation level could and should be throughout the change process. Bradshaw's work identified the need specific to PBIS in terms of what leads to sustainability in the Tier I implementation process. As is the case in school culture, the training impact and development of trained teams is an essential piece to movement of an innovation. To see an innovation as the schools next best thing or "buzz word" puts schools and staff in a defensive position before the innovation starts.

A randomized 3 year trial done by Bradshaw et al., researched the PBIS implementation process by using data from 37 elementary schools. Of these schools, 21 received the training process indicated by the PBIS framework, and 16 did not. The hypothesis focused on the impact of training on the implementation of the framework. The analysis found that 14 of the 21 schools or 66.7% of the trained schools achieved an 80% on the SET, or full implementation after year 1, 18 of the 21 or 85.71% of the trained schools achieved full implementation by year 2. Conversely, 1 out of 16 non trained schools achieved the 80% SET score, or full implementation by the end of year 1 and 3 of the 16 schools achieved full implementation by the end of year 2 (Bradshaw et al., 2008).

Training is often viewed as initial only. For PBIS to be successful the research points to multiple opportunities after the initial training. Weekly and monthly review of data and staff development with the trained team will allow for a better chance at success with the implementation. Review of data by staff members who were not directly involved in the training will afford each staff member in the school the opportunity to be part of the program. It also lends itself to working with staff members whose social role is not in line with where the organization is going as they move forward.

### **Forecast Chapter 3**

The above review of literature represents the theoretical framework related to the research questions addressed by the study. This final chapter section summarizes prominent themes and findings within the framework. In Chapter 3, the methodology of the research as well as the research design will be addressed.

### **CHAPTER THREE: RESEARCH DESIGN**

Chapter Three describes the methodology used to conduct the research. This research utilized program evaluation and mixed methods of quantitative survey method and qualitative focus group interviews. The sections in this chapter include research approach, research sites, data collection, data analysis, role of the researcher, and summary.

#### **Research Rationale**

It seems that every new school year brings a new “magic bullet” approach to working with young adults. Programs are developed and implemented and then placed on the back burner the following year when a new initiative comes into play. Everyone is searching for the answer in the form of change, yet schools struggle to allow systems the time to do so. Sugai and Horner have indicated that 80% of staff members must buy into the change for sustainable program implementation of PBIS (Sugai, 2002). The question becomes how do you get 80% of the staff to buy into a framework after some have spent years, if not decades, being promised that the next best thing is really the next best thing. At some point staff members just shake their heads and discuss how long they will have to endure this change until something better or different comes along. They also discuss the new initiative as cyclical in that the information brought out is the same thing they did years ago under a different name.

Sugai and Horner have identified school staff that should be included in the PBIS Implementation Team consisting of administration, teachers, support staff, counselor, special education, community, and parents. The research done at School 1 and School 2

had members from administration, teaching staff, support staff, counseling, and special education.

Building sustainable change for schools is important not for change, but for sustainability. How can schools expect students to know and understand their role or how to act in schools if the rules change three times between their Kindergarten and 5<sup>th</sup> grade school year? How can staff members expect to teach in a trusting environment when they cannot ever be comfortable because they are always learning a new system or framework? The failure of schools to sustain a high level of learning may go beyond the information being delivered and speak more to how it is being delivered. This research intends to identify the systems in place to develop sustainability within a research based educational initiative (PBIS). PBIS is an evidence-based framework that has a positive impact on student discipline referrals, attendance, and student achievement (Sugai, 2002). This research analyzed the implementation of that program and how it is built for sustainability. Through the research schools will be able to identify team members, not by title, but by social role in the school help build a sustainable program.

### **Research Purpose**

The purpose of this study was to identify what building system factors impact the successful Tier I implementation of PBIS at two elementary schools in Mid West, Wisconsin. The research question was: What are the factors that impact the positive Tier I Implementation of Positive Behavior Intervention Supports in two Midwestern suburban elementary schools? The purpose of the research was to determine what factors impact the positive implementation of PBIS in two suburban elementary schools. Though the research is not generalizable, the intent is to give schools and school districts

additional information as they move forward with any program implementation. Schools are notorious for implementing new programs aimed to fix the educational system.

Within that process of change, a number of things get lost. The results of the research can be used to proactively plan for the implementation of any framework as teams are created and trained for the improvement of schools and districts.

The research sets out to identify the factors that led to the successful Tier I implementation in two elementary schools related to the perception of the program by trained and untrained staff throughout the process. The framework that is currently in place in two schools was evaluated by the researcher.

According to the PBIS Wisconsin Annual Report in 2010, the organization is working with 681 of state schools to implement a solid approach to teaching social emotional learning at all levels. PBIS has been identified by the state as a framework grounded in valid and reliable research. The DPI endorses the use of PBIS and provides multiple training opportunities throughout the school year and beyond to implement the framework.

In January 2010, the CESA Statewide Network (CSN) and the Wisconsin Department of Public Instruction (DPI) formed the Wisconsin PBIS Network as a division of the Wisconsin RtI Center to provide training and technical assistance to CESAs and schools for the implementation and sustainability of PBIS.

According to research done by the PBIS Wisconsin Network, by the end of the 2010-11 fiscal year:

- 795 schools in 167 districts, representing all CESA regions in Wisconsin, had attended tier 1 PBIS team training.

- 152 schools had attended tier 2 PBIS team training and 17 schools had attended tier 3 PBIS team training.
- 681 schools were implementing PBIS (had completed at least one PBIS fidelity tool on the PBIS Assessment website).
- 280 schools were implementing tier 1 PBIS with fidelity meaning they met fidelity on at least one Team Implementation Checklist, Benchmarks of Quality, Self-Assessment Survey, or School-wide Evaluation Tool on the PBIS Assessment website (Wisconsin PBIS Network, February, 2012).

In the 2010-11 fiscal year, 201 PBIS trainings were held throughout Wisconsin; 322 schools attended Tier 1 PBIS team training, 110 schools attended Tier 2 PBIS team training, and six schools attended Tier 3 PBIS team training. Compared to schools trained in PBIS but not implementing, schools implementing with fidelity had 52 percent fewer days lost to out of school suspensions, 43 percent fewer out of school suspensions, and 36 percent fewer students receiving out of school suspensions (Wisconsin Positive Behavior Support Network, December, 2011).

The Midwest school district has formed an alliance with the PBIS network of Illinois. In doing this the Midwest school district has used the implementation framework that has been used in Illinois for the last 10 years. According to the Wisconsin Statewide PBIS Coordinator, other school districts throughout the state of Wisconsin are trying to implement the framework on their own with limited success (N. Beier, personal communication, October 22, 2010). The Midwest school district has trained and implemented the framework in all 12 of its elementary schools with fidelity. The statewide coordinator indicates that the rest of the state is implementing at just over



50% with fidelity. This percentage is based on The Implementation Checklist (TIC) scores reported to the state.

### **Research Approach**

The research methodology employed to resolve the question addressed by the study was that of a program evaluation. A mixed methods approach of quantitative data through the use of survey data and qualitative focus group data was used. Identifying the fidelity to which a school or school district has employed the framework is obtained through The Implementation Checklist, the Benchmarks of Quality, and the School Evaluation Tool. Diving deeper into the framework, the research attempts to identify informal roles in schools that are important to be part of the implementation for success. Therefore, the researcher utilized a mixed methods approach for a more in-depth analysis of team development. Mixed methods research is defined by Creswell and Plano Clark (2007) as a method to guide the direction of the collection and analysis of data and mixture of qualitative and quantitative approaches in many phases of the research process. It focuses on collecting, analyzing, and mixing both quantitative and qualitative data in a series of studies. Among the purposes for mixed-method evaluation design, Green et al. (1989) highlight the major factors that enhance the evaluation:

- Triangulation-tests the consistency of findings obtained through different instruments. In this research, triangulation increases the chances to assess the success of the implementation.
- Complementarily-clarifies and illustrates results from one method with the use of another method. In the current research case, the use of survey data will be used in conjunction with qualitative focus group data.

- Development-results from one method shape subsequent methods or steps in the research process. In this research, partial results from the survey measure might suggest that other assessments should be incorporated.
- Initiation-stimulates new research questions or challenges results obtained through one method. In the current research study, in-depth interviews with staff members will provide new insights on how the program has been perceived and valued.

### **Research Design**

Within the research of mixed method, this study employed the techniques of quantitative and qualitative to generate data relevant to the research questions what factors impact the successful implementation of PBIS in a suburban school district and the hypothesis that comprise the PBIS trained team has an impact on the implementation and sustainability of the framework. The survey was used to identify staff members who represented an accurate population of the school staff. To do this, the survey used Roger's Diffusion of Innovation Theory to determine the process of implementation.

### **Nature of the Mixed Methods**

By definition, mixed methods combine both quantitative and qualitative research. Some believe that mixed methods involves the philosophical assumptions that guide the research. Others believe that it is a technique, or method, of collecting data. Creswell believes that the definition lies in the middle. As a method, it focuses on collecting qualitative and quantitative data in a single study. The central thought is that combining both quantitative and qualitative research provides a better understanding of the research (Creswell, 2009).

Quantitative data are addressed as closed ended data (Creswell, 2009). In this collection method the researcher checks the observed behavior of the subject. The data collection is through simple questioning and checklists that consist of yes/no, multiple, choice, and measured variables. It is used to explain, predict, or control a phenomena (Leedy & Ormrod, 2005). Qualitative data collection are more open ended and allow the participants to use their own words. Leedy and Ormrod refer to qualitative collection as data used to answer questions about a phenomena and specifically to describe that phenomena from the participant's perspective (Leedy & Ormrod, 2005).

The collection of data from both perspectives may be used to gain a better perspective of the phenomena or program. However, it is not a true mixed method if the researcher simply collects and analyzes quantitative and qualitative data. Mixed together they can begin to form the complete picture of the data.

Creswell defines four key components for consideration that influence a design.

They are:

1. Timing
2. Weighting
3. Mixing
4. Theorizing

Timing refers to how the data will be collected. The researcher has the option to collect the data in phases, referred to as sequentially, or at the same time, referred to as concurrently. In the sequential collection of data, qualitative or quantitative data may be collected first. The order does not matter in the overall collection process. Concurrent data are collected simultaneously so the discussion of order is irrelevant.

Weight refers to the priority given to quantitative and qualitative data. In some studies the weight may be the same for qualitative and quantitative data. In others, the researcher may decide to weigh one of the measures more heavily based on the aim of the study.

Mixing is the third component to consider when addressing mixed methods designs. Mixing the data is merging the data set from qualitative to quantitative or quantitative to qualitative. A survey may be used as the quantitative piece and a focus group may afford the researcher to acquire a more in depth knowledge of the participant's perspective.

Finally, theorizing needs to be considered. Theory may come from the social sciences. It may be implicit or explicit, but it defines how the questions posed are formed. Theory provides the umbrella under which the questioning route, checklists, or multiple choice questions are formed (Creswell, 2009).

### **Appropriateness of the Mixed Methods to the Research**

The research attempts to answer the question of what factors impact the successful implementation of PBIS in a Midwest suburban school district. The mixed methods approach is appropriate in this regard because it utilizes both quantitative survey data and qualitative focus group data to identify the needs and factors that go into successful implementation.

The focus group data allowed the identified PBIS team to relate its experience, as well as a team of individuals, who are not on the PBIS team to extrapolate on their experience. The two focus groups provided unique perspectives. The PBIS team attended a two day training and the school team did not. The PBIS team is expected to

relay the information effectively to staff and eventually to the student population for implementation. The data described and compared the similarities and differences among the trained PBIS team and a representation of staff members who did not attend the training. The opportunity to get the perspectives of both groups provides the researcher with data that were used to identify needs of school districts prior to the implementation and raise the current 50% implementation with fidelity result in the state. The reason for the mixed methods approach was to provide a richer viewpoint of the perception among staff and increase the validation of the research through a comparison and triangulation of data.

Through the mixed methods process the district was able to identify where schools were succeeding in the implementation process as well as areas of concern. The identification of those concerns can be addressed before they become a barrier to implementation. The research also indicated the different groups within the school and which of those groups have the largest influential impact on the implementation of PBIS. The evaluation also identified key elements to the implementation process. When analyzing the process from start to implementation, Rogers Theory of Diffusion of Innovation can be used to determine what factors were the most influential for successful implementation of PBIS in these schools.

### **Research Plan**

The research plan was a culmination of four phases. Each phase added a piece to the research, and was built on the previous phase. In doing this, the researcher was able to provide a robust evaluation of the program. An Interactive Evaluation was used due to the fact that the program is in the middle of its implementation. Over the course of the

next three to five years the MWASD is prepared to implement the PBIS framework in each of its 21 schools. The intervention evaluation affords the organization the opportunity to evaluate the implementation process with schools that are involved in the process and use that data to plan for future schools as they enter the process. Through this process, the district will be able to identify where schools are succeeding in the implementation process as well as areas of concern. The identification of those concerns can be addressed before they become a barrier to implementation. The research will also indicate the different groups within the school and which of those groups have the largest influential impact on the implementation of PBIS. The evaluation will also identify key elements to the implementation process. When analyzing the process from start to implementation, Rogers Theory of Diffusion of Innovation can be used to determine what factors are the most influential for successful implementation of PBIS in these schools.

The first phase set out to identify individuals who would be willing to take part in a focus group to discuss the implementation process of PBIS in the school. This was done through a survey taken by staff members during an organized meeting. The survey was also used to determine the perception of all staff members regarding the implementation process of PBIS. The second phase of the plan was conducting the focus groups with a team who was trained in the PBIS Implementation process and a team who was not trained in the PBIS Implementation process. The third phase of the plan was an interview held with each administrator and the school district PBIS coordinator. The final phase of the plan was multiple observations in the school to assess the implementation process and triangulate the information gathered from the focus groups and surveys.

## **Timeline**

### **Time span**

The time span of the events transpired over a four month window from December 2010 to March 2011. Proposal and IRB thorough Cardinal Stritch University took place in December 2010. Data collection from focus groups at both sites took place in the spring of 2011. The review of the data and coding took place in the spring of 2011.

### **Chronology of events and procedures.**

1. Contact the district administrators and site for permission to conduct the research study.
2. Develop the survey instruments and directions.
3. Receive approval from IRB and school district.
4. Develop survey and focus group questions.
5. Pilot survey and focus group.
6. Develop timeline with site principals to conduct the survey.
7. Send introductory letter and rationale to staff members.
8. Send letter and directions to conduct the survey to staffs including a link to take the survey electronically.
9. Send follow up letters electronically to staffs indicating the close of the survey
10. Collect and analyze the data from the survey.
11. Perform four focus group interviews with staff members.
12. Perform interviews with school principals at each school.
13. Transcribe, analyze, and synthesize results and respond to research question.

## **Site and Sample**

### **Selection and description of site.**

The site was the Mid West Area School District. The Mid West Areas School District is located in west-central Wisconsin and considered a "small city" urban district. The district population is 99,500 residents with a total PreK-12 enrollment of 10,661. Schools in the district includes two high schools, three middle schools, twelve elementary schools, and two charter schools (Wisconsin Information Network for Successful Schools, December, 2010).

The total number of certified staff was 892 full time educators in 2010, with an additional 410 full time equivalent support staff, for a total of 1,302 full time equivalent employees. The total number of employees is greater, but many serve in part-time capacities. The racial/ethnic composition of the school district includes approximately 12% Hmong students, 1% Other Minority students, and 87% White\Caucasian students (Wisconsin Information Network for Successful Schools, December, 2010). Ten elementary schools and one middle school qualify for Title I assistance through federal programming. SAGE and Title II support is also received by the school district to lower class size at the elementary level. The community takes pride in its public institutions, including schools and support for the schools has been generally strong. The Sample included two elementary schools within that site. Students in the school district score at or above the state average on Wisconsin Knowledge and Concepts Examination (WKCE) and have a graduation rate of 93.2% as opposed to the statewide average of 85.7%. The district spends \$12,196 per student, which is lower than the state average of \$12,346



(Wisconsin School District Performance Report, 2009). Table 1 indicates 4<sup>th</sup> grade scores as compared with the state of Wisconsin.

Table 1

*District WKCE Scores of Fourth Grade Students*

MWASD Grade 4 WKCE Scores November 2009 Data		
	MWASD	Wisconsin
Reading	86.0	81.4
Mathematics	86.0	80.5
Science	82.0	77.0
Social Studies	95.0	92.5
Language Arts	82.0	77.3

*Source: Wisconsin Information Network for Successful Schools, December, 2010*

Table 2 shows student achievement in the MWASD is above the state average in all core content areas. The largest gap between the state and MWASD were in the areas of Reading, Mathematics, Science, and Language Arts.

### **Communication with Site.**

The researcher communicated with the administrator at each building. The conversation revolved around the willingness to take part in the study, as well as, the process described in the research design portion of this dissertation. The administrators signed a consent form indicating their willingness to take part in the study. The researcher also met with the PBIS teams to confirm their willingness to be part of the study in the spring of 2010.

### **Selection and description of site.**

The MWASD has 12 elementary buildings. Initially, the PBIS framework was introduced to the district schools in the 2008-2009 school year. All of these buildings are at varying levels of implementation with the PBIS framework. The intent of the study

was to analyze what factors impact the Tier I implementation process at the elementary level. The research will be designed around schools that represent the varying levels of that implementation.

The researcher selected two sites at which to collect the data. Both sites have developed teams to take part in the PBIS framework. The following demographic data were derived from the Department of Public Instruction website as well as staff information given from the central office staff in the district.

### **School One**

School One consisted of 460 students. Approximately 91.0% of the student population in 2009 was Caucasian, 5.5% were Asian, 1.1% were Black, 2.2% were Hispanic, and .4% were Native American. The percentage of low income students at the school was 21.0%. The English Language Learners population was 1.3%. Eighty-nine percent of the elementary students was enrolled in regular education, while 11.0% was in the special education program consisting of learning disabilities, emotional/behavioral disabilities, hearing/visual impaired, cognitive disabilities, and other health impairments (Wisconsin Information Network for Successful Schools, December, 2010). The school was considered a three section school in that the intent is to have three sections of each grade level Kindergarten-5<sup>th</sup> grade. Due to a current bubble, or higher population in one grade level, in the elementary system there were currently three sections of Kindergarten, four sections of First grade, four sections of Second grade, three sections of Third grade, three sections of Fourth grade, and three sections of Fifth grade. The school employed 45 staff members who include 20 regular education teachers, three special education teachers, one English Language Learner teacher, five support staff members, one school

counselor, and one administrator. Special area teachers instruct physical education, music, art, and library skills. They are currently in the 2<sup>nd</sup> year of the implementation process.

Table 2 indicates the academic profile for School One is as follows:

Table 2

*School 1 WKCE Scores of Fourth Grade Students*

School 1 Grade 4 WKCE Scores November 2009 Data		
	School One	Wisconsin
Reading	88.0	81.4
Mathematics	90.0	80.5
Science	84.0	77.0
Social Studies	94.0	92.5
Language Arts	84.0	77.3

*Source: Wisconsin Information Network for Successful Schools, December, 2010*

The data indicates School 1 was above the state average in 2009 in all content areas tested on the WKCE. The largest gap between the state and School 1 is in Mathematics. The smallest gap is in Social Studies.

### **School Two**

School Two consisted of 381 students. Approximately 88.5% of the student population in 2009 was Caucasian, 5.5% were Asian, 2.6% were Black, 2.9% were Hispanic, and .5% were Native American. The percentage of low income students at the school was 32.5%. The English Language Learners population was .5%. Sixty-eight percent of the elementary students were enrolled in regular education, while 32.0% were in the special education programs consisting of learning disabilities, emotional/behavioral disabilities, hearing/visual impaired, cognitive disabilities, and other health impairments (Wisconsin Information Network for Successful Schools, December, 2010). The school

was considered a three section school with the intent to have three sections of each grade level Kindergarten-5<sup>th</sup> grade. Due to a current bubble, or higher population in one grade level, in the elementary system there are currently three sections of Kindergarten, four sections of First grade, four sections of Second grade, three sections of Third grade, three sections of Fourth grade, and three sections of Fifth grade. The school employed 38 staff members who include 27 regular education teachers, three special education teachers, one English language learner teacher, five support staff members, one school counselor, and one administrator. Special area teachers instruct physical education, music, art, and library skills. They are currently in the 1<sup>st</sup> year of the implementation process of PBIS.

Table 3 indicates the academic profile for School 1 is as follows:

Table 3

*School 2 WKCE Scores of Fourth Grade Students*

School 2 Grade 4 WKCE Scores November 2009 Data		
	School One	Wisconsin
Reading	88.0	81.4
Mathematics	90.0	80.5
Science	84.0	77.0
Social Studies	94.0	92.5
Language Arts	84.0	77.3

*Source: Wisconsin Information Network for Successful Schools, December, 2010*

### **Communication with sample.**

A letter was sent to the schools in which the focus groups were to take place. The letter read as follows:

Dear *Name*,

I am currently working on my Doctorate of Education in Leadership, Learning, and Service at Cardinal Stritch University in Milwaukee, Wisconsin. I am currently an elementary administrator in [REDACTED]. I chose to conduct research for my dissertation in a larger school district than my own.

My dissertation seeks to find factors that implement the successful implementation of Positive Behavior Intervention Supports in mid-sized Midwestern school districts. I would really like to know how people feel about the process and how we as administrators and leaders can help in the successful implementation of the framework.

My intentions are to conduct 2 focus groups at your school. The first focus group would be comprised of individuals who have attended PBIS Tier 1 implementation training and are on your PBIS leadership team. The second focus group would be comprised of individuals who have not attended the PBIS Tier 1 implementation training and are not on your PBIS leadership team.

I realize and understand that teacher time is precious. I feel that the opportunity to identify barriers as well as successful practice will allow the school district to plan accordingly and identify future needs when implementing programming for the continued success of the program.

As part of my dissertation defense I intend to present my findings to the administration and district PBIS team. I will also present to your building if you feel it would be productive.

Please contact me at [REDACTED] or via email at

[REDACTED] to set up a time to conduct the focus groups.

Thank you for your support,

Joe Sanfelippo

Principal  
[REDACTED]

The researcher prepared to conduct two focus groups and one interview with the administrator at each school. The first focus group was comprised of individuals who attended the PBIS Tier 1 training and are considered to be the PBIS Team at the school. They were comprised of an administrator and five other staff members who included one counselor, two teachers, and two support staff members. Group two at each school was comprised five other staff members from the school who are carrying out the PBIS framework but were not involved in the initial training. A list of initial dates was given as options for a focus group to be conducted. The best option was conveyed to the administrator and then to the researcher. At that point the researcher also contacted the MWASD, PBIS Internal coach to acquire each school's TIC and BoQ information from the previous year. This measure is needed to know and understand the level of implementation in each school prior to the focus group to ensure that the program meets the standard as set by the PBIS network.

### **Selection and Description of Sample**

The researcher contacted the MWASD PBIS Internal coach to acquire all elementary school's TIC and/or BoQ information from the previous year. This measure is needed to know, and understand, the level of implementation in each school prior to the focus group to ensure that the program meets the standard as set by the PBIS network. The TIC data are used for schools in the first year of the process. Schools need to score at 80% on the TIC to be considered fully implemented in PBIS. The BoQ is for those schools which have reached the 80% TIC level. The BoQ is a more in depth measure that identifies areas needed for sustainability of the framework. That data indicated multiple schools met the criteria of full implementation. The two schools were chosen due to the fact that both schools have met the criteria at high levels with different student populations.

For the first phase of the study the researcher sent a quantitative survey to each school. The survey was completed by staff members regardless of role in the organization. The purpose of targeting all staff members instead of just teachers was to be concurrent with the makeup of the focus groups. Due to the fact that the PBIS team focus group is comprised of teaching staff, administrative staff, and support staff the survey was targeted at those individuals as well. The survey helped identify those staff members interested in focus group participation.

### **Data Analysis**

Data generated by techniques previously described were subsequently interpreted through the analysis techniques/procedures of focus group and quantitative analysis. Focus group research involved formalized process of bringing together a small selected

group of people for an interactive and spontaneous discussion of one particular topic or concept. In this form the moderator draws out as many ideas, feelings, and experiences as possible regarding the topic of interest (Krueger 2009). The information used throughout the focus groups is intended to identify perceptions regarding a certain topic.

Member checking was used to validate the information gathered during the interviews. During the interview process, the researcher conducted four focus groups and two interviews with administrators at the school. All interviews were recorded using two audio devices and one video device. The data was collected and transcribed into a document. The document was made available to all groups after the interview to ensure the accuracy of the transcription. Two comments were made by the staff regarding the document. One male staff member from School 1 said, “We certainly say ‘um’ a lot.” The other was from a male staff member at School 2. He said, “I look forward to seeing the results.”

### **Quantitative Data Analysis**

For the quantitative survey data, the Likert scale responses were coded from one to four: corresponding with (1) strongly disagree, (2) disagree, (3) agree, and (4) strongly agree. A Likert Scale indicates interval data allowing the researcher to use t tests and correlations (Cohen, 1988). The data were loaded into an Excel software data file with a separate line for each participant. Once all the continuous and categorical data were loaded into the Excel data analysis program, the researcher checked for accuracy of data, reliability of survey instrument, and normally distributed data.

In analyzing the survey data, the researcher used descriptive statistics to describe behavior or characteristics of the participants and statistical analysis or



inferential statistics to explain why the participants responded or behaved in a certain way, which was more difficult than descriptive analysis (Suskie, 1996). Descriptive analysis indicated the means, standard deviations, frequencies, and range of scores for the variables; whereas, statistical analysis included comparisons such as differences or correlations of groups so that inferences can be drawn from the sample and applied to the population (Creswell, 2009; Suskie, 1996). For example, the researcher used percentages, frequencies, and means to describe and present the data visually. Standard deviation and the variance were also used to describe the variability in the data. For inferential statistics, the researcher conducted tests between the means (t-tests). In this study, the researcher wanted to analyze the relationship between, for example, trained members of the school and their perception of the implementation process and untrained members and their perception of the implementation process. The researcher analyzed the connection between the two groups.

The researcher used the Pearson product-moment correlation coefficient ( $r$ ) to measure the strength of the correlation, which Figure 6 described the interpretation of the correlation coefficient as noted by Salkind (2004).

**Figure 6: Interpreting a Correlation Coefficient**

Size of the Correlation Coefficient	General Interpretation
.8 to 1.0	Very strong relationship
.6 to .8	Strong relationship
.4 to .6	Moderate relationship
.2 to .4	Weak relationship
.0 to .2	Weak or no relationship

Figure 6. Addresses the interpretation of the correlation coefficient as described by Salkind. The size of the correlation coefficient identified the relationship within the data. Source: Salkind (2004, p. 88)

In addition, t-tests were used to compare the mean score of two groups on some continuous variable (Pallant, 2007; Salkind, 2004), such as differences between trained and untrained teams, impact of length of time in the school on perception, and position held in the school. By using these descriptive and statistical analyses, a broader picture about the impact of training was developed.

### **Qualitative Data Analysis**

In analyzing focus group data, the main process involves making sense out of the text and recorded data. As Creswell (2009) points out, the analysis and interpretation involves “moving deeper and deeper into understanding the data (some qualitative researchers like to think of this as peeling back the layers of an onion), representing the data, and making an interpretation of the larger meaning of the data” (p. 183). Analyzing the focus groups interview data involved substantial amounts of information from the audio-taped recordings, videotaped recordings, and transcribed notes. From this comprehensive data bank, the researcher narrowed down to the significant statements or essence of the conversations.

The researcher followed the suggested process by Creswell (2009) in analyzing the interview data:

1. Organizing and preparing the data analysis by transcribing the interviews, and sorting and arranging the data into different categories of information. The researcher transcribed the recorded interviews into a Word document, sorted the various focus groups and observations/reflections from researcher and separated the data into different categories.
2. Listening to, and reading through all the data, to get a general sense of the information and reflect on the overall meaning, which was completed numerous times and with peer debriefers.
3. Starting the coding process which involves segmenting sentences into categories and labeling those categories with a term, which was completed by hand.
4. Using the coding process to generate a description of the setting or people as well as categories or themes for analysis. The experiences were clustered into key concepts and themes to determine the amount of similar responses and the group of participants' responses.
5. Figuring out how the description and themes are represented in the qualitative narrative. By creating visual displays of the major concepts and themes which focused on the research question and narrating the organized assembly of information, the conclusions were drawn and results were verified.
6. Making an interpretation of the data. After the conclusions were drawn and the results reviewed, the researcher provided an overall description of the characteristics of successful implementation of PBIS in the selected schools.

## **Nature of Survey**

Survey research is a method of data collection that provides quantitative data to explore a phenomena. The purpose of the survey used in this study was to provide quantitative data to explore the impact of PBIS on an elementary building as presented by staff members in that particular building. According to Suskie (1996) survey research should be used to explore a specific topic and explore causality of that topic. It describes a trend of a population by studying a sample of that population. It is often used in experiments to generalize a population based on a sample of that population. The researcher should first identify the need and the intent of the data gathering. The researcher then needs to identify the sample and decide whether it meets the needs of the experiment in the representation of the population and the relationship between the variables. The researcher should also determine why a survey is the best way to gather data for the study. In this examination the researcher indicates whether the survey will be collected at one time or over time. According to Fink (2002) four types of surveys exist. They are:

1. Self-administered Questionnaires
2. Structured records reviews
3. Interviews
4. Structured observations.

Statistical surveys are used to collect quantitative data from a certain population. Survey data are used to collect a focus or opinion on a topic. The use of statistical software including SPSS can be used to analyze the data. To ensure the questioning route was reliable, the researcher conducted two pilot focus groups. The first pilot was

conducting the survey at a school of similar size to schools one and two while the second pilot was conducting a focus group. The pilot studies took place in a school district outside of MWASD with similar backgrounds in terms of student population, socioeconomic status, and years in the implementation process. The researcher utilized the following suggestions by Leedy and Ormrod (2005):

1. The researcher identified questions in advance related to the overall research questions.
2. The researcher made sure the interviewees were representative of the group as much as possible. If this was unattainable, it was noted.
3. The researcher found a suitable place that was free from distraction and interruption, but was also convenient for all parties involved.
4. The researcher received written permission from the participants.
5. The researcher established and maintained courteous and respectful rapport at all times. By showing compassion and interest through body language and neutral encouragements, the researcher broke the ice and followed for more in-depth conversations.
6. The researcher focused on the actual facts rather than on the abstract or philosophical ideologies of the topic.
7. The researcher listened carefully and let the participants express their own thoughts in their own ways and not those of the researcher.
8. The researcher recorded the responses verbatim by taking down notes, recording the conversations, and videotaping the session to ensure the exact wording of the participants.

9. The researcher maintained an emotional control such as not showing surprise or disapproval that could alter the participants' reactions while creating an understanding atmosphere.
10. The researcher recognized that the comments are the participants' perceptions and not necessarily facts.
11. The researcher took the group dynamics into account by ensuring most, if not all of the participants participated in the session and at least identified themselves. This was done through an identification of who had and had not contributed to the questions.

***Appropriateness of the technique.***

In developing the survey the researcher needed to identify the purpose of the method within the context of the study. According to Suskie (1996) survey research should be used to explore a specific topic and explore causality of that topic. The survey data used in this study was the identification of staff members perceptions regarding PBIS and screen to ensure there is a representative population participating in the focus groups. The technique is appropriate in this study due to the necessity to screen participants in the focus group. Surveying the large population afforded the researcher the opportunity to invite focus group participants who represented the staff in terms of job title. The researcher was able to identify a cross section of participants who had been working in each building a varied number of years as well as both certified and non-certified staff employed by the school. The survey also provided valuable data that spoke to the confidence level of the groups who had been trained and untrained in PBIS.

*Development of reliable/valid/trustworthy materials/instrument(s)*

The Framework for questioning in the focus group was developed by Richard Krueger (2009). His work breaks the sequence into three discernable components that include questioning route, rationale, and questions. Within the context of those components are six steps in the procedure. These include the following for each focus group:

1. The Introduction
2. The Transition
3. The Training
4. The Advantages/Disadvantages
5. The Impact
6. Member Checking.

Each of these components includes the rationale for the steps. They range from create a positive tone to connect to the research framework, and finally to identifying and clarifying what has been said to ensure accuracy.

The questions were derived using the suggestions of Casey and Krueger (2000). They include:

1. Conversational
2. Words the participants would use
3. Easy to say
4. Clear
5. Short questions
6. Open-ended questions

7. One-dimensional
8. Clear directions.

The questioning route was determined based on the literature review regarding PBIS, Diffusion of Innovation Theory, and Focus group research work of Krueger and Casey (2000) as well as Leedy and Ormrod (2005). The researcher piloted the questions with individuals at two other schools and heeded the advice of the Wisconsin state PBIS coordinator as well as a professor at the University of Stout who has expertise in school psychology with an emphasis in behavior interventions and did his doctoral work with George Sugai who is cited multiple times throughout the literature review and research. The researcher broke the questions into five categories as suggested by Krueger and Casey (2000). These categories were opening, introductory, transition, key, and ending. This was followed by establishing the following ground rules:

1. Openness and Honesty
2. Respectful Communication
3. Confidentiality
4. Respect Differences in Opinion
5. All Voices Heard—Everyone is important in the process.

The script of questions was used as a framework. The researcher created a climate that was welcoming, comfortable, and centered using eye contact and focus during the group responses. The researcher also set up the questioning sequence to ensure confidence in answering for all members during the first initial questioning process. The researcher also paraphrased the content for accuracy of group statements and followed up questioning helped with a deeper understanding of the answers.



***Validity/trustworthiness.***

The focus group provides the third component to the triangulation formula of the research. The first component was to identify those schools that had met the criteria set out by the National PBIS network for full implementation. School One and School Two fulfilled the 80% score on The Implementation Checklist to attain this objective. The second component of the triangulation was to identify perceptions of the implementation process through survey data. Focus groups were used to gain a deeper perspective on the implementation process through those involved in, and not involved, in the training. Finally, observational data was taken at both institutions by the researcher to identify successful and unsuccessful logistics of each program.

The goal of the focus group was to learn and understand what individuals have to say, and why, regarding the topic of interest (Krueger 2009). The focus group goes beyond the quantitative data because the researcher can identify factors that impact the individuals that are given the task of implementing PBIS. The focus group gives an actual account of the process and procedures used by the district to implement programming and whether or not that infrastructure has been successful. It also allows the researcher to identify needs for future implementation of PBIS programming in the district.

***Pilot Study Survey.***

A pilot survey was conducted prior to the research at both schools in the MWASD. The pilot group was taken from a school district in a similar region with a demographic population similar to that of School One in the MWASD. The pilot study

survey served as an attempt to provide reliability and validity to the survey used in the research. Table 4 shows the descriptive data of the pilot sample.

Table 4

*Pilot Study Survey Participants*

Total Participants	35
Teachers	21
Support Staff	9
Administrators	1
Student Services	4
Average Years of Service at the school	7
Currently on the PBIS Trained Team	11
Currently Not on the PBIS Trained Team	24

The total participants in the study were similar to the potential number of individuals in the research study. The average years of service at the school were 7 years. The PBIS Untrained team members outnumbered those on the Trained team by nearly 3:1.

The application of survey to the data lies in two components. The first component is the overall satisfaction with the PBIS framework. In conducting the survey, the researcher was able to identify an overall perception of the staff in relating to the implementation process of PBIS. These data allow the researcher to identify the perception of the staff as a whole, perception from those with Tier 1 training, and those with no training. The intent of the survey was to get an overall perception of the implementation process of PBIS by members of the school who were both trained and not trained in the PBIS framework. The survey consisted of 11 questions related to the

implementation of PBIS in schools. The questions were adapted from the Schoolwide Evaluation Tool, multiple interviews with the Wisconsin state PBIS coordinator, and interviews with the Western Wisconsin PBIS coordinator. Each question was answered on a four point Likert scale. The options for survey participants were Strongly Agree, Agree, Disagree, and Strongly Disagree. The 11 questions were categorized into three areas. They were Training, School Environment, and Positive Impact. The first area, training, consisted of four questions. They were:

1. I know and understand the PBIS framework
2. I am provided with training and ongoing support to ensure my understanding and compliance with PBIS
3. Staff are in agreement regarding student behaviors
4. The PBIS program helps staff to be objective in their measurement of student behavior.

The second area, School Environment, consisted of three questions. They were:

1. The PBIS framework is effective at maintaining a safe school environment
2. Staff members are supportive of PBIS at our school
3. The PBIS framework is delivered with consistency.

The third area, Positive Impact, consisted of four questions. They were:

1. The PBIS team communicates effectively with other staff members
2. The PBIS framework is effective at promoting positive behaviors
3. The PBIS framework is effective at increasing instructional time
4. PBIS has made a positive impact on School Culture.

The survey was primarily researcher designed and needed to establish reliability. This was done through a pilot test. In the pilot test, the Chronbach Alpha score for the survey was .96. Table 4 reveals the reliability of the survey.

Table 5

*Reliability of Survey*

<b>Cronbach's Alpha</b>	<b>0.96</b>
<b>Split-Half (odd-even) Correlation</b>	<b>0.66</b>
<b>Spearman-Brown Prophecy</b>	<b>0.79</b>
<b>Mean for Test</b>	<b>34.06</b>
<b>Standard Deviation for Test</b>	<b>5.31</b>

Salkind (2005) considers a Chronbach Alpha score over .7 to be a reliable measure. The score of .96 met the criteria. The instrument produced a reasonable and normal distribution on the both the pilot sample of 24.

The following was distributed to the potential survey participants:

Thank you for taking part in the PBIS Implementation Survey. Please answer the following questions. If you are interested in taking part in the focus group (and a chance to win an ipod nano!) please place your name at the bottom of the survey.

Which best describes your role in the school?

Teacher: \_\_\_\_\_ Administrator: \_\_\_\_\_  
 \_\_\_\_\_ Support Staff: \_\_\_\_\_ Student Services: \_\_\_\_\_  
 \_\_\_\_\_

How long have you worked in the current school? \_\_\_\_\_  
 Are you currently on the PBIS team? YES NO

Use the following scale to indicate your feelings regarding PBIS	Strongly Disagree	Disagree	Agree	Strongly Agree
PBIS has made a positive impact on school culture				
I know and understand the PBIS framework				
Staff members are supportive of PBIS at our school				
The PBIS team communicates effectively with other staff members				
The PBIS framework is effective at promoting positive behaviors of students				
The PBIS framework is effective at maintaining a safe school environment				
The PBIS framework is effective at increasing instructional time				
I am provided with training and ongoing support to ensure my understanding and compliance with PBIS				
The PBIS framework is delivered with consistency				
Staff are in agreement regarding expected student behaviors				
The PBIS program helps staff to be objective in their measurement of student behavior				
When a new program or district initiative is rolled out I am suspect as to the time it will last before a new one comes along				

I am willing to take part in a 60-minute focus group (\$10 compensation and a chance to win an ipod nano)

Name:

Table 6 shows the results of the pilot sample. The Chronbach Alpha was .96.

Table 6

*Pilot Sample Results*

<b>Pilot School</b>	<b>All Scores</b>	<b>Trained Team</b>	<b>Untrained Team</b>	<b>T-Test</b>
PBIS has made a positive impact on school culture.	3.32	3.33	3.31	0.93
I know and understand the PBIS framework.	2.88	3.50	2.67	0.01
Staff members are supportive of PBIS at our school.	3.25	3.17	3.28	0.61
The PBIS team communicates effectively with other staff members.	3.25	3.17	3.28	0.71
The PBIS framework is effective at promoting positive behaviors of students.	3.22	3.00	3.29	0.24
The PBIS framework is effective at maintaining a safe school environment.	3.26	3.17	3.29	0.63
The PBIS framework is effective at increasing instructional time.	2.83	3.17	3.71	0.09
I am provided with training and ongoing support to ensure my understanding and compliance with PBIS.	2.67	3.33	3.44	0.00
The PBIS framework is delivered with consistency.	2.79	3.00	2.72	0.38
Staff are in agreement regarding expected student behaviors.	3.00	3.50	2.83	0.05
The PBIS program helps staff to be objective in their measurement of student behavior.	3.08	3.17	3.06	0.58
Overall Mean Scores	3.05	3.23	3.17	0.38

The second component of the pilot was the screening process of the participants for the focus groups. As has been the case in a number of different initiatives over time, the same people tend to volunteer to be part of each committee or team. Therefore, the same message is set out over and over. This message may not match that of the general population. In conducting the survey prior to the focus groups the researcher was able to bring people into the discussions that have not had their voice heard. At the very least the researcher attained an accurate representation of the school population in terms of years taught, school role or position, and perception of the program.

### **Nature of Focus Group**

The second phase of the study was qualitative focus group research. Staff members indicated an interest to participate in focus groups by answering a question on the survey meeting the established criteria. One focus group was predetermined by those individuals included on the school PBIS team. This team was comprised of at least two grade level teachers, one support staff member, and one student services team member. The other focus group was comprised of grade level teachers and support staff.

Focus group data collection involved the formalized process of bringing together a small selected group of people for an interactive and spontaneous discussion of one particular topic or concept. In this form, the moderator draws out as many ideas, feelings, and experiences as possible regarding the topic of interest (Krueger, 2009). The technique is appropriate in this context due to the specificity of the program evaluation conducted by the researcher. The data collection took place at two elementary schools with varying student populations. These schools also had a great deal of diversity amongst the staff members instructing those students. The opportunity to discuss the process and framework in a safe environment was a data collection tool that fit the need of the research. The research question was: What are the factors that impact the positive Implementation of Positive Behavior Intervention Supports in two Midwestern elementary schools? The focus group meets the specific need to be in a midsized Midwestern city.

There are many advantages to this type of research. Flexibility and acquiring a large amount of detailed data from each subject is a key advantage in this method. The ability to have a discussion where ideas can be brought out and built upon is also an

advantage. Participants may be more willing to share their feelings if the group is set up in a productive manner. This will allow dialogue that cannot be attained through survey research.

There are also disadvantages to focus groups. The lack of generalizability is at the forefront of the disadvantages. Due to the site specific program evaluation the researcher cannot generalize to all schools in the nation, state, or even other cities of like size. Focus groups can be quite costly in time and bringing individuals together could be problematic. In addition, the number of volunteers and their perception is a limitation. The focus groups rely on individuals taking part in the process, and if there are no volunteers, there essentially is no process.

***Appropriateness of the technique.***

The focus group and interview aligns with the purpose of the study and the research design. Evidence from the focus group process affords the researcher the opportunity to identify further why certain opinions are formed. The focus group and interviews are used to gain a deeper perspective of the PBIS implementation process. Identifying perceptions of staff members is essential in moving the implementation process forward in other schools and school districts. Those people involved in the PBIS training process have knowledge that others do not. The individuals in the MWASD who have been trained in the framework clearly have a better insight into why the framework has been successful in 10,000 schools worldwide (Sugai, 1997). Information gained through the statewide PBIS coordinator indicated that those schools who are unable to translate that knowledge to the masses in the schools have a much lower sustainability rate.



Focus group discussions allow participants to provide more in depth self-disclosure, but also afford the members of the discussion group the opportunity to feed off of each other's comments and emotion (Krueger, 2000). The focus group allowed the researcher to gain perspective of the two different groups as they have had similar experiences in the implementation process. Members of each group felt their opinion is valued with those who have had a similar experience. If the group included both individuals who took part in the PBIS Tier 1 training and those who did not the data may all come from those who are more educated on the subject. The individuals may also feel a certain sense of pressure to defend their perspective of the implementation process in the company of a heterogeneous group.

The researcher conducted focus groups at each school following the collection of the survey data. One focus group was comprised of the PBIS Implementation Team. The other focus group was comprised of five or six staff members from the staff who are not on the PBIS Implementation Team. The focus groups lasted between 45-60 minutes.

Finally, the administrative interviews were focused on certain areas predetermined by the researcher. The questions were derived from a focus on the perception of the implementation process. The work of Krueger (2009) and Krueger and Casey (2000) were used to derive the questioning route to ensure reliable and trustworthy questioning. The analysis of the focus group data encompassed multiple hours of transcription of audio and video tapes and notes. The researchers coded the responses from the participants to identify themes from the information. These data were used to identify patterns of responses.

### ***Coding and Analyzing Data.***

The researcher followed the suggested process of Creswell (2009) in analyzing the interview data:

1. Organizing and preparing the data analysis by transcribing the interviews, sorting and arranging the data into different categories and information. The data from the interviews were transcribed into a document. The researcher then placed the data in the appropriate schools to ensure staff had an opportunity to member check the document for accuracy.
2. Reading through all the data to get a general sense of the information and reflect on the overall meaning. In addition, the researcher saved the recorded data to an mp3 file and listened to each interview multiple times prior to reading the transcripts.
3. Starting the coding process which involved segmenting sentences into categories and labeling those categories with a term. Originally, 11 themes were identified.
4. Using the coding process to generate a description of the setting or people as well as categories or themes for analysis. A peer review was conducted with a colleague and the individual hired to transcribe the notes. Their review connected seven of the previously identified themes.
5. Figuring out how the description and themes will be represented in the qualitative narrative.
6. Making an interpretation of the data. The seven themes were condensed to six as the data supported connecting two of the original concepts.

### ***Procedure***

The researcher conducted two focus groups at each school. The first focus group consisted of individuals who attended the PBIS Tier 1 training and were considered to be the PBIS Team at the school. They were comprised of five staff members who included one counselor, two teachers, and two support staff members. Group two at each school consisted of six other staff members from the school who are carrying out the PBIS framework but were not involved in the initial training. A list of initial dates was given as options for a focus group to be conducted. The best option was conveyed to the administrator and then to the researcher.

Upon defining the date the researcher used Krueger's model to generate questions relative to the factors that impact the successful implementation of PBIS in the Mid West Area School District. The following questions were utilized by the researcher:

1. Tell me your name and how long you have been working with the PBIS framework?
2. What has your experience with PBIS been like?
3. Why did you choose to be part of the training process?
4. What was the training process like for you?
5. What has been particularly positive about the framework and its implementation?
6. What has been particularly frustrating about the framework and its implementation?
7. Is your life at school any different because of the implementation of PBIS? Is the life of the students any different because of the implementation of PBIS?

8. If you could give any advice to those implementing the process in the future, what would it be?

The questions were given to the focus group one week prior to the meeting.

Members of the focus group were told that they could bring notes or materials to the group meeting if it would be advantageous, but was not required. This information was communicated through the follow up letter confirming date, time, and place indicated by the following:

Dear *Name*,

I am currently working on my Doctorate of Education in Leadership, Learning, and Service at Cardinal Stritch University in Milwaukee, Wisconsin. I am currently an elementary administrator [REDACTED]. I chose to conduct research for my dissertation in a larger school district than my own.

My dissertation seeks to find factors that implement the successful implementation of Positive Behavior Intervention Supports in mid-sized Midwestern school districts. I would really like to know how people feel about the process and how we as administrators and leaders can help in the successful implementation of the framework.

Thank you for agreeing to be part of the focus group in this regard. I appreciate your time in helping to develop a protocol for implementation that meets the needs of all members of the school community.

Our focus group will take place at the following time:

<i>Date</i>	Date
<i>Place</i>	Your School Here
<i>Time</i>	Time
<i>Room</i>	TBD

Thank you again for your commitment to the process. I look forward to seeing you all on January 13<sup>th</sup>.

Sincerely,

Joe Sanfelippo  
Principal

The focus group began with the introduction of the researcher, introduction of the room (food, seating, tape recorder, location of bathrooms), the purpose of the group, and signing of the following confidentiality statement:

**Confidentiality Statement**

The aim of the focus group is to identify the factors that impact the successful implementation of Positive Behavior Intervention Supports in the school district. Your participation is voluntary. The information shared with the group today will not be individual specific within the context of the report. All information will be categorized by theme and individual names will not be used in any of the reporting.

I agree to the aforementioned confidentiality statement:

Name of Participant: \_\_\_\_\_

Signature of Participant: \_\_\_\_\_

An introductory script was read to the group to ensure everyone understood the procedure. The researcher utilized the following script:

Hello. My name is Joe Sanfelippo and I am doing a focus group on the implementation practices of elementary schools related to Positive Behavior Intervention Supports. The purpose of the focus group is to get feedback to help those schools and organizations in the future implementation of PBIS. Before we start I would like to go over a few ground rules. Your role in this analysis is very important. We want to hear from everyone in the room and their ideas when it comes to the implementation of PBIS in your school. Please allow everyone to speak and finish a thought before beginning one of your own. Before we begin would you please sign the confidentiality and permission form circulating around the group. This will ensure that all of the information is used only for our dissertation work and specific names of staff members will not be shared with anyone outside this room. The confidentiality form will serve as your raffle ticket. At the end of all of our focus groups I will be drawing a name from the pile to receive an Apple Ipod Nano as an appreciation for your time. Your confidentiality form will also make you eligible for the \$15 gift card when we have completed our session. I can't thank you enough for your participation as we try to improve the process by which we implement systems in schools.

Member checking was used by researcher to help improve the reliability and validity, of the study. Within the interview process, the researcher often asked clarifying questions to ensure the response was heard in the correct manner. Transcripts of the interviews were distributed in the appropriate staff lounges of each building. Team representatives from each group read through the transcripts and provided feedback as necessary. Narrative accuracy checks were used throughout the interviews.

## **Role of the Researcher**

### **Qualifications**

The role of the researcher was an independent body collecting data. The researcher was not employed by the school district. The researcher was a school administrator of five years, and has obtained a Bachelor of Science in Elementary Education, Master of Science in Educational Psychology, Masters of Science in Educational Leadership, and was enrolled in a doctoral program. The researcher's education in Educational Psychology provided ample training in group and individual counseling and the techniques employed in those areas are similar to those involved in facilitating surveys and focus groups.

### **Biases**

The researcher's bias comes from the social position held in the school district. Being a former administrator in the district, the researcher was collegial with the administrators in both schools. In addition to this, the researcher was the former supervisor of the counseling program in the district. Both teams in the study have counselors on the PBIS team and those counselors are the team coaches. Another bias is that the researcher was a building administrator in a school that is in the first year of PBIS implementation. These biases are addressed through the development of a valid and reliable questioning route. The transcription of the data was done by an external researcher. Adhering to the protocol and rigorous data analysis with triangulation, member checking, peer review, and use of an expert panel were implemented to reduce the risk of bias in the research.

### **Responsibilities**

The responsibility of the researcher was to collect the data pieces in the timeline allowed by both IRB and the school district. Testing windows was 30 days for each of the measures. Upon completion of those timelines, the researcher gathered and analyzed all data.

### **Summary/Coherency of Design**

Using the survey to identify bringing in an accurate reflection of the staff population in regards the perceptions of the PBIS implementation process obtains a perspective of all members of the school organization. The representative groups were used to identify needs of organizations to strategically compose teams for the best chance at implementation.

### **Validity/Trustworthiness**

The design was valid because a mixed methods approach was used to both identify a representative group of staff members as well as qualitative questioning route that accurately identified the needs of schools when implementing the PBIS framework. The quantitative phase used a survey which was developed by the researcher and piloted to determine the reliability of the measure. The Chronbach Alpha of the pilot group survey was .94 and the n was 40. The Chronbach Alpha of the two samples was .96. The qualitative phase used interviews which were most recommended for this study by members of the state wide PBIS team, the literature review and the MWASD. Validity and reliability measures were conducted in both the survey and focus group interviews and in the mixed methods methodology.



**Triangulation**

The purpose of triangulation in mixed methodology is to increase the credibility and validity of results. According to Cohen and Manion, triangulation is an “attempt to map out, or explain more fully, the richness and complexity of human behavior by studying it from more than one standpoint” (p. 254). By incorporating implementation fidelity checking, survey data, focus group data, and administrative interview data the research achieves that mark. Both schools met the desired 80% score on the SET and therefore the level of implementation was not a factor in the research. The survey data was able to identify the overall buy in to the framework and how the group as a whole felt about the implementation process. The focus group gave a different perspective in finding the connection and disconnection between trained and untrained. This allowed the researcher to reference the whole group feeling as well as a group that was trained and one that was not trained. Finally, the interview with the administrator in the building afforded the researcher the opportunity to address specific themes associated with the whole group and focus group responses.

The quantitative data were compared and correlated with the literature reviews, focus groups, and interviews with experts in the field on a state and national level. The qualitative data were descriptive and audited internally and externally with the help of the aforementioned experts in the field.

**Limitations**

The limitations of the study were with the sample size. There are over 10,000 schools (Sugai, 2002) nationwide involved in the PBIS framework. The sample only included two schools and that limits the study. Also, steps have been taken to reduce bias

in the study, but bias will still remain because of the researcher's familiarity with personnel at the sites.

Finally, participation was also a limitation to the study. When engaging in the school survey, only those willing to fill out the measure are counted in the school's outlook of the framework. There may have been many staff members who do not take part in the survey.

#### **Forecast Chapter Four**

The next chapter addresses the findings of the research. Through the mixed methodology approach, the quantitative and qualitative measures will be described in detail. The data were coded and themes presented through narrative descriptions of the participants views. By bringing the appropriate participants to the focus groups the researcher will reveal an accurate assessment of the implementation process of PBIS in two elementary schools in the MWASD.

## **CHAPTER FOUR: Research Results**

### **Presentation and Summary of Data**

#### **Quantitative Findings Related to Research Question**

##### **Descriptive Statistics of Survey Sample**

The survey sample included two schools in the MWASD. Sixty-Eight surveys were distributed, and 68 were returned. The combined staff population in the two schools was 83. Staff at School 1 consisted of 45 total memberships and staff at School 2 consisted of 38 total memberships. There was an 86% rate of participation for the survey when combining both schools. The survey asked participants to identify themselves as teachers, support staff members, administrators, and student service. Teachers included general education, or classroom individuals, specialists in the areas of Art Education, Media Specialists, Music Education, or Physical Education. Administrators included principals in each school. Support staff included Custodians, General Education Assistants, and Cooks. Student Services included School Counselors, School Psychologists, and School Speech and Language Specialists.

Participants were asked to identify their tenure at each building. The mean tenure for the 2 buildings was 10.42 years. The mean tenure at School 1 was 9.27 and was distributed as indicated in Table 7:

Table 7

*School 1 Tenure by Role*

<b>School 1 Tenure by Role</b>		
<b>School</b>	<b>Role</b>	<b>Tenure in years</b>
School 1	Teacher	10.46
School 1	Support Staff	8.13
School 1	Student Services	6.50
School 1	Administration	16.00
School 1	Mean Tenure	10.42

The mean tenure at School 2 was 11.56 and was distributed as indicated in Table 8:

Table 8

*School 2 Tenure by Role*

<b>School 2 Tenure by Role</b>		
<b>School</b>	<b>Role</b>	<b>Tenure in years</b>
School 2	Teacher	10.94
School 2	Support Staff	0.00
School 2	Student Services	7.00
School 2	Administration	15.00
School 2	Mean Tenure	11.56

Survey participants were also asked to identify if they were on the PBIS team at the school. Twenty total participants were members of the PBIS team. Nine participants at School 1 and 11 at School 2 were members of the PBIS Team. These totals are indicated in Table 9:

Table 9

*PBIS Team Membership by Role*

<b>PBIS Team Membership by Role</b>		
<i>School</i>	<i>Role</i>	<i>PBIS Team membership</i>
School 1	Teacher	5
School 1	Support Staff	2
School 1	Student Services	1
School 1	Administration	1
<b>Total Participation</b>		<b>9</b>
School 2	Teacher	7
School 2	Support Staff	0
School 2	Student Services	3
School 2	Administration	1
<b>Total Participation</b>		<b>11</b>

Forty-eight individuals were not on the PBIS Team. That number consisted of 28 at School 1 and 20 at School 2. These totals are indicated in Table 10:

Table 10

*PBIS Team Non Membership by Role*

<b>PBIS Team Non Membership by Role</b>		
<i>School</i>	<i>Role</i>	<i>PBIS Team Non</i>
School 1	Teacher	21
School 1	Support Staff	6
School 1	Student Services	1
School 1	Administration	0
<b>Total Participation</b>		<b>28</b>
School 2	Teacher	19
School 2	Support Staff	0
School 2	Student Services	1
School 2	Administration	0
<b>Total Participation</b>		<b>20</b>

**Summary of Descriptive Statistics.**

The descriptive data revealed that the tenure of staff had little to no impact on the implementation of PBIS in these two institutions. Teachers at School 1 had been

employed at the school for 10.46 years. Teachers at School 2 had been employed at the school for 10.96 years. The .5 average additional year at School 2 was not significant. Support staff were only surveyed at School 1 because the members of the Support Staff at School 2 did not take part in the meeting that was scheduled on the day of the survey distribution. Three members of the Student Services team took the survey at School 1, while one Student Services team member took the survey at School 2. The average tenure of the three Student Service team members at School 1 was 6.5 years and the one member of the Student Services team at School 2 had been at the school for 7 years. Finally, each administrator at the schools completed the survey. The administrator at School 1 had been with the school for 16 years, while the administrator at School 2 had been in the building for 15 years.

The two sites were similar in tenure in each particular building yielding the conclusion that length of time spent in a building did not impact the implementation of the PBIS framework. Staff tenure in the areas of Teacher, Administrator, and Student Service staff were all within 1 year of membership at the school. School 1 and School 2 did, however, show a significant difference in population of students. School 1 educates 79 more students than School 2. They have more staff and larger class sizes. They were also outgrowing their building and have taught classes in hallways, cafeterias, and small rooms. However, the population at School 2 is much more diverse in terms of need. Low income families at School 1 encompass 21% of the population, while School 2 has 32% in this area.

Table 11 indicates the demographic and descriptive items of significant difference in School 1 and School 2.

Table 11

*Differences in Demographic and Descriptive Data*

School 1	School 2
<ul style="list-style-type: none"> <li>□ 460 Students</li> <li>□ 45 Staff Members</li> <li>□ Student Demographics <ul style="list-style-type: none"> <li>■ Caucasian-91.0%</li> <li>■ Asian-5.5%</li> <li>■ Black-1.1%</li> <li>■ Hispanic-2.2%</li> <li>■ Native American-0.4%</li> </ul> </li> <li>□ F/R Lunch is 21.0%</li> <li>□ 89% Regular Ed Population</li> <li>□ 11% SPED Population</li> </ul>	<ul style="list-style-type: none"> <li>□ 381 Students</li> <li>□ 38 Staff Members</li> <li>□ Student Demographics <ul style="list-style-type: none"> <li>■ Caucasian-88.5%</li> <li>■ Asian-5.5%</li> <li>■ Black-2.6%</li> <li>■ Hispanic-2.9%</li> <li>■ Native American-0.5%</li> </ul> </li> <li>□ F/R Lunch is 32.5%</li> <li>□ 68% Regular Ed Population</li> <li>□ 32% SPED Population</li> </ul>

The largest discrepancy with the two schools comes in the area of Special Education Services. The Special Education population at School 1 is 11.0% while the Special Education Population at School 2 is 33%. The significance of this data lies with the services which can be provided to the individual students. Those students who have been placed in Special Education programs would be considered Tier III students, and may have an impact on the perception of how PBIS is implemented.

**Findings Between School 1 and School 2 Perceptions**

The overall findings between School 1 and School 2 Perceptions included means and standard deviations of the populations. Each question was answered on a 4-point Likert scale. The options for survey participants were Strongly Agree, Agree, Disagree, and Strongly Disagree. Numerically, Strongly Agree was converted to a numerical value of 4, Agree was converted to a numerical value of 3, Disagree was converted to a numerical value of 2, and Strongly Disagree was converted to a numerical value of 1.

The mean represented the average score and the standard deviation represented the average distance from the mean. Standard deviation represents a measure of how well the mean represented the data. A larger standard deviation meant that the data points were farther from the mean while a smaller standard deviation indicated that the data points were closer to the mean (Field, 2005). The smaller standard deviation suggested less variability within the data. Table 12 describes the mean scores for all data in the survey. For items related to all participants, the item with the highest mean score was “The PBIS framework is effective at promoting positive behaviors of students” ( $M=3.37$ ), whereas the item with the lowest mean score was “The PBIS framework is effective at increasing instructional time” ( $M=3.00$ ). The total mean score for all responses was 3.24.



Table 12

*All Mean Scores from School 1 and School 2*

All Mean Scores from School 1 and School 2	All Scores	School 1 All	School 1 Trained	School 1 Untrained	School 2 All	School 2 Trained	School 2 Untrained	All Trained	All Untrained
PBIS has made a positive impact on school culture.	3.35	3.43	3.89	3.29	3.24	3.70	3.00	3.79	3.17
I know and understand the PBIS framework.	3.24	3.27	3.78	3.11	3.20	3.70	2.95	3.74	3.04
Staff members are supportive of PBIS at our school.	3.23	3.37	3.56	3.25	3.10	3.18	3.06	3.35	3.17
The PBIS team communicates effectively with other staff members.	3.29	3.43	3.89	3.21	3.19	3.18	3.20	3.50	3.21
The PBIS framework is effective at promoting positive behaviors of students.	3.37	3.40	3.67	3.39	3.25	3.45	3.12	3.55	3.29
The PBIS framework is effective at maintaining a safe school environment.	3.35	3.37	3.67	3.32	3.28	3.64	3.06	3.65	3.22
The PBIS framework is effective at increasing instructional time.	3.00	3.25	3.22	3.20	2.73	3.30	2.38	3.26	2.88
I am provided with training and ongoing support to ensure my understanding and	3.19	3.37	3.89	3.14	3.03	3.50	2.80	3.68	3.00
The PBIS framework is delivered with consistency.	3.02	3.20	3.44	3.07	2.81	2.90	2.76	3.16	2.96
Staff are in agreement regarding expected student behaviors.	3.28	3.33	3.67	3.29	3.16	3.36	3.05	3.50	3.19
The PBIS program helps staff to be objective in their measurement of student behavior.	3.28	3.43	3.67	3.29	3.17	3.27	3.11	3.45	3.21
Overall Mean Scores	3.35	3.35	3.67	3.23	3.17	3.27	3.11	3.51	3.12

**Comparison of School 1 perception overall.**

School 1 had a participation rate in the survey at a level that would be considered representative of the school population. Administration, teachers, support staff, and student services were all represented. The distribution of surveys collected from the PBIS, or trained teams, and non PBIS, or untrained teams were representative of the school staff population as all full time staff members took the survey. School 1 survey results indicated a positive perception of the PBIS framework implementation overall.

Table 13 displays all scores from School 1. For items related to all participants in School

1, the items with the highest mean score were “The PBIS framework is effective at promoting positive behaviors of students”, “The PBIS Team communicates effectively with other staff members”, and “PBIS has made a positive impact on school culture” (M=3.43), whereas the item with the lowest mean score was “The PBIS framework is delivered with consistency” (M=3.20). The total mean score for all responses was 3.35.

Table 13

*School 1 All Scores and Standard Deviations from School 1*

<b>All Scores School 1</b>	<b><i>School 1 All</i></b>	<b><i>Standard Deviation</i></b>	<b><i>School 1 Trained</i></b>	<b><i>Standard Deviation</i></b>	<b><i>School 1 Untrained</i></b>	<b><i>Standard Deviation</i></b>
PBIS has made a positive impact on school culture.	3.43	0.50	3.89	0.33	3.29	0.46
I know and understand the PBIS framework.	3.27	0.57	3.78	0.44	3.11	0.50
Staff members are supportive of PBIS at our school.	3.37	0.55	3.56	0.53	3.25	0.52
The PBIS team communicates effectively with other staff members.	3.43	0.50	3.89	0.33	3.21	0.50
The PBIS framework is effective at promoting positive behaviors of students.	3.40	0.49	3.67	0.50	3.39	0.50
The PBIS framework is effective at maintaining a safe school environment.	3.37	0.55	3.67	0.50	3.32	0.55
The PBIS framework is effective at increasing instructional time.	3.25	0.57	3.22	0.44	3.20	0.58
I am provided with training and ongoing support to ensure my understanding and compliance with PBIS.	3.37	0.48	3.89	0.33	3.14	0.52
The PBIS framework is delivered with consistency.	3.20	0.60	3.44	0.73	3.07	0.60
Staff are in agreement regarding expected student behaviors.	3.33	0.70	3.67	0.50	3.29	0.71
The PBIS program helps staff to be objective in their measurement of student behavior.	3.43	0.50	3.67	0.50	3.29	0.46
<b>Overall Mean Scores</b>	<b>3.35</b>		<b>3.67</b>		<b>3.23</b>	

**Comparison of Schools 1 perception by training.**

Training did play a role in perception of the PBIS implementation process at School 1. The mean score for members of the school who went through the PBIS

training was 3.67, whereas the mean score for the members of the school who did not go through the PBIS training was 3.23. A t-test was conducted to identify if there were any significant differences in the responses between trained and untrained members of School 1. Items with a t-test where the p value was  $<.05$  were considered statistically significant. The items that yielded a statistical difference included “PBIS has made a positive impact on school culture,” “I know and understand the PBIS framework,” “The PBIS team communicates effectively with other staff members,” “I am provided with training and ongoing support to ensure my understanding and compliance with PBIS,” and “The PBIS program helps staff to be objective in their measurement of student behavior.” All items had a  $p=0.00$ . The survey item with the most consistency between trained and untrained teams was “The PBIS framework is effective at increasing instructional time” with a  $p=.91$ .

### **Comparison of School 2 perception overall.**

School 2 did not have a Support Staff component and therefore did not represent one facet of the school. To address this deficiency, Support Staff data from school 1 were not used when comparing the two institutions. Table 14 displays the scores from School 2. For items related to all participants at School 2, the item with the highest mean score was “The PBIS framework is effective at maintaining a safe school environment.” ( $M=3.28$ ), whereas the item with the lowest mean score was “The PBIS framework is effective at increasing instructional time” ( $M=2.73$ ). The total mean score for all responses was 3.11.

Table 14

*School 2 All Scores and Standard Deviations from School 2*

All Scores School 2	School 2 All	Standard Deviation	School 2 Trained	Standard Deviation	School 2 Untrained	Standard Deviation
The PBIS framework is effective at maintaining a safe school environment.	3.28	0.45	3.64	0.5	3.06	0.24
The PBIS framework is effective at promoting positive behaviors of students.	3.25	0.43	3.45	0.52	3.12	0.33
PBIS has made a positive impact on school culture.	3.24	0.5	3.7	0.48	3	0.32
I know and understand the PBIS framework.	3.2	0.54	3.7	0.48	2.95	0.39
The PBIS team communicates effectively with other staff members.	3.19	0.4	3.18	0.4	3.2	0.41
The PBIS program helps staff to be objective in their measurement of student behavior.	3.17	0.37	3.27	0.47	3.11	0.32
Staff are in agreement regarding expected student behaviors.	3.16	0.63	3.36	0.5	3.05	0.69
Staff members are supportive of PBIS at our school.	3.1	0.3	3.18	0.4	3.06	0.24
I am provided with training and ongoing support to ensure my understanding and compliance with PBIS.	3.03	0.55	3.5	0.53	2.8	0.41
The PBIS framework is delivered with consistency.	2.81	0.47	2.9	0.57	2.76	0.44
The PBIS framework is effective at increasing instructional time.	2.73	0.71	3.3	0.48	2.38	0.62
Overall Mean Scores	3.11		3.38		2.95	

**Comparison of School 2 perception by training.**

Training did play a role in perception of the PBIS implementation process at School 2. The mean score for members of the school who went through the PBIS training was 3.38, whereas the mean score for the members of the school who did not go through the PBIS training was 2.95. A t-test was conducted to identify if there were any significant differences in the responses between trained and untrained members of School 2. Items with a t-test where the P value was  $<.05$  were considered significant. The items with statistically significant differences in the means for the trained vs. untrained groups

were as follows: “PBIS has made a positive impact on school culture,” “I know and understand the PBIS framework,” “The PBIS framework is effective at promoting positive behaviors of students,” “The PBIS framework is effective at maintaining a safe school environment,” “The PBIS framework is effective at increasing instructional time,” and “I am provided with training and ongoing support to ensure my understanding and compliance with PBIS.” All items had a  $P=0.00$ . The survey item with the most consistency between trained and untrained teams was “The PBIS team communicates effectively with other staff members” with a  $P=.91$ .

### **Comparison of School 1 and School 2 by all participants.**

A t-test was used to determine significance among the groups. The mean score on the survey from School 1 was 3.24. The mean score from School 2 was 3.11. The  $p$  is smaller than .05 at a value of 0.00. A t-test was conducted to determine what questions were significantly different. Specifically, four of the survey questions yielded a statistically significant difference in the surveys completed by all members of both schools. The items with statistically significant differences in the means for the two school groups were as follows: “Staff members are supportive of PBIS at our school” (Sig. 0.05), “PBIS framework is effective at increasing instructional time” (Sig. 0.01), “I am provided with ongoing support to ensure my understanding and compliance with PBIS” (Sig. 0.04), and “The PBIS framework is delivered with consistency” (Sig. 0.02). The item with the least significant difference was “I know and understand the PBIS Framework” with a Significance value of .61. Table 15 indicates the mean scores from each school and the results from the t-test.

Table 15

*p value results from School 1 and School 2 All Scores*

School Means and p value for Significant Difference	School 1 Means	School 2 Means	P value
The PBIS framework is effective at increasing instructional time.	3.25	2.73	0.01
The PBIS framework is delivered with consistency.	3.20	2.81	0.02
I am provided with training and ongoing support to ensure my understanding and compliance with PBIS.	3.37	3.03	0.04
Staff members are supportive of PBIS at our school.	3.37	3.10	0.05
The PBIS program helps staff to be objective in their measurement of student behavior.	3.43	3.17	0.06
The PBIS framework is effective at promoting positive behaviors of students.	3.4	3.25	0.09
The PBIS team communicates effectively with other staff members.	3.43	3.19	0.12
PBIS has made a positive impact on school culture.	3.43	3.24	0.13
Staff are in agreement regarding expected student behaviors.	3.33	3.16	0.18
The PBIS framework is effective at maintaining a safe school environment.	3.37	3.28	0.31
I know and understand the PBIS framework.	3.27	3.20	0.61
Overall Mean Scores	3.34	3.09	0.15

### Comparison of School 1 and 2 by trained team.

The trained teams at each school went through the same process in terms of the information gathering. Each team took part in a district directed training delivered by the same individuals. The training consisted of the same materials and both groups attended a national conference to prepare to roll out to their buildings. The data indicated that there was no significant difference in response to 10 of the 11 questions on the survey. A t-test was used to determine significance among the groups. We can then conclude that the average of the dependent variable is not the same for all groups. If the null

hypothesis is rejected, then all we know is that the two groups are different from each other. The mean score on the survey from School 1 was 3.67. The mean score from School 2 was 3.38.

The only question that yielded a significant difference was “The PBIS Team communicates effectively with other staff members.” The total mean score of the survey was 3.51. The highest mean score from both groups was “PBIS has had a positive impact on school culture” (M=3.79) followed closely by “I know and understand the PBIS framework” (M=3.74).

Table 16 the mean scores from each untrained group and the coinciding t-test results.

Table 16

*T-test results for Trained Teams*

School Trained Team Means and T-Tests for Significant Difference	School 1 Trained	School 2 Trained	P-Value
<b>The PBIS team communicates effectively with other staff members.</b>	<b>3.43</b>	<b>3.19</b>	<b>0.00</b>
I am provided with training and ongoing support to ensure my understanding and compliance with PBIS.	3.37	3.03	0.08
The PBIS framework is delivered with consistency.	3.20	2.81	0.08
Staff members are supportive of PBIS at our school.	3.37	3.10	0.09
The PBIS program helps staff to be objective in their measurement of student behavior.	3.43	3.17	0.09
Staff are in agreement regarding expected student behaviors.	3.33	3.16	0.20
Overall Mean Scores	3.35	3.11	0.33
PBIS has made a positive impact on school culture.	3.43	3.24	0.34
The PBIS framework is effective at promoting positive behaviors of students.	3.40	3.25	0.37
I know and understand the PBIS framework.	3.27	3.20	0.72
The PBIS framework is effective at increasing instructional time.	3.25	2.73	0.72
The PBIS framework is effective at maintaining a safe school environment.	3.37	3.28	0.89

**Comparison of School 1 and 2 by untrained team.**

The untrained, or non-PBIS Team, membership groups had different experiences in regard to the roll out of PBIS in their building. Though the Trained Teams had the opportunity to receive the same training in how to disseminate the information to their constituents, it was incumbent upon those groups to develop a plan that would meet the needs of their particular buildings. In doing this, they determined where their buildings were at with the knowledge gained regarding PBIS and in knowing how much background each group needed to be successful with the implementation.



A t-test was used to determine significance among the groups. The mean score on the survey from School 1 was 3.25. The mean score from School 2 was 2.95.

The survey data indicated that there was a significant difference in four questions. All questions yielded a significance level of  $<.05$ . Table 17 illustrates the significant difference between School 1 and School 2 Untrained Teams. There was a significant difference in “PBIS has made a positive impact on school culture” ( $P=.02$ ), “The PBIS framework is effective at promoting positive behaviors of students” ( $P=.05$ ), “The PBIS framework is effective at increasing instructional time” ( $P=0.00$ ), and “I am provided with training and ongoing support to ensure my understanding and compliance with PBIS” ( $P=0.02$ ). There were no significant differences in the other seven questions. The highest correlation between the two untrained teams was “The PBIS team communicates effectively with other staff members” ( $P=.92$ ).

Table 17

*School Untrained Teams Means and T-Tests for Significant Difference*

	School 1 Untrained	School 2 Untrained	P Value
<b>School Untrained Team Means and T-Tests for Significant Difference</b>			
PBIS has made a positive impact on school culture.	3.43	3.24	0.02
The PBIS framework is effective at increasing instructional time.	3.25	2.73	0.00
I am provided with training and ongoing support to ensure my understanding and compliance with PBIS.	3.37	3.03	0.02
The PBIS framework is effective at promoting positive behaviors of students.	3.40	3.25	0.05
The PBIS framework is effective at maintaining a safe school environment.	3.37	3.28	0.06
The PBIS framework is delivered with consistency.	3.20	2.81	0.08
Staff members are supportive of PBIS at our school.	3.37	3.10	0.14
The PBIS program helps staff to be objective in their measurement of student behavior.	3.43	3.17	0.14
I know and understand the PBIS framework.	3.27	3.20	0.25
Staff are in agreement regarding expected student behaviors.	3.33	3.16	0.26
The PBIS team communicates effectively with other staff members.	3.43	3.19	0.92

The overall findings of the quantitative data revealed that a PBIS had an impact on the schools surveyed. In researching the means of both schools, the highest scores for each school came in the following survey question PBIS has made a positive impact on school culture. The highest mean scores for School 1 for the following questions were:

1. PBIS has made a positive impact on school culture (3.43)
2. The PBIS team communicates effectively with other staff members (3.43)
3. The PBIS program helps staff to be objective in their measurement of student behavior (3.43)

The highest mean scores for School 2 for the following questions were:

1. PBIS has made a positive impact on school culture (3.24)
2. The PBIS framework is effective at promoting positive student behaviors (3.25)
3. The PBIS framework is effective at maintaining a safe school environment (3.28)

In addressing the overall data, mean scores at School 1 were higher than those at School 2. Though “PBIS has made a positive impact on school culture” was the highest scoring mean for both schools, there was a significant difference between the two scores with the School 1 mean of 3.43 and the School 2 mean of 3.24. The p value of these two scores was significant at .02.

The factor that impacts the positive implementation in schools when comparing the data between schools was training. There was a statistically significant difference in the mean scores from School 1 to School 2 with a p value of .02. With the overall mean score higher at School 1, the research indicates that the higher mean may have been impacted by the training or lack of training provided by the district or the Trained Team at the school.

### **Qualitative Findings Related to Research Question**

In a mixed methods design, the research analyzed focus group data independently to answer the following research question: What factors impact the positive implementation of Positive Behavior Intervention Supports at two Midwestern suburban elementary schools?

The purpose of the focus groups was to gather in depth qualitative data to provide a greater understanding of what two staff groups did to positively impact the implementation of PBIS in their schools. In this analysis, open ended questions were used and the results from all data sources were used to identify themes.

The discussions identified a number of different factors that impacted the positive implementation of PBIS in the schools. Those findings that produced a significant impact on the implementation process were Knowledge, the importance of a Connector, School Environment, and Communication.

### **Description of Site and Sample of Focus Groups**

Four focus group interviews and two individual interviews were conducted in the MWASD. Two of the focus group interviews and one individual interview were held at each of the two sites. School 1 focus groups and interview were held in three different rooms on three different dates. In each room the researcher set up two recording devices and a video camera. Prior to the interviews beginning, the researcher did a sound check from different portions of the table where everyone would sit to ensure that the voices could be heard. The researcher also set up the video camera in a place where audio and video of the interviews could be captured. The focus groups at School 1 consisted of a PBIS Trained team of five individuals and a Non Trained PBIS Team of six individuals. The PBIS Trained Team consisted of one male participant and four female participants. The school role, or employment position, make up of the group was two general education teachers, two support staff members, and one student services member. The Untrained PBIS team consisted of six individuals. All six were female, and the school role make up was four general education teachers and one support staff member.

School 2 focus groups and interview were held in one location on three different dates. Again, the researcher used two different recording devices and a video camera. The audio and camera were checked multiple times prior to each interview. The researcher set up the video camera in a place where audio and video could be captured.

The focus groups at School 1 consisted of a PBIS Trained team of six individuals and a Non Trained PBIS Team of seven individuals. The PBIS Trained team consisted of four female staff members and two male staff members. The school role of this team was four general education teachers, one student services member, and one support staff member. The Non PBIS Team was made up of seven individuals. All seven were female and the school roles were six general education teachers and one student services member.

In summary, 23 staff members from the total staff sample population (N=83), 28% of staff, and two of the administrators from the total administrator population (N=2), or 100% of administration, participated in the focus group or individual interviews. All of the focus group participants took the survey and volunteered their time to be part of the small group interviews.

### **Findings Related to Focus Group Discussions**

The focus group findings are a compellation of answers to open-ended questions asked to all participants in the four focus groups and two interviews. The key questions revolved around three themes. They were Experience, Advantages and Disadvantages, and Impact. To determine major themes and trends for the 23 focus group participants, the researcher coded the transcripts by noting consistent wording, identified statements that related to the three major themes, grouped the statements into sub themes, identified like responses, and addressed common threads to describe the experience of the participants. The key concepts were statements that the majority, or over 50% of the group participants, agreed upon during the course of the focus group sessions. An example of this would be the idea of communication throughout the implementation process of PBIS. All members of all focus groups felt that communication was a key

component to their success. The most successful groups communicated the best according to all four focus group teams and both interviews with Administrators. The themes and sub themes formulated the findings. Figure 7 describes the findings and four themes related to knowledge, importance of connector, school environment, and communication.

**Figure 7: Focus Group Model of Impacting Success Factors**



Figure 7. The Impacting Success Factors within the focus group data. Knowledge, School Environment, Communication, and the importance of a connector were factors that impacted the success of the implementation of PBIS according to the focus group participants.

1. Knowledge. Knowledge incorporated a number of different aspects from how the program was running to how they could increase their “tool box” of positive happenings in the school. The sub themes for Knowledge were:
  - a. Trained vs. Untrained Perspective
  - b. Quality of the Training
  - c. Materials

- d. Tools for Advancement
  - e. Consistency of Delivery
- 2. The importance of a Connector. This turned out to be the number one factor in the positive implementation process. A go to person who was able to communicate and be knowledgeable about the process, where it had been, and where it was going. The sub themes for The importance of the Connector were:
  - a. Administration connection
  - b. Meeting effectiveness
- 3. School Environment. Survey data indicated that though there were not a great deal of differences in the two schools when it came to the trained teams, both groups viewed themselves quite differently in their role throughout the school. The sub themes for School environment were:
  - a. Willingness to accept change
  - b. Connection to previous programming
  - c. Trust of decision making team
- 4. Communication. The groups felt that an open and honest level of communication between everyone involved was absolutely essential for the positive implementation of any program, including PBIS.
  - a. Overall perspective of communication structure
  - b. Communication Tools
  - c. Consistency in Communication

## **Findings about Knowledge**

In the absence of knowledge, people tend to make up their own information. The knowledge piece of the implementation process was essential to the success of each group. Both the trained and untrained teams felt the knowledge and the way it was presented was a key component to their success. One instructor from a Trained Team indicated the importance of distributing that knowledge when he said, “We’re really closing the gap as far as the support and knowledge, the transfer of knowledge from the people who were originally trained. Everyone has been really supportive. They won’t just tell you what to do they will explain it and make sure you know why you’re doing it.” The knowledge stemmed from the information disseminated from the district level, which was clearly defined by the district coordinator. One member of a Trained Team indicated that the knowledge base of the district trained teams was outstanding in saying, “Their knowledge is amazing. If they don’t know the answer, they know where to get it, and get it quick.” This was echoed by a member of an untrained team at a different site, “I can’t believe how much they know. I often wonder where they keep all of those statistics. SWIS, ODRs, Check in Check out, it all runs together for me. I am glad we have people who want to take the time to get to know the program. It takes a lot of pressure off of us.” The use of multiple sources of media has helped the dissemination of knowledge as well. As a member of an untrained team said, “We are always getting stuff from the district. Some of it is good, some of it is boring, but at least they are making an effort to get the word out to people. It seems like knowing more about PBIS is a priority in our district.”



### **Trained vs. untrained perspective.**

The trained group felt better about their knowledge than the untrained group, but the untrained group felt supported in the process. Members of the trained group felt like they were being trained all the time through constant emails and interschool mail. Notices of what was going in the district were always shared through a number of different sources. Many of the trained members referred to the “Curse of Knowledge” where individuals have the knowledge, but lack the presentation when it comes to dispersing said knowledge. “Presentation is key, no one cares what you know if you don’t say it in a way that makes them feel valued.”

Members of the untrained group felt that the role of knowledge came from the connector. If there was a quality connector in the building they knew they would get the knowledge that they needed at the time they needed it. The groups referred to the trust component between the trained and untrained teams. If there was trust built up prior to the training it was much easier to accept the change that was happening in the school. The untrained groups both felt like they were able to ask questions to anyone in the trained groups, though each had a person that they would rather go to in a time of need.

### **Quality of the Training**

Members of both trained and untrained groups tended to feel that the training they received was much better than what they have heard from other districts. “We are so lucky to have the people we have downtown training us. They are used statewide and it is a luxury to have them working with us.” The groups felt that the amount of training was in line with where they wanted to be as a group, but felt like the ongoing training lacked for the untrained groups. They then tried to find ways to support each other

through the process. Support can come in many forms for both groups. The ongoing support was addressed through grade level, primary (Kindergarten-Second Grade) units, colleagues, and administrators. The first step of that ongoing support was a commitment from the group to move forward with the framework. A member of School 1 said, “That’s the thing, you want that longevity, okay we’re in this, you all have to buy into it or it’s going to fade out, it will be one of those things that we’re going to start and then won’t be here in a couple of years.” Another staff member reiterated this idea in saying, “the consistency can be there because you get to start with your own beliefs.” Both of the trained groups felt like the training was a little overwhelming at first. They said that when they got into the building level initiatives they were able to take more control of what was going on. Some just wanted the trainers to tell them what to do as opposed to letting them go through the process, but they all ended that conversation with the idea that they were happy they went through the planning process and got the knowledge base to help everyone at their school.

### **Materials**

“Figuring out all the steps and forms can be frustrating if they are not user friendly. At the beginning it was so overwhelming.” The tools for advancement need to be user friendly and consistent. If they constantly change then everyone is trying to learn something new all of the time and we never move forward. The tools tend to be the first thing groups change because it is so easy for a small group to come up with something they feel may be better. If that change is not communicated to advance the group then everyone tends to lose confidence in the process. Materials were important to the student success as well. Having a consistent set of rules and having those rules placed in areas

where kids knew to go was apparent in both schools. The arrival and dismissal rules were posted by the doors, the playground rules were posted by the doors going out to the playground, the lunchroom rules were posted in the lunchroom. They were all placed at the same height in those areas so kids knew where to look when they needed some reinforcement. The supervisors in all areas knew where to get the materials and when to use them. This was an essential piece to the positive implementation of the process.

### **Tools for advancement.**

A common thread that came out during the knowledge discussion was what comes next and how do they get there. It seemed like everyone wanted to continue the process because they had seen so much success to a certain point. The most frustrating piece for all groups tended to be in the ongoing support. Due to the fact that the MWASD was a leader in the PBIS movement in the state there were not a lot of models to follow in the area. The proverbial “building the airplane as you fly” applied to the process they were using. This tended to be frustrating for the groups. One member of trained team said, “...just being told that the next piece is there and it’s really not. Like I don’t know if, I think we’re ready to move on, lie we feel pretty comfortable so we’re looking for that next nugget...it’s frustrating to see.” Both schools seemed to be reaching for the next step, even if they had not completed the one they were currently working with in the process. They felt that using the connector in this position was a solid option. Keeping the momentum moving was an element that needed to take place for advancement. The idea of momentum came up in three of the four focus groups. At times there was a lag in the consistency, so moving the group forward was seen as the job of the trained team. In doing that, they needed to address not only the logistical needs of

the group by reinforcing the matrix or the forms used for infractions of the rules, but also the emotional needs of the group that they worked with on a daily basis. One member of an untrained team said, “We’ll be really good for a little bit and then it kind of slacks off.” In these times the Trained Teams work to bring the staff together through an all staff activity at a meeting or outside of school to relax as a group.

### **Consistency of delivery.**

“A common language is essential. It helps the consistency and the students are hearing it from Kindergarten all the way to 5<sup>th</sup> grade. If I see someone in the hallway that’s not in my classroom I can say something to them in language they have heard and that they’ve experienced and right away they know what I am talking about and we can work through the issue.” The common language comes in the form of the behavior matrix. Each school has a matrix developed by the team and implemented by the entire staff. The matrix is taught to the individuals in the school in the same manner whether you are a Kindergarten student or a 5<sup>th</sup> grade student. This develops consistency as well as helps the teachers to learn the matrix so they can use it in all areas of the school. The matrix in both schools consists of common language in the hallways, on the playground, lunchroom, bathrooms, arrival and dismissal. The consistency this develops with all members of the school leads to successful conversations with everyone.

## **Findings about Connector**

### **Importance of communication**

A very organized leader helps. The leadership can be shared, but having a designated person to work with proved to be a key component. A staff member at School 2 referenced how important the connector was at their school. The individual will be

referred to as Suzy. “I don’t know where we would be without Suzy. I believe that anybody that’s going to implement PBIS in their school needs to have what I’m going to say is Suzy is an expert.” Another staff member indicated, “She’s very on top of things and they meet a lot. They work very hard, the PBIS groups that we have benefit the whole staff.” The importance comes in the connector having a vision of where the process has been and where it is going. The ability to step back in the middle of the storm and know that they have the knowledge base to get the groups through is comforting to everyone involved. If either team needed a consultant, they always knew who to go to for information. When there are a number of individuals with knowledge, yet no one is the “go to” person, the process tends to get slowed down or stopped. The connector can come in many forms. Knowledge is key component to the connector. They need to be in a leadership role, but they do not have to be the administrator. School 1 uses the administrator as the connector, while School 2 uses a different member of the faculty. The connector’s communication skills were the number two attribute to the successful implementation of programming. Members of the focus groups felt that knowledge was not enough when it came to delivering both data of the what was going on and the vision of where they were going.

#### **Administration connection.**

Horner and Sugai (2002) identify the Administrator as a key component to the success of the implementation process. All four groups felt that this was the case in the MWASD. One member of a trained team at School 1 said about her administrator, “I think we really have to give him credit because we hear different things from other buildings where just, you know from the outside perspective things just aren’t going well

because administrators really aren't on board or they don't know what is going on and we know he is our leader in this, the support has been there 100%". The administrative support has to go beyond attending the meetings. The administrators in both schools were active participants of the process. They were teachers of the process as opposed to individuals who sat passively by and waited for another initiative to enter the school. One was considered the connector in the building, while the other one found a connector that was respected by the staff and students to ensure that all members of the school bought into the process. The administrators were also advocates outside the building. When asked was the most important piece of the process for them one of the administrators said,

Make sure you believe in what you are going to implement. Don't just implement something because it worked at another school. I really think you need to look at your kids and your situation and make sure that you whole-heartedly believe in what you are doing. Don't be afraid in the planning stage to back up and say this is going too fast. So I would say you gotta believe in it. If you truly believe in it then when it's time to share with other people and implement they'll buy into it.

**Meeting effectiveness.**

Meetings always have a purpose with these two schools. They both use the mantra, "No Data, No Meeting." Each meeting is used to go over the data from a previous time period. If they are concentrating on playground rules then they have data to support the playground incidents. They both use a program called SWIS. It is a software program that documents behavior. SWIS allows the schools to see where the problem areas in the school are and helps to address a specific need as you plan for large

or small groups. SWIS data can be desegregated by student incidents, time of incident, number of incidents, type of incidents, motivation for incidents, and location of incidents. These data are shared at least twice a month with each school's PBIS team and monthly with all staff. The administrator at one of the schools sends out a weekly update on where the Office Discipline Referrals have happened in the school and what can be done to rectify the situation. The conversations at meetings take on the idea of change from a staff perspective. Consistent change happens when everyone meets together. The focus groups all pointed out that the meetings deal with how they can change as a staff instead of trying to change student behavior. Their goal was to set up the environment for student success. In having these conversations, it was very apparent that all four groups take great pride in the conversations that they have during their monthly meetings. One member of the focus group said that the consistency helps everyone realize the meaning of being a learning community because "you may have 25 kids on your roster, but you have 460 that you help supervise." A member of another focus group said, "Suzy put me in my place because I said something about my student and she said, 'Oh, No, that student is our student and I think PBIS helps bridge that gap....'" The conversations revolve around their students. Not the ones in their classes, but the ones in their entire school. That led to great buy in from both schools.

### **Findings about School Environment**

#### **Willingness to accept change.**

With an average tenure of 10.5 years in their respective schools, the participants in this study have seen a number of programs come and go. Many referred to Responsive Classroom and Restitution, two programs that were previously implemented in the

district to varying degrees of success. It was very easy for them to see this process as the latest in a long chain of new initiatives that enter schools. The acceptance to the change came from the leadership in the building. When the leaders in each building voiced their opinion on the process and how it would be helpful to adopt, the group tended to go in that direction. The commitment of the administration was also a key component to the process. The real win came in the form of student success. One staff member said,

A big part of that is making children take ownership of their own motivation to behave in a way that makes the other kids want to be around them. So we really believe that kids need to want it themselves and that external rewards aren't going to be long lasting motivators.

### **Connection to previous programming**

Individuals in both groups liked to see the connection to previous programming. The concept was not something so new, it just made sense. The idea of consistency for all students, and teaching everything was a wonderful theory that for years went unenforced because everyone wanted to do their own thing when it came to classroom behavior. PBIS is touted as a framework, or umbrella under which a number of different other programs can apply. A member of School 2 said,

Our building is well trained in Responsive Classroom and Restitution and this I feel dovetails very nicely because we've already taken the end of August through the beginning of September to model and practice for six weeks of school behaviors. The children are aware of their expectations of themselves and it makes it easier on us to transition them knowing they have been through a similar process in the past.



### **Trust of Decision Making Team**

The trust of the groups was also a key component in the success of both buildings. The trust of the administration that the PBIS process wasn't something that was going to be here for awhile and then gone was really important to staff members. The connection to a person from the decision making team was also a key component. The connector was seen as the lead decision maker in the process and if they had the trust of the group then it was easy for each member of the trained and untrained group to follow. The untrained groups mentioned the support for the team came in the form of the relationship they built with each other. One staff member at School 2 said, "They'll help explain why we're doing it this way and who else you might talk to to get additional information and so you feel like you've got a better base. IT's not here...you should do this and then walk away. They check back, how did it go? Do you need more? You know, just open communication has been huge I think for a lot of us." It seemed that the trust did not have to be with the entire team. As long as the staff member had someone to connect to through the process, they were able to feel successful in the implementation. The follow up conversations were a stressed when talking about how the decision making team advocates for the whole school.

### **Findings about Communication**

#### **Overall perspective of communication structure.**

The decision making team also encompasses the trust in the district wide team. One administrator said of the district coordinator, "It is a passion for him and he is connected to the whole thing directly, he spends a lot of time on it, and really, I've never seen anything like this structure before". The district has a structure that has been

modeled by many across the state. According to the Statewide coordinator, if you use the structure that the MWASD has put in place you are 80% more likely to implement the framework with fidelity. One member of an untrained team said, “I have been around a long time, and things seem to come and go a lot in education. The way our district has gotten into PBIS I have a feeling it will be around for awhile.” At this point, half the schools in the state of Wisconsin who try to implement PBIS fail to implement it with fidelity. All 12 elementary schools in the MWASD have implemented PBIS Tier 1 with fidelity. One member of a trained team said, “The effort that the district has put into training these people is unbelievable. Often we see people get trained and then we don’t hear from anyone for awhile. PBIS is different in that we are hearing things from other buildings and from the district a great deal.” The communication of how the framework fits the different buildings is a structure that the district wide coordinators take into account when bringing a school through the process. The thought that Schools 1 and 2 have in terms of support for each other comes from a district wide movement that is exceptionally communicated through multiple mediums and addressed on general and individual levels.

### **Communication tools**

One member of School 2 indicated, “There is consistency in the tools that we use. They explain the forms to us and review the flow chart so we know where everyone is from students to teachers. Hearing things time after time is really helpful when using the tools.” Those tools have been implemented district wide, but allow the individual buildings to have some autonomy when it comes to developing their own structure. The tools are available to all members of the district through a common website. The use of

that website is part of the training module and all members of the trained teams at each school were very impressed by the site and the fact that it is updated on a regular basis to help everyone succeed.

Communication tools also are in place so students and parents are aware of what is going on in the school. School 1 discussed the parent component in the trained focus group, the untrained focus group and the Administration interview. One member of School 1 said, “...we do share with the parents, the infractions, the consequences, the positives, the negatives, so they know exactly the same types of works that we are using with the kids and the expectations. So, I would say, share with the parents, believe in what you are doing and focus on the positive.”

#### **Consistency in communication.**

Consistency in the communication is addressed between Trained Teams, untrained team, administration, and district level coordinators in successful schools. The work MWASD has done to develop consistency in communication has led to a rate of implementation with fidelity that is unmatched across the state of Wisconsin. Every elementary school that has implemented the framework has done it with fidelity as measured by the Schoolwide Evaluation Tool. That speaks to the consistency in the expectation of what goes on at the all levels in the MWASD. Each School in this study took small steps to integrate a few pieces of communication and did them very well. They avoided the urge to implement everything available to them and picked a few things that they could do really well. It was when they mastered a few communication items that they were able to add as time went along.

One of the communication pieces that was used with both schools was The Big Five. This is a report that shows members of the school where certain infractions are happening throughout the school. The Big Five report shows infractions based on time, location, problem behavior, day and month. This information was given to the staff on a regular basis by the connector. The information was not only dispersed, but taught in how to interpret the data so when staff meetings occurred, everyone was speaking the same language.

### **Summary of Focus Group Themes**

To determine major themes and trends for the 23 focus group participants, the researcher coded the transcripts. The first component to the coding process was to transcribe the oral responses to the questions into written text. Secondly, based on the literature review and empirical studies surrounding the PBIS framework, a series of word searches in the text were performed. The researcher listened to all interviews 10 times. Within the context of the listening sessions, the researcher noted the common vocabulary that came through in the audio. The researcher then moved to the written text and searched out those words through the word find function in Microsoft Word. When certain words were prevalent, the researcher noted them into multiple categories or themes.

All members of all focus groups felt that communication was a key component to their success. The most successful groups communicated the best according to all four focus group teams and both interviews with Administrators. The themes and sub themes formulated the findings. The four major themes included:

1. Knowledge. Knowledge incorporated a number of different aspects from how the program was running to how they could increase their “tool box” of good things happening in the school
2. The importance of a Connector. This turned out to be the number one factor in the positive implementation process. A go to person who was able to communicate and be knowledgeable about the process, where it had been, and where it was going.
3. School Environment. Survey data indicated that though there were not a great deal of differences in the two schools when it came to the trained teams, both groups viewed themselves quite differently in their role throughout the school
4. Communication. The groups felt that an open and honest level of communication between everyone involved was absolutely essential for the positive implementation of any program, including PBIS.

### **Summary of Results**

The purpose of this study was to identify the factors that led to a successful implementation of PBIS in two suburban elementary schools. The mixed methods study was triangulated by employing the data collection methods of survey, focus group, and observation. Sixty-Eight staff members at the two schools, making up 85% of the staff took part in the survey. Twenty-three participants then took part in one of four focus groups, which were moderated by the researcher. This chapter summarized the survey results and interview themes that were connected to the purpose of the study.

**Forecast Chapter 5**

Chapter Five provides a discussion and interpretation of the survey and focus group findings. Implications for further research are also reported. These conclusions consist of the research findings and literature, and implications for leadership, learning, and service.

## **CHAPTER FIVE: DISCUSSION**

### **Overview**

The final chapter reviewed the content of the prior four chapters and discussed the finding, conclusions, and implications of the study as related to the research question.

### **Review of Study**

The purpose of this study was to identify what school building factors impact the successful Tier I implementation of PBIS at two elementary schools in Mid West, Wisconsin. The purpose of the research was to determine what factors impact the positive implementation of PBIS in two suburban elementary schools in order to evaluate the PBIS process and help schools address student behavior. Though the research is not generalizable, the intent is to give schools and school districts additional information as they move forward with any program implementation or change. Within that process of change, a number of things get lost. The results of the research can be used to proactively plan for the implementation of any framework as teams are created and trained for the improvement of schools and districts.

The research question is: what are the factors that impact the positive Tier I Implementation of Positive Behavior Intervention Supports in two Midwestern suburban elementary schools. The contention was that high achieving schools, conducting a systematic approach to PBIS, benefited both the staff implementation process and student achievement of their populations. The research attempted to identify the factors that led to the sustainability of Tier I implementation in two elementary schools.

The following factors were identified as key to the successful implementation by the research:

1. School Environment
2. Connector
3. Knowledge
4. Communication.

A review of the literature found the process of the dissemination systems in each played a role in the successful implementation of the framework. Rogers' Diffusion of Innovation was used as the framework to address the needs of how the information was moved from trained teams to untrained teams. The impact of opinion leaders, or connectors, had a clear and consistent affect on the knowledge and how it was communicated to the members of the organization.

Implications on those organizations moving forward, as well as leadership, learning and service were identified in the research. This chapter discusses the following areas impacted by the implementation and addresses how best to move forward as supported by the research in this study:

1. Implications for Elementary Schools
  - a. Implications for School Environment
  - b. Implications for School Readiness for change
  - c. Implications for Team Development
  - d. Implications for State Agencies
2. Implications for Leadership, Learning, and Service



- a. Implications for Leadership
- b. Implications for Learning
- c. Implications for Service

### **Conclusions Related to Research Purpose**

#### **Study Findings/Conclusions about Research Question**

*What factors positively impact the successful implementation of PBIS in two suburban elementary schools?*

The mixed methods research explored the factors that impacted the positive implementation of PBIS in two elementary schools. The schools were chosen due to their similarity in place of the implementation process and their distinct difference in student clientele and staff tenure. Surveys were distributed to the staff members at both schools to address the perception of the implementation process at their particular school. Before the administration of this research, the survey was piloted for reliability and validity. The internal reliability had a Chronbach alpha score of .96. The perception items were within a four point response scale corresponding with strongly agree (4), agree (3), disagree (2), strongly disagree (1).

The overall quantitative and qualitative results described both school as successful in the implementation. Survey results indicate the PBIS framework had a positive impact on their school culture (School 1 M=3.43, School 2 M=3.24). On the survey, between the two schools there was one significant difference. “Staff Members are supportive of PBIS at our school” yielded means of Agree (3) in both institutions. However, School 1 produced a M=3.37 as opposed to a M=3.10 in School 2. The p value for this item was

.005. The difference would suggest that the supportive staff would impact the overall timeline of the implementation process. The staff composition played a role in the consistency of delivery as well as the willingness to change. This was reinforced in the focus group data as the trained and untrained teams in School 1 were more connected in their responses. The focus group findings from School 2 indicated that, though the process has been effective and fully implemented, the road to get there was difficult in the area of staff commitment.

### **School Environment Comparisons**

The School Environment played a role in the implementation of PBIS. Identifying key members of the staff to be part of the trained teams, while not intentionally done, played a role in the successful implementation of PBIS. The members of the trained team at School 1 were veteran staff members who had established social roles in the organization far before the implementation process had begun. In doing this, the school had opinion leaders on the trained team that were trusted by those who did not attend the training. Therefore, the information shared with the untrained team was accepted due to the manner in which it was delivered. Recruiting respected members of the school on that team made it easier for the school to accept change. They were younger than those who were untrained (Trained  $M=9.00$ , Untrained  $M=11.43$ ). This made it a bit more difficult for the groups to impact change. Though the group knew and understood the process, some members were new and they were in the process of initiating those individuals to a new environment. This impacted the smoothness of the roll out, though they still were successful in the process.

Modern day education systems tend to find the newest buzz word to improve school climate and, in turn, student achievement. In that process a number of schools change their practice only to change it again in the coming year or years. School Readiness for Change is a component that needs to be addressed when implementing a new program. Some schools view PBIS as the framework that they will adopt and move forward with for a number of years. Some schools view PBIS as a component of what they are already are doing and try to meld it into their current system. Both perspectives will work when implementing PBIS, but the identification of where the school is can be an important component when discussing how to move forward with the process. For instance, School 1 had been researching a number of different behavior management processes over a period of months. When PBIS was introduced to them, the system they had was relatively effective, but needed a framework to develop consistency. School 2 had been working under a sound system over a number of years, even calling themselves a “Responsive Classroom School” multiple times in the focus group interviews, and therefore was trying to meld what they currently do to a new framework.

The members of School 2 felt like they had an effective process and trying to join the frameworks together led to less buy in from the large group when beginning the process. The statewide coordination group emphasized the importance of the beginning of the process and addressed the need for schools to start with some success. They referred to false starts not being a neutral event. Therefore, the roll out of the process was key in developing a sense of commitment from the staff as they worked together to move the framework in the right direction. This commitment should lead to more discussions of the process in classrooms with students, with colleagues during

collaboration meetings, and more engagement in staff meetings when PBIS is the topic of choice. This proved to be a very solid base to the implementation of PBIS in both schools. If the school environment was ready for change, the implementation of the framework was readily accepted by those in the school environment.

### **Connector Comparisons**

Both Connectors at the schools were effective in delivering their message. Both were considered opinion leaders and respected by staff members. The school role of the connectors may have had an impact on the timing of the roll out. The connector at School One was the Administrator of the building, while the connector at School 2 was a Student Services team member. Both focus groups spoke highly of the connectors and their role in how the process came to fruition. Each group had a distinct idea of where the connector stood in the school role as well as the district role. The connectors at both school served on district committees and used similar methods to impart knowledge of the process on their constituents. Rogers' view of opinion leaders addresses the connector position in the organization. The connector factored into the positive implementation in that the feeling from the group of having a designated person to connect the two teams was important to both the Untrained Teams and the Trained Teams.

### **Knowledge Comparisons**

According to Rogers (2003), Knowledge is the stage where the information starts. The individual becomes aware of the innovation and how it functions. During this stage, the individual has not been inspired to learn more about the innovation. It is information gathering, but only what is presented as opposed to actively seeking it out. In the absence of this step in schools, people tend to make up their own knowledge based on their own

experience. The knowledge piece of the implementation process was essential to the success of each group.

**Figure 8: Rogers Model of Five Stages in the Innovation-Decision Process**

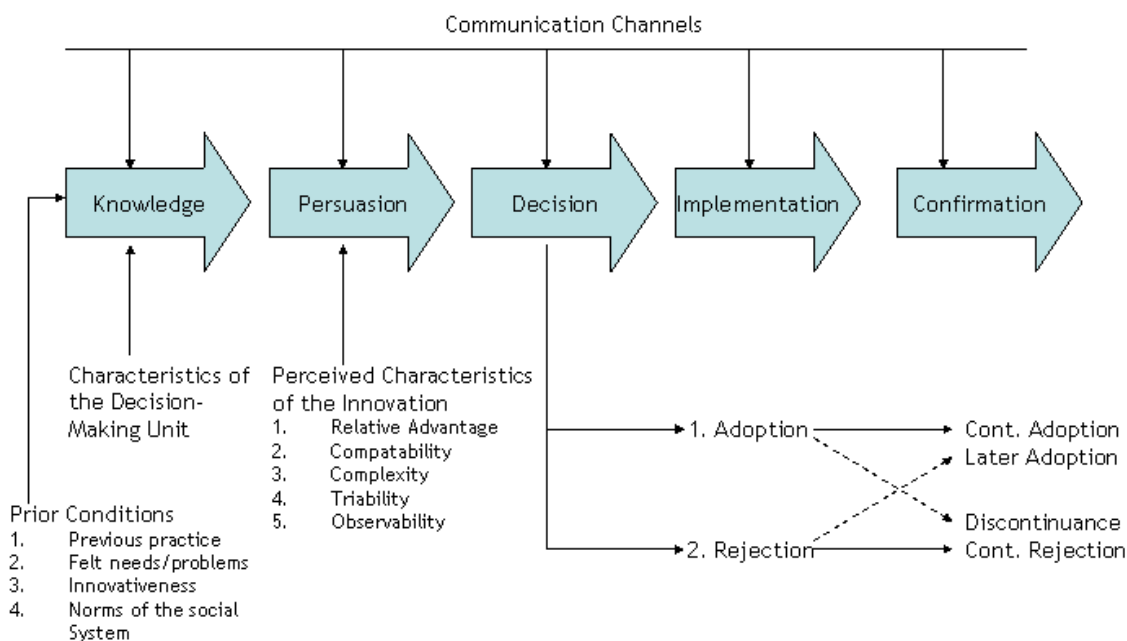


Figure 8. Identifies Rogers communication channels. These five stages make up the innovation and decision process. Source: Diffusion of Innovations, Fifth Edition by Everett M. Rogers (2003)

Members of both the trained and untrained teams felt the knowledge and the way it was presented was a key component to their success. In connecting to Rogers, Knowledge is the first piece of the Diffusion process, and the next step of Persuasion cannot be done unless a strong knowledge base is put in place (2003). The district provided the same training to both teams. The teams were trained on the same day by the same presenter. The materials used in the training were distributed by the PBIS National Center. The teams initiated the implementation process in the same way. Both schools were contacted by the district wide coordinator to gauge the readiness for implementing the program. Table 18 illustrates a questioning route used by the National PBIS

Organization for school readiness and is used by the MWASD to initiate the process with schools.

Table 18

*School Readiness Installation*

Guiding Questions	Activities	Outcomes
What individuals have authority to reallocate resources/facilitate implementation and connection with state improvement plan?	Provide an overview of innovation to key individuals, make them aware of innovation and how it addresses need and links with improvement plan	Key stakeholders (individuals with authority to allocate resources and affect policy) identified and commitments are secured (e.g. management team)
Who will guide the implementation?	Meet with key stakeholders and potential implementers Identify members for implementation team (work to allocate FTE) Stakeholders sign off implementation plan	Implementation team established Coordinate with fluency in implementation blueprint established
What does implementation of the innovation involve?	Develop long term implementation plan (coordinator, coach, Training, Evaluation)	Plan for building coaching capacity developed Long term implementation plan established based on implementation blueprint

*Wisconsin Positive Behavior Intervention Supports Network, December, 2010*

School 1 and School 2 did differ in their thought of moving forward in the process. School 1 felt like the informational piece to PBIS was informative and the ease of the implementation process brought a desire to learn more and move forward. This is where the process started to get cumbersome with the group. Due to the fact that this school had implemented to a successful point and wanted to continue its growth, School 1 researched outside of their current district to facilitate that need. However, the MWASD was leading the charge in the PBIS movement, and therefore, the knowledge base of future implementation of Tiers was not readily available from surrounding areas.

The frustration from School 1 came in the form of researching outside of the state wanting the information on next steps. Though they could get to this point through national PBIS organizational websites, they felt that the specific knowledge they were trying to acquire was not readily available and transferable to their particular situation.

School 2 was in a different situation when it came to knowledge. The need for knowledge at School 2 came in the way of connecting past practices to current framework. The PBIS framework was adopted after a successful implementation of another school culture system, Responsive Classroom, and the marriage between the two tended to be difficult for members, both trained and untrained, to connect. Without the knowledge base it would be very difficult to implement the subsequent components and therefore would hinder the implementation process.

### **Communication Comparisons**

The communication structures at both schools were in place to advance the framework. The schools identified consistency and tools as the most impactful when came to the implementation process. Each school handled these identification concepts in different capacities and to varying degrees of success.

The tool that each school used was similar. They were both trained in a program called SWIS and each staff member was given what is known in the framework as, The Big Five. The Big Five is a compellation of graphs that address occurrences of referrals by student, location, date, time, and problem behavior. These data were then used to plan for future initiatives of the school in regards to addressing specific needs. For example, if a group was to see that there were more office discipline referrals happening on Tuesdays at 12:00 in the cafeteria, the teams can make some recommendations on how to better set

up the area for student success. It also addresses the issue of whether or not it is a school environment issue or a specific student issue. This helps the team to coach the individual or set up the environment. Each school uses this information in some capacity.

The consistency of the communication was different at both schools. School 1 was given data on a weekly basis through a school wide medium such as email. The Big Five at School 2 was given to the teams on a regular basis, but usually during meeting times. The team members then took the information back to their groups and disseminated it amongst the untrained group members during grade level collaboration meetings. Related to the research question, the communication structure of the group did play a role in the overall implementation of the process, though it did not produce a statistically significant difference. The overall mean average of the satisfaction with PBIS was higher at School 1 as indicated by the survey question “PBIS has made a positive impact on school culture” (School 1= 3.43, School 2=3.24). This matched high scores on the question “The PBIS team communicates effectively with staff members” (School 1=3.43, School 2=3.19). The p values of both survey questions were not at significant level with “PBIS has made a positive impact on school culture” having a p value of .13 and the survey question “The PBIS team communicates effectively with staff members” having a p value of .12. The communication is key to the positive implementation in that members of both groups wanted to be part of the process moving forward. If they were unable to connect with the training or the positive aspects coming from the training they tended to disengage in the process.



## **Conclusions Compared to Related Literature**

### **Review of Findings Related to Literature**

Rogers' Diffusion of Innovation Theory addressed areas of implementation from a knowledge perspective as well as a social role perspective. According to Rogers, knowledge, persuasion, and decision making all precede the implementation process. In the current study, the knowledge base that the trained team was given through the district trainings served this role. The persuasion aspect was addressed through the connection between the trained and untrained teams within the context of all school meetings, electronic communications, and discussions. The next stage of decision making took place prior to the implementation process. The group decided, internally and externally, whether or not they would accept the change in innovation, or this case, framework as they moved forward in their school culture.

Opinion leaders in these areas tend to be the key to whether or not innovation is accepted or rejected. From an educational perspective, it is important to know the roles and responsibilities of individuals in all systems when developing, implementing, and sustaining an initiative. Once known, a systematic approach to the implementation process can be used to sustain progress over time.

Rogers' Theory is relative to the research because there is no magic bullet to what ails the public education system. Failed initiatives throughout time may have more to do with the implementation and delivery than whether or not they are best practice. It is the role of the leadership team, consisting of members of all groups, to find a way to sustain productive programming for the betterment of student achievement.

Program Implementation is a process that involves carrying out basic policy that gets moved into practice. It was originally derived from the classic top down model where an edict was given from someone high in the organization and those under that individual were to carry out said order (Nakumura and Smallwood, 1980). Over time this model was criticized because the policies that were being implemented tended to be too complicated for that implementation process. During the 1970s, a link between policy design and implementation took place. There were new ways to address the need for policy makers to connect human and psychological factors to the implementation process (VanMeter and VanHorn, 1975). Their work stressed a close relationship between the design of policy and the implementation of the policy. They found a connection between the personal and psychological complexities that influence the implementation process. This work influenced the work in the 1980s. Bolman and Deal's research in that decade has become the framework by which organizations are formed.

The connection to program implementation and the delivery of the PBIS framework in the MWASD is directed through the collaborative efforts of the policy makers to grow the circles of leadership as it impacted the school system. Instead of an implementation that was directed by a few, the policy makers in the MWASD developed the implementation team from within. Though there was a distinct leader in the process, the committee work and collaborative effort to move the process forward afforded the district the ability to increase awareness and ownership as they moved to full implementation at the school level.

## **Conclusions Related to Findings**

### **Implications for Public Elementary Schools**

Though the data from the research is not generalizable, there are a number of factors that can be addressed to meet the needs of other Elementary Schools and in the state of Wisconsin and beyond. PBIS has been a topic of discussion in the state for a number of years and as schools continue to dive into the possibility of using PBIS as their framework, the research can give them some direction to impact the implementation in their schools.

### **Implications for School Environment**

School environments are a key component to research when deciding the route that PBIS will take in the implementation process. The length of time a staff has been together and helps, in one sense, the cohesiveness of the group and hinders, in another sense, the progression of the staff as a whole. The infusion of new staff members into the building can have an impact on the culture, but the relevance of that impact hinges on the acceptance of current staff. If a staff is willing to allow new members to add something to the group, they will be able to move forward. Conversely, if the staff is unwilling to change because they have always done things in a certain capacity, the new staff member essentially melds into the processes that have always been a part of said culture.

The willingness to accept new individuals into the organization is predicated on the environment that the school currently holds, and begins with the educational leaders of that building. Though the administrator in the building is considered the nominal educational leader in the school, other members of the staff emerge to develop the culture

of the building. Cultivating these individuals to impart the vision of the school helps to move the school in the right direction.

### **Implications for School Readiness for Change**

First and foremost, identifying where the school is in relation to a new initiative is important. Some initiatives are placed upon members of the learning organization from a district or administration perspective. Though these may be in the best interest of children, the lack of buy in and trust from the staff members can hamper, and in some cases, completely destroy the implementation of a new process.

The work done by the National PBIS organization uses the information in Figure 9 as a readiness activity for schools when implementing PBIS as part of their blueprint plan.

**Figure 9: Guiding questions across phases of implementation**

<b>Phase of Implementation</b>	<b>School Team Implementation Target</b>		
	Universal	Tier II	Tier III
Exploration and Adoption	<i>What is SWPBS and how will it address our concerns?</i>	<i>What do we need to have in place to start a Tier II system?</i>	<i>What do we need to have in place to start a Tier III system?</i>
Installation	<i>What are the essential features of SWPBS and how do we put SWPBS in place?</i>	<i>Tier II team established and interventions based on data targeted.</i>	<i>Tier III team established and assessment intervention development process developed.</i>
Initial Implementation	<i>Put minimal features in place such as teaching expectations.</i>	<i>One or two Tier II interventions in place.</i>	<i>Basic FBA-PBS process in place with some community connections.</i>
Full Implementation	<i>All components of universals in place</i>	<i>Tier II process and range of interventions in place</i>	<i>Tier III process and range of interventions in place</i>
Innovation & Sustainability	<i>Universal process and supports annually reviewed and revised based on data</i>	<i>Tier II process and supports annually reviewed and revised based on data</i>	<i>Tier III process and supports annually reviewed and revised based on data</i>

Figure 9. Guiding questions across phases of implementation to assist with the development of a district professional development action plan. Source: Wisconsin Positive Behavior Support Network, December 2011.

Asking the guiding questions helps the group to become more accustomed to the process and ensure that the knowledge base has started and the desire to implement change is apparent in the school.

### **Implications for State Training Agencies**

The development of the trained team and untrained team, the communication systems set up to disseminate information, and follow through on those instructions have a profound impact on the ability to get the desired buy-in from staff will be addressed through survey and focus group data. The MWASD has been recognized on a state level in high regard by statewide coordinators as being very progressive in its commitment to PBIS in their district. According to the statewide PBIS coordinator, the commitment to the PBIS framework and training in the MWASD is a model that would address the success rate of schools across the state when it comes to implementation with fidelity. The district has developed a plan, implemented, and adjusted as needed. The success seen in the two schools was congruent with those across the district at the elementary level. As of the spring of 2010, 90% of elementary schools had fully implemented the PBIS framework.

Historically, schools would pilot initiatives and curriculum based on a pilot system where one group would try the new initiative and then the schools decide whether or not the new framework would go through. This would be met with some resistance because the process was not collaborative. This tended to alienate a certain group of people, and if that group was large enough, the initiative could fail before it gained momentum. This need was addressed in the MWASD through a number of staff development opportunities for both the district members and the school teams to work with and define the vision of the framework. The opportunity to voice opinions and help define the roles of everyone in the process led to a great deal of buy in from the groups.

The opinions and definition of roles came in the development of the process by the Teaching and Learning department of the district. The discussions at that level aimed to form an initiative that would coordinate the behavioral components of the district so teachers, students, and parents were using a similar language when addressing the behavioral needs of students. In researching the options available, the PBIS framework provided an effective model to use in the district. It met the needs of the schools in that it gave some autonomy to account for different types of population, but it provided a framework that could be referred to at each site regardless of population.

The other way districts struggle to address change is in the form of budget means. Conceptually, the district supports new initiatives, but the funding for the program falls through because other needs are addressed first. The programmatic and financial commitment to PBIS in the MWASD was an essential reason it has succeeded.

In the MWASD, the need was brought out in much the same way as School 1. The district was researching a common framework to address specific deficiencies regarding identification of behavior issues, specifically Emotionally Behavior Disturbed identification of African American males. The need to define and develop consistency across the district led to the search of something that could be used in all buildings. The early commitment of the organization to address this need was communicated effectively and defined in terms that members of the district could understand and implement. That commitment, according to the statewide coordination team, was one of the defining factors in the success the district has seen to this point.

## **Implications for Leadership, Learning, and Service**

### **Implications for Leadership**

The opportunity for leaders to coach and grow their circles of leadership is very evident when working within the context of this framework. There are no trainings in this framework for individuals. Everything done in the MWASD was through a team lens. The opportunity to have the administrator as part of the process was a key component in the success of the building. The key to the leadership was their role as the connector. Someone who could move the group in the right direction was a desirable trait for both schools as evidenced in the focus group data. However, it was not the only component to the success of these two schools.

The leadership role may not have changed over time, but the perception of it has certainly gone through a metamorphosis. The best leaders in education are collaborative in nature. They actively seek out ways to develop their inner circles of individuals and seek to find knowledge to grow the whole group. The idea that moving a group forward can be done on the legs of one leader lends itself to burnout and lack of followership.

Groups need leaders. In the Bradshaw study, leadership was one of the four key components to implementing successful school wide PBIS change (Bradshaw et al., 2007). Block (2002) referred to leaders in schools as social architects in the modeling of change they did for their schools. Leadership needs to help other staff members grow to ensure the successful implementation of change. They need clearly defined expectations and the support and knowledge that they are going in the right direction. These two items are not mutually exclusive. If they have support and no knowledge, eventually the group will realize that there is support for nothing that moves them forward. If they have



knowledge, but no support, they feel that they will not invest because they are waiting for the leader to support the ideas in fear that they are learning the knowledge for nothing. School leaders need to take that concept into account when developing new initiatives that will guide the groups to enhancing an environment for all who are part of the learning organization.

### **Implications for Learning**

At the heart of every school, the concept of learning should abound with every beat. Schools are learning organizations, and the learning should take many forms. This takes many forms throughout the class period, day, week, and year. The idea that learning is relegated only to academia is not a concept schools can employ. The learning is addressed through problem solving, behavior, and academic needs. Though these can be discussed in different scenarios, problem solving, behavior, and academic need tend to meld together in a successful school.

Staff members should be models of learning. Financially speaking, if the leaders in the building are supportive, but don't impart any new knowledge, they are very expensive greeters. The idea of leadership in schools is to move groups forward, as is expected from teachers to move students forward. If leaders don't model that piece of the learning organization, the group can never move forward. It is incumbent upon the leadership in organizations to seek out ways to advance the group. If schools continue to do what they have always done, then they will continue to see deficits in academic areas as well as behavior areas and should not expect any difference if current practice and procedure is used.

The survey research indicated a large disconnect between the teams who were trained and those who were not. When researching both schools and identifying the survey results of trained and untrained members, the researcher found that there was a significant difference found in eight of the 11 survey questions asked. Table 20 indicates the questions, means, and P-Values in comparing Trained and Untrained teams:

Table 20

*Trained and Untrained Team Responses by Question:*

Survey Question	Trained	Untrained	P Value
PBIS has made a positive impact on school culture.	3.79	3.17	0.00
I know and understand the PBIS framework.	3.74	3.04	0.00
Staff members are supportive of PBIS at our school.	3.23	3.17	0.15
The PBIS team communicates effectively with other staff members.	3.29	3.21	0.02
The PBIS framework is effective at promoting positive behaviors of students.	3.37	3.29	0.04
The PBIS framework is effective at maintaining a safe school environment.	3.35	3.22	0.00
The PBIS framework is effective at increasing instructional time.	3.00	2.88	0.04
I am provided with training and ongoing support to ensure my understanding and compliance with PBIS.	3.19	3.00	0.00
The PBIS framework is delivered with consistency.	3.02	2.96	0.22
Staff are in agreement regarding expected student behaviors.	3.28	3.19	0.08
The PBIS program helps staff to be objective in their measurement of student behavior.	3.28	3.21	0.05

The use of the PBIS framework in schools consistently addresses the learning piece. The trained teams need to teach the untrained teams and develop a sense of consistency and purpose. This idea is transferred to the classroom and to each student, which then moves outside of the school to the parents. The ideas that all of these things can work together for the betterment of the school is based in sound research and success stories like the two in the MWASD are happening all across the country. Inherent in the framework is the teaching of procedures. The learning of how to behave in certain situations is not told to students, it is taught to students. There is a distinct different

between the two. It is very important that the learning through the framework never stops. The process lends itself to this thought, and if schools implement with fidelity that concept will come out in every facet of the organization.

### **Implications for Service**

Schools provide a service to the public. They are a service organization. Within that concept is the fundamental thought of improving the current structure for the betterment of everyone it touches. PBIS gives students, staff, and family members a common vocabulary that can lead to the enhancement of communities.

School is a place where there is a captive audience. Public education systems have a clientele that allows them the opportunity to change communities. In smaller communities, the school is the hub of the activity. There are community meetings held in schools, there are extracurricular and athletic events that happen in schools, and the tax payer is funding what happens in those institutions. Having a consistent framework that addresses the behavioral need of students affords those students to get more out of their school experience and, in turn, grow their communities through a more educated product graduating every year.

### **Concluding Remarks and Future Research**

School should strive for continuous improvement. The constant microscope schools fall under should not be an excuse to curl up and trivialize all of the things that are going wrong in education today. This is an opportunity to shine some light on the great things happening in schools. The PBIS framework in Wisconsin is attempting to make a difference in schools across the state. The opportunity to work within a structure that uses data to support the plan, is transparent in nature, and promotes the positive

aspect of behavior is a wonderful thing to showcase. Parent communications that consist of specific data as opposed to general concepts are welcomed by the public. Addressing this communication through a statement such as, “We have had a 68% reduction in Office Discipline Referrals on the Playground” holds more weight for parents than indicating “We have been better on the playground.” The parents at schools want results. They want to see that their students are doing well and what is being done when they are not. The PBIS framework and its implementation with fidelity affords school cultures to thrive through a consistent monitoring system that works to create a culture of understanding and readiness for schools. So much time is spent telling parents how to get kids ready for schools. It is the school’s job to make sure they are ready for kids.

Continued research needs to be done in the area of systems coaching. At this point, a train the trainer mentality resounds across the state. A small group of people is trained and they are expected to bring the entire school along with a limited knowledge base. The implications for change in this area veer toward the training of more individuals, ideally all school staff, in the model. This would allow staff members to gain the knowledge needed to assist in the persuasion of staff members as Rogers indicates in his model.

The role of the administrator in the building is essential to the successful implementation of PBIS. According to Fullan and Knight, the coaching piece, or in this research the connector, is the second most influential agent of change in schools. Allowing educational leaders to grow those coaches is an essential piece to the puzzle. Growing the circles of leadership in the school will create a larger sense of ownership with the larger group.

Finally, a better understanding of the implementation process is important if schools want to increase the level of program fidelity. Too often schools start an initiative only to see it thrown to the side for something new. The sustainability of the framework happens in the ability of staff members to hold on to knowledge, yet continuously improving what they have done in the building. If these teams are to sustain their PBIS effort they will need to continuously utilize data to support the initiatives and rejuvenate staff through the process.

In the area of behavior management, consistency is needed for students to know and understand their role in the organization. If they know and understand they are more willing to accept and be part of the process. Students need to know expectations, and if those expectations are changing at the beginning of every school year it is difficult to develop emotionally in the school setting. The PBIS concept of assume nothing and teach everything ensures that all students know and understand the process and the expectations. Expectations don't need to be lowered in schools; they just need to be taught. In doing that, the students of the coming years will be poised to lead more, learn together, and offer service to others in a time when the world needs it most.

## Bibliography

Alberto, P., & Troutman, J. (2002). *Applied Behavior Analysis for Teachers* (6th ed.).

Upper Saddle River, NJ: Prentice Hall.

Albin, (Eds.), *Families and positive behavior support: Addressing problem*

*behavior in family contexts*, (pp. 133-154). Baltimore: Paul H. Brooks.

Barkley, R.A. (1998). *Attention-Deficit Hyperactivity Disorder: A Handbook for*

*Diagnosis and Treatment* (2nd ed.). New York, NY: Guilford Press.

Bear, G. G., Cavalier, A. R., & Manning, M.A. (2002). Best practices in school

discipline. In A. Thomas & J. Grimes (Eds.), *Best practices in school*

*psychology IV*, (pp. 977–991). Bethesda, MD: National Association of

School Psychologists.

Bolman, L. G., & Deal, T. E. (2008) *Reframing Organizations*. San Francisco:

Jossey-Bass.

Bryk, A., & Schneider, B. (2002) *Trust in Schools: A Core Resource for Improvement*.

New York: The Russell Sage Foundation.

Carr, J. E. (1978). Ethno-behaviorism and the culture-bound syndromes: The case of

amok. *Culture, Medicine and Psychiatry*, 2, 269-293.

Carr, E. G, Dunlap, G., Horner, R. H., Koegel, R. L., Turnbull, A. P., Sailor, W., et al.

(2002). Positive behavior support: Evolution of an applied science. *Journal of*

*Positive Behavior Interventions*, 4, 4-16.

Chen, D., Downing, J. E., & Peckham-Hardin, D. (2002). Working with families of

diverse cultural and linguistic backgrounds: Considerations for culturally

responsive positive behavior support. In J.M Lucyshyn, G. Dunlap, & R.W.

- Cohen, J. W. (1988). *Statistical power analysis for the behavioral sciences* (2<sup>nd</sup> ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Colvin, G., & Fernandex, E. (2000). Sustaining effective behavior support systems in an elementary school. *Journal of Positive Behavior Interventions*, 2(4), 251-253.
- Colvin, G., & Kameenui, E.J. (1993). Reconceptualizing behavior management and school- wide discipline in general education. *Education and Treatment of Children*, 16(4), 361-381.
- Corder, G. W. & Foreman, D. I. (2009) *Nonparametric statistics for non-statisticians: A step-by-step approach*. Boston: Wiley.
- Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: Sage Publication.
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches*. Los Angeles: Sage Publication.
- Creswell, J. W., & Plano Clark, V. L. (2007). *Designing and conducting mixed methods research*. Thousand Oaks, CA: Sage Publication.
- Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research* (2<sup>nd</sup> ed.). Thousand Oaks, CA: Sage Publication.
- Curry, O.S. (2008). Positive behavior support (PBS) in the Talladega county school system: A descriptive analysis of fidelity, implementation and outcomes. *Dissertation Abstracts International Section A: Humanities and Social Sciences*, 68, 2738.
- Dunlap, G. (2006). The applied behavior analytic heritage of PBS: A dynamic model of action-oriented research. *Journal of Positive Behavior Interventions*, 8, 58-60.

- Field, A. (2005). *Discovering statistics using SPSS* (2<sup>nd</sup> ed.). Thousand Oaks, CA: Sage Publications.
- Fink, A. (2006). *How to conduct surveys: A step-by-step guide*. Thousand Oaks, CA: Sage Publications.
- Horner, R. H., & Sugai, G. (2000). School-wide behavior support: An emerging initiative. *Journal of Positive Behavior Interventions*, 2(4), 231-233.
- Horner, R.H., Todd, A.W., Lewis-Palmer, T., Irvin, L.K., Sugai, G., & Bolland, J. B. (2004). The school-wide evaluation tool (SET): A research instrument for assessing school-wide positive behavior behavior support. *Journal of Positive Behavior Interventions*, 6(1), 3-12. Individuals with Disabilities Education Act of 1997, P.L. 105-17, 20 U.S.C. § 1400 et seq.
- Individuals with Disabilities Education Improvement Act of 2004, P.L. 108-446, 20 U.S.C. §1400 et seq.
- Kartub, D.T., Taylor-Greene, S., March, R. E., & Horner, R. H. (2000). Reducing hallway noise: A system approach. *Journal of Positive Behavior Interventions*, 2(3), 179-182.
- Kazdin, A. E. (1982). *Single-case research designs: Methods for clinical and applied settings*. New York: Oxford University Press.
- Kendler H. H. (1987). *Historical foundations of modern psychology*. Chicago, IL: The Dorsey Press.
- Knoster, T., Anderson, J., Carr, E. G., Dunlap, G., & Horner, R. H. (2003). Emerging



challenges and opportunities: Introducing the association for positive behavior support. *Journal of Positive Behavior Interventions*, 5(2), 183-186. The Effectiveness of PBIS 68

Krueger, R. A. (1988). *Focus groups: A practical guide for applied research*. Newbury Park, CA: Sage Publication.

Krueger, R. A., & Casey, M. A. (2000). *Focus groups: A practical guide for applied research*. (3<sup>rd</sup> Ed.). Thousand Oaks, CA: Sage Publications.

Leedy, P., & Ormrod, J. (2005). *Practical research: Planning and design*. Upper Saddle River, NJ: Pearson Education.

Lowe, K., Jones, E., Allen, D., Davies, D., James, W., Doyle, T., et al. (2007). Staff training in positive support: Impact on attitude and knowledge. *Journal of Applied Research in Intellectual Disabilities*, 20, 30-40.

Luiselli, J. K., Putnam, R. F., Handler, M. W., & Feinberg, A. B. (2005). Whole-school positive behaviour support: Effects on student discipline problems and academic performance. *Educational Psychology*, 25, 183-198.

Mash, E. J. & Dozois, D. J. A. (1998). Child psychopathology: A developmental systems perspective. In E. J. Mash & R. A. Barkley (Eds.), *Child psychopathology* (2nd ed.), (pp. 3-74). New York: Guilford.

McCurdy, B. L., Kunsch, C., & Reibstein, S. (2007). Secondary prevention in the urban school: Implementing the behavior education program. *Preventing School Failure*, 51, 12-19.

Miles, M. B. & Huberman, A. M. (1994). *Qualitative Data Analysis* (2nd edition). Thousand Oaks, CA: Sage Publications.

- Michaels, C. A., Brown, F., & Mirabella, N. (2005). Personal paradigm shifts in PBS experts: Perceptions of treatment acceptability of decelerative consequence-based behavioral procedures. *Journal of Positive Behavior Interventions*, 7(2), 93-108.
- Morris, R. C. & Howard, A. C. (2003). Designing an effective in-school suspension program. *The Clearing House*, 76, 156-159.
- Muscott, H.S., Mann, E.L., & Lebrun, M.R. (2008). Positive behavioral interventions and supports in New Hampshire. Effects of large-scale implementation of school positive behavioral support on student discipline and academic achievement. *Journal of Positive Behavior Interventions*, 10, 190-205.
- Nakamura, R., and Smallwood, F. 1980, *The Politics of Policy Implementation*, St Martin's Press, New York.
- Nelson, R. J, Martella, R., & Galand, B. (1998). The effects of teaching school expectations and establishing a consistent consequence on formal office disciplinary actions. *Journal of Emotional and Behavioral Disorders*, 6(3), 153-162.
- Nelson, J. R., Martella, R. M., & Marchand-Martella, N. (2002). Maximizing student learning: The effects of a comprehensive school-based program for preventing problem behaviors. *Journal of Emotional and Behavioral Disorders*, 10(3), 136-149.
- Nersesian, M., Todd, A.W., Lehmann, J., & Watson, J. (2000). School-wide behavior support through district-level system change. *Journal of Positive Behavior Interventions*, 2(4), 244-247.
- Owen, J. M. (2007) *Program Evaluation: Forms and Approaches*. Third Edition. Allen

- and Unwin. Sydney, and Guildford Press, New York.
- Pallant, J. (2007). *SPSS survival manual: A step by step guide to data analysis using SPSS for Windows* (3<sup>rd</sup> ed.). New York: Open University Press.
- Rogers, E. M. (2003). *Diffusion of innovations*. New York: Free Press.
- Salkind, N. J. (2004). *Statistics for people who (think they) hate statistics* (2<sup>nd</sup> ed.). Thousand Oaks, CA: Sage Publications.
- Scott, T. M., & Barrett, S. B. (2004). Using staff and student time engaged in disciplinary procedures to evaluate the impact of school-wide PBS. *Journal of Positive Behavior Interventions*, 6(1), 21-27.
- Schlechty, P. C. (1993). On the frontier of school reform with trailblazers, pioneers, and settlers. *Journal of Staff Development*, 14(4), 46-51
- Smith, K. (2010). *Positive Behavior Intervention Supports (PBIS) Strategic and Sustainability Plan*. Unpublished manuscript.
- Solomon, B., Klein, S., Hintze, J., Cressey, J. & Peller, S. (2009, February). *How effective is school-wide positive behavior support in preventing problem behaviors? A meta-analysis of the single-subject school-wide research*. Paper presented at the meeting of the National Association of School Psychologists, Boston, MA.
- Steinberg, W. J. (2008). *Statistics alive!* Los Angeles: Sage Publication.
- Sugai, G., & Horner, R. H. (1999). Discipline and behavioral support: Preferred processes and practices. *Effective School Practices*, 17, 10-22.
- Sugai, G., Horner, R., Dunlap, G., Hieneman, M., Lewis, T. J. Nelson, M. C., et al. (2000). Applying positive behavior support and functional behavioral assessment

- in schools. *Journal of Positive Behavior Interventions*, 2, 131-143.
- Sugai, G., Sprague, J. R., Horner, R. H., Walker, H. M. (2000). Preventing school violence: The use of office discipline referrals to assess and monitor school wide-discipline interventions. *Journal of Emotional and Behavioral Disorders*, 8(2), 94-101.
- Sugai, G., & Horner, R. (2002). The evolution of discipline practices: School-wide positive behavior supports. *Child & Family Behavior Therapy*, 24, 23-50.
- Sugai, G., & Horner, R. H. (2002). Introduction to the special series on positive behavior support in schools. *Journal of emotional & behavioral disorders*, 10(3), 130-136.
- Suskie, L. A. (1996). *Questionnaire survey research: What works*. Tallahassee, Florida: Association for Institutional Research.
- U. S. Census Bureau. (2008). *Wisconsin quickfacts*. Retrieved from <http://quickfacts.census.gov/qfd/states/55000.html>
- U. S. Census Bureau. (2009). *2009 Resident population*. Retrieved from <http://www.census.gov/>
- U. S. Census Bureau. (2009). *Population estimates*. Retrieved from [http://www.census.gov/popest/archives/2000s/vintage\\_2008/](http://www.census.gov/popest/archives/2000s/vintage_2008/)
- Utley, C. A., Kozleski, E., Smith, A., & Draper, I.L. (2002). Positive behavior support: A proactive strategy for minimizing behavior problems in urban multicultural youth. *Journal of Positive Behavior Interventions*, 4, 196-207.
- Van Meter, D. S. and Van Horn, C. E. 1974. "The policy implementation process : A conceptual framework." *Administration and Society*. February.
- Walker, H. M., Horner, R. H., Sugai, R., Bullis, M, Sprague, T., Bricker, D. et al. (1996).

Integrated approaches to preventing antisocial behavior patterns among schoolage children and youth. *Journal of Emotional and Behavioral Disorders*, 4, 194-209.

Warren, J. S., Edmonson, H. M., Griggs, P., Lassen, S. R., McCart, A., Turnbull, A., et al. (2003). Urban applications of school-wide positive behavior support: Critical issues and lessons learned. *Journal of Positive Behavior Interventions*, 5, 80-91.

Wisconsin Department of Public Instruction. (2009). *No Child Left Behind Act of 2001*. Retrieved from <http://dpi.wi.gov/esea/doc/fulltext.doc-2653.0KB>

Wisconsin Department of Public Instruction. (2010). *WINSS data analysis*. Retrieved from <http://www.dpi.state.wi.us/sig/dm-demographics.html>

Wisconsin Department of Public Instruction. (2010). *School finance data warehouse: School district FY 2008-2009 comparative cost per member*. Retrieved [http://www2.dpi.state.wi.us/sfsdw/Std\\_Rpts\\_Results.asp](http://www2.dpi.state.wi.us/sfsdw/Std_Rpts_Results.asp)

Wisconsin Department of Public Instruction. (2010). *Wisconsin school district performance report*. Retrieved from <https://apps2.dpi.wi.gov/sdpr/district-report.action>

Wolfe, P. (2009, June 23). Brain research and education: The vital connection. *Summer Institute 2009*. Symposium conducted at Cardinal Stritch University Doctoral Leadership Department in Milwaukee, WI.