ABSTRACT

Franklin D. Bowden, Jr., IMPLEMENTING A MULTI-TIERED SYSTEM OF SUPPORTS (MTSS) AT THE HIGH SCHOOL LEVEL (Under the direction of Dr. James O. McDowelle). Department of Educational Leadership, March 2019.

Implementing Multi-Tiered System of Supports (MTSS) at the high school level has been particularly unique and challenging, especially considering that it is an unfunded mandate for North Carolina and is designed to be a unique process for each school. Therefore, there are limited specifics from the state.

The literature identifies several issues that impact student success: absenteeism, previous course failures, standardized test performance, multiple out of school suspensions, and alternative school assignments. A universal screener that relies on past data and student performance was used to determine which students needed interventions. The screener looked at the factors suggested by the literature. Additionally, progress monitoring and data analysis are to be used to aid the decision-making process regarding interventions and to continue the process of determining who needs them. Effective professional development, increased teacher buy-in, and the use of improvement science are to be used to ensure the implementation lasts. The existing professional learning communities (PLCs) would be used as the committees for data analysis.

Some issues developed that delayed the full implementation process. They included a new principal for the school and two hurricanes that disrupted the community and caused the loss of eight instructional, seven consecutive days at one time. The universal screener was still used, and data were collected. The sensitivity was 54.9%. The specificity was 96.7%. The classification accuracy was 94.3%. Several factors may have impacted the sensitivity to include limited information on rising 9th-graders and giving too much value on the impact of students returning from the alternative school. The screener was only used for one semester and

additional use is needed to fully analyze its accuracy. Even so, the screener as currently designed does appear to be a useful tool in identifying students that need interventions.

Although intervening circumstances and events occurred that prevented the small-scale proof of practice to be fully implemented, invaluable leadership lessons were learned. Next steps are included as to how to proceed with the implementation.

IMPLEMENTING A MULTI-TIERED SYSTEM OF SUPPORTS (MTSS) AT THE HIGH SCHOOL LEVEL

A Dissertation

Presented to

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East Carolina University

In Partial Fulfillment

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Doctor of Education in Educational Leadership

by

Franklin D. Bowden, Jr.

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IMPLEMENTING A MULTI-TIERED SYSTEM OF SUPPORTS

(MTSS) AT THE HIGH SCHOOL LEVEL

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DEDICATION

I started this journey a bit late in my life. One of my goals, however, was to show my children that no matter where they may find themselves in their lives that they can still be more. I want to dedicate this to all my children.

Bertha Bowden, my mom, has always believed in me. No matter the odds, no matter the situation. She has been my rock when I was alone and prayed for and encouraged me. You have my never-ending thanks and love. My dad, Franklin, with my mom, instilled in me the importance of education. I watched him build a great business. He encouraged me to build my mind. He, too, has my love and thanks. I also dedicate this to my parents.

My wife, Sharon, from the day we started dating until now has been my biggest cheerleader. I know that this journey has been taxing on her almost as much as it has been on me. I also know that I could not have made it through this journey without her support. She drove the car from Florida while I was writing on the laptop in the back seat of the car after our honeymoon cruise so that I could make a deadline for my MSA—and she has not stopped doing her part to support my efforts. I love you for that. This dissertation is definitely dedicated to you. This part of the journey is over.

But in all things, I acknowledge Christ who gives me strength. Ultimately, it is His faithfulness to me that allows me to accomplish this. In all things, I acknowledge Him and give Him the glory.

ACKNOWLEDGMENTS

When my son passed away at the beginning of this doctoral journey, there were several people that provided me with the patience, support, and encouragement to not give up when I felt that I had nothing left in me. Dr. James (Jim) McDowelle, my dissertation committee chair, never stopped believing in me and gave me the space and encouragement to continue the process. I will always be grateful for him. Roger Edwards, the principal of Hoke County High School at the time (currently the Associate Superintendent for Hoke County Schools) was understanding and allowed me time to work through the difficulties of losing a child. It is appreciated more than he will ever know.

My committee of Dr. McDowelle, Dr. Art Rouse, Dr. Kermit Buckner, Dr. Charles Jenkins, and Dr. Larry Mabe are to be acknowledged. Dr. Jenkins and Dr. Mabe are extremely special to me in that through them I earned my MSA. Their insight and guidance have been extremely helpful to me in this stage of my career.

Theresa Mott, the Hoke County High School Data Manager, was invaluable to me. Her ability to look through data, find and process data, and help me to see it in clearer terms made addressing the data easier and manageable. I cannot thank her enough. Thank you to my local advisor, Shannon Register (now Dr. Register), for her insight and encouragement.

Finally, I must acknowledge Dr. Heriberto Corral. Of all the people that I know, he kept encouraging me to begin this journey. He always believed in me. I am most grateful.

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CHAPTER 1: INTRODUCTION

Naming and Framing the Problem of Practice

The Hoke County School system (HCS) is located in Hoke County, North Carolina near Ft. Bragg, where Raeford is the county seat and the largest town. Many know of the school district due to its involvement in the *Leandro* case whose original ruling occurred in 1994 (*Leandro v. State*, n.d.; Smith, n.d.) and impacted school funding issues in North Carolina. As one of the low wealth counties in the lawsuit, constant monitoring of student success has been a lynchpin of the district. The district continues to be a low-wealth district. Of the 13 schools in the district, 10 are designated as Title I schools (W. Chavis, Hoke County Schools Finance Officer, personal communication, September 4, 2014), and the three that are not are a high school, an alternative school, and an early college that are not eligible for Title I funding under the district current model. Title I funding is part of the Every Student Succeeds Act (ESSA) and provides financial assistance to local educational agencies (LEAs) that have high rates of low-income children so that they can meet acceptable state testing standards (U.S. Department of Education, 2018).

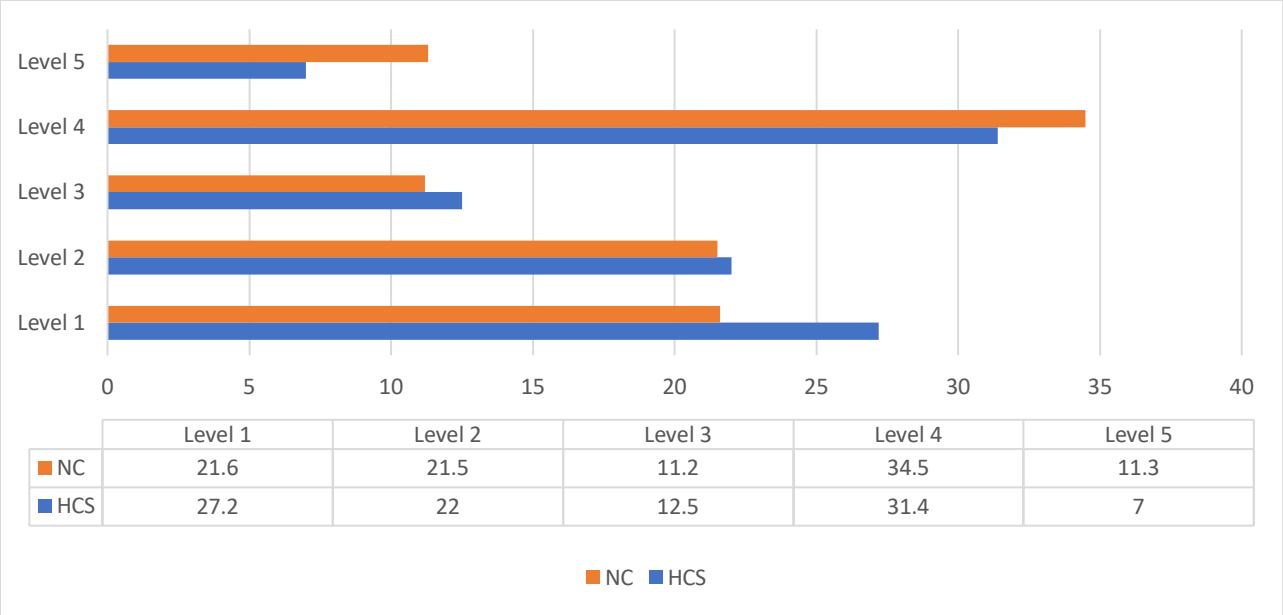
North Carolina School Report Cards for the District

According to the North Carolina School Report Cards District Snapshot (North Carolina Department of Public Instruction, 2016), school attendance at all grade levels is on par with the state averages. Average course size for students in English II, Math I, and Biology are either equal to or better than the state average. The district number of criminal acts per 100 students is below the state average at all grade levels. Though the access to technology ratio is slightly higher than the state average for 2015-2016, the high school has implemented a one-to-one device initiative for the 2016-2017 school year (T. Caulder, MTSS/PBIS/Behavior Support

Coordinator, Hoke County Schools, personal communication, December 1, 2016). This should improve the access to technology ratio in coming years.

The narrative changes when looking at student performance. There are five achievement levels for End-of-Grade (EOG) testing. Levels 1 and 2 are the lowest levels and are below grade level. Further, students performing at a level below Level 4 are also not considered to be on track for *College-and Career-Readiness* (North Carolina Department of Public Instruction, 2016). Levels 3 through 5 are at or above grade level. Upon review of the End-of-Grade Tests (EOG) results which are for grades 3-8, the district exceeds the state average at Level 1 in reading with 27.2% to 21.6% respectively. The rates are similar but with not as great a difference with Math and Science. In Math, the rate is 2.1% higher and 1.1% higher in science. At Level 2, the district is nearly at the state average with 22.0% to the state's 21.5%. The district has lower rates than the state at Level 2 in Math and Science. At Level 3, Hoke County Schools (HCS) scores 1.3 percentage points higher than the state in reading, 2.4 in Math, and 1.8 in Science. For Level 4, HCS falls behind the state with 31.4% to 34.5% but outperforms the state in Math and Science at this level. HCS, however, underperforms at Level 5: 7.0% to 11.3% in Reading, 12.5% to 17.6% in Math, and 15.9% to 21.0% in Science (North Carolina Department of Public Instruction, 2016). Figure 1 on EOG Reading 2016, Figure 2 on EOG Math, and Figure 3 on EOG Science graphically illustrate this.

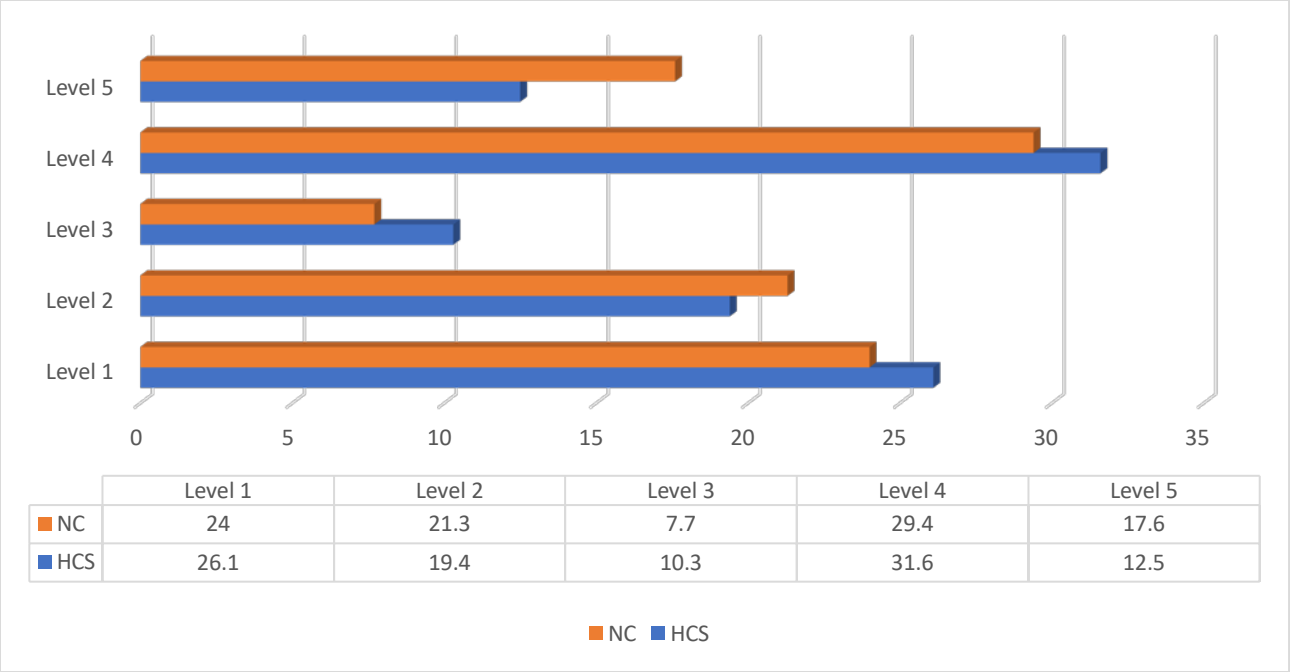
The trend is similar for grades 9-12 and the End-of-Course (EOC) testing. For Level 1, the district exceeds the state average 25.0% to 20.4% in English II and 32.3% to 23.2% in Biology. HCS does do better than the state with a lower percentage at Level 1 than the state in Math I (20.2% to 25.0%). At Level 2, however, the district falls behind the state in each area: 25.7% to 20.8% for English II, 15.1% to 14.5% for Math I, and 26.3% to 21.2% for Biology. At



	Level 1	Level 2	Level 3	Level 4	Level 5
NC	21.6	21.5	11.2	34.5	11.3
HCS	27.2	22	12.5	31.4	7

Note. North Carolina Department of Public Instruction, 2016.

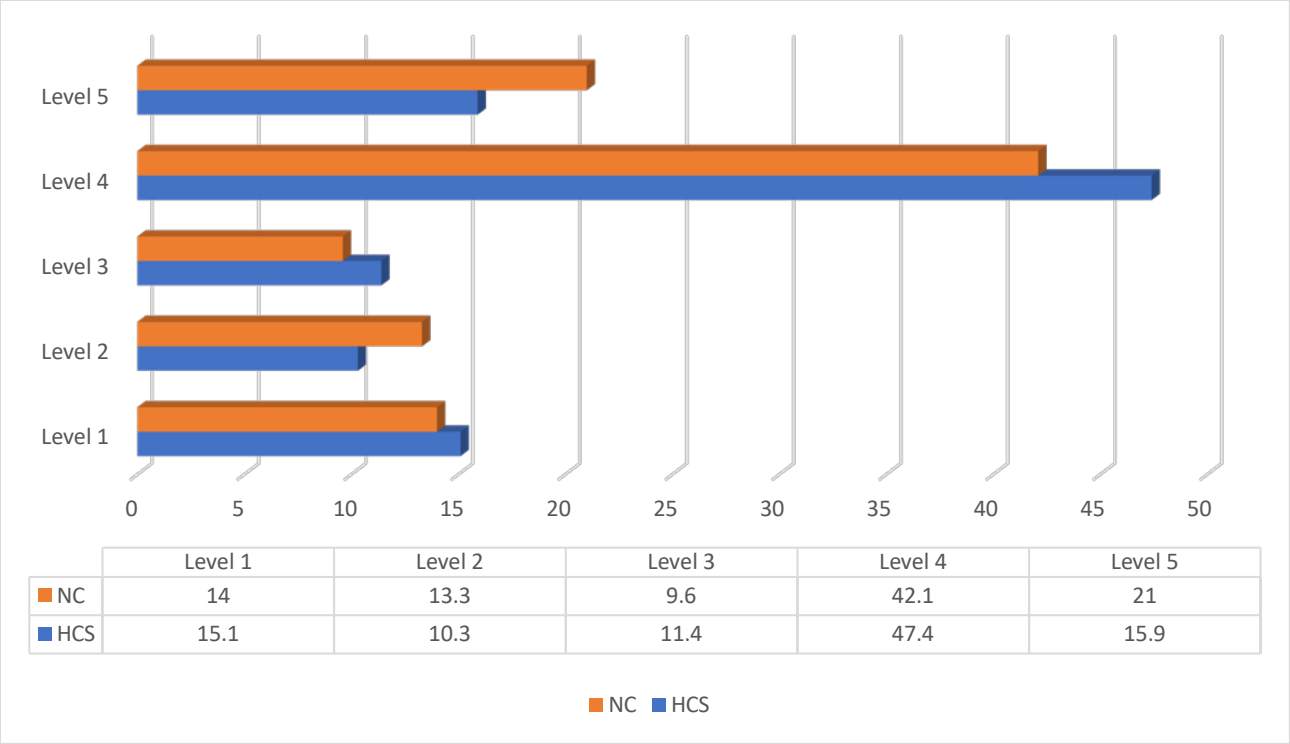
Figure 1. Hoke County Schools EOG Reading 2016.



	Level 1	Level 2	Level 3	Level 4	Level 5
NC	24	21.3	7.7	29.4	17.6
HCS	26.1	19.4	10.3	31.6	12.5

Note. North Carolina Department of Public Instruction, 2016.

Figure 2. Hoke County Schools EOG Math 2016.



	Level 1	Level 2	Level 3	Level 4	Level 5
NC	14	13.3	9.6	42.1	21
HCS	15.1	10.3	11.4	47.4	15.9

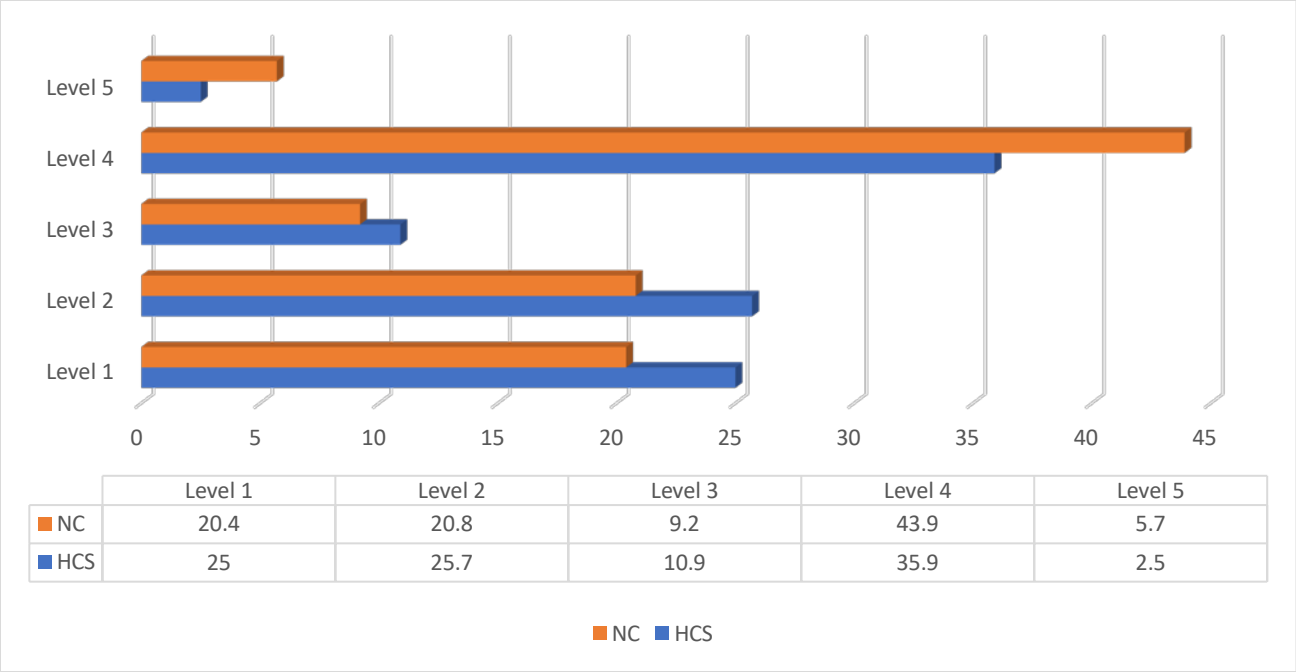
Note. North Carolina Department of Public Instruction, 2016.

Figure 3. Hoke County Schools EOG Science 2016.

Level 3, however, some improvement is seen. HCS scores higher than the state average for English II (10.9% to 9.2%) and Math I (16.7% to 10.7%). Biology misses the mark (7.7% to 8.3%). For Level 4, the district falls behind the state for English II and Biology (35.9% to 43.9% and 26.5% to 31.5% respectively). For Math I, HCS outperforms the state average 40.6% to 34.3%. For Level 5, the district simply does not compete. Though the report does not report percentages less than 5% or more than 95% (North Carolina Department of Public Instruction, 2016), only 2.5% remains for English II and that is less than the state's 5.7%. The differences are much greater for Math I and Biology. HCS only scores 7.3% at this level while the state average is 15.6%. The results are similar in Biology. HCS scores 7.1% to the state's 15.8% (North Carolina Department of Public Instruction, 2016). Figures 4-6 are the aforementioned findings.

District and County Demographics

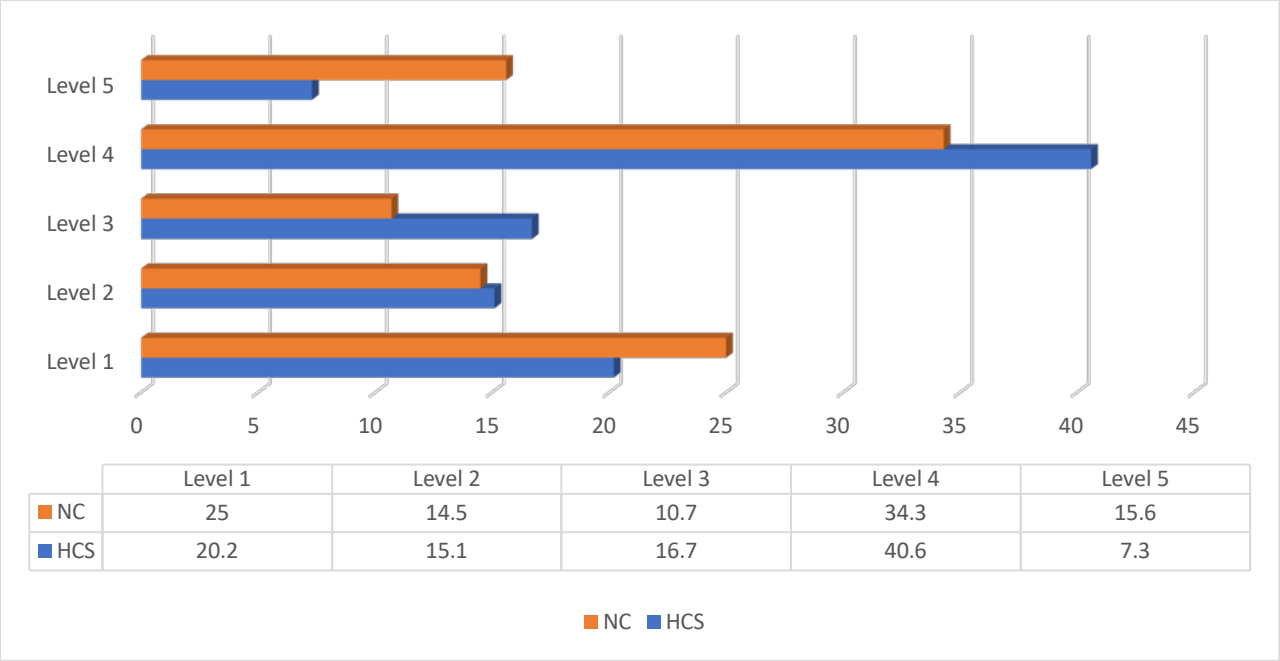
Demographically, the school district does not mirror the county population. Overall, the county population disaggregates as follows: White (non-Hispanic) 41.4%, Black (African American) 34.1%, Hispanic 12.4%, Native American 9.3%, and 2.8% other racial groups (U. S. Department of Commerce, 2015). The district's racial makeup is significantly different: Whites (non-Hispanic) 26.2, Black (African American) 35.4%, Hispanic 21.4%, Native American 9.2%, and 7.8% other racial groups (Long, 2016). Though some may speculate that these differences are due to certain populations attending private and charter schools, no data has been provided to the author to substantiate any such claim. Figure 7 demonstrates the demographical differences between the school district population and the county population.



	Level 1	Level 2	Level 3	Level 4	Level 5
NC	20.4	20.8	9.2	43.9	5.7
HCS	25	25.7	10.9	35.9	2.5

Note. North Carolina Department of Public Instruction, 2016.

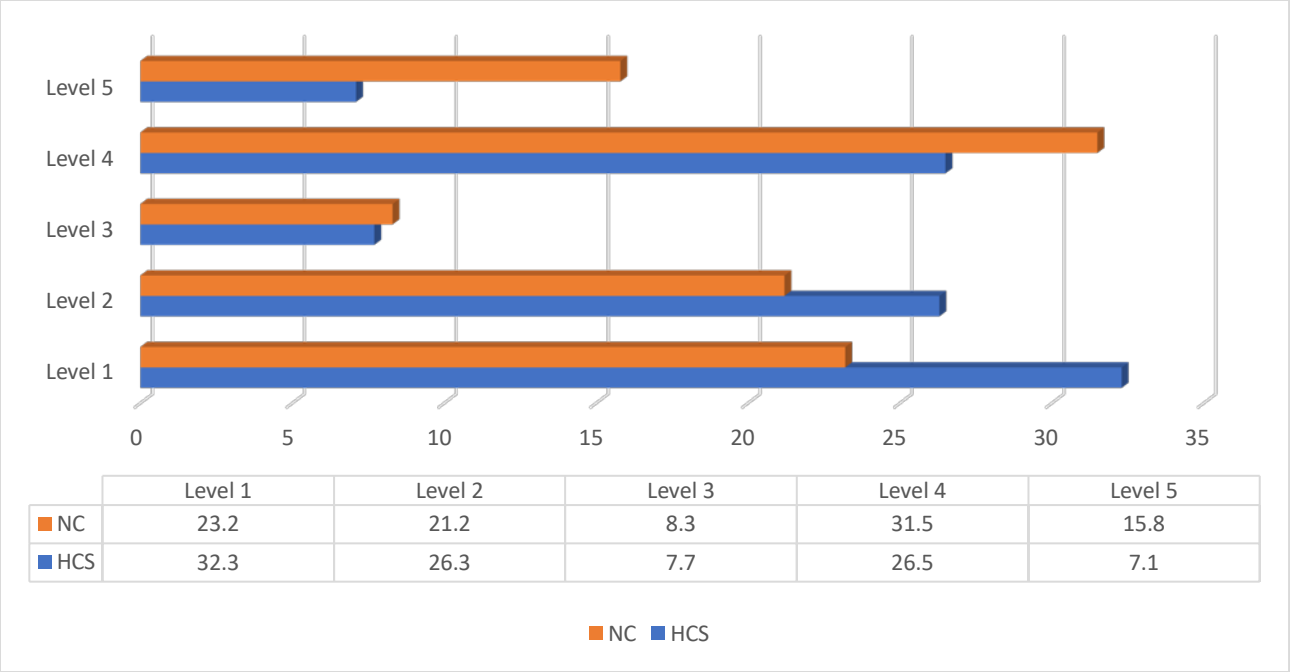
Figure 4. Hoke County Schools English II EOC 2016.



	Level 1	Level 2	Level 3	Level 4	Level 5
NC	25	14.5	10.7	34.3	15.6
HCS	20.2	15.1	16.7	40.6	7.3

Note. North Carolina Department of Public Instruction, 2016.

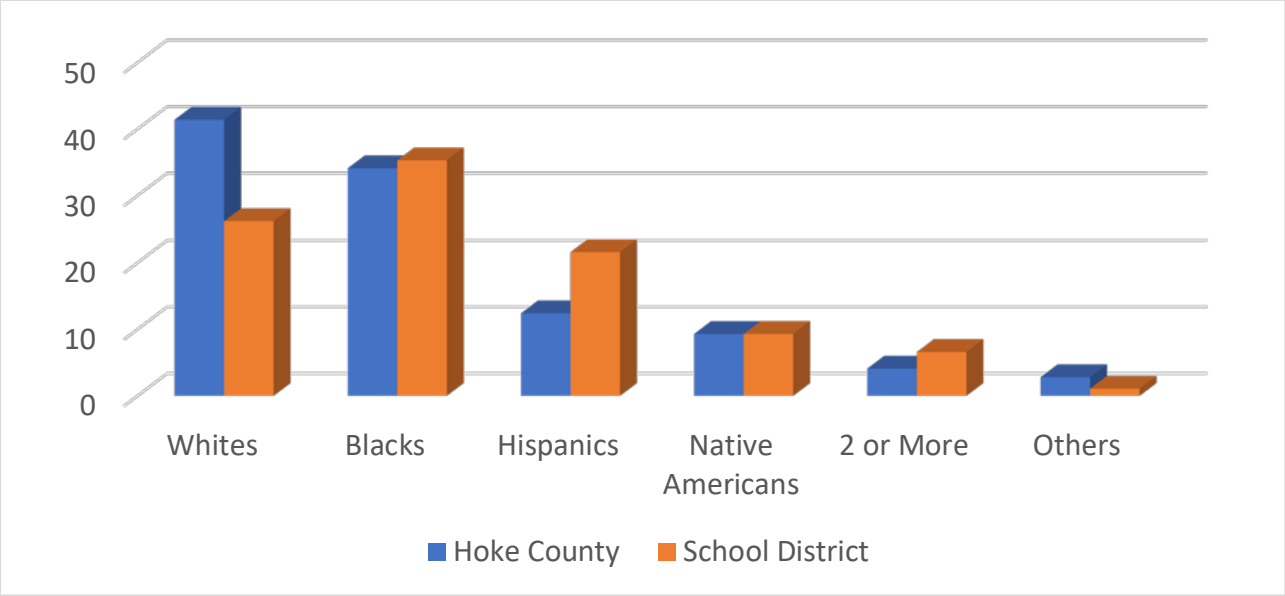
Figure 5. Hoke County Schools Math EOC 2016.



	Level 1	Level 2	Level 3	Level 4	Level 5
NC	23.2	21.2	8.3	31.5	15.8
HCS	32.3	26.3	7.7	26.5	7.1

Note. North Carolina Department of Public Instruction, 2016.

Figure 6. Hoke County Schools Biology I EOC 2016.



Note. U.S. Department of Commerce, 2015 and Long, 2016.

Figure 7. Hoke County vs. School District Demographics.

Problem of Practice Analysis

Though some general ideas and concepts have been given by the North Carolina Department of Public Instruction to districts regarding the Multi-Tiered System of Supports (MTSS), no comprehensive guidelines have been provided regarding the implementation of MTSS in public schools, which in fact is an unfunded mandate. This is further compounded by the difficulty of implementing MTSS at the secondary level. Districts, therefore, have been forced to create guidelines and operational procedures regarding the rollout and implementation of MTSS. State training is limited to concepts and theories. Though Hoke County Schools (HCS) began this process of figuring out how to implement MTSS districtwide in 2014 with training for elementary schools in 2015, Tonya Caulder, MTSS/PBIS/Behavior Support Coordinator for Hoke County Schools (Caulder, personal communication, December 1, 2016) stated that it is unlikely that the rollout will be ready for the high schools by 2018 despite her stating that it must be fully implemented by July 1, 2020 and needing at least two years to fully implement. HCS does, however, have an MTSS Leadership Committee. It is comprised of representatives from the schools currently using MTSS and several persons at the district level to include Debra Dowless, Assistant Superintendent for Elementary Schools; Lynn Blackshear-Ray, Director of Exceptional Children Department; and Elizabeth Mitchell, Director of Indian Affairs. This writer is tentatively to be a part of this leadership team as well.

Teachers have been provided little to no real training in MTSS. Positive Behavioral Interventions and Supports (PBIS) have been employed by the county for several years and is in use at all schools as of 2016, but many schools are still struggling to have teachers shift in their mentality regarding student discipline, and most administrators in the district have privately expressed to the writer in countywide administration meetings their frustration with the effective

rollout of PBIS and teacher resistance to it. To be more accurate in this assessment, additional and more accurate data were needed. Further, Response to Intervention (RTI) principles are currently in use for the evaluation of potential special needs students in order to move away from the discrepancy model for such placements.

Initial Obstacles

In May of 2018, the principal at the time wanted MTSS to be limited to the 9th-graders for the 2018-2019 school year. His logic was that the juniors and seniors for that school year would graduate prior to the full implementation of MTSS as required in July 1, 2020. By then, only the current 10th-graders would have missed the implementation and adding them as seniors would be much easier than adding them in the 2018-2019 school year. Further, since the middle schools began implementing MTSS in the 2017-2018 school year, students coming from the district middle schools will be familiar with MTSS, and this will aid in the fluidity of the rollout over time.

The principal and two assistant principals (including this writer) met in May to form the MTSS implementation committee by appointment. The initial committee was comprised of Roger Edwards, Principal; Sabrina Finkbeiner, Assistant Principal; Colin McDavid, Physical Education teacher; Angela Goslee, Social Worker; Annette Jones, Guidance Counselor; Luisa Palacio, English as Second Language teacher; Rosann Kosko, Social Studies teacher; Sean Finkbeiner, Special Needs teacher; Shelley Wilburn, Special Needs teacher; Tacara McGregor, Math teacher; Terraine Francois, teacher assistant; Tony Hunt, County Commissioner and Dropout Prevention counselor; and this writer, Franklin Bowden, Jr., Assistant Principal and MTSS Implementation Committee Chair.

This group met on May 22, 2018 with the district MTSS coordinator and came to the following decisions after presentations by the coodinator and Bowden and a group question and answer session:

1. MTSS will only rollout for the rising 9th-graders for the school year 2018-2019.
2. The committee will engage in TIPS training (Team Initiated Problem Solving) on 21 June 2018, a requirement for the district.
3. MIC members will complete the state's MTSS Modules currently available. The modules are:
    a. Module 1.1: Establish Readiness: This course addresses the common language of MTSS, understanding the MTSS Core Support, learning the basics of problem-solving teams, and preparing for the changes that MTSS will bring.
    b. Module 1.2: Essential Elements of Core Support: In this course, participants will learn about data evaluation systems, the key elements of Core Support, and how to begin defining Core Support
    c. Module 1.3: Analyze Core Support: In this course, participants will review problem-solving models, especially in reading, math, and behavior.
4. The timeline for the completion of the modules is as follows:
    a. Module 1.1: MIC by 9 July 2018 and the rest of the staff by 28 September 2018
    b. Module 1.2: MIC by 10 August 2018 and the rest of the staff by 1 February 2019
    c. Module 1.3: MIC by 28 September 2018 and the rest of the staff by 1 April 2019

5. The next meeting was scheduled for 21 June 2018 to follow the TIPS training.

The committee met on June 21, 2018, however, the coordinator had a death in her family and was unable to attend and provide the TIPS training. It was rescheduled. Additionally, several other changes occurred. The school board promoted the principal to associate superintendent and a new principal was named. Additionally, Palacio was also promoted to another position and replaced on MIC by Eleazar Bello, a foreign language teacher. Further, the new principal had a different vision for the implementation of MTSS than his predecessor.

The committee discussed limiting the implementation to 9th-graders. Many, however, felt that using English II, Biology I, and Math I would be easier and more effective in a small-scale proof of practice. The new principal, however, favored full implementation by the beginning of the Spring semester with partial implementation in the Fall. The committee selected the latter. The committee further agreed to meet again on August 20, 2018, but new principal later stated that a new date would have to be selected and canceled the meeting.

Statement of Problem

Lacking more detailed guidance from the North Carolina Department of Instruction and seeing the district's timetable, implementing MTSS at the high school level needed to begin immediately to be fully and appropriately compliant with MTSS by July 1, 2020. It was proposed to begin implementing MTSS at Hoke County High School in the Fall of 2018 with a small-scale proof of concept.

Measure of Improvement

The success of the implementation would be measured by determining the screening results from the use of MTSS at the high school. It was proposed that, using a formula demonstrated in Figure 8, the screening results would have a sensitivity, specificity, and

	Failed Outcome	**Successful Outcome**
Positive on screen	**15** true positives (TP)	**10** False positives (FP)
Negative on screen	**10** false negatives (FN)	**50** true negatives (TN)
Sensitivity = TP/(TP + FN)	**15/(15 + 10) = 60%**	
Specificity = TN/(TN + FP)	**50/(50 + 10) = 83%**	
Classification Accuracy = (TP + TN)/(TP + FP + FN + TN) = 76%		

Note. (Johnson et al., 2009).

Figure 8. Two-by-Two Table of screening results example

classification accuracy that is at least 80% though it should be noted that no standard was found to determine what the level of accuracy should be. Additionally, it was expected that there would be a reduction in the number of discipline referrals, an increase in the documentation of student interventions for behavior and academics, and a reduction in the number of in-school and out-of-school suspensions as compared to the previous Fall semester. Previously, little documentation regarding interventions had been kept, and the school administrative team assumes that little has been done regarding interventions. It was believed that a correlation existed between the increase in interventions and a decrease in discipline referrals in addition to increased academic performance. [It was expected that at the end of the Fall semester that the rate of discipline referrals would be reduced by at least 20% and academic performance would exceed that of the previous Fall semester by at least 10% in the areas where MTSS was implemented. The previous Fall semester data were released at the end of August 2018.]

CHAPTER 2: REVIEW OF LITERATURE

Problem Background

MTSS is a combination of two systems previously and currently in use by many school districts in the county: Positive Behavioral Interventions and Supports (PBIS) and Response to Intervention (RTI). To better understand this, one must understand the two tracks that have merged to become MTSS.

PBIS Background

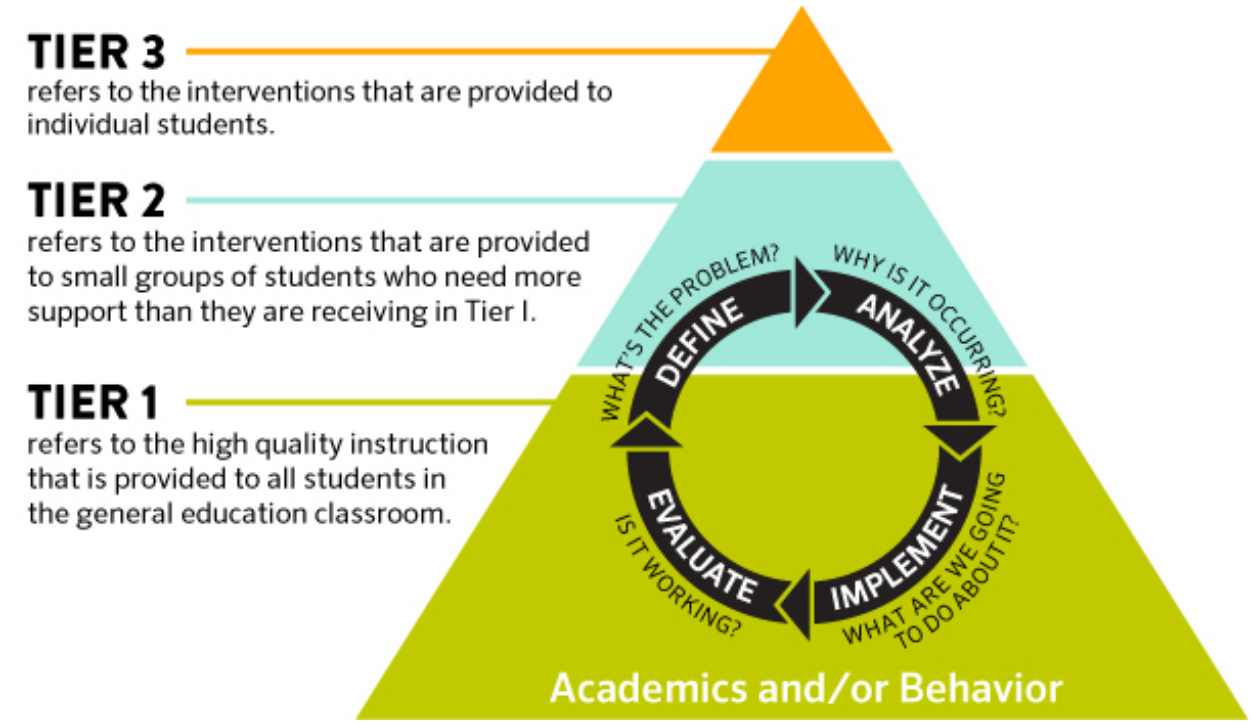
The first track is PBIS. PBIS developed in the 1980s as a method to improve behavioral interventions for students with behavior disorders (Sugai & Simonsen, 2012). It was further developed by the University of Oregon which, through their research, produced models for professional development, school-wide implementation, and improved student outcomes (Horner, 2010; Sugai & Simonsen, 2012). Congress reauthorized the Individuals with Disabilities Education Act in 1997 and added funding to establish a PBIS center (U.S. Department of Education, 2005). This resulted in the Center on Positive Behavioral Interventions and Supports at the University of Oregon with further collaboration the Universities of Kansas, Kentucky, Missouri, and South Florida (Sugai & Simonsen, 2012). More than 16,000 schools are assisted in their use of PBIS according to Sugai and Simonsen.

RTI Background

The second track is RTI. RTI finds its roots as a national framework through the wording of the amendments to IDEA in 2004 (Belser, Shilingford, & Joe, 2016). In these amendments, it is clearly stated that LEAs "may use a process that determines if the child *responds* to scientific, research-based *intervention* [emphasis added]" (Indiana University School of Education, 2013). This is in direct contrast to the previous model used, the discrepancy model, which waited for

student failure or student gaps in achievement and intellectual ability to occur before consideration of significant changes in instruction were made to accommodate such identified students (National Association for the Education of Young Children, National Head Start Association, & Division for Early Childhood of the Council for Exceptional Children, 2014). The discrepancy model had two primary problems at the secondary level: It did not identify students that could benefit from interventions nor did it render needed information to determine what interventions to use (Walker, Emanuel, Grove, Brawan, & McGahee, 2012).

RTI, however, is a 3-tiered framework to evaluate academic delivery of instruction and performance of students. Tier 1 is the core instruction. In general, 80% of the students should perform academically at a proficient level or at least show growth. Instruction is given to all students at Tier 1. All students should receive scientifically-based instruction that is differentiated according to the individual needs of the students (RTI Action Network, 2016). Tier 2 is for those students needing more intense instruction and should not represent more than 15% of students. Instruction at this level would involve small groups and some individualized instruction to include afterschool tutoring. Tier 2 is for those students that are not making adequate progress based upon scientifically-based assessments from Tier 1 instruction (RTI Action Network, 2016). Tier 3 should only represent 4-5% of the student population. It is the most intense level of instruction and is primarily individualized instruction for struggling students (RTI Action Network, 2016) and may result in referral to the exceptional children's program. The merger of PBIS and RTI is what MTSS is (Multi-tiered system of support (MTSS) & PBIS: What is multi-tiered system of support (MTSS)?, n.d.). Figure 9 demonstrates how the three tiers work.

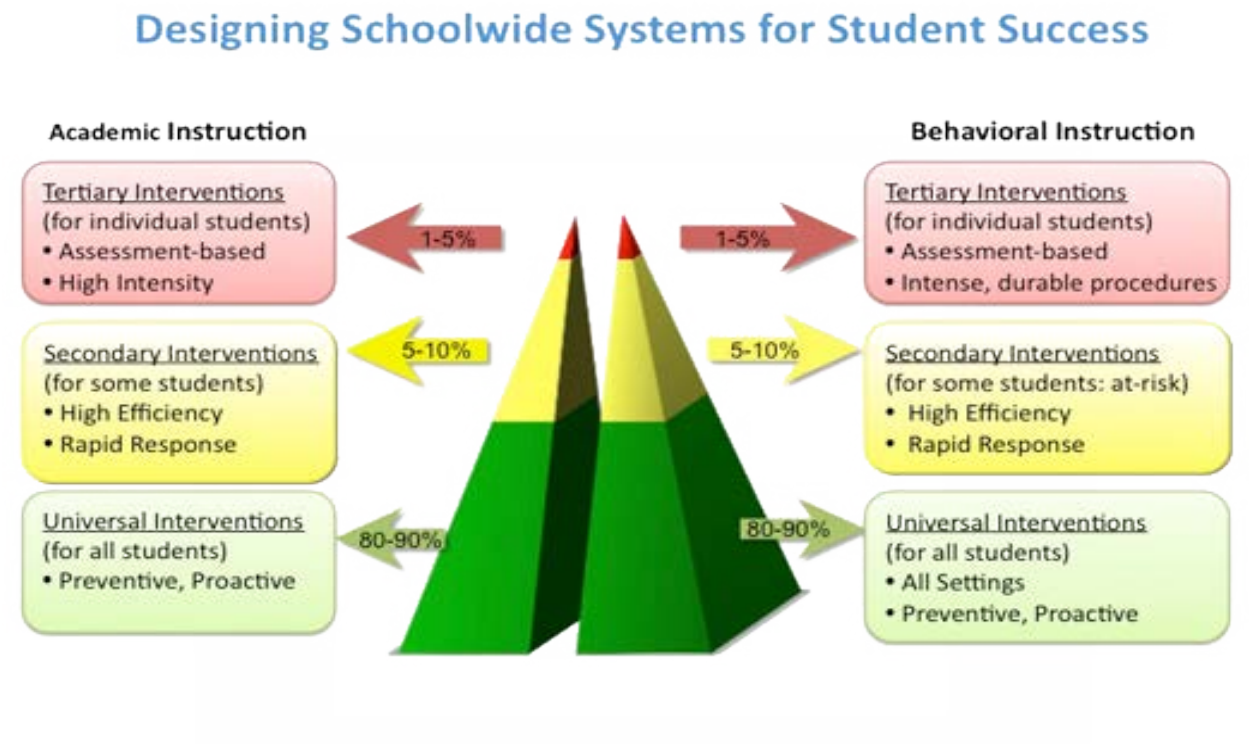


Note. MTSS Diagram from North Carolina Virtual Academy (Multiple Tiered Systems of Support [MTSS], 2017).

Figure 9. MTSS three tier system.

PBIS and RTI Distinction Disagreement

It should be noted that there is some disagreement in the literature regarding the distinction between PBIS and RTI. George Sugai is critical of these distinctions flatly stating that the belief that PBIS is a behavioral model and RTI is an academic model is incorrect. He refers to this as a "misconception" (Sugai & Simonsen, 2012, p. 4). Later in these writings, PBIS will be described as the behavioral part of MTSS. Sugai, however, believes this misrepresents the fact that ingrained in PBIS is a framework to implement support for academics as well as behavior (Sugai & Simonsen, 2012). It should still be noted, however, that most educational structures view RTI and MTSS as similar entities and usually treat them the same. Literature for RTI will still be used for the support of MTSS. This also holds true for PBIS since this is usually a tiered system, too (Multi-tiered system of support (MTSS) & PBIS: What is multi-tiered system of support (MTSS)?, n.d.). Figure 10 demonstrates the comparison. Still, in the 64th Conference of Exceptional Children for the Public Schools of North Carolina held in Greensboro, North Carolina in 2014, a distinction is made between MTSS, RTI, and PBIS. In the conference, Dr. Kathleen Whitmire sees RTI as primarily limited to special education as opposed to MTSS as a system-wide approach for all students (Whitmire, 2014). Additionally, the conference in general had several presentations on RTI in relationship to special needs students and several presentations on PBIS. So, as recently as 2014, educators were still distinguishing RTI and PBIS from each other and the concept of MTSS was still quite new. Adding to the confusion is the lack of a consistent structure for MTSS. Whitmire presents seven essential components of MTSS. In Florida, which is the current model for North Carolina, that number is six. Further, Caulder emphasizes the intentional vagueness of the MTSS mandates from the Public Schools of North Carolina Department of Instruction. The belief is that each LEA (and even each school)



Note. Comparison of tiered academic and behavioral instruction (Multi-tiered system of support (MTSS) & PBIS: What is multi-tiered system of support (MTSS)?, n.d.).

Figure 10. Comparison of RTI (academics) to PBIS (behavior) in a tiered system.

must create their own plan to implement MTSS, but the state will hold them accountable and will measure each LEA's success by looking at the number of students identified as having a specific learning disability (SLD). These numbers will impact special education funding. Failing to stay below a certain range, currently projected to be 5%, will result in a reduction in funding for special needs programming for the LEA with no reduction in the required services to be rendered.

MTSS Alignment with District Priorities

Further, an implementation of MTSS should still align with the HCS priorities. The HCS stated priorities are as follows:

- Priority 1: Every student will graduate from high school prepared for work, higher education, and citizenship.
- Priority 2: Every student will have a personalized education.
- Priority 3: Every student, every day will have excellent educators.
- Priority 4: Every school will have up-to-date technology systems to serve its students, parents, and educators.
- Priority 5: Every student will be healthy, safe, and responsible.

(Hoke County Schools' 2016-2021 Strategic Plan, n.d.)

MTSS Implementation Elements

In order to implement MTSS, several elements must be understood. They include the use of a universal screener, progress-monitoring, interventions, and data analysis (Johnson, Smith, & Harris, 2009). Further, an effective use of improvement science is necessary to make sure that the changes actually happen and that, in the long term, the changes have a positive impact (Langley, Moen, Nolan, Nolan, Norma, & Provost, 2009).

Universal Screener

The universal screener can be defined as "a screening system to identify students most at risk for poor learning outcomes" (Pentimonti, Walker, & Edmonds, 2017). A universal screener should also be predictive of behavioral problems (Johnson et al., 2009). Universal screeners can be done quickly and with minimal cost. The screeners are called universal because all students will be screened by the same system (Pentimonti et al., 2009). Additionally, Pentimonti notes that these screenings should occur several times a year.

One issue with universal screenings their accuracy. It is important that the screenings be accurate. It should be able to predict with reasonably accuracy those students that will be successful and those that will not (Johnson et al., 2009). One way to do this is to monitor and record the following: true positives, true negatives, false positives, and false negatives. All predictions that are true (true positives and true negatives) give credence to the accuracy of the screener. The false ones do not. Thus, the true predictions should significantly outnumber the false ones (Johnson et al. 2009). Figure 8 is an example from that text on how to track and determine accuracy:

To be clear, Johnson defines the following terms:

1. True positives are those students correctly identified as at-risk.
2. True negatives are those students correctly identified as not at-risk.
3. False positives are those students incorrectly identified as at-risk.
4. False negatives are those students incorrectly identified as not at-risk.

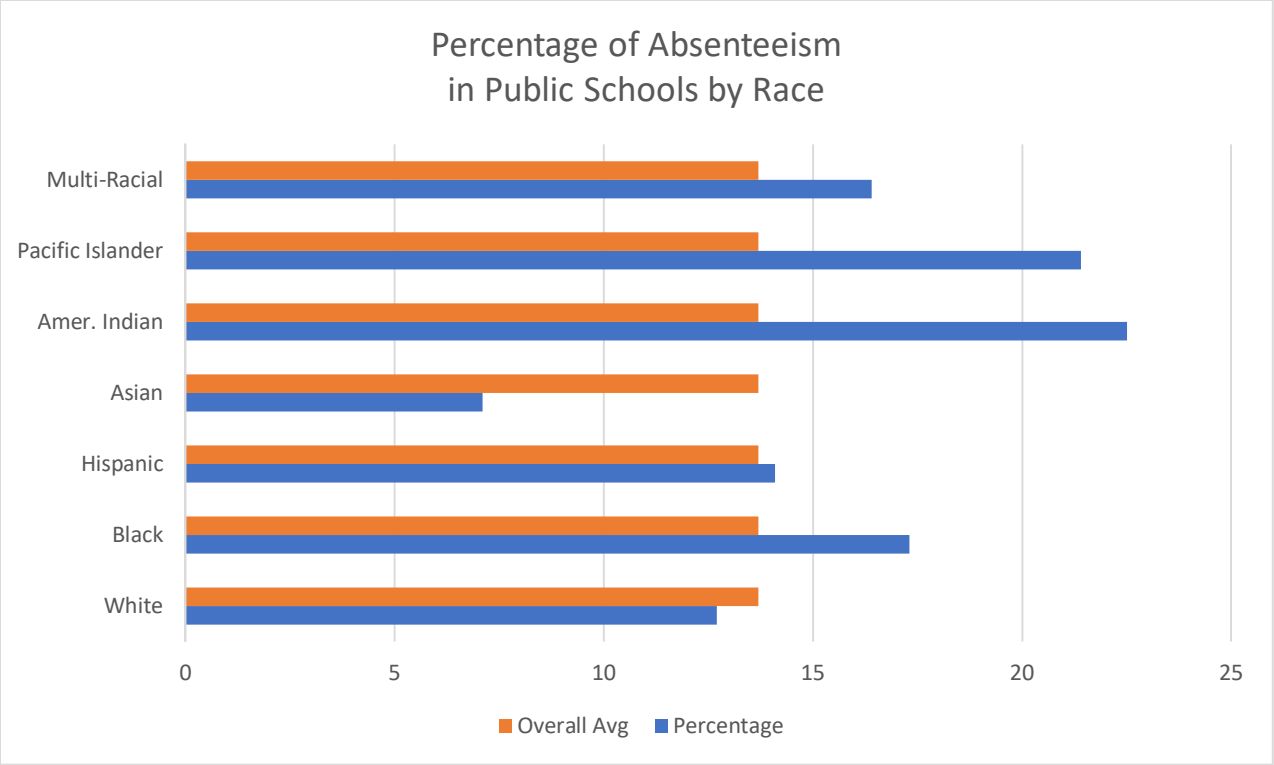
At the secondary level, unique concerns present themselves such as students at a high risk of dropping out of school and students not reaching proficiency on mandated state tests

(Pentimanti et al., 2009). It should be noted, however, that the indicators used to determine which students are at-risk should be carefully selected. Johnson notes the ease of using prior assessments may be tempting but less of an indicator than the actual grades that a student received. Multiple measures are needed to ensure that the screening instrument is accurate enough to be relied upon thus the need for an assessment of the universal screener.

Absenteeism. Attendance is important regarding student success in school (Smith, Emrick, Gilmore, High, Martin, Petro, & Rocks, 2009). It should be a factor in screening previous behavior that would impact student outcomes. Students that miss 10% or more of classes increase their risk of course failure (Balfanz & Byrnes, 2012). In the 2013-2014 school year, more than 6 million students missed fifteen or more days of school (U.S. Department of Education, 2016). Putting that into perspective, that means that nearly one in seven students suffer from chronic absenteeism (U.S. Department of Education, 2016). Though there is no significant difference in absenteeism by gender, the differences are apparent by race Figure 11 demonstrates.

Previous course failures. Course failures have significant implications in student success. Not only do they predict future student behavior and student dropout, they can have negative implications regarding education beyond high school and job opportunities (Needham, Crosnoe, & Muller, 2004). Further, students that fail are a good predictor of students dropping out of school (Needham et al., 2004).

Standardized test performance. Standardized tests and their use for student and school accountability have increased their impact on student academic outcomes (Needham et al., 2004). End of Course exams and North Carolina Final Exams account for 25% of a student's final grade for English I, English II, English III, English IV, Math 1, Math 2, Math 3, Discrete



Note. U. S. Department of Education, 2016.

Figure 11. Percentage of absenteeism in public schools by race.

Math, Pre-Calculus, Advanced Functions and Modeling, American History I, American History II, World History, Biology, Chemistry, Physics, and Physical Science (T. Mott, Data Manager, Hoke County High School, personal communication, May 11, 2016).

Multiple out of school suspensions. Suspensions result in lost time from school. Through the importance of attendance has been previously addressed, school suspensions incorporate additional factors since the decision regarding attendance is not left to the individual student. Recent data states that American students are losing 18 million days of school from out-of-school suspensions (Kiema, 2016). The loss of classroom instruction has a negative impact on student academic success and is a factor in student success (Losen, Hodson, Keith, Morrison, & Belway, 2015).

Alternative school assignment. Though student assignment to the alternative school in the Hoke County School District is due to some disciplinary issue and removes previously missed days of instruction when the student is transferred from the sending school to the alternative school (T. Mott, personal communication, May 11, 2016), it is a factor in student success in that the removal of previous missed school days from a student's records does not replace the learning opportunities the student missed from the lost instructional days.

Referrals from school counselors and social workers. School counselors and school social workers have access to some information that is not shared with administrators (A. Goslee, Hoke County High School Social Worker, personal communication, May 22, 2017). As a result, it becomes important that their collective expertise be a factor in determining what should be done with certain students for which they have unique information.

Progress Monitoring

Progress monitoring is also an important element. It can be defined as "the routine assessment of student performance to determine whether the student is responding adequately to the instructional program" (Johnson et al., 2009, p. 101). Progress monitoring must be done regularly to measure the effectiveness of interventions used in the various tiers. Progress monitoring tools should be "brief, valid, reliable, and evidence-based" (Pentimanti et al., 2009). Essentially, progress monitoring should provide the following: essential documentation of student progress, sufficiently informed decision-making in regard to instruction and interventions, increase student expectations, and improved student outcomes (Johnson et al., 2009).

At the secondary level, interventions can seem to be challenging. One process is to develop a "bank of interventions" (Johnson et al., 2009, p. 49). This would be in two parts. The first would be to look at interventions that are already in place such as afterschool tutoring. Make them a part of the bank of interventions. The second part is to identify areas of greatest need, limiting this to three or four areas in academics and behavior. Prioritize the needs and work to find effective interventions for those three or four needs, especially in the first year of implementation (Johnson et al., 2009).

Data Analysis

Data analysis is a critical component of implementing MTSS. This includes procedures for collecting data and having specific procedures in place to analyze the data. It must be determined what data will be collected for a Tier 2 referral and for a Tier 3 referral. This could include summative and formative assessments, attendance history, and benchmark testing. Someone must be responsible for the collection of the referrals. Specific forms must be agreed

upon and used. Looking for existing forms can and will save valuable time. A time and process to include parents must also be determined. Other tasks such as presenting the data to the problem-solving committee must also be assigned (Johnson et al., 2009).

Professional Development

According to Guskey and Yoon (2009), "No improvement effort has ever succeeded in the absence of thoughtfully planned and well-implemented professional development" (p. 497). That conclusion necessitates creating effective professional development (PD) as it relates to MTSS. PD should be developed and chosen in terms of the effective use of workshops, outside experts, time, follow-up, activities, and content (Guskey & Yoon, 2009). What Guskey and Yoon learned in their study of PD is that all successful PD included workshops, despite the assumption by many that they are wasteful. Additionally, according to Guskey and Yoon (2009), when workshops, to include summer institutes, are "focused on the implementation of research-based instructional practices, involved active-learning experiences for participants, and provided teachers with opportunities to adapt the practices to their unique classroom situations" (p. 496) they were effective.

Though the current trend is to use in-house experts, Guskey and Yoon make it clear that this is only a good beginning and that outside experts are needed to help sites and districts focus on the research instead of practices that participants currently agreed with or were using. Further, high quality professional development needs the effective use of time, usually 30 hours or more (Guskey & Yoon, 2009).

The activities in professional development cannot be focused on so-called best practices. Rather, the activities associated with PD must be determined based upon the specifics of the content, the particulars and nature of the job, and the content in which the PD will be used on the

job. In other words, effective PD does not develop from a set of best practices. It comes from the "careful adaptation of varied practices to specific content, process, and context elements" (Guskey & Yoon, 2009, p. 496).

For the content of PD to be most beneficial for the improvement of student outcomes, the teacher's content knowledge and the pedagogic content knowledge must be improved. Teachers need to increase their content knowledge, but they also must increase their ability to effectively teach that content as well (Guskey & Yoon, 2009).

There must also be effective follow-up as an active part of PD. Adapting to new curricula, academic standards, and pedagogic expectations requires follow-up that happens in real time that helps teachers adapt what they have learned to the real and unique classroom situations in which they find themselves. Follow-up after the primary PD activities increases student outcomes (Guskey & Yoon, 2009).

Buy-In

Buy-in is a critical part of any initiative. Generally, effective initiatives require the aid and support of significant number of other people (Kotter & Whitehead, 2010). Kotter and Whitehead (2010) address four general ways that buy-in is thwarted: "confusion, …death by delay, … fear mongering, … [and] ridicule and character assassination" (p. 15). Additionally, they give a basic five-step approach to overcoming the ways that buy-in is thwarted:

1. Garner the attention of the people by fully involving the attackers and allowing them to attack.
2. Then win the minds of the people using non-complicated, easy to understand, and common-sense responses.
3. Win their hearts by showing respect to all, remaining calm, and being focused.

4. Constantly monitor the people whose hearts and minds are the majority of the people. Do not get focused on the attackers.
5. Prepare in advance by anticipating what the attackers may say. (Kotter & Whitehead, 2010)

Further, Kotter and Whitehead list eight steps to help with buy-in. The first is to increase the urgency of the issue. This can be a great motivator for complacent people. The next step is to build a team of people who share this urgency. These should be volunteers, if possible. The third step is to ensure that this team of people not only shares the vision, but understands it and can extrapolate what things should look like in the future should this initiative be implemented. The fourth step is constant, consistent communication of the initiative. The fifth step involves foreseeing obstacles and overcoming them early. The sixth step to is to find short-term activities that will garner success. Early victories give initiatives momentum. Step seven is to continue to work at creating buy-in and creating the environment for change. In large scale efforts, it can become easy to lose the momentum if too much focus is given to early victories. The effort to fully implement buy-in must continue for high level buy-in to occur. The final step is to make sure the changes made though the initiative actually remain in place beyond the initial implementation and that the organization does not revert to previous methods that were replaced by the initiative (Kotter & Whitehead, 2010).

Using Improvement Science

Finally, improvement science should be used. According to Langley et al. (2009), there are three questions to consider with using improvement science:

1. What are we trying to accomplish?
2. How will we know that a change is an improvement?

3. What change can we make that will result in improvement? (p. 24)

What then follows is the appropriate use of the four stages of the improvement cycle: Plan, Do, Study, Act (PDSA) (Langley et al., 2009).

The Plan part of the cycle addresses what questions should be answered, what are the predicted answers to those questions, and having a plan to collect the data associated with answering those questions. The Do part of the cycle means that the plan was attempted and observations are made and documented regarding the doing of the plan to include what went right, what went wrong, and the unforeseen (Langley et al., 2009).

The Study part of the cycle is the time reserved to study and compare what was predicted to happen in the Plan part of the cycle to what happened in the Do part of the cycle. Taking the time to study the results helps to improve the process as the cycle continues. The final part of the cycle is the Act part. Here, what has been learned is used to improve what has already been done. Then the cycle begins anew (Langley et al., 2009).

The Concerns-Based Adoption Model

One of the frameworks for implementing a new school initiative is the Concerns-Based Adoption Model [CBAM] (CBAM: The Concerns-Based Adoption Model, 2015). This model has three primary parts or dimensions: Stages of Concern, Levels of Use, and Innovation Configuration Map (CBAM, 2015). The Stages of Concern has seven levels that are quantified as zero through six. The stages of concern are Awareness, Informational, Personal, Management, Consequence, Collaboration, and Refocusing (Loucks-Harsley). Loucks-Harsley expressed these terms by giving each one an expression to better understand them (see Table 1).

Table 1

The Concerns-Based Adoption Model Stages of Concern

Stage of Concern	Expression of Concern
6. Refocusing	I have some ideas about something that would work even better.
5. Collaboration	How can I relate what I am doing to what others are doing?
4. Consequence	How is my use affecting learners? How can I refine it to have more impact?
3. Management	I seem to be spending all my time getting materials ready.
2. Personal	How will using it affect me?
1. Informational	I would like to know more about it.
0. Awareness	I am not concerned about it.

Note. Loucks-Harley (n.d)

CHAPTER 3: METHODOLOGY

Proposed Use of Improvement Science

Answering the three questions of improvement science and following the PDSA cycle guided the process: Plan, Do, Study, and Act. The plan was for MIC to meet at least once a month to complete this process.

MIC has been in the Plan stage, determined the universal screener, and how to effectively progress monitor. By having MIC follow PDSA, the intent was to plan the rollout of MTSS; implement the partial rollout in the Fall of 2018 and the full rollout in the Spring of 2019 which is the DO part of the cycle; study and review benchmarks, 9-week/semester grades, and behavior reports which is the Study part of the cycle; analyze the results determining next steps which is the Act part of the cycle; and start the process over again. It was proposed that this process would repeat itself at least once every 45 days once the school year began. The use of the Two by Two Screening formula (see Figure 8) provided a measure of fidelity for the results of the implementation so that MIC and others would have access to facts regarding the success of the rollout and aid in the identification of where to look for improvements.

Implementation of MTSS Elements

Universal Screener

In the May 2018 meeting of MIC, a universal screener was determined. When looking at what was suggested by the elementary and middle schools in the district, creating a screening test seemed appropriate, but when comparing the curriculums of the different schools, it became obvious that such a test would be non-productive and infeasible. It is the writer's belief that high school students are over tested. Having witnessed students giving little to no effort to benchmark tests, there was reason to believe that any data gained from an actual test would be unreliable.

Further, creating a test that would be useful to all teachers in all subject areas would be daunting at best. The high school has courses in English, mathematics, and science. It also has courses in culinary arts, theater, welding, and band to mention a few. In all, the high school offers 143 different courses (see Figure 12).

Students will receive one point for each occurrence of an element of the screener. Students with 4 or more points will receive Tier 2 interventions. The elements of the screener were as follows. The first was to identify students with more than 10 absences in a course in the previous semester (or year for rising 9th-graders). The second element was to identify students that have multiple suspensions in the previous semester (or year for rising 9th-graders). The third element was to identify students that had failed multiple courses in the previous semester (or year for rising 9th-graders). The fourth element was to identify students that had scored a Level 1 on an End-of-Grade exam. The fifth element was to identify students that had scored a Level 1 on an End-of-Course exam. All these data would be available through PowerSchool though some data would be missing for transfer students. Additionally, students transferring from an alternative school or that have specific referrals from guidance and/or the social worker would automatically receive Tier 2 interventions.

Initially, a scoring system was used. Students have period attendance and not daily attendance, and the attendance data were compiled using daily totals from the batch output for absences. This means that if a student missed one day, the system would output 4 absences (one for each period). Using 10 absences as guide for excessive absences in a class, 40 to 79 absences counted as 1 point. Eighty or more absences counted as 2 points. Each course failure counted 1 point. This category was capped at 4 since some students take online classes in addition to the period classes and could potentially receive more than 4 failures. Students receiving an

Courses at Hoke County High School

English Language Arts	Math	Science	Social Studies	Career and Technical Education
AP English Language	AP Calculus	Anatomy and Physiology	20th Century	Agricultural Science
AP English Literature	AP Statistics	AP Biology	African American Studies	Animal Science 1
Broadcasting	Discrete Math	AP Chemistry	American History 1	Animal Science 2
Creative Writing	NC Math 1	AP Environmental	American History 1-Hn	Automotive 1
Debate	NC Math 1-Hn	Biology	American History 2	Automotive 2
English 1	NC Math 2	Biology-Hn	American History 2-Hn	Automotive 3
English 1-Hn	NC Math 2-Hn	Chemistry	American Indian Studies	Barbering 1
English 2	NC Math 3	Chemistry-Hn	AP European History	Barbering 2
English 2-Hn	NC Math 3-Hn	Earth & Environmental	AP Government	Barbering 3
English 3	Precalculus	Earth & Environmental-Hn	AP Micro/Macro Political	Career Management
English 3-Hn	SREB Math (College)	Fundamentals of Engineering	AP Psychology	Carpentry 1
English 4		Marine	AP US History	Carpentry 2
English 4-Hn	**JrROTC**	Physical Science	AP World History	Carpentry 3
Yearbook	JrROTC 1	Physics	Civics and Economics	Core and Sustainable Construction
	JrROTC 2		Constitution Law	Cosmetology 1
Arts	JrROTC 3	**Physical Education**	Psychology	Cosmetology 2
AP 2d/Drawing	JrROTC 4	Health & PE	Sociology	CPT
Art History		Intro to Physical Conditioning	World History	Culinary Arts 2
Band 1	**Foreign Language**	Leadership	World History-Hn	EKG Technician
Band 2	AP Spanish	Liftetime Sports		Electrical Technician
Band 3	ESL 1	Physical Conditioning: Faster, Stronger		Fire Fighting 1
Band 4	ESL 2	Physical Conditioning: Maintenance		Foods
Chorus 1	ESL 3	Sports		Health Science
Chorus 2	Essential Literacy	Sports Medicine 1		Health Team Relations
Chorus 3	Native Speakers 1	Sports Medicine 2		Horticulture 1
Chorus 4	Native Speakers 2	Sports Officiating		Horticulture 2
Dance 1	Spanish 1			Intro to Automotive
Dance 2	Spanish 2			Intro to Culinary Arts
Dance 3	Spanish 3			Medical Assistant
Dance 4				MS Excel
Music Appreciation		143 Courses		MS Word
Theater Arts 1				Nursing
Theater Arts 2				Personal Finance
Theater Arts 3				Pharmaceutical Technician
Theater Arts 4				Principles of Business
				Public Safety 1
				Public Safety 2
				Teacher Cadet
				Welding 1
				Welding 2
				Welding 3

Figure 12. Hoke County High School list of courses

Achievement score of Level 1 in an EOC or NCFE would receive 1 point for each occurrence (EOGs for rising 9th-graders). Students that transferred from the alternative school were given a score of 4. Any student receiving a score of 4 or more was identified as needing Tier 2 interventions.

Progress Monitoring

Progress monitoring would be done through reviewing and analyzing benchmarks which occur three times a semester, progress reports which are given two times a semester, 9-weeks and/or semester grades which occur two times a semester, interventions and discipline reports once monthly, and student attendance reports once monthly and as requested. Having specific information to review at both the MIC and professional learning community (PLC) level helps in the effective monitoring of student progress.

Data Analysis

The source of data will come from PowerSchool reports for grades and suspensions, ECATS (Every Child Accountability & Tracking System) for behavior, EVAAS (Education Value-Added Assessment System), Data collection forms (created by MIC) and/or the system of collection from ECATS, and the use of professional learning communities (PLCs) to analyze student data from their teams to determine the appropriate interventions and make referrals to MIC for review. Use of the Two by Two Screener formula to determine effectiveness of the universal screener and the Model for Improvement to determine the overall effectiveness of the MTSS implementation would also help to ensure accuracy in the analysis of the effectiveness of MTSS in the school.

Interventions

The Tier 2 interventions would consist of programs currently in existence at the high school. Teachers have had extensive training of using tiered or café style lessons in their classrooms. These lessons were designed to allow multiple ways for students to learn the same material usually allowing students to choose their method of instruction and/or assignment from several rows and columns. Each mini-lesson was designed around different learning styles but allows the students to learn the same material but in different ways. There was after-school tutoring with buses provided on Tuesdays and Thursdays. This is part of the AYPYN program (Army Youth Programs in Your Neighborhood). This pays for teachers to tutor and for bus transportation for students. There was also tutoring in the morning before school and during the two lunch periods. Additional interventions would be documented to include teacher-student conferences, telephone calls to the home, and referrals to guidance and/or the social worker. It should be noted that the tutoring sessions would require the teacher to specifically document the reason for the tutoring, the academic gap, and the standards being covered. Further, the school provided online instruction and had a heavy emphasis on PBIS. Additional interventions would be developed through MIC.

Professional Development

Professional development schedules would be completed to include three state modules and additional weekly training/professional development during common planning periods. As previously noted, MIC had a more rapid schedule for PD than did the rest of the school staff. This was to better ensure that these core staff members not only understand the process for implementing MTSS but to increase their buy-in. Their buy-in would help to increase the buy-in for the staff. This would also increase the emphasis on Tier 1 (core) instruction. Having teachers

understand the emphasis of reaching 80% growth with all subgroups on all summative assignment/assessments would bring the initial focus back to strong core instruction to better ensure success for students.

Professional Learning Communities

The PLCs would also be revamped so that they would become the problem-solving committees for the school. Traditionally, PLCs have only met once a week. They would now meet at least two times weekly. One would be for the traditional lesson planning for which they have been used. The other one would be to address the issues involved with students that may need Tier 2 interventions. Situations that the PLCs cannot find solutions for would be referred to MIC where they would determine the interventions. A specific process would be developed for this through MIC and the principal.

Summary

MIC would rely heavily upon improvement science as it analyzes the data regarding behavior and academics. Following the three questions and the PDSA cycle, the purpose was to be intentional in the study of the planning of the process, implementation, examination of the results, and acting on the newly found information. The development of a universal screener, the use of progress monitoring, and effective data analysis would play important roles in helping students and determining the effectiveness of the implementation. The use of PLCs as problem-solving committees would help solve one of the problems in implementing MTSS at the secondary level due to the comparatively complex structure of a high school as compared to an elementary school where most of the MTSS research currently lies. The use of key personnel on MIC would also help to build the buy-in so necessary for a new initiative to succeed. The initial rollout would limit itself to Tiers 1 and 2, and MIC would finalize additional limitations to keep

this as small-scale as practical to improve the full implementation in the Spring of 2019. The development of specifically targeted professional development on regular intervals would also increase effectiveness. Though the Concerns-Based Adoption Model is a sound instrument for the implementation of MTSS at this school, time did not allow its proper utilization and was not a part of the implementation plan.

CHAPTER 4: RESULTS

Since the change in school administration, the change in administrative direction delayed the implementation, only the universal screener was implemented and evaluated. As such, considerations and reflections regarding new leadership and the response to it will be included.

The Administration Change Factor

To fully understand the results, it is necessary to understand the changing developments in the Hoke County High School structure and environment. When this problem of practice was developed and the concepts presented in April, 2018, the principal of the Hoke County High School had been in place for seven years. The ideas and methodologies were shared with and approved by him to include timelines, activities, and expected outcomes. All of this was attached to this writer's job expectations and as a necessary part of expectations for the school by the school district and the North Carolina Department of Public Instruction.

On June 12, 2018 at 9:30 p.m., the new principal sent an email to the entire Hoke County High School staff that the Hoke County School Board had named him the new principal of Hoke County High School at the board meeting that night effective July 1, 2018. In this email, he requested that the staff begin meeting with him individually to discuss what they perceived to be necessary changes for the school. This writer was not aware that this change was coming nor were any indicators given by his predecessor. On June 14, 2019, the outgoing principal sent the staff an email regarding the change in administration. He stated that though he was aware of the possible changes that he was unable to discuss them due to the necessity of board approval for such changes to be official. He was promoted to the position of Associate Superintendent effective July 1, 2018.

The new principal, hitherto referred to as the principal, held an administrative meeting on June 15, 2018 for the assistant principals at the time. The associate principal was the administrator for the English Department, Fine Arts Department, Advanced Placement courses and exams, was the liaison for the school with the district's Curriculum and Instruction Department, and served in the absence of the principal. This writer, assistant principal 1 (AP1), was the administrator for buses, the Foreign Language Department, the Physical Education Department, MTSS, Security (cameras and the school resource officers), the English Learners Program, and campus cultural activities. Assistant principal 2 (AP) was the administrator for the Math Department, PreACT exam, ACT exam, and Native American Support Team. Assistant principal 3 (AP3) was the administrator for the Science Department, the Robotics Program development, PBIS (Positive Behavior Intervention Support), AYPYN (Army Youth Programs in Your Neighborhood) tutoring program, the STEM program (Science, Technology, Engineering, and Math), and the School Improvement Team. Assistant principal 4 (AP4) was the administrator for Social Studies, Campus Tutoring, the Student Government Association, student clubs and organizations, and was the school testing coordinator. Career and Technical Education (CTE) courses were divided among the assistant principals.

The principal developed some concerns regarding the administrative team after meeting with numerous teachers. He concluded that the administrative team was not visible, was ineffective, did not work well together, and needed leadership development. He stated that he came to this conclusion from his discussions with teachers. He changed all the administrative duties. This writer shifted from being the administrator for buses, foreign language, and physical education to becoming the administrator for Math and being the testing coordinator for the school. Further, the role of the testing coordinator was expanded to cover all testing to include

ACT WorkKeys (previously done by the Career and Technical Education Director), PreACT (previously done by Guidance with Brewington handling logistics), and ACT (previously done by Guidance with Brewington handling logistics) The SAT was still handled by the guidance department. In essence, during the 18-week academic cycle for a semester, there would either be the PreACT or ACT to setup, monitor, and administer for the school to include multiple training sessions and make-up days for testing, three weeks for benchmark testing, a week of end of semester testing, two weeks of make-up testing for end of semester testing, and the ACT WorkKeys testing to include training and make-up testing for students in each semester. MTSS was still his responsibility. The principal included the addition of 20 walkthrough observations a week that were not department related but followed a rotation schedule that spread these walkthroughs throughout the campus, a campus that sets upon nearly 50 acres. This was done in order to make the assistant principals more visible to more of the staff. Add to this the observations of teachers (28 in the first semester), student discipline, afterschool ballgame duties, and other miscellaneous duties and the time to effectively implement MTSS was greatly diminished.

Factor One

Additional factors also impacted implementing MTSS in a timely manner. Prior to the naming of the principal, a meeting was scheduled for June 21, 2018 to begin the implementation process for MTSS. This meeting was designed to begin the training process for the MTSS Implementation Committee (MIC). It was to include Team Initiated Problem-Solving (TIPS) training and to finalize the exact process for the small-scale implementation of MTSS for the Fall semester of 2018. Tonya Caulder, Hoke County Schools MTSS/PBIS/Behavior Support Coordinator, was to lead this training. Ms. Caulder's mother, however, passed away on June 20,

2018 making her unable to provide the training. MIC met on June 21, 2018 (see Appendix D) as planned using only an outline of the TIPS process and focusing more on how to do the small-scale implementation of MTSS. It was agreed to wait until the TIPS training was completed for MIC before making a final decision on how to rollout MTSS. The principal also made it clear that he did not want to begin using the ScholarChip-ABE (ABE) program until the following school year. He stated his desire to avoid too many changes for teachers with a new administration. ABE (Alternate Behavior Education) was selected by the Hoke County School District as the tool to monitor, track, and modify negative student behaviors, discipline of those behaviors, and the interventions used (T. Caulder, MTSS/PBIS/Behavior Support Coordinator, Hoke County Schools, personal communication, May 7, 2018). ABE is a program that was intended for use in data collection for the implementation of MTSS. In its place, the principal decided to continue using an online program called *Educators Handbook*. This program was already in use by the school and could track some data. AP 3 and AP 2 retooled this program to assist in the use and tracking of interventions linked to MTSS (see Appendix C).

To her credit, Caulder scheduled another meeting for MIC for July 25, 2018 (see Appendix E) and was able to attend. Though there was a delay, this meeting reset the process and placed it back on schedule. She began by training MIC on TIPS. Appendix F is an image from her presentation and helps to visualize the TIPS process. The process as planned was to have the existing PLCs use TIPS to analyze student behavior and academic performance using data collected by teachers and information provided by guidance counselors and social workers. TIPS is a required intervention tool for the district.

Caulder explained the TIPS process. It begins with data collection. This data would include results from formative assessments, behavior referrals, benchmark assessments, and any

other resource that would provide information helpful to evaluating students and determining next steps. This would allow the PLC to identify accurately the problem to address. Over time, the process follows these steps according to Caulder:

1. To determine the ultimate goal regarding the change needed
2. To determine the solution and process to obtain the desired goal for change
3. To implement the process/solution
4. To monitor the progress of the implementation by comparing what happens to the goal
5. To make a summative or final decision as to the success of the solution selected
6. To repeat the TIPS process if the solution does not work

Caulder followed TIPS training with a discussion regarding ECATS (Every Child Accountability & Tracking System). The software was still not available. When available, the plan was to initially implement this with NC Math II and Biology classes. It was not to be implemented until the teachers for these courses had completed the first two MTSS modules provided by NCDPI. Caulder shared a the previously approved plan for proceeding with the implementation (see Appendix H). AP 1 presented an attendance flowchart to help address the processes for monitoring attendance issues (see Appendix G). Attendance issues would be documented in *Educators Handbook* for referral to administrators and dropout prevention counselors. No more meetings were held in the Fall semester due in part to unforeseen circumstances.

Factor Two

Hurricane Florence impacted the school year in a negative way. Making landfall in North Carolina on September 14, 2018, Hurricane Florence caused the loss of seven school days. Add

to this the lost school day due to Hurricane Michael in October and it is easy to see how priorities changed for the school. Even with the return to school, many students and staff members found themselves displaced and with significant personal loses to property. The focus at the school was on recovering from the hurricanes, returning to a normal pattern, and determining how to help students and teachers make up for lost instructional days. Seven of the missed days were waived by state and only one needed to by physically made up (Jodie Bryant, Director of Public Relations, Hoke County Schools, personal communication, October 29, 2018). The new principal was concerned regarding implementing MTSS with the disruptions in October and believed that in the best interests of the school that the implementation could not effectively begin until the Spring Semester 2019. He did, however, push for the completion of the first two MTSS training modules from the North Carolina Department of Public Instruction by December 19, 2018. Of the 130 teachers employed at the high school only six did not complete it by December 19, 2018.

Since implementation would not actually begin until February 2019, the universal screener was all that remained to be analyzed. This, however, may have allowed for a more isolated evaluation of the screener since interventions were limited to only what had been done in previous years. It should be noted that the new administration placed great emphasis on wearing identification badges and being on-time to class. Late students had to get tardy passes from one of two locations on campus. Tardy sweeps were employed between class periods that helped to reduce the number of students skipping classes. Previously, teachers did not always document late students in PowerSchool. Obtaining tardy passes greatly improved the accountability for the number of times students were late to class. This may have impacted the

attendance component of the screener as most of the false negatives came from an increase in attendance issues (absences and tardies).

The Screener Results

Data were compiled for the universal screener during the week of August 27, 2018. It was again compiled after the end of the Fall semester during the week of February 4, 2019. In order to make sure that the comparative data remained relative, students that transferred out were removed. Students that enrolled after August 27, 2018 were not included. Further, all students that were enrolled for the beginning of the school year but never came to school were also eliminated. This left the enrollment count at 1,854 students. First year 9th-graders were included though attendance data was not made available to us. Further, there was no way to quickly compile the achievement level data for students, so this was not used. The ability to quickly compile data was critical to having a useful tool for screening a high school of this size.

After the removal of students that transferred out or that were registered and never reported to school, there were 116 students originally identified (see Figure 13). By the end of the semester, the screener was run again; 44 additional students were identified then. That made a total of 160 students. Though there was some overlap due to students having multiple identifiers for interventions, the following data was compiled. Of the 160 identified, thirty-six came from the alternative school. Thirty were sent to the alternative school during the semester. Forty-one missed more than 10% of their days the previous semester with either no improvement or an increase in their poor attendance habits. Twenty-eight improved their attendance from the previous semester. Thirty-one had course failure rates greater than the previous semester. Sixteen had course failure rates lower than the previous semester. Seven were first time 9th-graders that were identified at the beginning of the semester with only one needing interventions at the end of

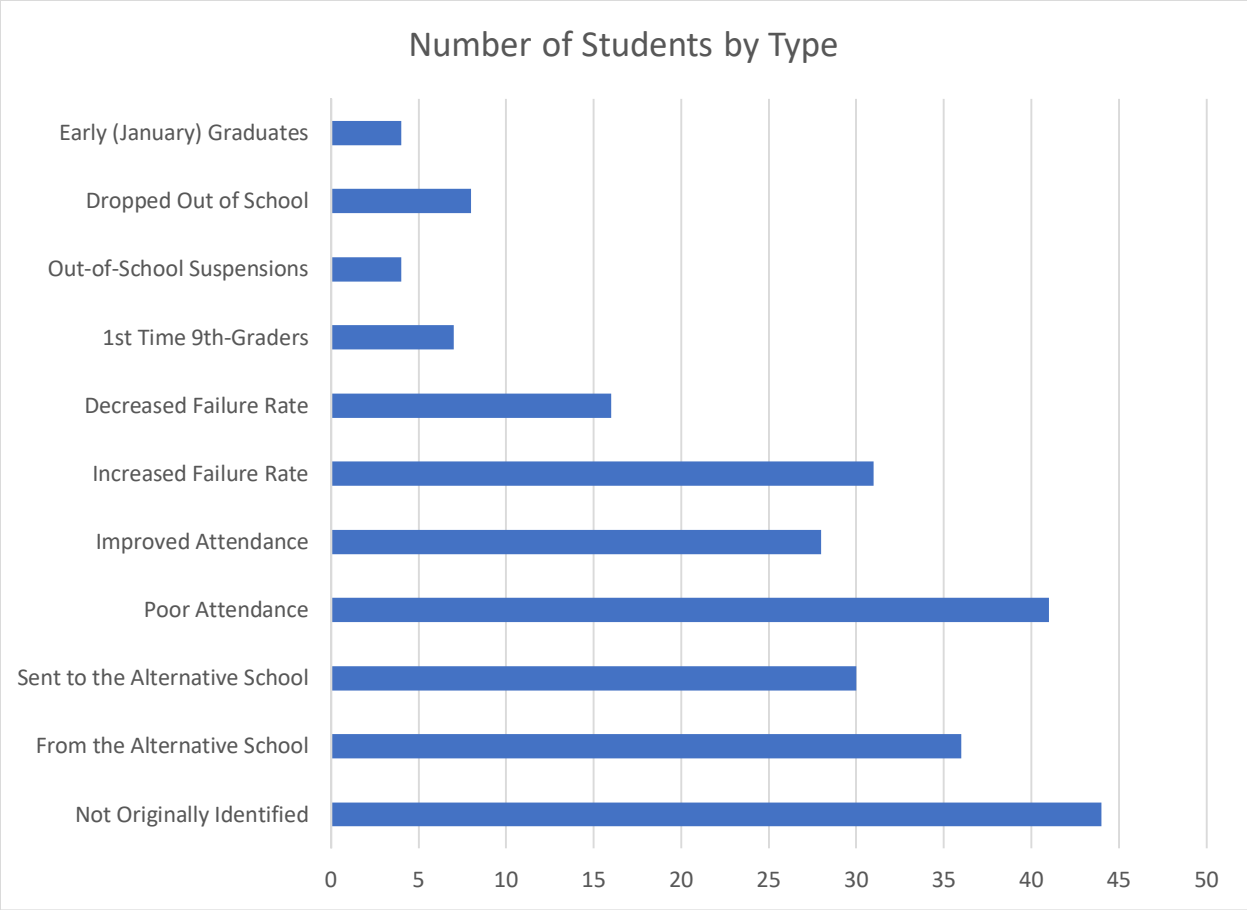


Figure 13. Number of students identified by type.

the semester. Four had out of school suspensions. Eight students dropped out during the semester. Four were early graduates. Dropouts were counted as indicating the need for interventions as were those sent to the alternative school during the semester.

Students initially identified as needing interventions and still needing them at the end of the semester were considered to be true positives (TP). Students initially identified as needing interventions but not needing them at the end of the semester were considered false positives (FP). Students initially identified as not needing interventions and remaining so at the end of the semester were considered true negatives (TN). Students initially identified as not needing interventions but being identified as needing them at the end of the semester were identified as false negatives (FN). This created the following numbers: 56 true positives, 58 false positives, 46 false negatives, and 1,694 true negatives (see Figure 14).

The sensitivity of the screener (true positives) was 54.9%. The specificity of the screener (false negatives) was 96.7%. Finally, the classification accuracy, the rate that the screener correctly determined, was 94.3%.

Comparative Data

To see if there were additional concerns with regard to the universal screen, data points were found for a four-semester period. Attendance (to include absences and tardies), out-of-school suspensions (OSS), and failure rates data were collected. Some trends revealed themselves. Absences remained steady for the past two Spring semesters with the Spring semester absences being higher than that of the Fall semester. There was an upturn in absences for the Fall of the 2018-2019 school year. Additional data may indicate a reason for the increase.

The number of students tardy to class has been a steady number in all tracked semesters except the Fall Semester of the 2018-2019 school year. The number of tardy students dropped by

	Failed Outcome	**Successful Outcome**
Positive on screen	**56** true positives (TP)	**58** False positives (FP)
Negative on screen	**46** false negatives (FN)	**1694** true negatives (TN)
Sensitivity = TP/(TP + FN)	**56/(56 + 46) = 54.9%**	
Specificity = TN/(TN + FP)	**1694/(1694 + 58) = 96.7%**	
Classification Accuracy = (TP + TN)/(TP + FP + FN + TN) = (56 +1694)/(56 + 58 + 46 + 1694) = 94.3%		

Figure 14. Two-by-Two Table of screening results.

over 2,000 students from an average of 10,470 per semester to 8,346. This drop may be explained by a change the principal put into place regarding being tardy to class. Students late for class must report to one of two locations on campus to get a tardy pass. This may have caused more students to go to class on-time. Further, when looking at the number of absences during this same time frame, the total number of absences increased. At the least, a correlation appears to exist between the decrease in the number of tardies and the increase in the number absences. This may indicate that rather than getting tardy passes some students are missing classes. This is, however, one semester using this method and may prove to be an anomaly.

The number of students with out-of-school suspensions has been declining with the exception of one year. In the Spring of 2016-2017, the number was 130. In the Fall of 2017-2018, there was a 60% increase in the number of students with out-of-school suspensions. That declined to 100 in the Spring of 2017-2018. The number for the Fall of 2018-2019 was 109.

The student course failure rate showed more failures in the Spring semester as opposed to the Fall semester. In the Spring of 2016-2017, the failure rate was 11.92%. In the Fall of 2017-2018, the failure rate was 11.23 and was 12.91% in the Spring semester. It was 11% for the Fall of the 2018-2019. Course failure rates were lower in the Fall semester of each year.

Monitoring this kind of data will allow for the following of trends that may influence the universal screener, implementations, and school discipline. The collection of this these data points and others yet to be determined will increase the fidelity of the data collection and analyzation process.

Using the Improvement Science

One must begin by answering the three questions of improvement science:

What are we trying to do?

How will we know that what changed is actually an improvement?

What change can be made that will result in improvement?

(Johnson et al, 2009).

Answering these three questions narrowed the focus on the results in such a way as to determine if the implementation resulted in improvement. The answers are incomplete due to the changing circumstances that delayed the implementation process.

What are We Trying to Do?

MTSS implementation was the goal. There were several steps that were completed: the creation of the implementation committee, the creation of a plan of action, and the creation and use of the universal screener. Several steps were not completed to include the implementation on a small-scale with select departments, the development of professional development, and the full implementation of MTSS. Ultimately, what was attempted was to implement MTSS with fidelity. That did not happen. What did happen was through the use of the universal screener, some insight was gained in how best to use it. Though the sensitivity was not as good as desired, the specificity and accuracy were. That part of the effort was accomplished.

Implementing MTSS will accomplish the goal of complying with an unfunded state mandate and will help to create a more unified school improvement model. Additionally, MTSS has a focus on core instruction, so improving that should help with overall student achievement. Over time, the preventions and interventions in MTSS should reduce discipline referrals and out-of-school suspensions, increase effective core instruction (which ideally should improve student

achievement), more effectively address attendance issues, and provide more effective services to students in need of additional helps with academics and behavior. Finally, because the implementation will begin as a small-scale proof of practice and will happen with only certain departments at the same time that other departments will continue using previous methods, this may be viewed as a "parallel approach" to implementation (Langley et al., 2009). In essence, the goal is to create a small scale-proof of practice that implements MTSS in select departments within the school by end of the 2018-2019 school year and that will enable a schoolwide implementation by August 2019.

Was the Changed an Improvement?

Though this will take more than one school year, the use of data will be key to knowing if improvement occurred. Baseline data from the 2017-2018 year was collected and stored. Each year thereafter, comparisons will be made and charted regarding absences, tardies, out-of-school suspensions, transitions to the alternative school, and course failures. Pre-assessments and progress monitoring tools such as common assessments and benchmarks will be used to measure student growth academically. Data will be collected regarding for use in PLCs to guide instruction and address student behaviors. Over time, an increase in effective core instruction linked to a decrease in out-of-school suspension, discipline referrals, and lost instructional time would all be indicators that improvement occurred.

What Changes will Result in Improvement?

Training the staff to think about students in terms of attendance, behavior, and academics aligns teacher and administration to think along the lines of the MTSS format. Retooling PLCs to dig into the issues with students beyond just the issue but to look for the why will result in improvement. Ensuring that instruction to all students shows at least growth for 80% of the

students, Finally, using interventions to prevent problems instead of relying heavily upon discipline to handle problems will result in improvement.

CHAPTER FIVE: SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary of Problem of Practice

The original intent of this problem of practice was to implement MTSS at Hoke County High School. The problem centered around the intentionally limited direction the North Carolina Department of Public Instruction gave to districts and schools regarding the required full implementation of MTSS by July 1, 2020. This allowed each district/school to develop their own program specific to their situation. Teachers at the high school had not been given any real training on MTSS at the beginning of this problem of practice. The Hoke County School District had, however, begun the process of implementing MTSS at the elementary and middle school level. The district had developed an MTSS Leadership Committee but did not have a representative from Hoke County High School. Positive Behavioral Interventions and Supports (PBIS) had been in place for several years and the Exceptional Children's Department had experience and training with Response to Intervention (RtI).

An MTSS Implementation Committee (MIC) was formed to address the problem of implementing MTSS at the high school. The committee consisted of key personnel from the school that would bring a variety of experience to the committee and would help with teacher buy-in for the rollout. The original plan was to rollout MTSS only for the 9th-grade with the belief that the following year those 9th-graders would be 10th-graders, the rising 9th-graders would have already been exposed to MTSS in the middle school, the then 11th-graders would be added, and the seniors would graduate prior to the full rollout.

A timeline for completing the MTSS training modules provided by the state was created to help give the committee a better understanding of the base concepts of MTSS. These modules

addressed school readiness for implementation, the elements of core support, and some basic understanding on what to analyze in collected data.

In order to effectively implement MTSS, several elements must be developed and understood: the universal screener, progress-monitoring, effective interventions, and data analysis (Johnson, Smith, & Harris, 2009). Adding improvement science is also important to make sure real change is happening and that the change has a positive impact (Langley et al., 2009). The use of the Two-by-Two Table of Screening would aid in the measuring of the accuracy of the universal screener (Johnson, Smith, & Harris, 2009).

Several factors were planned to be measured. Absenteeism was important. Students that missed 10% or more of their classes increased their risk of course failure (Balfanz & Byrnes, 2012). Nearly one in seven students missed fifteen or more school days which would be defined as chronic absenteeism (U.S. Department of Education, 2016).

Previous course failures were to be considered. Course failures have negative implications for education beyond high school and job opportunities (Needham et al., 2004). Poor standardized test performance was considered due the similar impact that it has on education beyond high school and job opportunities (Needham et al., 2004). These scores, however, would have to be compiled by looking at each individual student. This would be too time consuming to use for the universal screener and was not used as a factor for the screener.

Multiple out of school suspensions result in lost time from school. Though attendance is addressed, decisions about suspensions are not left to the student. With students losing 18 million days of school due to suspension nationwide (Kiema, 2016), this factor was used in the universal screener. Additionally, alternate school assignments due to discipline were included as a separate

factor. Though students have their absences removed when this occurs (T. Mott, personal communication, May 11, 2016), they still lose instructional days.

Finally, referrals from school counselors and social workers could determine if a student needed Tier 2 interventions. These persons have access to information that may not be generally shareable. As such, their recommendations would be followed.

It was planned to use progress monitoring as a next step after the universal screener. Using regular and routine "assessments of student performance to determine whether the student is responding adequately to the instructional program" (Johnson et al., 2009, p. 101) is necessary so that adjustments can be made to ensure student success. This can be challenging at the secondary level. The creation of various item banks for various curriculums is one way to address this (Johnson et al., 2009) and was planned as a part of the implementation process. Further, the need for such assessments to be "brief, valid, reliable and evidence-based" (Pentimenti et al., 2009) is essential for these progress monitoring instruments to useful and effective. These progress monitoring assessments and other factors such as attendance would need regular data analysis. Using the currently existing PLCs to do this would allow for the use of an existing structure and would only require some retooling of this to be effective.

Professional development would then be used to make this transition. No improvement effort can be successful without effective professional development (Guskey & Yoon, 2009). This would require the use of workshops, outside experts, and structured follow-ups (Guskey & Yoon, 2009).

For the implementation of MTSS to be effective, several key stakeholders are needed that buy-in to the process (Kotter & Whitehead, 2010). Buy-in can be achieved by avoiding the four general ways that buy-in is thwarted: confusion, death by delay, fear mongering, and ridicule and

character assassination (Kotter & Whitehead, 2010). To achieve this, the plan was to follow the Kotter and Whitehead's five-steps to overcome efforts to kill buy-in and to follow their eight steps to achieve buy-in (see Table 2 and Table 3).

It was also planned to use improvement science in the implementation of MTSS at Hoke County High School. Asking the key questions and following the PDSA cycle (see Figure 15) would have allowed for systematic analysis of the process of implantation as it progressed.

As process began May 2018, several setbacks occurred. The MTSS/PBIS/Behavior Support Coordinator for Hoke County Schools was to lead the initial training. Her mother passed away just before the first training session. This delayed the training for a month. During this time, a new principal was named. His direction for the school was different from his predecessor as would be expected, and this further slowed the process down. Two hurricanes followed that completely disrupted the fall semester and the lives of people in the district. These unforeseen circumstances impeded the efforts to fully begin the implementation process for MTSS. The only part of the process could be done was to use the universal screener as designed and look at the outcome again when run at the end of the semester. Though the sensitivity was only 54.9%, the specificity was 96.7% and the classification accuracy was 94.3%. Thus, the general accuracy was high as was accuracy of true negatives. The number of true positives was not. There may be several factors that affected this. Of the first time 9th-graders identified, less than 15% were accurately true positives. Further, the alternative school factor may have weighted too heavily. Additionally, of the 36 from the alternative that were identified as needed interventions, only 10 did by the end of the semester. That means the nearly more than 3 out 4 were incorrectly identified. To correct this, the alternative school factor may need to be reduced from a factor of 4 to 3 or the overall score for interventions increased from 4 to 5. Since accurate attendance data

Table 2

Five-Step Approach to Thwart Buy-In Killers

Step	Approach
1	Garner the attention of the people by fully involving the attackers & allowing them to attack.
2	Win the minds of the people; use non-complex, easy to understand, and commonsense responses.
3	Win their hearts by showing respect to all, remaining calm, and being focused.
4	Monitor the people whose hearts and minds are the majority--don't focus on the attackers.
5	Prepare in advance; anticipate what the attackers may say.

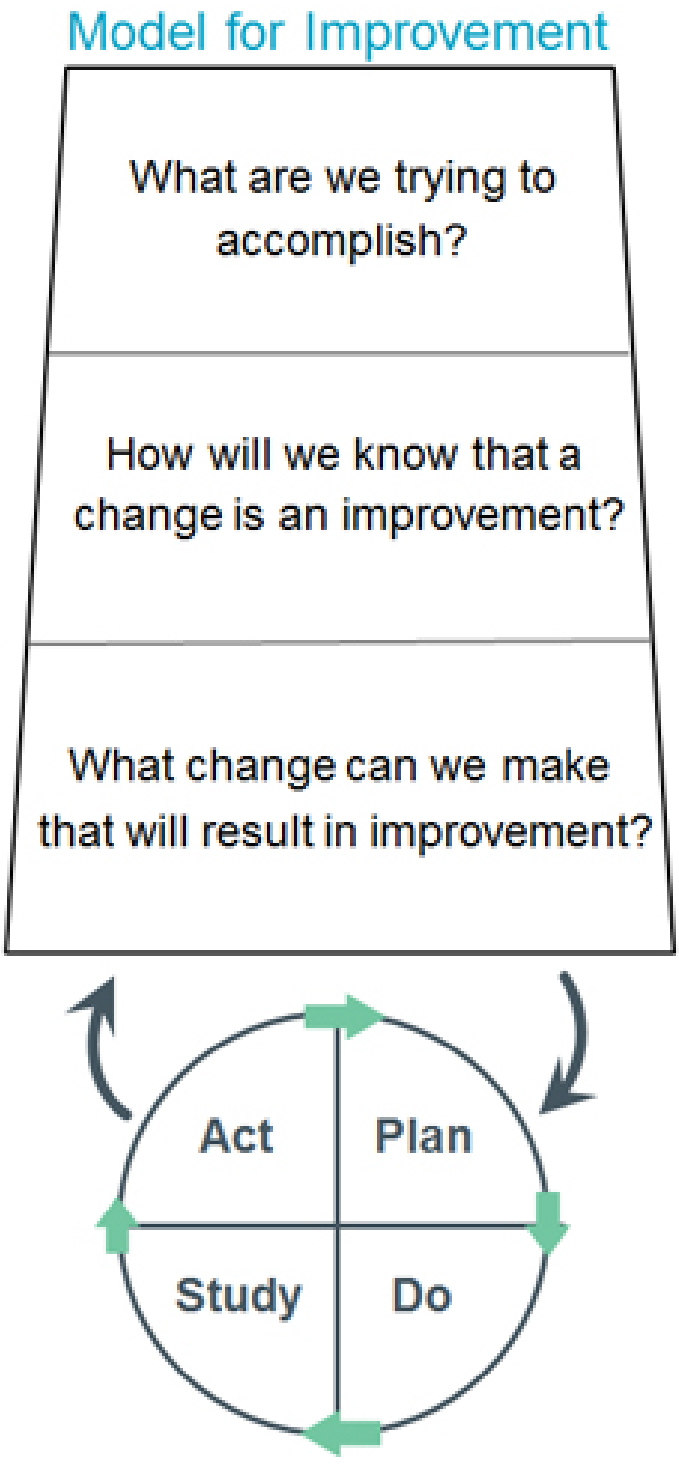
Note. (Kotter & Whitehead, 2010).

Table 3

Eight Ways to Help with Buy-In

	Strategies
1	Increase the urgency of the issue.
2	Build a team of people who share the urgency.
3	Ensure this team share and understand vision.
4	Have constant, consistent communication of the initiative.
5	Foresee obstacles and overcome them early.
6	Find short-term activities to garner success.
7	Continue to work to create buy-in; create the environment for change.
8	Make sure the changes made remain in place beyond the implementation stage.

Note. (Kotter & Whitehead, 2010).



Note. (Langley et al., 2009).

Figure 15. Improvement Science Model.

cannot be easily pulled from students that left the high school, went to the alternative school, and then return to the high school, some data will be lost. These changes may increase the sensitivity with only minimal impact on the specificity of the screener and the classification accuracy.

Conclusions

A problem of practice dissertation is genuinely a real-world problem with real-world circumstances. In any initiative, adapting to changing circumstances in essential to finding ways to make things work. This problem of practice was no different.

The universal screener was designed so that no actual testing would be necessary to identify students that would need Tier 2 interventions. It was assumed that, at the high school level and with the number of tests and exams these students take, these students would not necessarily take another test that was ungraded and give sufficient useful data with which to screen. Traditionally, students were usually not identified as needing help until several weeks of instructions had passed and this was a disadvantage to students that would ultimately need help. Therefore, the screener as designed is a useful instrument and will help to quickly identify students in need of interventions.

It must be remembered that this was only done for one semester. Multiple semesters are needed to fully determine the value of the screen. Additional data compiled by the PLCs would also need to be compared to the screener. This would allow the comparison of the findings from the PLCs with that of the screener. This may help to identify further adjustments that need to be made to the screener.

Having completed only completed the universal screener portion of the implementation, the writer had to address the real-world situations that occur with attempting to implement a new program at the school. Numerous factors can impede the implementation as was the case this

time. The transition in school leadership and the impact of two hurricanes that resulted in lost instructional days caused the implantation to be delayed until March 2018. In any initiative, including a new implementation, leadership is a critical factor. Although intervening circumstances and events occurred that prevented the small-scale proof of practice to be fully implemented, invaluable leadership lessons were learned. The writer will explicate those lessons in the following section.

Leadership Reflections

Becoming the principal of a high school for the first time is challenging. Following a veteran, exemplar principal is a dynamic that further complicates the process. Establishing one's self as the new principal with a somewhat different approach and agenda than one's predecessor could easily become daunting. The same situation would present itself if the position was school superintendent. Further, going through the process of implementing a new practice with new procedures required the use of executive skills to be effective by all those involved.

When embarking upon this journey as a principal, superintendent, or other such school leader in this situation, several elements or standards in school leadership come to mind: cultural leadership, strategic leadership, and micropolitical leadership (North Carolina Department of Public Instruction, 2007). One should be mindful that though there may be preferences in methodologies, there are no "cookie-cutter" answers that will work in any and all circumstances. Further, circumstances are fluid—changing and evolving with each action, decision and/or interaction with others. This means that what may work in the beginning of the transition may need to change and evolve as circumstances change. Additionally, what may not be useful or workable in the beginning may be found to be useful as circumstances change. This interpretation, however, may be influenced by the writer's inclination toward situational

leadership, which by application, would have an inclination to use any leadership style as the situation dictated. Still, the premise behind the thinking and reflection on the aforementioned circumstances would seem to hold regardless of the leadership style with the probable exception of the laissez faire leadership style.

Cultural Leadership

Cultural leadership may be defined as having the understanding of the importance of district's culture and its impact on "the exemplary performance of all schools" (North Carolina Department of Public Instruction, 2007). This requires an understanding of the people in the district, the communities that make the district, and other factors effecting the district. This would mean learning "how they came to their current state and how to connect to their traditions" to move them from where they are to where they need to be (North Carolina Department of Public Instruction, 2007). Changing the culture of a district cannot be done without building trust and creating a sense among all stakeholders that all will be well. Lacking that, change will be received as the proverbial bull in a china shop. It would be assumed that some degree of patience and some degree of urgency would be needed to effect change. Circumstances would dictate the appropriate proportions. An appropriate balancing of the two are needed to change a culture, if that is the desired goal.

One thing that was apparent as completing this problem of practice was the difficulty in appropriately and effectively changing culture. When the culture has been entrenched for years, some change may occur immediately, but the price for quick change may result in only getting the minimum and not the best out of people. It can damage trust. Trust is a factor to school success. According to Covey in his book *The Speed of Trust: The One Thing that Changes Everything*, "schools with high trust had more than a three times higher chance of improving test

scores than schools with low trust" (Covey, 2018). It is critical to have trust in order to build capacity.

One may also note three principles necessary to create the culture one wants: "Identifying organizational truths," leader buy-in," and the "alignment of behaviors and beliefs" (Fechtman, 2018). It is not uncommon for organizational members to experience the culture of the organization differently. This is due to the lack of consensus as to what the organization's values are. As such, members of the organization usually cannot determine the value driven force behind the organization and, therefore, cannot follow them as a group (Fechtman, 2018). To fix this, the organization must have what Fechtman (2018) calls "intentional culture".

The first principle of intentional culture is identifying organizational truths. In other words, for what does the organization stand? To be sure that these truths are evident, they need to be clearly defined and accurately measured. This can be done through interviews of the staff and/or various stakeholder surveys. What the organization stands for must be cultural knowledge for those in the organization as well as those external to the organization that interact with it (Fechtman, 2018). Though culture can be perceived to be an intangible that is difficult to define, it can and should be clearly defined and measured.

Intentionally or unintentionally, the leadership of an organization creates the culture of the organization. What leaders do is closely monitored and often used as a model for all members of the organization. Therefore, leaders must model the culture that they wish to have in their organization. Leaders will either enable the proper culture or disable it (Fechtman, 2018).

Once the values that will make the culture are determined, the behaviors of the organization must align to those beliefs. Creating congruence between the beliefs of the organization, the leaders, and the stakeholders of the organization is critical to having a positive

and strong culture (Fechtman, 2018). One must be careful to not be disillusioned into believing the culture is one way when in fact it is another. Regular measurement of the what the various stakeholders believe becomes useful in determining congruency.

Since the term character is less nebulous than the term culture, school character may be a better way to analyze this. Whether an individual school or a school district, school character usually defines what the school culture is. “Building and enhancing the school’s character is the key to establishing its credibility among students, teachers, parents, and administrators and externally in the broader community” (Sergiovanni, 2009, p. 18). Lacking this character, the organization cannot be effective (Sergiovanni, 2009).

Jim Collins in his book *Good to Great* describes what he calls “a culture of discipline” (Collins, 2001):

> “All companies have a culture, some companies ha e discipline, but few companies have a culture of discipline. When you have disciplined people, you don’t need hierarchy. When you have disciplined thought, you don’t need bureaucracy. When you have disciplined action, you don’t need excessive controls. When you combine a culture of discipline with an ethic of entrepreneurship, you get the magical alchemy of great performance” (Collins, 2001, p. 13).

One obvious factor to the writer was the difficulty in building trust within and for the administrative team. When entering a new position of leadership, finding ways to establish and build trust are critical to effective leadership. Shifting the culture must be intentional. In fact, one should think of culture in terms of character to make the process more concrete and to ensure that all stakeholders will see and align themselves to that character such that improvement and

effectiveness become by-products. Finally, creating a culture of discipline helps to make the organization capable of obtaining excellent results.

Strategic Leadership

Strategic leadership may be defined as carefully and thoughtfully creating the conditions to effect change "strategically re-imaging the district's vision, mission, and goals" to ensure that students are globally competitive (North Carolina Department of Public Instruction, 2007). This also entails creating the environment that allows and encourages the constant reflection by community and staff on what the core values of the district's future and the roadmap to get there (North Carolina Department of Public Instruction, 2007). This requires challenging the status quo processes that produce the future desired for the district. It further requires that the processes created to get to that future actually drive the decision-making (North Carolina Department of Public Instruction, 2007). Personal agendas are roadblocks to this and interfere with effective strategic leadership. Further, to be effective, leadership must be shared. No one can do it all alone, especially school leaders. This is a key element of strategic leadership, particularly when viewing shared leadership as a type of progressive leadership (Sergiovanni, 2009). This shared leadership may be viewed as giving leadership to persons according to their rank or position. Matching one's responsibilities with one's authority makes this process effective (Sergiovanni, 2009).

Strategic leadership is not narrow in focus; it is broad. One must understand that decisions impact more than the immediate area. Decisions are not simply isolated events. Rather, each decision has impact that spreads, thus influencing and impacting the future and future decisions. Strategic leadership focuses on the future. It must be more than the immediacy of now. Operational leadership focuses on the day-to-day operation and decision-making. It may even be

good with short-term planning. Strategic leadership must see beyond today creating and utilizing a blueprint for the future. Finally, strategic leaders seek out change. They are the driving force behind organizational change (Hughes, Beatty, & Dinwoodie, 2014).

When entering a new leadership environment, existing personnel and structures will be in place. The general idea is not to enter the gates purging the city to make room for new people. That may come at some point but rarely is appropriate in the beginning. Rather, it may be better to use what one has. Retooling processes, recasting vision, revitalizing personnel may be a quicker route to improvement. Some replacements are bound to happen. They should be the exception and not the rule.

All leaders should be strategic leaders, not just the superintendent. In fact, teachers, teacher assistants, custodians, cafeteria workers, and office workers should all be strategic leaders. If the culture is strong, common, and ethical, there is no reason that strategic leaders cannot strategically drop the proverbial pebble in the pond and create ripples of change for the future.

Micropolitical Leadership

Micropolitical leadership may be defined as promoting "the success of learning and teaching by understanding, responding to, and influencing the larger political, social, economic, legal, ethical, and cultural context" (North Carolina Department of Public Instruction, 2007, p. 6). The superintendent leads in defining roles for the superintendent and board to include helping to shape and define the mutual expectations so necessary for the board and the superintendent to work together effectively. This requires developing an understanding of the internal and external political processes impacting the district.

The success of micropolitical leadership lies in the perception of those being led. Success relies upon two factors: whether or not the strategies are consistent with the target groups' norms and values and whether or not the goals are consistent with the target groups' norms and values (Blaise, 1993). Blaise give the example of administrators being more visible to increase teacher performance. Administrators being visible is a strategy that is consistent with teacher norms and values. The goal or expectation that teachers will increase their performance is also consistent with their norms and values.

Despite the not uncommon unpleasantries of politics, effectively navigating the waters of politics makes being the captain of the ship an easier job. That said, the playing of politics for sake of playing politics would seem to be an inappropriate part being an effective leader. One must keep in mind that the livelihoods of staff and the future of students are always at stake with the decisions district leaders make. This writer recognizes his distaste for the political shenanigans so often witnessed in school districts. They are usually devoid of ethical content. To be effective in this realm, one must never lose sight of doing what is right above what is expedient or even preferred. To be effective, one must understand the norms and values of those being lead and either work within those norms and values or change the culture in order to have norms and values that will allow for the micropolitical to be positive and effective.

Future Plans and Next Steps

In March 2019, another effort to implement MTSS was begun. The Biology Department teachers were brought in for training on March 19, 2019. They received an overview of MTSS and began TIPS training. This training was led by the district MTSS coordinator. On March 22, 2019, these same teachers received training on buy-in and how to handle the attacks that may come from the staff during this implementation. This training followed what was addressed by

the writer regarding buy-in (see Table 2 and Table 3). Additional training was scheduled for March 26 and April 2 so that these teachers can work through a mock-MTSS style PLC. These sessions will be used to help develop tools for the PLCs to use. Further, the Biology Department began using ABE to input referrals, interventions, and parental contacts. Biology teachers will do the bulk of the presentations to others in the weeks ahead.

On April 8, 2019, a larger training will be held with the remainder of the Science Department, as well as the Exceptional Children's Department and the Fine Arts Department. The Biology teachers will lead this training with help from the MTSS Coordinator and the writer. These additional teachers will begin using ABE after April 8. On May 13, 2019, the Mathematics Department will be trained and added to the implementation process. They too will then be added to those teachers using ABE.

Each Tuesday at 7:00 a.m., the Hoke County Schools MTSS Coordinator will provide training for the Hoke County High School assistant principals. This will allow the assistant principals to be able to more fully participate in the implementation of MTSS and work on changing the current culture regarding discipline and core instruction. Further, a staff training will be done on April 1, 2019.

The entire staff will begin the completion of five MTSS modules from the North Carolina Department of Public Instruction. The module, MTSS 1.3: Analyze Core Support for School MTSS Teams v. 1.19, is scheduled to be completed by all staff members by April 15, 2019. The second one, MTSS 2.1: Establish Readiness and Sustainability for Building an Intervention System for the School Team, is to be completed by May 17, 2019. The remaining three (MTSS 2.2: Building a Literacy Component to an Intervention System for School Teams, MTSS 2.3: Build a Math Component to an Intervention System for School Teams, and MTSS 2.4: Build a

Behavior/Social-Emotional/Attendance Component to an Intervention System for School Teams) will by done over the summer of 2019. In August 2019, full implementation of MTSS will begin by adding the remaining department to the trainings.

The teachers from the Biology department involved in the initial training will continue to be trainers. They will also lead in the development of PLC forms to be used with the TIPS model for PLC use for the staff.

Though the PLCs will do the bulk of the data analysis for MTSS, the MTSS Implementation Committee will be trained to become the MTSS Committee. This committee will address student situations that the PLCs were unable to handle. It should be kept in mind that these modules only provide a general overview. The information, especially for high schools, requires much adaptation for effective application as the high school level.

Recommendations

A full commitment to implementing MTSS will be necessary to have it fully in place and effective by July1, 2020. It must be a top priority. In the Spring semester of 2019, at least two departments in the school must be well acclimated to using ABE and ECATS. The atmosphere for buy-in must begin in the Spring semester in order to have the sense of urgency necessary to have the implementation work.

With the inclusion of ABE, the screener should be adjusted to utilize the information that it collects. This will mean adding write-up data concerning behavior and interventions currently not available in as useful a form at ABE should provide.

The full implementation plan was not used. It should be used beginning with two departments in the Spring of 2019 and then fully prepared for over the summer months. It will

take at least one administrator that is given ample time during the work day to supervise the implementation. It will be a complex task to do in a little more than a year (see Figure 16).

Each day, the principal sends out morning notes. The inclusion of something in regard to MTSS each day would create the sense of urgency that will be critical to implementing this initiative. Further, MIC will need to be reenergized to be effective in helping to create the buy-in so necessary for implementation and change to take root in the school environment. The administration team will need to fully buy into MTSS for it work on the campus.

Appropriate, effective professional development needs to be planned. Some will need to be developed in-house. Some will need to come from outside experts. That means that there will need to be a financial commitment made in order to have professional development that effects the changes and growth needed to implement MTSS.

MTSS is a program for school improvement. It should help schools to better manage students, be more effective in core instruction, and be more effective in the use of data to guide the decisions so critical to student and school success. It should help to target interventions toward students that can be easily missed. Helping them improve will help improve school performance. Ultimately, this should be the goal of all schools: making sure that every student that comes through the school's door is better for it.

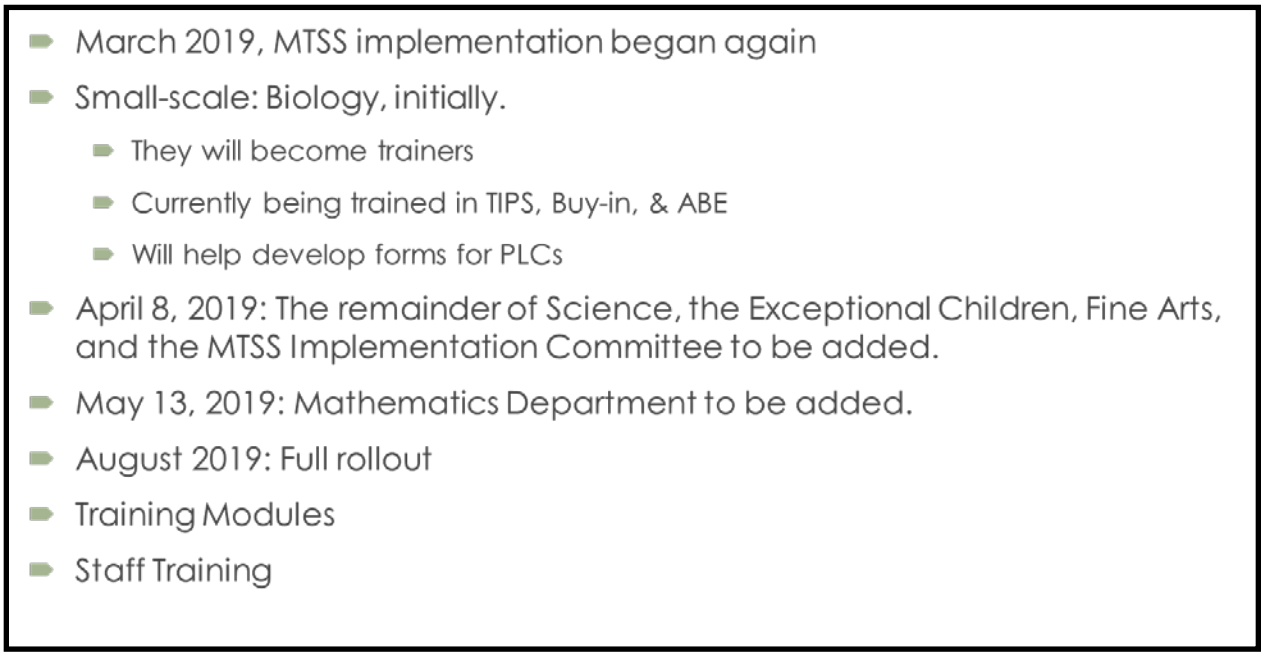


Figure 16. Next steps/future plans.

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APPENDIX A: INSTITUTIONAL REVIEW BOARD APPROVAL

EAST CAROLINA UNIVERSITY
University & Medical Center Institutional Review Board
4N-64 Brody Medical Sciences Building· Mail Stop 682
600 Moye Boulevard · Greenville, NC 27834
Office 252-744-2914 · Fax 252-744-2284 ·
www.ecu.edu/ORIC/irb

Not Human Subject Research Certification

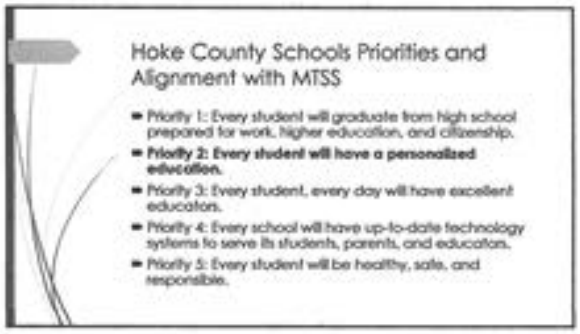
From: Social/Behavioral IRB
To: Franklin Bowden
CC:
Jim McDowelle
Date: 1/9/2019
Re: UMCIRB 18-002988
Social/Behavioral IRB

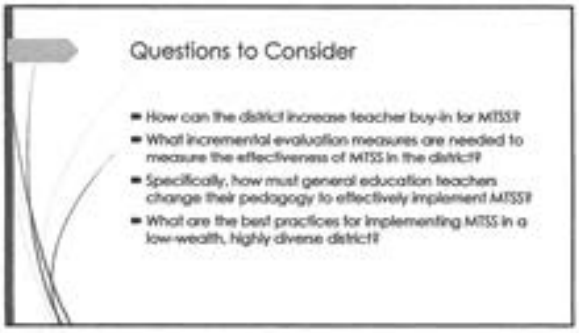
On 1/9/19, the IRB Staff reviewed your proposed research and determined that it does not meet the federal definitions of research involving human participants, as applied by East Carolina University.

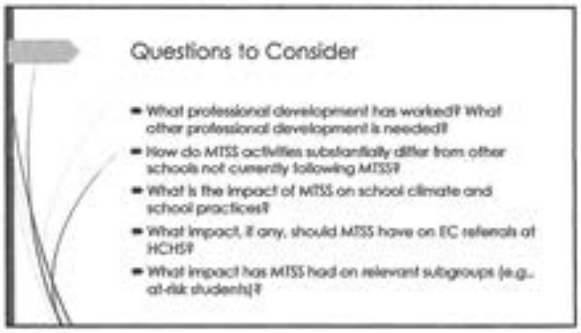
Therefore, it is with this determination that you may proceed with your research activity and no further action will be required. However, if you should want to modify your research activity, you must submit notification to the IRB before amending or altering this research activity to ensure that the proposed changes do not require additional UMCIRB review.

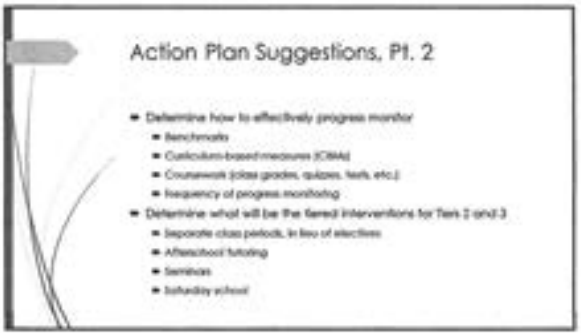
The UMCIRB appreciates your dedication to the ethical conduct of research. It is your responsibility to ensure that this research is being conducted in accordance with University policies and procedures, the ethical principles set forth in the Belmont Report, and the ethical standards of your profession. If you have questions or require additional information, please feel free to contact the UMCIRB office at 252-744-2914.

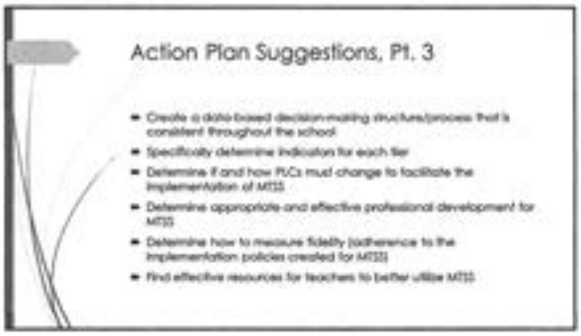
APPENDIX B: INITIAL MIC PRESENTATION MAY 2018











APPENDIX C: TIERED INTERVENTIONS

Hoke County High School Tiered Interventions

Tier 1	Tier 2	Tier 3
After School DOP Detention	After School DOP Detention (Teacher/DOP)	Alternate Education Assignment
Before School Detention w/ Teacher	Alternate Education Assignment (on campus)	Behavior Intervention Plan (Team)
Bounce	Behavior Contract	Bus Suspension (more than 5 days)
Change Seating	Behavior Intervention Assignment (IEP only)	Out of School Suspension Pending Hearing
Combined w/ Another Action	Behavior Intervention Plan (BIP)	Parking Permit Revoked
Lunch Detention (classroom)	Bus Suspension (5 days or less)	Reported to SRO
Parent Conference (Teacher)	Chill Out	
Parent Contact (Teacher)	DOP Contract	
Student Conference	DOP Referral	
Student Improvement Plan	Guidance Referral	
Student Provided Opp. To Correct	ISS (all day)	
Verbal Warning	Lunch Detention (cafeteria)	
Written Warning	Lunch Detention (ISS)	
	Mediation Agreement	
	Other School-Based Action	
	Out of School Suspension	
	Parent Conference (Administration)	
	Parent Contact (Administration)	
	Parent Contact (Student Services)	
	Parking Permit Suspended	
	Peer Mediation Referral	
	Period Detention (ISD)	
	Refer to Administrator	
	Refer to Case Manager	
	Restitution	
	Saturday Academy	
	School Social Worker Referral	
	Tobacco Intervention Session	

APPENDIX D: AGENDA MIC MEETING JUNE 21, 2018

AGENDA

MTSS IMPLEMENTATION COMMITTEE

21 JUNE 2018

Refreshments

9:00 TIPS Training, Part 1: Tonya Caulder

9:55 Break

10:05 TIPS Training, Part 2: Tonya Caulder

11:00 Break

11:10 Small scale proof concept discussion/decision
- 9th-grade only
  - EOCs only (Eng II, Math I, & Bio I)
  - All English & Math

Next steps

Next Meeting: Online, in-person, email only

12:30 Adjournment

APPENDIX E: AGENDA MIC MEETING JULY 25, 2018

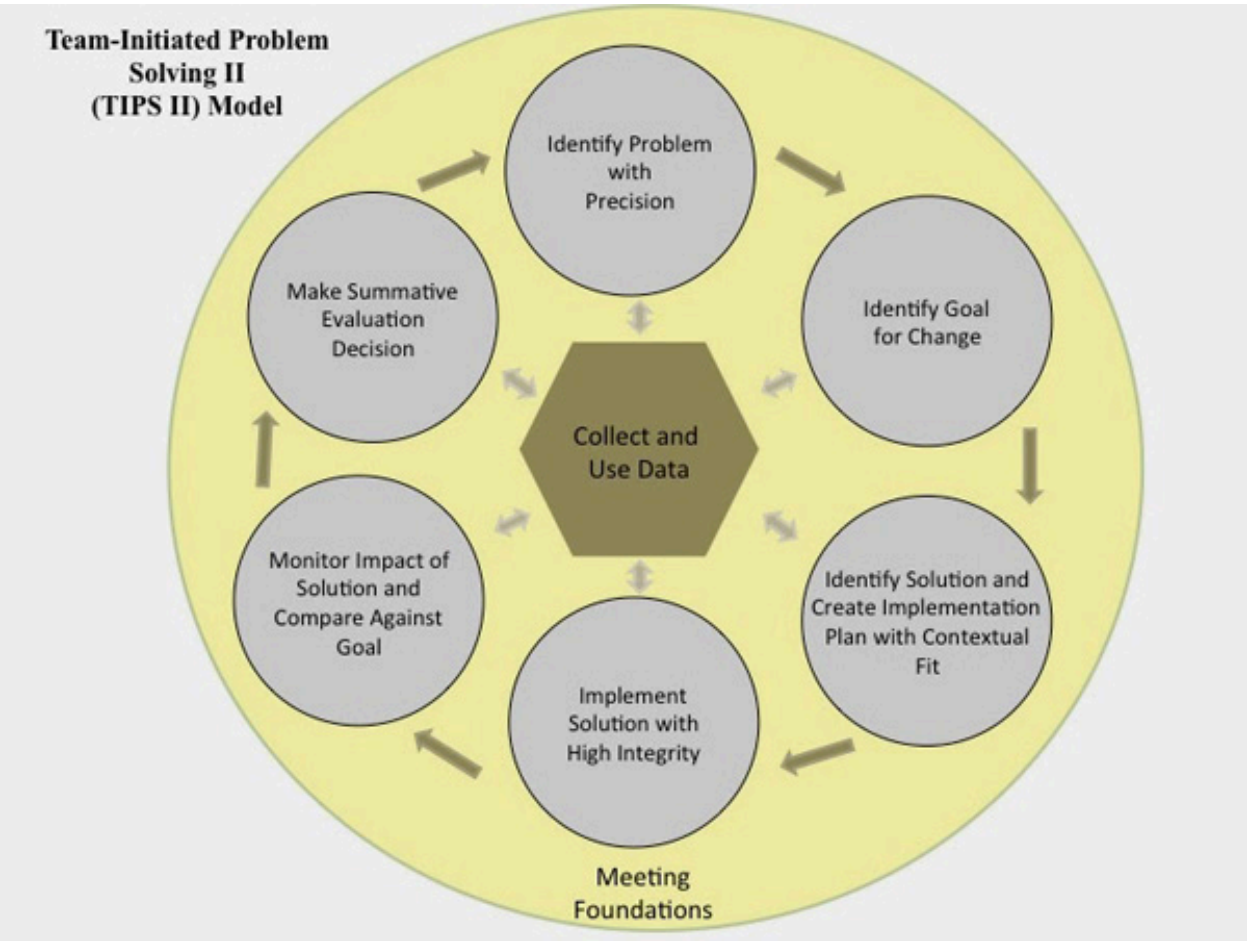
AGENDA

MTSS IMPLEMENTATION COMMITTEE

25 JULY 2018

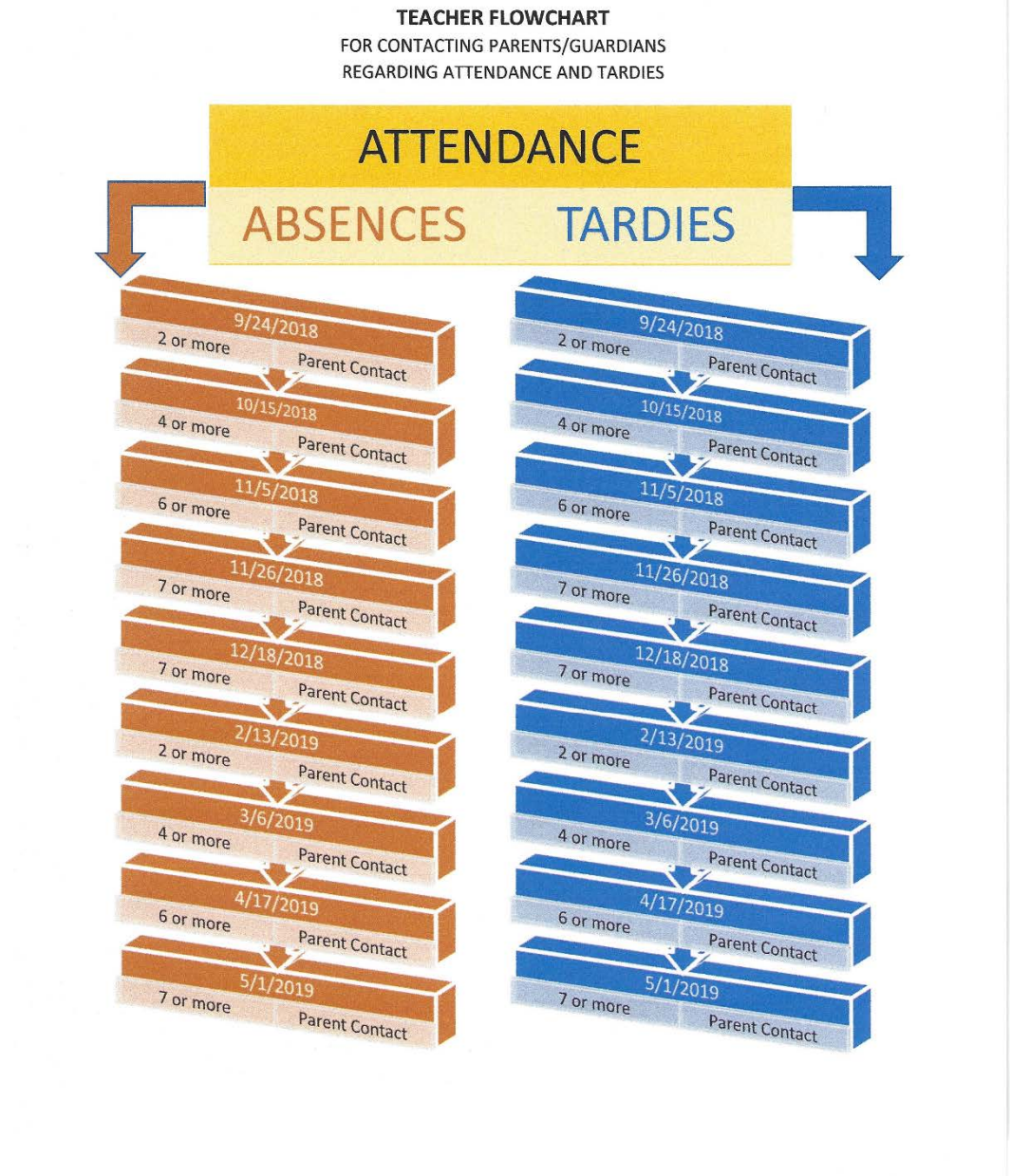
9:00	TIPS Training, Part 1: Tonya Caulder
9:55	Break
10:05	TIPS Training, Part 2: Tonya Caulder
11:00	Break
11:10	- ECATS/Educators Handbook
	- Only Math II and Biology I, if software unavailable
	- Update progress on Modules
	- Review Attendance Flowchart
	- Universal Screener
	Next steps
	Next Meeting: Week of return, TBA
12:30	Adjournment

APPENDIX F: TIPS IMAGE FROM MIC MEETING JULY 25, 2018



Presented by Tonya Caulder
Source: https://www.pbis.org/training/tips?text-only

APPENDIX G: TEACHER FLOWCHART FOR STUDENT ATTENDANCE



APPENDIX H: MTSS MODULES TIMELINE FOR HCHS

Timeline	Module Information	CEU/Module Information
Hoke High MTSS Team **June 12-July 9, 2018** **Hoke High Staff** **June 12-September 28, 2018**	Overview: MTSS Leads will share with staff how to access ALL modules, the timeline, and complete Module 1.1 together #8164 (MTSS Module 1.1 Establish Readiness)	**Course Credit:** 1.0 CEU credit is issued upon the completion of the course. **Course Objectives** • Participants will establish common language and understanding around MTSS Core Support • Participants will prepare for change • Participants will reflect on the role of MTSS Problem-Solving Teams • Participants will complete the MTSS Beliefs Survey
Hoke High MTSS Team **July 10-August 10, 2018** **Hoke High Staff** **October 1-February 1, 2019**	Staff will complete online Module 1.2 #8234 (MTSS Module 1.2 Essential Elements of Core Support)	**Duration:** 1 month suggested but we allowing the summer for teachers to complete **Course Credit:** 1.0 CEU credit is issued upon the completion of the course. **Course Objectives:** • Participants will build a data evaluation system • Participants will evaluate key elements of Core Support • Participants will begin defining Core Support
Hoke High MTSS Team **August 13-September 28, 2018** **Hoke High Staff** **February 28-April 1, 2019**	Staff will complete online module 1.3 #8169 (MTSS Module 1.3 Analyze Core Support)	**Duration:** 1 month suggested but we are allowing a 3 month window. **Course Credit:** 1.0 CEU credit is issued upon the completion of the course. **Course Objectives:** • Explore and identify research based problem solving models • Review examples for core problem solving in reading, math and behavior