

2018 - 2019

# **ANNUAL REPORT**

MISSOURI SCHOOLWIDE POSITVE BEHAVIOR SUPPORT

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THIS REPORT is a joint effort of the Missouri Schoolwide Positive Behavior Support (MO SW-PBS) team. It encompasses information relating to training and support provided to schools and districts participating in MO SW-PBS during the 2018-2019 school year. The report is a review of progress and a reflection on outcomes to guide continued improvement efforts. Thank you to all partners who contributed to the success of MO SWPBS during the 2018-2019 school year.

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The Missouri Schoolwide Positive Behavior Support (MO SW-PBS) initiative is committed to serving all stakeholders in achieving improved educational outcomes for our students, schools, and districts. We are also committed to actively assisting the Missouri Department of Elementary and Secondary Education (The DESE) to meet the state's "Show Me Success" mission. This mission is to guarantee the superior preparation and performance of every child in school and in life. The state improvement plan has three strategic priorities:

- A. Access, Opportunity, Equity: Provide all students access to a broad range of high-quality educational opportunities from early learning into post-high school engagement
- B. Teachers and Leaders: Prepare, develop and support educators to ensure an effective teacher in every classroom and an effective leader in every school
- C. Efficiency and Effectiveness: Create an internal environment of continuous improvement, effective programming and efficient business operations

MO SW-PBS also assists all stakeholders in meeting many of the State Performance Plan (SPP) Part B indicators identified through The DESE in conjunction with the U.S. Department of Education, Office of Special Education Programs (OSEP) (https://dese.mo.gov/special-education/ state-performance-plan).

MO SW-PBS aligns with Missouri State Performance Plan Indicators as follows:

- SW-PBS helps to create school environments in which students are more likely to be successful in general education classroom environments (#5), to graduate (#1), and to be successful in meeting their post-secondary goals (#13 & #14)
- SW-PBS decreases the likelihood of students being suspended or expelled or dropping out of school (#2 & #4)

- SW-PBS includes programs for preschool aged children (#6 & #7)
- Parental involvement is an integral component of SW-PBS (#8)
- SW-PBS addresses issues of disproportionality and participation in general education settings through creating proactive, consistent and predictable school environments (#5, #9 & #10) where appropriate social and behavioral skills are directly taught and reinforced, and where inappropriate social and behavioral skills are directly addressed and remediated

The MO SW-PBS goals (see question #1 on the next page) include actionable outcomes to provide training materials, technical support, state initiatives collaboration, and capacity exploration that ensure the MO SW-PBS work aligns with and enhances The DESE's goals and SPP indicators. MO SW-PBS is taking an active role in the development and installation of The DESE's State System of Support (SSOS) model, which is designed to integrate the work of current state initiatives to create a sustainable system capable of supporting schools based on their specific needs. The MO SW-PBS goals further serve as a framework to structure activities and to assess progress.

Historically, work in the multi-tiered behavioral framework has gone by several names: Effective Behavior Support (EBS), Positive Behavior Support (PBS), Positive Behavior Interventions and Support (PBIS) and Schoolwide Positive Behavior Support (SW-PBS). Regardless of the name given to this multi-tiered framework throughout this report, the logic and goals of the work are the same: creating schoolwide environments in which all students achieve social behavioral and academic success. In Missouri, the work is referred to as Schoolwide Positive Behavior Support (SW-PBS).

# CONTEXT

Evaluation of the context details the goals, objectives, and activities of the program. Context serves as a foundation for identifying required resources, assessing expected and actual implementation, and analyzing expected and actual outcomes and evidence of performance (Algozzine et al., 2010, p. 3). The answers to the following questions show evidence of our action plan and the people who provided and received support through MO SW-PBS for 2018–2019. This annual report is guided by the framework laid out in the "Evaluation" Blueprint for School-Wide Positive Behavior Support." Questions and categories are taken directly from this document.

# **Question 1**

# What are/were the goals and objectives for MO SW-PBS implementation?

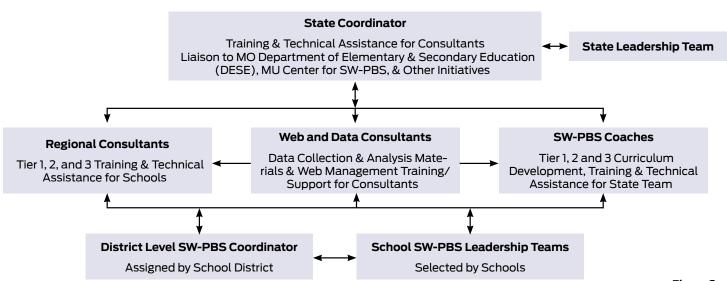
The 2015–2018 MO SW-PBS three-year Action Plan includes six primary goals that are reviewed annually. The goals and supporting objectives are revised and updated as data indicate appropriate. Each goal is addressed in more detail within this report. They are:

- MO SW-PBS is the social behavioral, three-tiered intervention utilized in the Statewide System of Support (SSOS).
- 2. MO SW-PBS Consultants sustain capacity to provide professional development and technical assistance for social behavioral interventions across three tiers of support.
- 3. MO SW-PBS provides standardized professional development and technical assistance for school and/or district teams and administrators.
- 4. MO SW-PBS utilizes a systematic process for data collection and evaluation of implementation fidelity and student outcomes.
- 5. MO SW-PBS implements systems for replication, sustainability, and improvement.
- 6. MO SW-PBS utilizes a communication plan targeted to stakeholders.

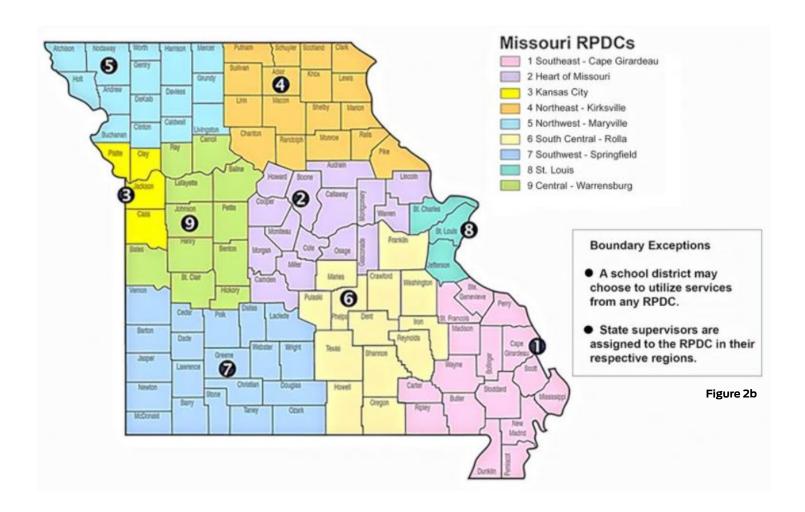
MO DESE Goals: 1, 2, 3, 4

# **Ouestion 2**

# Who provided support for MO SW-PBS implementation?



MO SW-PBS is guided through a State Leadership Team whose purpose is to set short- and long-range goals and to monitor progress toward the goals with input from stakeholders. Members of the team represent The DESE, Regional Consultants, State SW-PBS Coaches, the State Coordinator, the National Technical Assistance Center for PBIS, and the University of Missouri (MU) Center for SW-PBS. State Coordinator Dr. Nanci W. Johnson directed the day-to-day activities of the initiative and provided ongoing training and technical assistance for MO SW-PBS staff. Leadership Team member Dr. Tim Lewis, Co-Director of the PBIS National Technical Assistance Center and Director of the MU Center for SW-PBS, provided guidance from a national perspective. His input supported appropriate alignment with the PBIS National Technical Assistance Center objectives and ongoing access to a variety of national and international resources to enhance the quality of MO SW-PBS. Support from The DESE commissioners, directors, and staff members was invaluable in moving the initiative forward.



Twenty-four Consultants with a total of 18.43 full time equivalents (FTEs) were based in all nine state Regional Professional Development Centers (RPDCs) and primarily served school districts within those boundaries through training and technical assistance across all 3 tiers of support. Additionally, they worked closely with school and district SW-PBS leadership teams as requested. The Consultants' assessment of the ongoing work within schools and districts guided the content and structure of the regional and district trainings. Five additional SW-PBS Coaches with 5 FTE provided training and mentoring to new Consultants (primarily those providing Tiers 2 and 3 training and support), acted as facilitators for districts participating in the DCI-B, and conducted state level administrative tasks (e.g., content development, planning of statewide events, virtual production module development, etc.). The Web and Data Consultant developed a data training curriculum and provided data training to consultants and school districts. The state director led the day to day operations. St. Louis Special School District (SSD) PBIS Facilitators provided training and technical assistance to the districts within their service area across all three tiers of implementation. The MO SW-PBS Consultants and SSD Facilitators actively collaborated and supported each other's work.

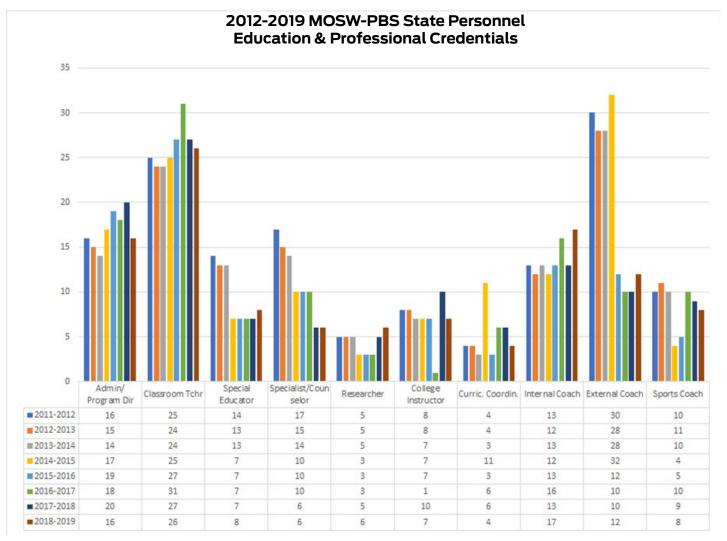


Figure 2c

The MO SW-PBS State and Regional Consultants began reporting educational and professional credentials once a year beginning in the fall of 2010. The results show evidence of educational credentials and professional experience necessary to provide exemplary support to Missouri schools. During the 2018-2019 implementation year, Consultants had a combined total of 731.5 years of experience in education.

> MO SW-PBS Goal: 2, 3, 5, 6; MO DESE Goal: 3; SPP Indicator 2, 4

# **Question 3**

# Who received support during SW-PBS implementation?

Over the life of this initiative the number of students served has increased from 108,000 during the 2006-2007 school year to over 237,909 (26.7% of all Missouri students) in the 2018–2019 school year.

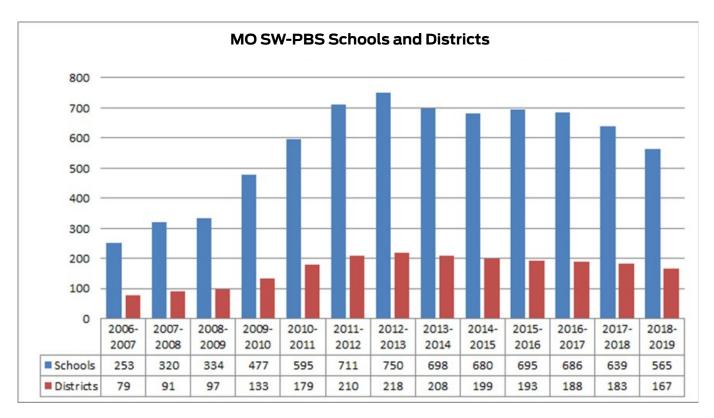


Figure 3a

The number of schools and districts working with MO SW-PBS increased from 2006-2007 school year through the 2012–2013 school year, when the count peaked at 750 schools in 218 districts. The number of schools and districts served by MO SW-PBS has since decreased. It is important to note that beginning with the 2011–2012 school year, there was a 50% reduction in Tier 1 full time equivalent (FTE) for MO SW-PBS personnel. This resulted in fewer FTE to recruit and retain participating schools for Tier 1 work in 2012-2013 and be-yond. Furthermore, beginning with the 2018-2019 school year, the DESE re-directed and

assigned MO SW-PBS to the District Continuous Improvement (DCI), initiative, an initiative aimed at improving schools through building capacity at the district level. Five school districts were recruited to par-ticipate in the behavior domain of the DCI during 2018-2019. However, in alignment with this dis-trictwide initiative, the DESE directed MO SW-PBS to stop recruiting new individual schools. During the 2018–2019 school year 565 schools were active participants, accounting for 23.3% of all Missouri public and charter schools. These schools were from 167 districts or 32.1% of all Missouri districts.

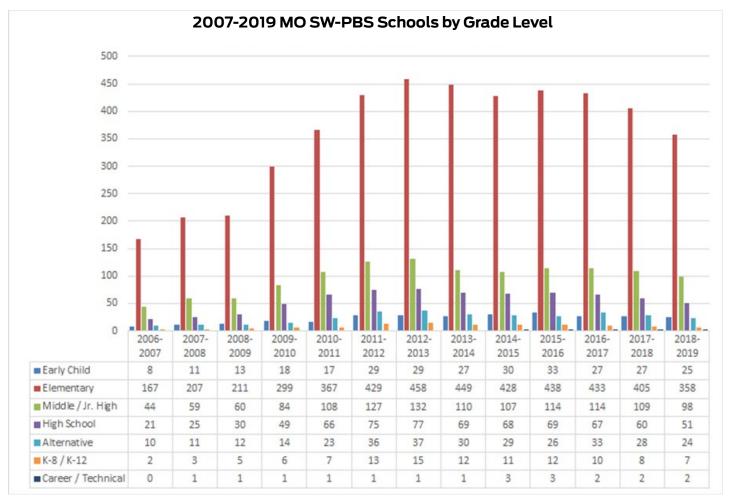


Figure 3b

The majority of MO SW-PBS participating schools continue to be those serving elementary grade levels. While the number of schools has decreased in all categories, the proportion of participating schools represented by the different grade configurations has remained relatively constant.

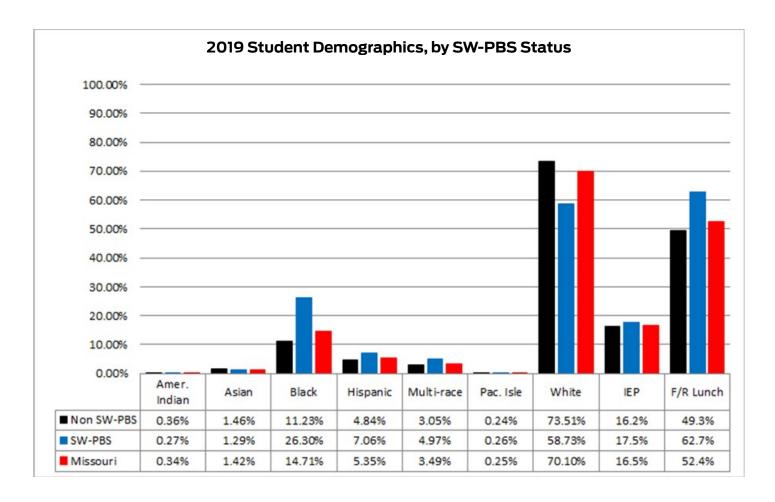


Figure 3c

Student populations in MO SW-PBS schools continue to be more ethnically/racially and economically diverse (using free/reduced lunch status as a proxy for economic status) when compared to students in 1) all Missouri schools and 2) Non SW-PBS schools, respectively.

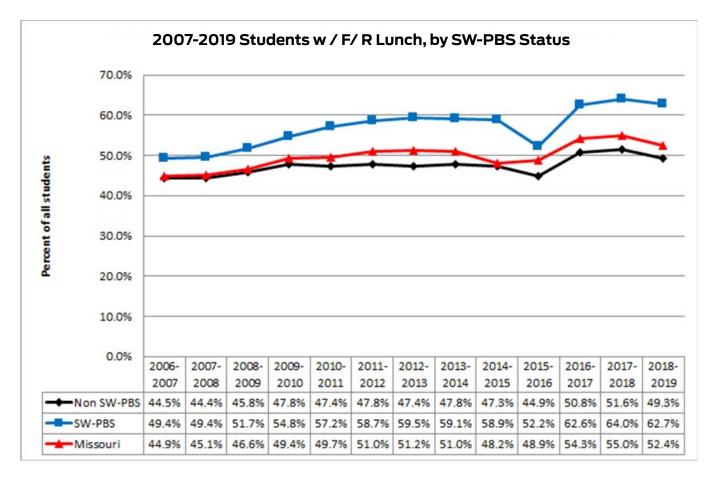


Figure 3d

MO SW-PBS has historically provided training and support to schools in which a greater percentage of students received Free and Reduced Price Lunch as compared to 1) students in all Missouri schools, and 2) students in Non SW-PBS schools, respectively. While there was a small decrease in the percentages of students receiving Free and Reduced Price Lunch across all three categories, the gap between MO SW-PBS schools and both Non SW-PBS schools and all Missouri schools has continued to increase.

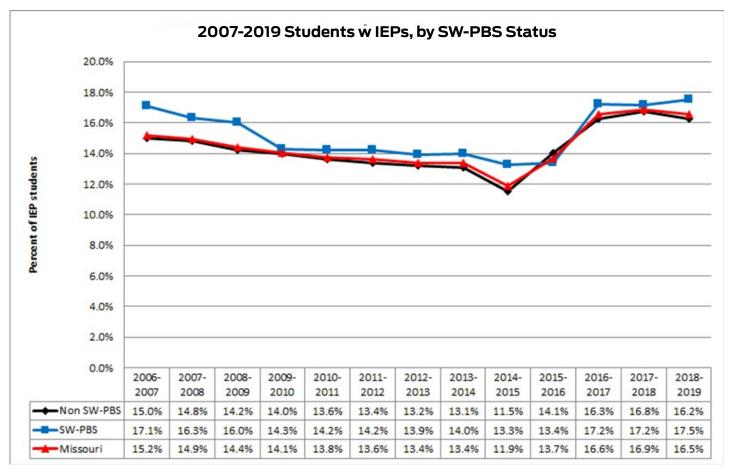


Figure 3e

IEP rates were calculated for all PK-12 students. Figure 3e shows that SW-PBS schools have historically served more students with disabilities than have 1) all Missouri schools, and 2) Non SW-PBS schools, respec-tively. This gap widened slightly in 2018-2019.

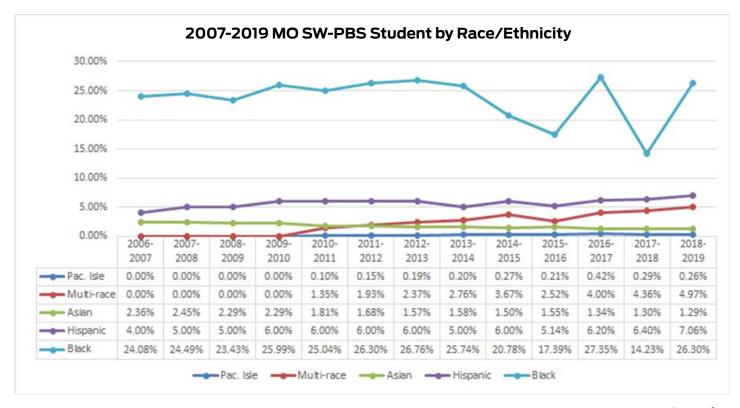


Figure 3f

During the 2018–2019 school year, MO SW-PBS continued to serve a slightly more diverse student population than the rest of the state. As figure 3c shows, MO SW-PBS schools serve a smaller proportion of White students and larger proportions of African American, Multi-Racial, and Hispanic students than all Missouri schools. The relative proportion of most demographic groups has remained fairly stable over time. With the exception of 2014-2015, 2015-2016, and 2017-2018, the proportion of African American students in MO SW-PBS schools has remained stable, as well.

> MO SW-PBS Goal: 1.5: MO DESE Goal: 2; SPP Indicator 6, 7

# INPUT

Input details what was done to meet the needs, address the problems, and manage the opportunities of SW-PBS. Input is a basis for planning and re-planning efforts, allocating resources, and assessing fidelity and outcomes (Algozzine et al., 2010, 8). MO SW-PBS has answered the following questions to evaluate our professional development efforts.

# **Question 4**

What professional development was part of MO SW-PBS implementation support?

To support Consultants in providing high-quality training and technical assistance to schools, the MO SW-PBS leadership team has made a priority of providing consultants with high-quality professional development. The State Coordinator organized and facilitated training and support to the MO SW-PBS Consultants through formal two-day monthly meetings. These meetings included review and analysis of current research and policy, presentation and training content/skill development, using data to establish priorities, and understanding the application of the content from the PBIS National Center Blueprints (Algozzine et al., 2010; Sugai et al., 2005). Particular emphasis was placed on aligning and integrating the SW-PBS training curriculum with other state initiatives to assure continuity and alignment.

The MO SW-PBS Consultants continued to improve and refine professional development curriculum and activities during 2018-2019, ensuring a logical and meaningful progression of knowledge and skill acquisition across all three tiers. Training and technical assistance was provided regionally by consultants for school teams at the Exploration Phase, the three phases of Tier 1 (Preparation, Emerging, and Emerging Advanced), and the four training phases of Tiers 2 and 3. The training curriculum is provided across the 3 tiers with a focus on distinct preparation/ piloting and implementation phases at each tier. The logic for the structure was aligned with the evidence-based phases identified by the National Implementation Research Network, or NIRN (Fixsen, Naoom, Blasé, Friedman, & Wallace, 2005). As NIRN (2009) reminds us, "The failure to utilize research rests in large part on a faulty or non-existent implementation infrastructure." MO SW-PBS training and technical assistance are designed to support fidelity of implementation and long-term sustainability.

## TRAINING PHASES

#### **EXPLORATION AND ADOPTION**

Decision to Participate

## **TIER 1, PREPARATION PHASE**

Prepare Tier 1 Systems, Data and Practices; Implement with ALL staff, pilot with some students

### **TIER 1, EMERGING PHASE**

Implementation with ALL staff and students

### **TIER 1, EMERGING ADVANCED**

Ongoing and more comprehensive implementation for sustainability; assess readiness for Tier 2

#### TIER 2

Prepare Tier 2 Systems, Data and Practices; pilot a single Tier 2 intervention

#### **TIER 2 ADVANCED**

Ongoing implementation of at least one more Tier 2 intervention and sustaining Tiers 1 and 2, assess readiness for Tier 3

#### TIER 3

Prepare Tier 3 Systems, Data and practices, pilot a single Functional Behavior Assessment / Behavior Intervention Plan

#### **TIER 3 ADVANCED**

Ongoing and comprehensive implementation of additional FBA/BIPs sustaining ALL 3 tiers of support

# **Exploration and Adoption Phase Professional Development**

In accordance with guidance from the DESE, MO SW-PBS did not recruit new schools during the 2018-2019 school year. As such, the exploration and adoption phase looked different than in previous years. For 2018-2019, The DESE, in collaboration with MO SW-PBS, identified potential school districts to par-ticipate in a districtwide adoption as part of a State Personnel Development Grant (SPDG). This initiative, called the

District Continuous Improvement-Behavior (DCI-B), offered districts incentives to help offset the costs of training and implementation, and had the ultimate goal of building district capacity to develop and maintain an integrated framework of academic and behavioral support. Districts were selected based upon the likelihood of successful implementation. For example, schools that were already participating in the District Continuous Improvement

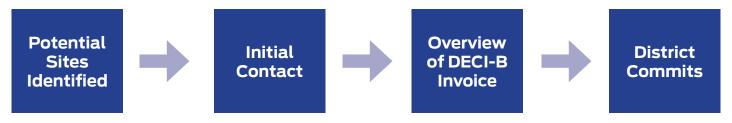


Figure 4b

for academics (DCI) were excluded from consideration, under the assumption that concurrent participation in two new and intensive initiatives would be overwhelming, and therefore decrease the likelihood of success. In addition, districts that had one or more schools already implementing SW-PBS were included, as these schools could provide model demonstration sites for other district schools.

Once potential sites were identified, district leadership was contacted by the MO SW-PBS director. If the district expressed interest, One or more members of the MO SW-PBS leadership team met with the District

Leadership Team. The MO SW-PBS Leadership Team shared with the DLT the benefits and expectations/ obligations of participation in the DCI-B. The district was then provided the opportunity to commit to participate in the grant.

The DCI-B is a district driven approach. MO SW-PBS State Coaches facilitated the DLT as they generated meaningful goals and aligned action plans that addressed the needs of the district, while falling within the guidelines set by the DCI-B and the SW-PBS framework.

# **Tier 1 Professional Development**

During the 2009–2010 year, MO SW-PBS developed a Tier 1 scope and sequence to guarantee that training content at the Preparation and Emerging Phases followed a logical progression for novice teams. In 2010–2011, a standard training curriculum was aligned with that scope and sequence and piloted in all of the regions. Curriculum updates were implemented each subsequent year according to training feedback from consultants and participants. MO SW-PBS has developed and refined a Tier 1 workbook and aligned training materials. All Tier 1 resources can be accessed at <a href="http://pbismissouri.org/tier-1-workbook-resources/">http://pbismissouri.org/tier-1-workbook-resources/</a>.

Approximately 141 standardized, regional Tier 1 training sessions were conducted throughout the 2018-2019 school year for teams in the Preparation, Emerging, and Emerging Advanced training phases.

Some regions customized trainings by breaking regions into multiple sites and cadres to address their unique geographic or demographic characteristics. Extended training opportunities included topics such as the Schoolwide Evaluation Tool (SET) (Sugai, Lewis-Palmer, Todd, & Horner, 2005), Data Tools, and Administrator Networking, as well as Secondary School, Early Childhood, and Coaches Networking. Individualized technical assistance continued throughout the year to further develop depth of knowledge and fluency. Long-distance technology supports such as conference calling and virtual connection tools such as ZOOM were also employed to increase consultants' opportunities to participate in school-based activities.

# **Tier 2 Professional Development**

Like the Tier 1 curriculum, the Tier 2 curriculum articulates participant learning at two distinct levels. For example, the focus of year one of Tier 2 training is for teams to develop knowledge and fluency with accurate identification of students who are at risk for, but not yet experiencing chronic unexpected behavior. During the first year, teams develop systems for implementation and data procedures while piloting a single Tier 2 intervention. In Tier 2 Advanced, teams solidify systems and data, refine the first Tier 2 intervention and add a second or third intervention. These training efforts leverage consistent systems work and the high-quality data collection and analysis practices that were established in Tier 1. The goal is for schools to minimize current unexpected behaviors and prevent more extreme unexpected behaviors from occurring in the future.

The initial Tier 2 curriculum was developed and piloted during the 2009–2010 year. Curriculum revisions have been made annually, based on participant and consultant feedback and data-based outcomes for participating schools. By the end of 2011–2012 the Tier 2 curriculum had demonstrated high rates of participant approval, reliability in readiness to begin Tier 3 training, and increased outcomes on standardized measures of fidelity, such as the Benchmark for Advanced Tiers (BAT) (Anderson et. al., 2010), and the Tiered Fidelity Inventory (TFI) (Algozzine et.al., 2014) (MO SW-PBS schools that were training at Tier 2 and beyond used the BAT from 2009 through 2015, and the TFI from 2015-2016 to the present).

During the 2018-2019 implementation year MO SW-PBS provided 54 standardized Tier 2 training sessions across 9 RPDCs. All Tier 2 resources can be accessed at http://pbismissouri.org/tier-2-workbook-resources/.

# **Tier 3 Professional Development**

Similar to the Tier 1 and Tier 2 curricula, the Tier 3 curriculum has 2 distinct levels. In the first year of Tier 3, teams build on the function-based thinking (FBT) and effective team systems they established in Tiers 1 and 2, adding fluency with the basics of identifying students who need individualized support. These teams also learn the fundamentals of functional behavior assessment (FBA), or simple FBA, and function-based behavior intervention planning (BIP). In addition, teams learn to develop systems to implement and monitor BIPs with consistency and fidelity. During Tier 3 Advanced training teams refine procedures for their systems and data, and ensure that they are training multiple personnel in FBT and practices for Tier 3. Teams continually use data as part of their systematic process to deliver multi-tiered behavioral supports to all students. As in Tiers 1 and 2, the goal is for schools to minimize current unexpected behaviors and prevent more extreme unexpected behaviors from occurring in the future.

The first Tier 3 training content was developed and piloted in 2011–2012. Tier 3 readiness criteria, training content, and recommended intensity of technical assistance were revised based on participant and consultant feedback, and data-based outcomes for participating schools. The Consultants who provided Tier 2 or 3 training and support, SW-PBS Coaches, Web/Data Consultant, State Coordinator, and MU SW-PBS personnel participated in reviewing outcomes and structuring revisions. The first Tier 3 Workbook was developed and piloted in 2013–2014 and utilized statewide in all 2014–2015 participating Tier 3 schools.

During the 2018-2019 implementation year MO SW-PBS provided 51 Tier 3 standardized training sessions in all RPDCs. All Tier 3 resources can be accessed at <a href="http://pbismissouri.org/tier-3-workbook-resources/">http://pbismissouri.org/tier-3-workbook-resources/</a>.

#### Summer Institute

In addition to the regional trainings at Tiers 1, 2 & 3 the 13th Annual Summer Institute (SI), MO SW-PBS: Creating Places Where Everyone Belongs! provided extended learning, sharing, and networking opportunities for MO SW-PBS schools. The event provided structured team time with the consultants; state and national perspectives from keynote speakers; topics of interest that aligned with state and national priorities; and strands based on the three tiers. Sessions were organized by Foundation, Application,

and Enrichment to assist teams in selecting sessions aligned with their school's level of implementation. Topics included family involvement, collaboration within schools, functional behavioral assessment, classroom strategies, interagency and cross-initiative collaboration, Tier 2 and Tier 3 structures and interventions, bully prevention, multi-tiered systems of support (MTSS), student voice, and implementation specific to school levels (early childhood, elementary, middle, high school and alternative schools).

**MO SW-PBS Goal:** 2, 3, 4, 5, 6; **MO DESE Goal:** 2, 3; SPP Indicator: 5, 9, 10

# **Question 5**Who participated in the professional development?

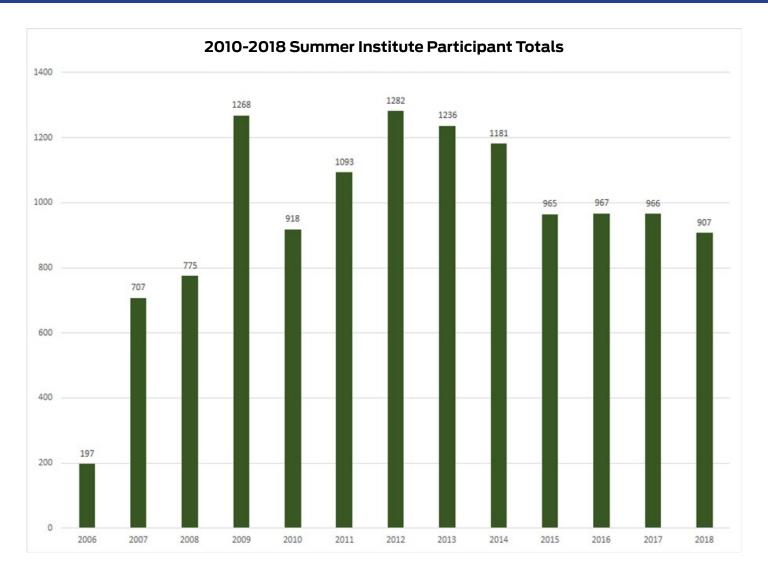
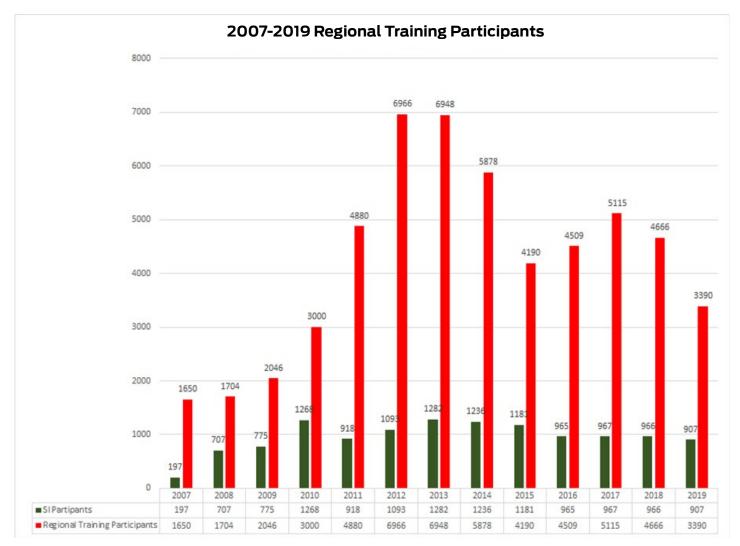


Figure 5a

Summer Institute traditionally ends the implementation year and kicks off the upcoming training year. As such, Summer Institute 2018 set the stage for training during the 2018–2019 school year. Over 900 partici-pants attended the 2018 summer event.



Figuure 5b

Additionally, over 3,390 participants attended 4 to 6 standardized regional training sessions throughout the 2018-2019 year for each phase and/or level. Preparation and Emerging teams attended six total sessions, each, while Emerging Advanced teams and teams at all phases of Tier 2 and Tier 3 attended four sessions, each. Over time, MO SW-PBS has experienced an increase in the numbers of schools training at Tiers 2 and 3, even as there has been a decrease in Tier 1 training. Furthermore, as mentioned above, MO SW-PBS did not recruit new schools at the Preparation phase, unless they came on board as part of a district that participated in the DCI-B. Because the number of participants that are reported is the sum of participants at each training session (as opposed to individuals who were trained at least once), some individuals are counted as many as six times. Therefore, while much of the decrease in the number of participants trained is explained by the decrease in the number of participating schools, some of this decrease may also be attributed to the shift in the number of schools from Preparation and Emerging training phases, where there are six training sessions, to Emerging Advanced and Tiers 2 and 3, where there are only four training sessions, respectively.

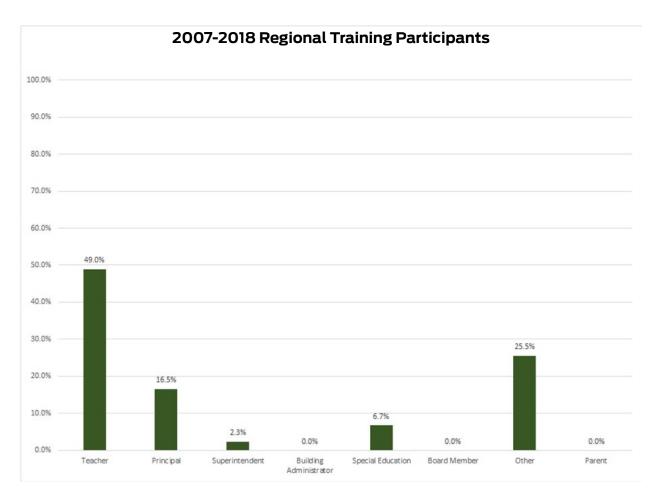
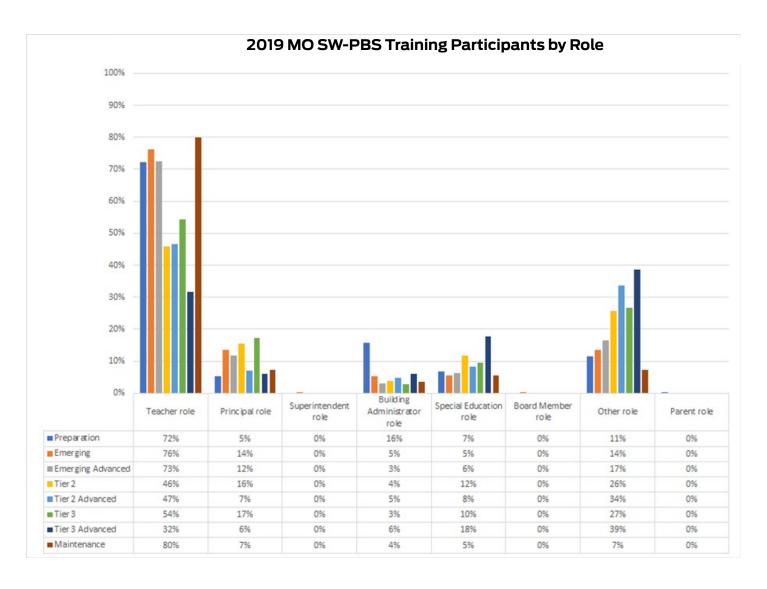


Figure 5c

MO SW-PBS Goal: 3, 4, 5, 6; MO DESE Goal: 3; SPP Indicator: 5, 8, 910

Attendees at the MO SW-PBS Summer Institute represent a variety of building and district roles, including teachers, principals, district superintendents, building administrators, special educators, and board members. In addition, representatives from The DESE, MO SW-PBS, SW-PBS personnel from other states, Regional Professional Development Center Directors and personnel from other initiatives (e.g., Special Education, etc.) also attended the 2018 Summer Training Institute.



Similarly, MO SW-PBS professional development participants included but were not limited to schoollevel coaches, classroom teachers, special education teachers, school counselors, and administrators.

Figure 5d

MO SW-PBS Goal: 3, 4, 5, 6; MO DESE Goal: 3; SPP Indicator: 5, 8, 9 10

# **Question 6**

# What was the perceived value of the professional development?

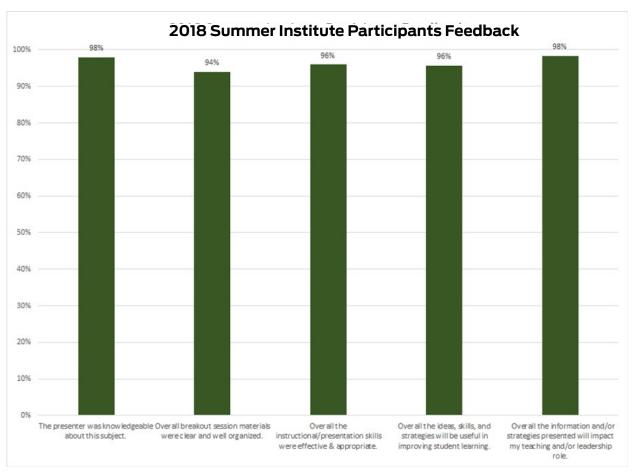


Figure 6a

The 2018 Summer Institute Feedback reports the percentage of all participants who either agreed or strongly agreed with the survey questions. In addition, comments from participants who attended the Summer Institute shared the value of the event and how it related to their SW-PBS work:

- "It was a great session- we got some new ideas to take back to our school and are excited to start planning!"
- "You pushed my thinking and gave me new ideas of strategies to try."
- "The presenter was engaging and informative. I am brand new to this and it helped me to have a quick overview of the error correction strategies and the information about signage and the language of PBS."
- "Great ideas to take back to my building!! I understand function so much better."
- "Loved the practicality of this session! I received ideas for both my classroom and at home."
- "Thanks for offering real-life suggestions and examples of how to engage students with the practices."
- "Ideas came both from presenters as well as through collaboration of attendees. Great Opportunity to enhance learning by providing time for this collaboration!"
- "Amazingly well put together considering it was a fill in. I walked away with a better understanding of where the 8 effective practices and PBIS come together in Tier 1. It will help me as administrator to support teachers with implementation and maintenance."
- "Absolutely loved getting to work on the forms after a great explanation of them!"
- "This is like a line of cocaine. No really. I mean that in the best way possible. Best PD for PBIS I've ever attended."

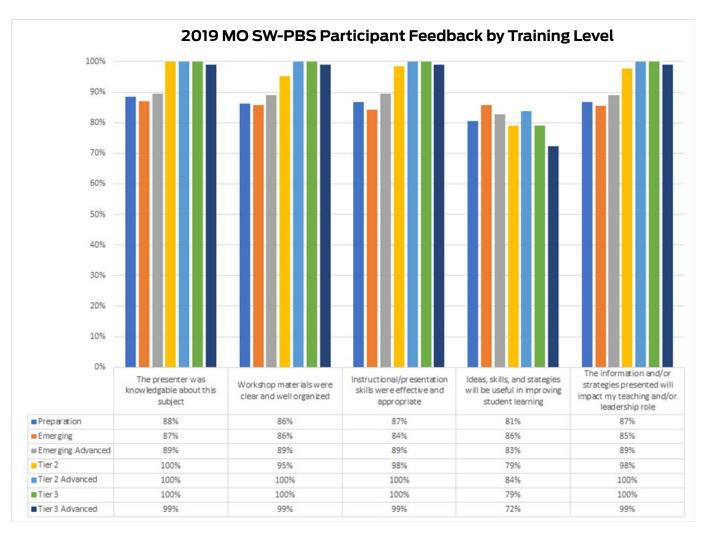


Figure 6b.1

Figure 6b reports the percentage of participants from regional trainings who either agreed or strongly agreed with the statements. These evaluations refer to content, presentation, and applicability of the MO SW-PBS curriculum. Feedback from participants indicates that they found the overall content and presentation style to be beneficial. Feedback also indicates a decline in the percentage of participants in Tier 1 training who either agreed or strongly agreed with the question. A closer examination of the data revealed that in one region, the total number of survey respondents was entered, but not the number of respondents who agreed or strongly agreed with these specific questions. This occurred for this region's Preparation and Emerging sessions. In addition, for this region Emerging Advanced had three times the number of respondents to the survey as who marked Agree or Strongly Agree to the evaluation questions. At the time of this writing, this appears to be a problem with the electronic data management system.

> MO SW-PBS Goal: 1. 3. 6. 7. 10: MO DESE Goal: 3; SPP Indicator 5, 7, 8

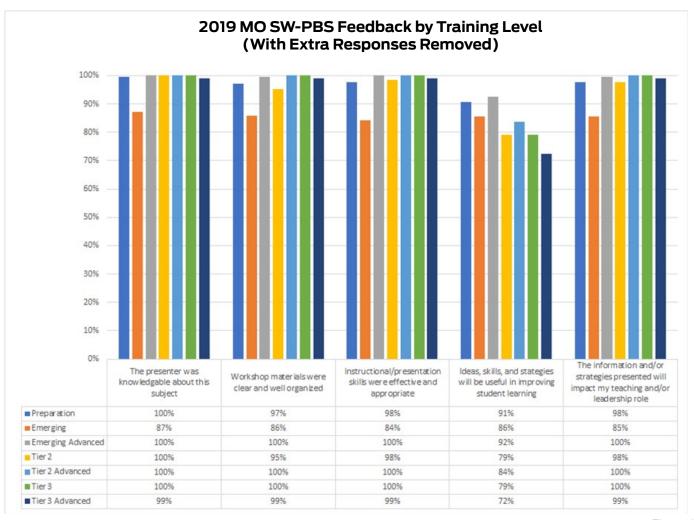


Figure 6b.2

Figure 6b.2 charts the same data with the Preparation and Emerging data for this region removed. This was not done for Emerging Advanced because, while suspect, it could not be determined for certain that the data was flawed.

MO SW-PBS Goal: 1, 3, 6, 7, 10; MO DESE Goal 3; SPP Indicator 5,



In SWPBS evaluations, fidelity indicators detail how faithfully the program was implemented relative to its original design and focus and the resources that were directed to it, (Algozzine et al., 2010, p. 12). The answers to the following questions provide evidence that the Missouri SW-PBS essential components were in place.

# **Question 7**

# To what extent was SW-PBS implemented as designed?

This question asks if all core features (i.e., essential components) of SW-PBS were implemented. These components have been integral to the structure of SW-PBS from its inception (Lewis & Sugai, 1999) and have been found essential through multiple national studies across the years. The components are:

- Common Philosophy and Purpose
- Leadership
- Clarifying Expected Behavior
- **Teaching Expected Behavior**
- **Encouraging Expected Behavior**
- Discouraging Unexpected Behavior
- **Ongoing Monitoring**
- **Effective Teaching and Learning Practices**

Knowledge of the essential components deepened as teams progressed through the phases of training and implementation. For example, the content of the component "Ongoing Monitoring" guided teams to increasingly sophisticated data analysis. Fluency in collecting and developing the "Big 5" graphs of office discipline referrals (ODRs) in the Preparation Phase led to systematic analysis of the "Big 5" in the Emerging Phase.

School outcomes for all phases of the MO SW-PBS training sequence were identified and taught. Tier 1 or Universal outcomes were based on items from

The Schoolwide Positive Behavior Support Implementers' Blueprint and Self-Assessment (Sugai et al., 2005) and assessment tools such as the Effective Behavior Support Self-Assessment Survey (EBS/SAS or SAS) (Sugai, Horner, & Todd, 2003). the Schoolwide Evaluation Tool (Sugai, Lewis-Palmer, Todd, & Horner, 2005), the Benchmarks of Quality (BoQ) (Kincaid, Childs, & George, 2005), and the Tiered Fidelity Inventory (TFI) (Algozzine et. al., 2014). Schools historically used all or some of these measures for internal and/or external monitoring and evaluation purposes with the technical assistance of consultants.

Essential components of the SW-PBS advanced tiers were articulated through a formalized scope and sequence based on research from peer reviewed literature and assessment tools such as the Benchmarks for Advanced Tiers (BAT) (Anderson, et al., 2010) and the Tiered Fidelity Inventory (TFI) (Algozzine, et al., 2014). This scope and sequence guided the content, structure, and scaffolding of Tiers 2 and 3 for providing Targeted/Group and Intensive supports, respectively. MO SW-PBS conducts annual assessments of school progress and uses this information to refine Tiers 1, 2, and 3 scope and sequence content, readiness criteria guidelines, and projected needs for technical assistance per site, accordingly.

> MO SW-PBS Goal: 1, 3, 4, 5; MO DESE Goal: 1, 2, 3, 4; SPP Indicator 1, 2, 4, 5, 6, 7, 9, 10

# **Question 8**

# To what extent was SW-PBS implemented with fidelity?

This question refers to the identification of those essential components that schools are implementing, and of these components, which are being implemented with fidelity (personal correspondence with Rob Horner, August 24, 2010).

The evaluation of the fidelity of implementation at the Tier 1 level in MO SW-PBS schools was multi-faceted. Schools shared artifacts as evidence of implementation fidelity (e.g., team meeting minutes, Office Discipline Referral [ODR] reporting, and participation in standardized surveys) with Consultants. Ongoing progress monitoring of fidelity was assessed using the Effective Behavior Support Self-Assessment Survey (EBS/SAS or SAS) (Sugai, Horner, & Todd, 2003). For schools newly implementing with students, an on-site evaluation was completed by external personnel using the School-wide Evaluation Tool (SET) (Sugai, Lewis-Palmer, Todd, & Horner, 2005). More veteran Tier 1 schools used the self-reporting Tiered Fidelity Inventory (TFI) (Algozzine et al., 2014). Schools training or implementing at the Tier 2 and 3 levels also used the TFI (Algozzine et al., 2014) for ongoing monitoring and evaluation of advanced tiers.

#### Tier 1

One of the MO SW-PBS essential components is ongoing monitoring and evaluation. The standardized Preparation Phase training curriculum emphasized establishing data collection techniques and initial data analysis. As schools progressed through the MO SW-PBS Tier 1 training sequence, they typically implemented SW-PBS with fidelity, demonstrating fluency with data collection and analysis.

Schools in the Emerging phase and beyond were expected to continue consistent data collection and analysis and to report data quarterly to consultants, with a statewide goal of 80% or better reporting. Prior to the 2016-2017 school year, schools demonstrated they were at least holding meetings and running data reports by submitting monthly meeting minutes and Big 5 Data Reports. Beginning in the 2016-2017 school year, schools were required to begin submitting Solution Plans. A Solution Plan is an action plan resulting from the analysis of ODR data to make schoolwide decisions. Schools trained prior to 2016-2017 were allowed to continue to submit minutes and Big 5 Data. Participation by schools in the collection and submission of data to regional consultants increased from 48.2% and 48.8% for 2017-2018 meeting minutes and Big 5 Data Reports/Solution Plans, respectively, to 54.4% and 54.8% for 2018-2019 meeting minutes and Big 5 Data Reports/Solution Plans, respectively.

MO SW-PBS schools also monitor school safety and climate. Prior to the 2018-2019 school year, schools were required to complete the School Safety Survey (Sprague, Colvin, & Irvin, 2002) (SSS) in the fall of each year. Beginning with the 2018-2019 school year, schools were given the option of taking either the School Climate Survey (La Salle, McIntosh, & Eliason, 2016) (SCS) or the SSS. Currently, both surveys are recorded under the heading of the School Safety Survey in the MO SW-PBS Online Data System, and are therefore reported as SSS/SCS. The percentage of schools taking the SSS/SCS increased from 58.8% of participating schools in 2017-2018 to 71.1% of participating schools in 2018-2019.

Finally, 64.5% of participating schools took the EBS/SAS, a decrease from 69.5% of participating schools from the previous school year.

Typically, school data reporting has decreased during the spring of the school year when standardized testing and other year-end reporting are also expected. MO SW-PBS utilizes automated emails to school coaches at each training tier and communication via social media platforms Twit-ter and Facebook to remind school teams and coaches of data collection timelines. MO SW-PBS builds time into monthly meetings for data review and updates with all state members to monitor the status of data collection.

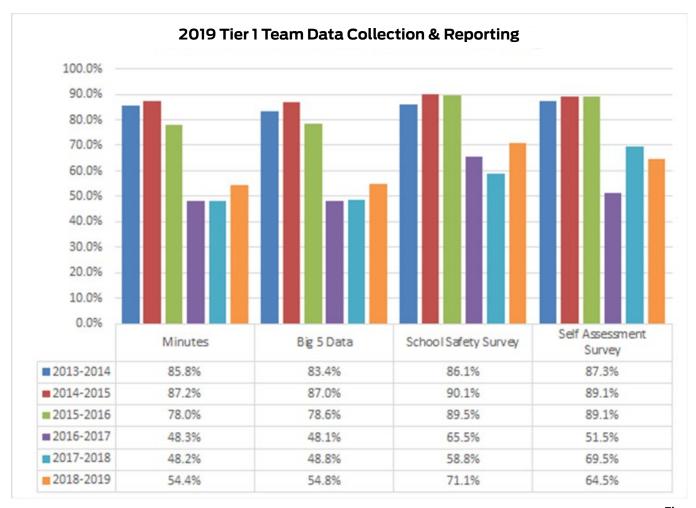


Figure 8a

Figure 8a shows participation in quarterly reporting over time.

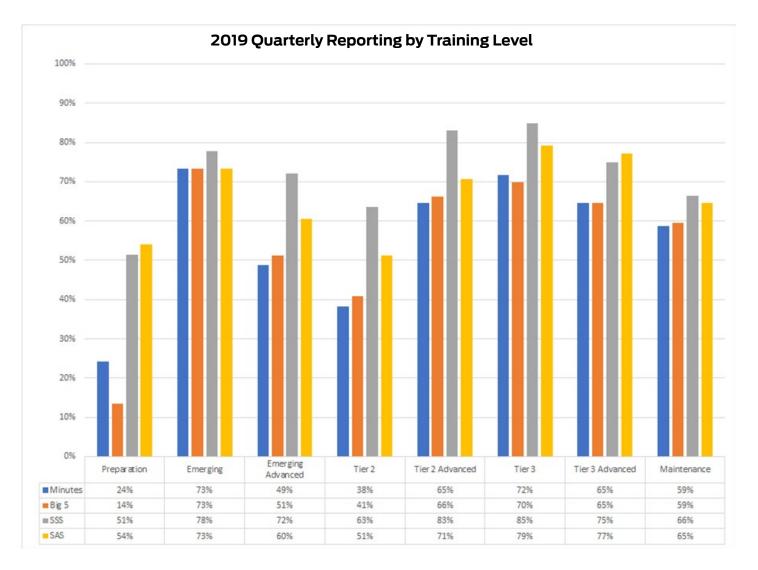


Figure 8b

Figure 8b shows quarterly reporting by training level. This chart shows that as schools progress through training, they are more reliable in submitting Tier 1 data and taking implementation fidelity surveys.

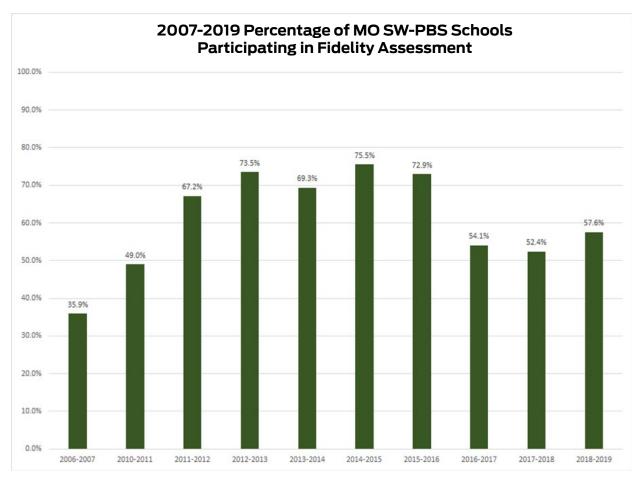


Figure 8c

In an attempt to build a sustainable statewide model, MO SW-PBS established new assessment procedures during the 2010–2011 year. Schools that demonstrated Tier 1 fidelity of implementation by scoring 80% / 80% on the SET for two consecutive years (SET scores are typically expressed using two metrics: percent in place for subsection B-Expectations Taught / and the total score) had the option to use the Benchmarks of Quality (BoQ) instead. During 2011–2012 there was a resurgence in the percentage of Emerging and above schools that actively reported results of SETs or BoQs.

In 2014–2015 schools supported by Special School District (SSD) piloted the TFI (Algozzine et al., 2014), which is a research-validated measure for monitoring the fidelity of implementation at Tiers 1, 2, and 3. The pilot replaced the use of the BoQ at Tier 1 and the BAT for SSD teams implementing Tiers 2 and/or 3. During the 2015–2016 school year, MO SW-PBS adopted the use of the TFI to replace the BoQ for Tier 1 schools that scored two consecutive scores of 80% / 80% on the SET and the BAT for all Tier 2–3 schools.

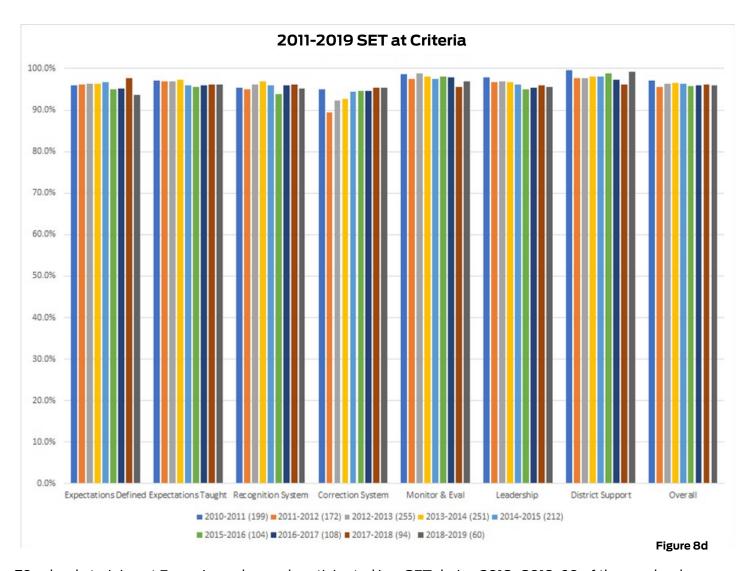
Figure 8c depicts the percentage of MO SW-PBS schools that have participated in Tier 1 fidelity assessments.

# **External Fidelity Measure**

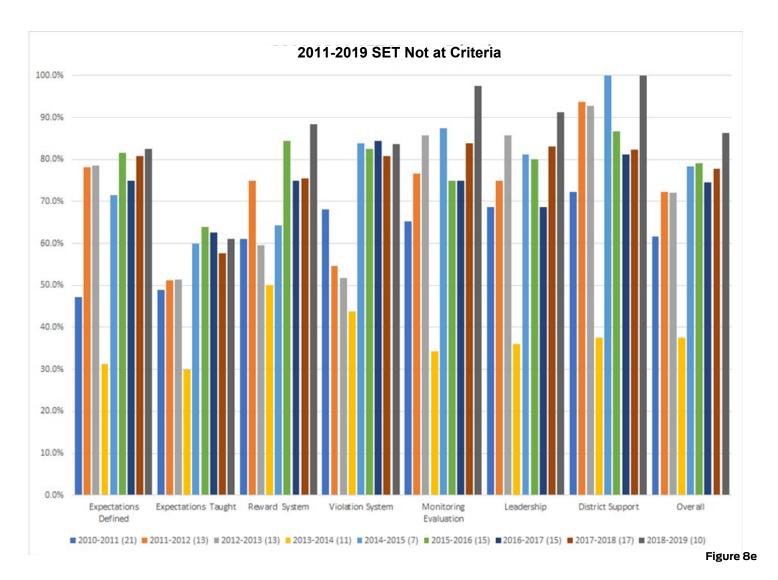
Missouri schools during or after their first year of implementation with students (typically Emerging) can request a SET. The SET is a research-validated instrument that is designed to assess the level of implementation of critical features of Schoolwide Positive Behavior Support. The SET was designed to determine:

- The extent to which schools are already implementing SW-PBS,
- The extent to which technical assistance efforts result in change in tier 1 implementation, and
- The extent to which SW-PBS procedures are related to valued change in the safety, social culture, and violent behavior in schools.

The SET produces a summary score that provides a general index of schoolwide implementation. Schools scoring 80% / 80% or above are implementing Schoolwide Positive Behavior Support at the Universal (or Tier 1) level with fidelity (Todd, Lewis-Palmer, Horner, Sugai, Sampson, & Phillips, 2003). In addition to providing schools with support, aggregate SET data is used to identify strengths of the MO SW-PBS curriculum and delivery, as well as opportunities to better prepare schools for full implementation.



70 schools training at Emerging or beyond participated in a SET during 2018–2019. 60 of those schools (86%) met the 80% / 80% criteria for fidelity of implementation. For schools meeting the 80% / 80% implementation criteria, average scores on each of the essential features of the SET fluctuated only slightly from years past.



In the remaining 10 schools that participated in a SET, but did not attain fidelity criteria of 80% / 80%, all schools scored above 80% on all essential features except part B, Expectations Taught.

## Internal/External Fidelity Measure

The PBIS National Technical Assistance Center recognizes the TFI (Algozzine et al., 2014) as a valid and reliable progress monitoring self-assessment for Tier 1 implementation and has included the TFI as an online survey in PBIS Assessments . The TFI also includes an option for an external schoolwide walk-through component.

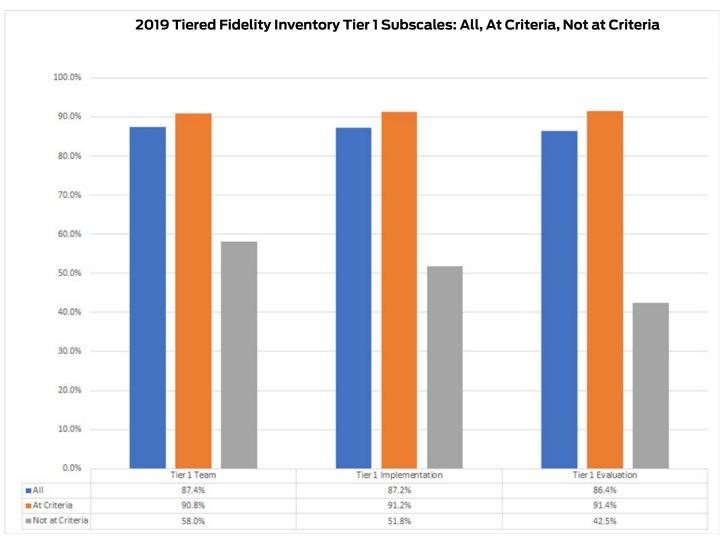


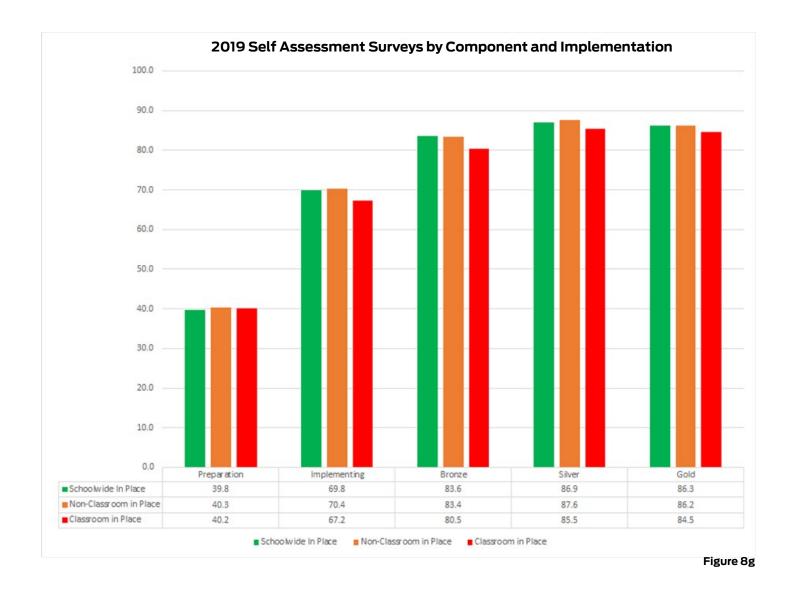
Figure 8f

Two-hundred forty five veteran MO SW-PBS schools administered the TFI (Algozzine et al., 2014) at least one time for evaluation of Tier 1 fidelity. Of these, 220 (89.8%) scored at or above the 70% criteria in the Tier 1 Scale, indicating fidelity of implementation at Tier 1. The Tier 1 Scale score average for all schools was 87.0%. Researchers have found that scores at or above 70% on the Tier 1 scale are comparable to other measures of Tier 1 implementation fidelity (Mercer, McIntosh, & Hoselton, 2017).

When viewing the TFI results by Tier 1 subscales, the average scores were 87.4%, 87.2%, and 86.4% for Tier 1 Teams, Implementation, and Evaluation, respectively.

#### Internal Measure

The Effective Behavior Support Self-Assessment Survey (EBS/SAS or SAS) (Sugai et. al., 2003), which is the only survey taken by all staff members to measure their perceptions of implementation fidelity, has long been considered a reliable and valid self-reporting measure that can help guide self-assessment and action planning by school level teams. More recently, the SAS has proven to be a predictor of sustainable implementation of SW-PBS (Matthews, McIntosh, Frank, & May, 2014). Over 90 Missouri SW-PBS partner schools volunteered for and participated in the sustainability research conducted by Kent McIntosh and colleagues upon which the current literature has been written.



Each year, MO SW-PBS recognizes participating schools that meet rigorous criteria. Schools that earned Bronze level recognition have met criteria for implementing Tier 1 with fidelity. Schools that earned Silver level recognition met criteria for implementing Tiers 1 and 2 with fidelity. Schools that earned Gold level recognition met criteria for implementing Tiers 1, 2, and 3 with fidelity. In addition to the three recognition categories, MO SW-PBS also designates schools as either Preparation or Implementing. Preparation schools were in their first year of training, not yet implementing and therefore, not eligible to participate in MO SW-PBS recognition. Schools designated as Implementing either did not apply for, or did not earn recognition, but were at or beyond their Emerging training year.

As schools demonstrate increasing fidelity of implementation as measured by MO SW-PBS Recognition levels, staff perceptions regarding the level of implementation have increased in the subscales of Schoolwide, Non-Classroom, and Classroom systems.



Figure 8h

Because the Implementing recognition level includes schools representing the full range of training levels from Emerging through Maintenance, and because this category includes schools that did not apply for recognition, Figure 8h disaggregates SAS scores of the Implementing recognition schools by training level. This data shows that within the Implementing recognition level and above, as the training level progresses, scores on the SAS generally improve for all three subscales.

#### Tier 2 and Tier 3

Tier 2 and Tier 3 implementation and training content is less well defined, nationally. This is also reflected in the limited number of fidelity measurement tools for Tier 2 and Tier 3. The Tier 2 and Tier 3 Readiness

Checklists were developed by MO SW-PBS to guide Consultants and participating schools in determin-ing when schools were "ready" to begin the Tier 2 or Tier 3 training process. Historically, MO SW-PBS Tier 2 and Tier 3 Teams used the BAT for fidelity assessment. However, following recent guidance from the PBIS National Technical Assistance Center, MO SW-PBS has begun using the TFI (Algozzine et al., 2014) to guide Tier 2 and Tier 3 teams in self-reflection, ongoing monitoring, and action planning at all three tiers. Beginning in 2015–2016, all MO SW-PBS Schools that were training and/or implementing at Tier 2 and Tier 3 began using the TFI to monitor Tier 2 and Tier 3 implementation fidelity. In addition, some schools training at Tier 1 scored 80%/80% or above on two consecutive SETs were also eligible to take the TFI.

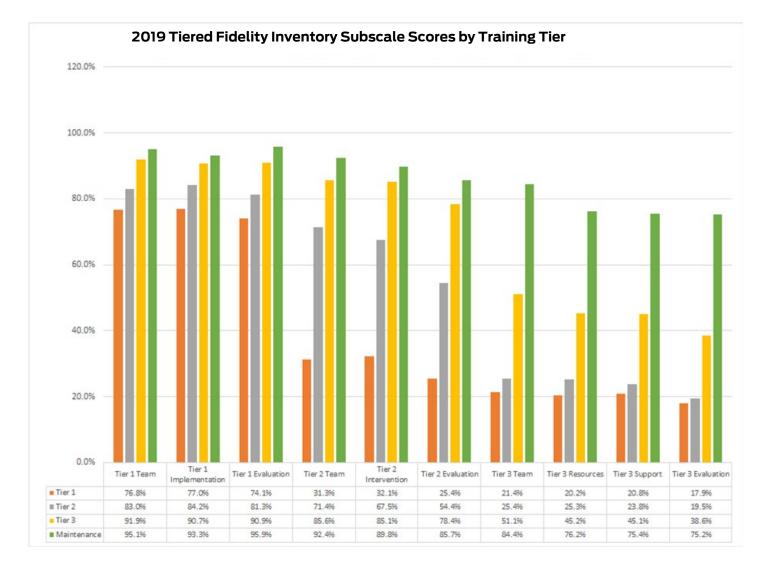


Figure 8i

The average for subscales "in place" on the TFI by training tier suggest that fidelity of implementation of each of the subscales improves as schools move through the phases of training.

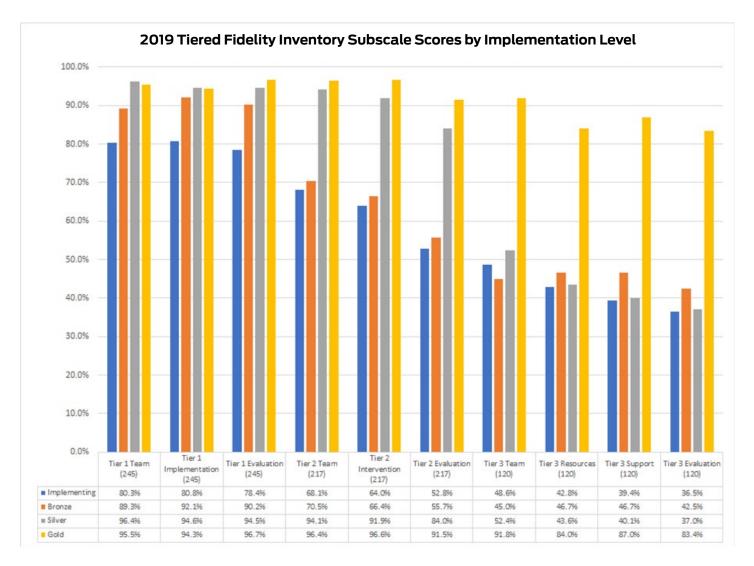


Figure 8J

Figure 8J provides TFI results by recognition, with schools that are not training at or implementing at the tier monitored by that subscale filtered out. This chart gives a more accurate depiction of the relationship between training and recognition levels and a measure of implementation fidelity at the different tiers.

## MO SW-PBS Recognition as a Fidelity Assessment

While the purpose of the MO SW-PBS recognition process is both to honor schools that implement at high levels and to identify model demonstration sites, the recognition designations and associated criteria provide an additional measure of implementation fidelity. See description following Figure 8k regarding recognition/ implementation fidelity categories.

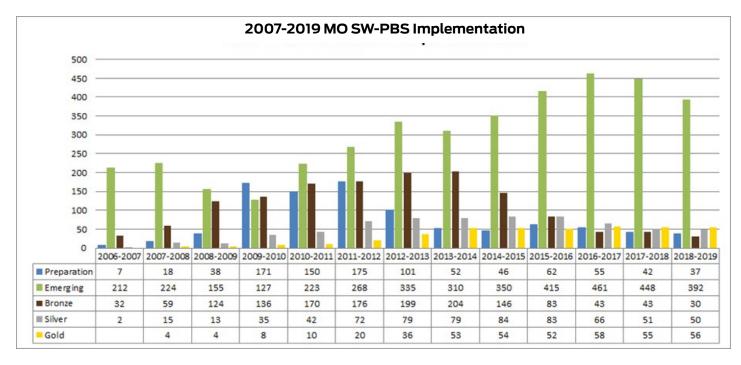


Figure 8k

During the 2014-2015 school year, MO SW-PBS increased the rigor of the recognition criteria to account for research by Mathews et al. (2014) that demonstrated that items on the SAS predicted sustainability, as well as to ensure that truly exemplary schools were identified and recognized. As such, MO SW-PBS added criteria that at least 80% of certified staff must take the SAS, and the school must score at least 60% in the Schoolwide, Non-Classroom, and Classroom components, respectively. In 2015-2016 these criteria were increased again so that the school must score at least 70% in the Schoolwide, Non-Classroom, and Classroom compo-nents, respectively.

In 2018–2019, 12% (30/246) of eligible MO SW-PBS participating schools (Emerging, Emerging Advanced, and Tier 2 training levels) earned Bronze recognition; 42% (50/118) of eligible schools (Tier 2 Advanced and Tier 3 training levels) earned Silver recognition; and 34% (56/164) of eligible schools (Tier 3 Advanced and Maintenance Training Levels) earned Gold recognition.

> MO SW-PBS Goal: 1, 2, 3, 4, 5: MO DESE Goal: 3, 4; SPP Indicator: 1, 2, 4, 5, 6, 7, 8, 9, 10

# IMPACT

Information from impact evaluation indicators reflects the extent to which targeted outcomes are being and/or likely to be achieved. Office discipline referrals (ODRs), suspensions, expulsions, levels of behavior risk, attitude surveys, and end-of-grade and other achievement assessments are widely used markers for behavior and other changes resulting from high-fidelity implementation of SW-PBS. Impact indicators and assessments represent data gathered after a SW-PBS program is implemented as evidence of its outcomes and the extent to which intended outcomes were achieved (Algozzine et al., 2010, p. 25).

To measure impact, an efficient system to collect and aggregate student outcome data has been used and refined in Missouri over the past 10 years. The MO SW-PBS leadership team identified factors, which were included in the suggested reporting outline based on a review and alignment with two National PBIS Center guiding documents: 1) The Implementers' Blueprint (Sugai et al., 2005) and 2) The Evaluation Blueprint (Algozzine et al., 2010). These factors can be categorized as Inputs and Outputs. These variables are collated into a MO SW-PBS End of Year Report (EoY) (Table 1) and made available to schools. In addition, these factors can be invaluable for all SW-PBS stakeholders (e.g., schools and districts, Regional SW-PBS Consultants, state level, national level), particularly when they are reviewed in tandem. Schools routinely report all but three of the EoY factors to The DESE (see items with an "\*"). The three factors not reported to The DESE are directly reported to MO SW-PBS. Participating MO SW-PBS schools that submit these items and take surveys by the respective deadlines will receive an EoY report that contains all of the data that is underlined in the table below.

#### Missouri Schoolwide Positive Behavior End of Year Report MO DESE of Elementary and Secondary Education CORE Data

#### INPUTS / CAUSE

Student Demographics

- Student Race
- Student Ethnicity
- Student Gender
- Free and Reduced Lunch Status
- IEP. Non-IEP or All Students

#### **Building Demographics**

- RPDC Region
- Location (Rural, Suburban, Urban)
- Enrollment Number
- Grade Level

Staff Headcount New & Transfer Staff

# **OUTPUTS / EFFECTS**

Attendance

Missouri Assessment Program (MAP)

- Communication Arts
- Math

#### PBIS Assessments from PBIS National Center

INPUTS / CAUSE / FIDELITY School Safety Survey (SSS) Self Assessment Survey (SAS) Schoolwide Evaluation Tool (SET) Tiered Fidelity Inventory (TFI)

**OUTPUTS / EFFECTS School** Safety Survey (SSS) School Climate Survey (SCS)

#### Other Recommended Data Sources

INPUTS / CAUSE / FIDELITY Classroom Walk Through

**OUTPUTS / EFFECTS** Academic Progress Monitoring Graduation / Dropout Rates

ISS / OSS

Minor Discipline Referrals

Office Discipline Referrals (ODRs)

- By Grade Level (IEP & Non-IEP)\*
- By Student\* (non-identifiable)

Assistance Referrals & Special Education Identification /

Eligibility\* Tier 2 Intervention Outcomes

Tier 3 Intervention Outcomes

## **Question 9**

To what extent is SW-PBS associated with changes in student (behavioral) outcomes?

There are several general issues to keep in mind when reviewing the student outcome data in the annual report. For reporting purposes 1) any SW-PBS implementation groups that had fewer than 10 schools were omitted from the reporting to protect anonymity of schools and to avoid introducing bias into the reports; 2) trends must be analyzed with caution due in part to a small number of schools in some SW-PBS groups in some years, particularly in relation to the All Missouri schools group and the Non SW-PBS schools group, which encompasses 77% of Missouri schools (e.g., differences may be a product of group sizes only, see figure 8k); 3) students with individualized education plans (IEPs) are not included in the "all" students reporting category in this report.; and 4) "students with IEPs" refers to those students with low incident, severe disabilities who qualified to take the alternative.

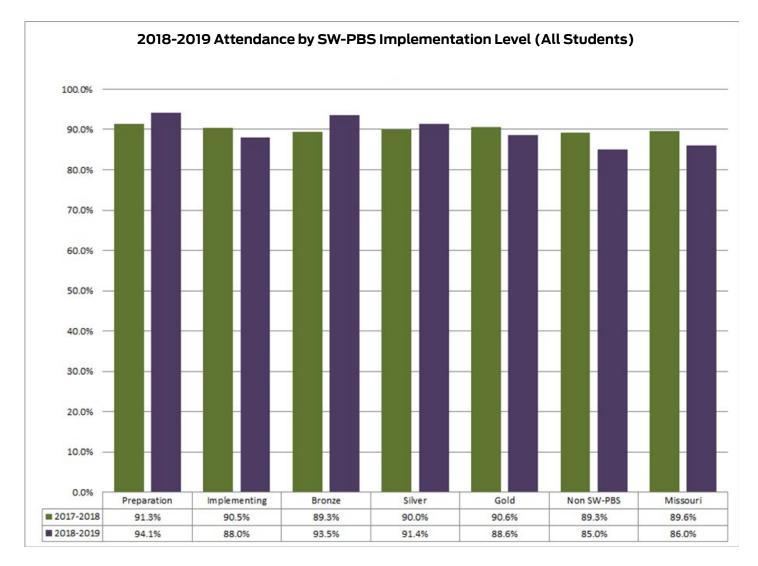


Figure 9a

During the 2014–2015 school year, The DESE changed the way it asks schools to report attendance from an average daily attendance rate to the percentage of students that have 90% or above attendance. However, the data available was in the form of hours attended and hours available. Furthermore, MO SW-PBS has historically presented attendance data as the percentage of hours attended out of the hours available. Therefore, we continue to present it in the same format.

The data shows that attendance rates fell for All Missouri Schools and Non SW-PBS Schools. However, attendance rates increased in all MO SW-PBS implementation categories except Implementing and Gold. In addition, attendance rates were higher in all MO SW-PBS Implementation categories than in 1) All Missouri Schools and 2) Non SW-PBS schools, respectively.

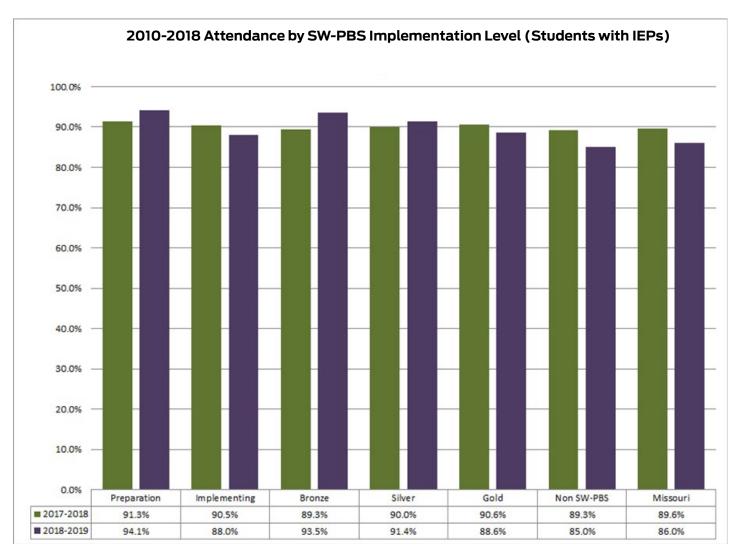


Figure 9b

Similarly, attendance for students with IEPs fell for All Missouri Schools and Non SW-PBS Schools. However, attendance rates increased in all MO SW-PBS Schools except for Implementing and Gold. Finally, attendance rates for students with IEPs in MO SW-PBS schools was higher in all implementation categories than in 1) All Missouri Schools, and 2) Non SW-PBS Schools, respectively.

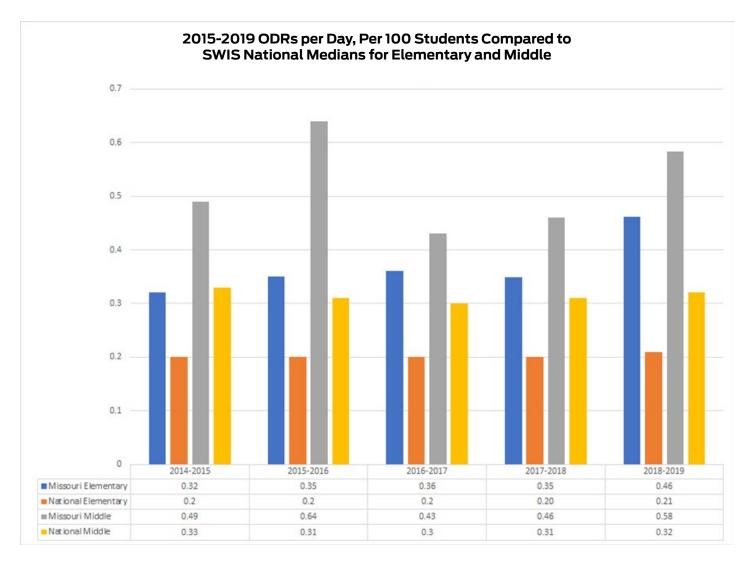


Figure 9c

School-wide Information System (SWIS) (Loika et. al., 2005) is an online resource available to schools implementing SW-PBS available through PBIS Applications (https://www.pbisapps.org/Pages/Default.aspx). During the 2018–2019 school year, 76 (13%) of MO SW-PBS schools used SWIS for data entry and report generation. Because there were fewer than 10 schools using SWIS in the grade configurations of Preschool, High School, PreK-8/PreK-12, and alternative schools, only elementary and middle school data are reported.

MO SW-PBS elementary and middle "SWIS schools" had higher ODR rates relative to 2018–2019 SWIS national norms.

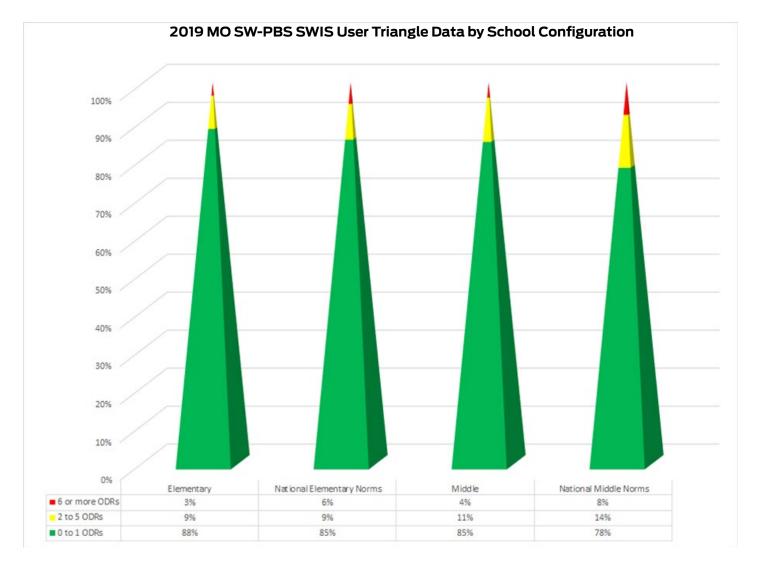


Figure 9d

Another way to consider ODR data is in terms of the percentage of students with 0-1 ODRs, 2-5 ODRs, and 6 or more ODRs. Figure 9d compares these percentages to SWIS National norms. Again, only Elementary and Middle Schools are reported because there were fewer than 10 schools using SWIS in the other school configurations.

Missouri SW-PBS Elementary and Middle schools that used SWIS had higher percentages of students with one or more ODRs, and fewer students with 2 or more ODRs than the Elementary and Middle School SWIS National Norms.

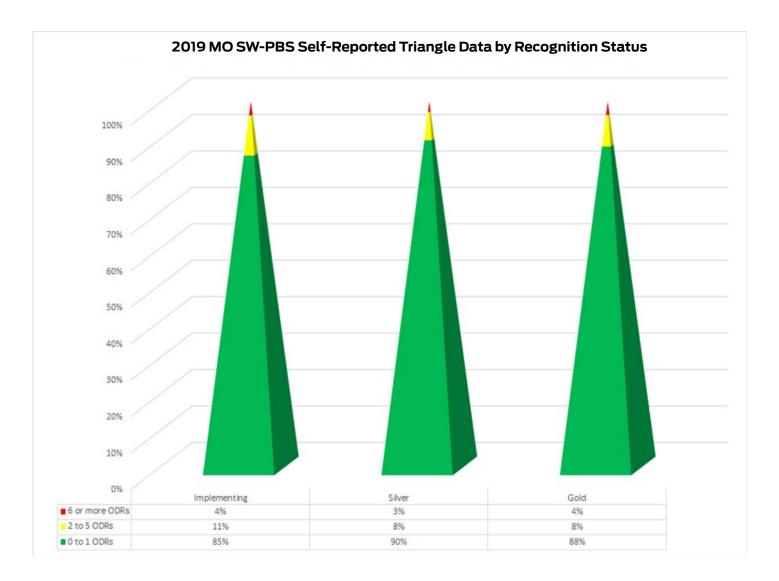


Figure 9e

If we consider students with 0-1 ODRs as responding to Tier 1 implementation, students with 2-5 ODRs as requiring Tier 2 supports, and students with 6 or more ODRs as meeting criteria for Tier 3 supports, and compare these percentages by implementation level as measured by MO SW-PBS recognition, we see that as schools implement with increased fidelity, fewer students meet the decision rule for Tier 2 and Tier 3 supports.

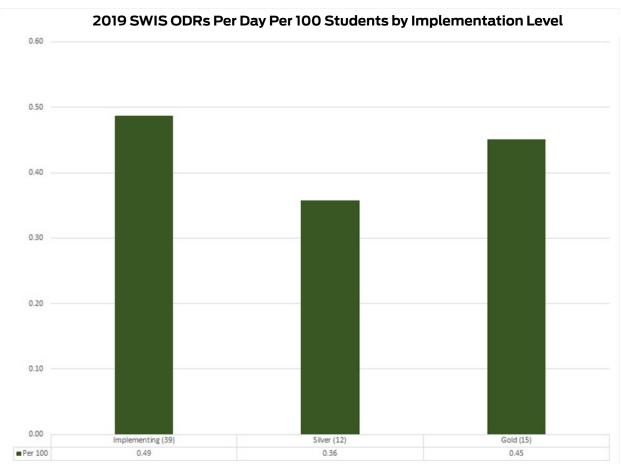


Figure 9f

Finally, 2019 average ODRs per day, per month, per 100 students by implementation level indicates that both Silver and Gold recognition schools average fewer ODRs per day per 100 students than Implementing Recognition Schools. However, Silver recognition level schools have fewer ODRs per day per 100 students than Gold level schools. This data should be interpreted cautiously, as there are very few Silver and Gold schools that use SWIS. Comparisons could not be drawn from Preparation or Bronze level schools, as they had fewer than 10 schools that subscribed to SWIS, respectively.

> MO SW-PBS Goal: 4, 6, 10; MO DESE Goal: 1, 3, 4; SPP Indicator: 1, 2, 4, 5, 13, 14

## **Question 10**

To what extent is SW-PBS associated with changes in academic performance, dropout rates and other areas of schooling?

MO SW-PBS is proud to share examples of how SW-PBS is correlated with positive outcomes for all students and specifically for those with disabilities.

The 2014–2015 school year was a time of transition for the Missouri Assessment Program (MAP), the measure that is used to indicate academic outcomes for students. Grade-level assessments in communication arts and mathematics in grades 3–8 and science in grades 5 and 8 were

administered fully on-line for the first time. Additionally, test content was aligned to new standards. As such, The DESE discouraged comparisons to MAP results from years prior to the 2014–2015 school year. The DESE continued with this new format for 2015–2016 and 2016–2017 but changed the test again in 2017-2018, making multi-year com-parisons problematic. As such we are sharing only 2017–2018 and 2018-2019 MAP data in this report.

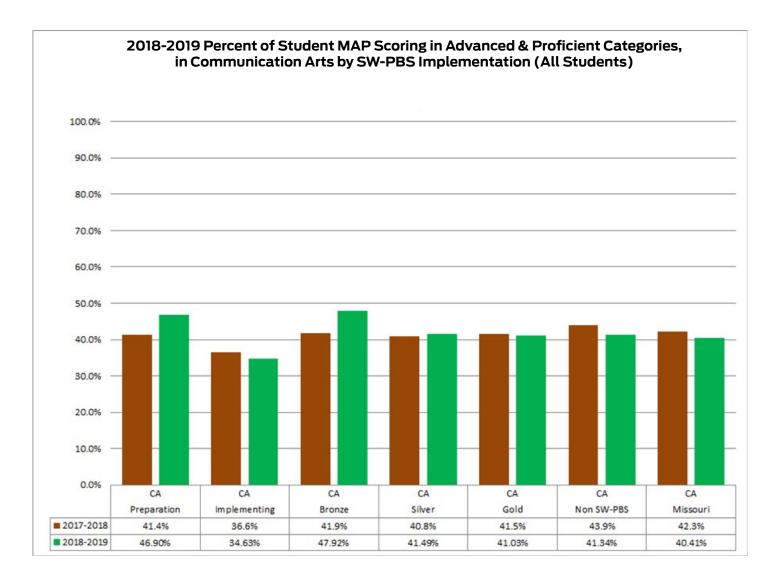


Figure 10a

The percentage of students scoring proficient and advanced in Communication Arts fell in 1) All Missouri Schools and 2) Non SW-PBS Schools. However, the percentage of students scoring proficient and advanced increased in all MO SW-PBS schools except for schools in the Implementing and Gold recognition categories. Furthermore, the average percentage of students scoring proficient and advanced in all MO SW-PBS categories except Implementing were higher than average percentages of students scoring proficient and advanced in All Missouri Schools. Finally, the average percentage of students scoring proficient and advanced in all MO SW-PBS schools except Implementing and Gold was higher than the percentages of students scoring proficient and advanced in Non SW-PBS Schools.

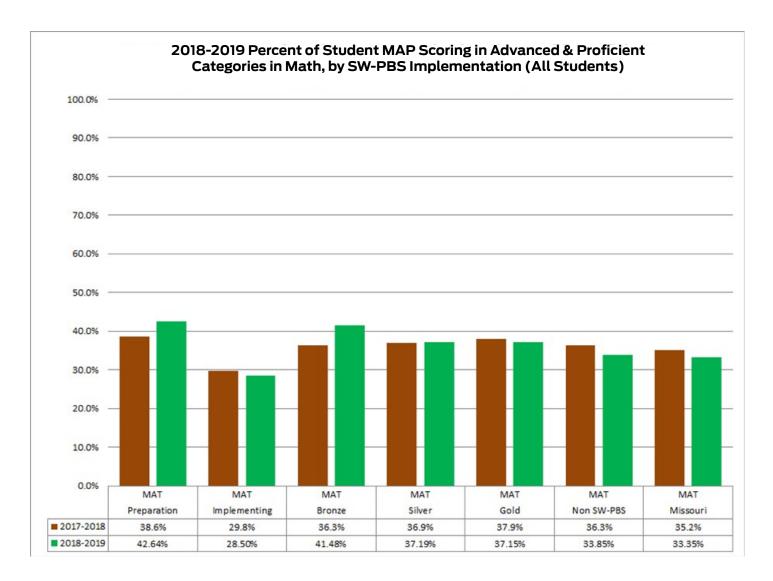


Figure 10b

In Mathematics, the percentage of students scoring proficient and advanced fell for 1) All Missouri Schools and 2) Non SW-PBS Schools. All MO SW-PBS Schools had higher percentages of students scoring in proficient and advanced than 1) All Missouri Schools and 2) Non SW-PBS Schools. Finally, with the exception of Implementing and Gold recognition schools, all MO SW-PBS categories increased the percentage of students scoring proficient and advanced in mathematics on the MAP.

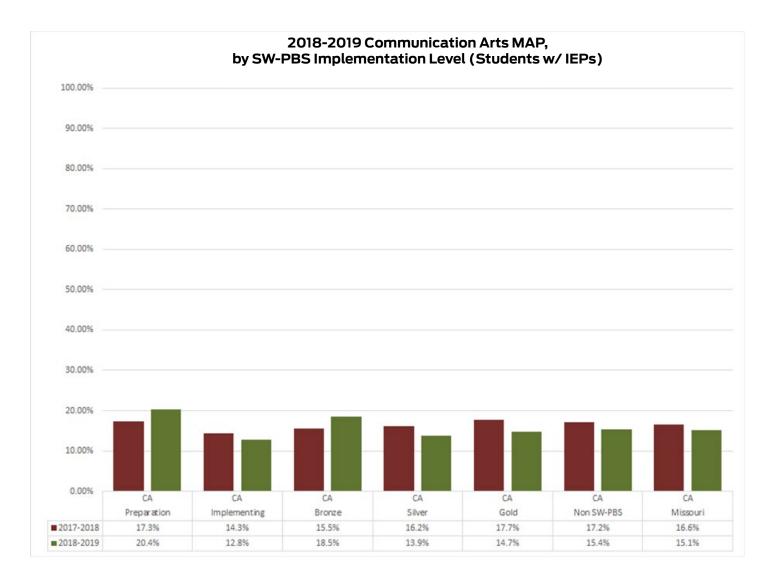


Figure 10c

The percentage of students with IEPs scoring proficient and advanced in Communication Arts on the MAP fell in 1) All Missouri Schools and 2) Non SW-PBS Schools. Similarly, the percentage of students with IEPs scoring proficient and advanced in Communication Arts on the MAP fell in all MO SW-PBS recognition levels except Preparation phase schools and Bronze recognition schools. Furthermore, with the exception of Preparation and Bronze recognition level schools, the percentage of students with IEPs scoring proficient and advanced in Communication Arts on the MAP for MO SW-PBS schools was below the percentages of students scoring proficient and advanced in both 1) All Missouri Schools and 2) Non SW-PBS Schools.

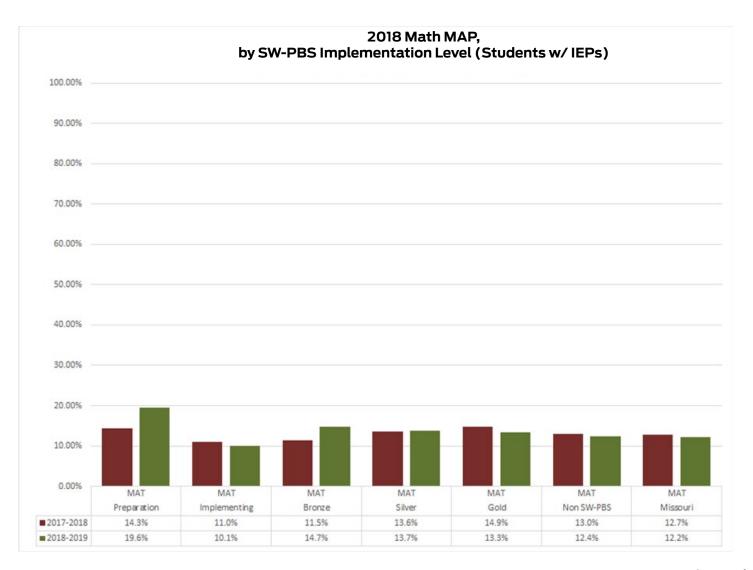


Figure 10d

Similarly, the percentage of students with IEPs scoring proficient and advanced in mathematics fell in 1) All Missouri Schools and 2) Non SW-PBS Schools. In contrast, the percentage of students with IEPs scoring proficient and advanced in mathematics increased in all MO SW-PBS recognition categories except Implementing. Finally, with the exception of the Implementing category, the percentage of students with IEPs scoring proficient and advanced in mathematics was higher in all MO SW-PBS recognition categories than in 1) All Missouri schools and 2) Non SW-PBS schools.

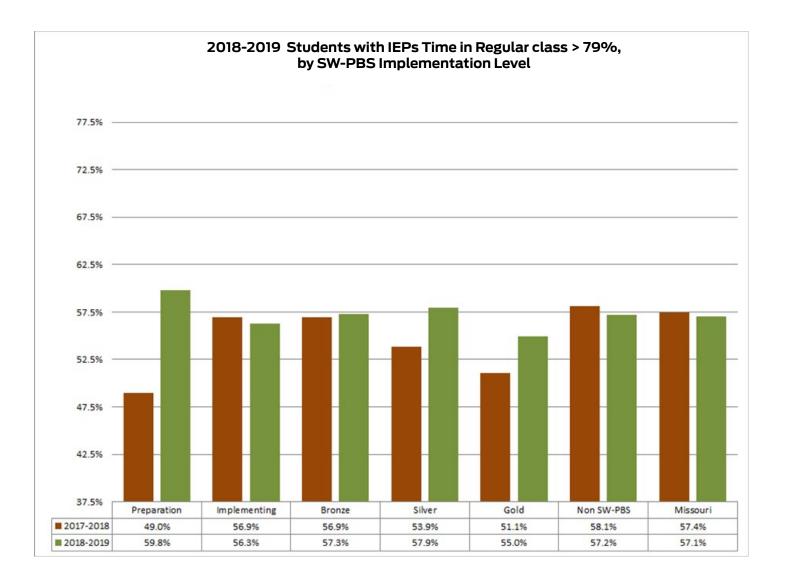


Figure 10e

Another way to monitor outcomes for students with disabilities is time spent in the regular education settings. Schools report this relative to the percentage of students with IEPs that spend "greater than 79%" of their time in the regular education setting. The percentage of students with IEPs spending more than 79% of their time in the regular education setting fell in 1) All Missouri Schools, 2) Non SW-PBS Schools, and in the Implementing Recognition level. All other MO SW-PBS recognition levels increased the amount of time students with IEPs spent in the regular education setting. In addition, with the exception of the Implementing and Gold recognition levels, all MO SW-PBS school categories averaged greater time spent in the regular education setting than did 1) All Missouri Schools and 2) Non SW-PBS Schools.

> MO SW-PBS Goals: 1, 3, 4, 5; MO DESE Goal: 1, 2, 3; SPP Indicator: 1, 2, 4, 5, 6, 7, 8, 9, 10, 13, 14

# REPLICATION, SUSTAINABILITY, AND IMPROVEMENT

An emerging area of evaluation emphasizes the extent to which efforts to implement a program like SWPBS can be replicated with sustained impact, (Algozzine et al., 2010, p. 30). Missouri SW-PBS has answered the following questions to show evidence of replication, sustainability and improvement.

## **Question 11**

To what extent did SW-PBS implementation improve capacity for the state/region/district to replicate SW-PBS practices, sustain SW-PBS practices, and improve social and academic outcomes for students?

MO SW-PBS is fortunate that The DESE has continually committed strong support for implementation of evidence-based practices. The DESE supports MO SW-PBS in many ways. Some of these include:

- 1. financing regional and state positions,
- 2. relying on the initiative as a State Performance Plan (SPP) improvement activity for numerous SPP indicators.
- 3. committing human and financial resources to support the MO SW-PBS Online Data Collection System.
- 4. promoting the initiative since 2005 through the actions of assistant commissioners (e.g., letters to superintendents, presentations to stakeholders, collaboration with the Missouri Department of Mental Health to promote 3-tiered models across agencies), and
- 5. recognizing schools achieving exemplary implementation.

The DESE has experienced the same challenges as most other state educational departments related to shrinking budgets and increasing expectations to demonstrate improvement. As such, The DESE has instituted the development of a state system of support (SSOS) to facilitate improved collaboration across initiatives and more efficient use of personnel.

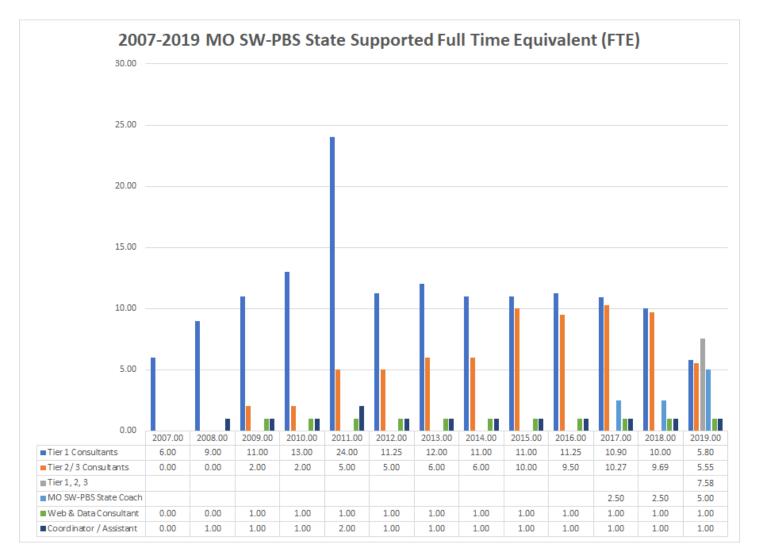


Figure 11a

MO SW-PBS regional consultant FTE was decreased by 50% in 2011-2012, but all personnel positions were maintained through the training of the consultants in other SSOS content. As the number of schools imple-menting at Tier 2 and Tier 3 increased, The DESE increased the FTE dedicated to training and technical assistance for schools at those tiers. In total, the DESE assigned 25.93 FTE to the MO SW-PBS work in 2018–2019, with this FTE distributed among 31 personnel across the state. MO SW-PBS is committed to assisting The DESE in furthering the SSOS work.

## **Missouri SW-PBS School Counts by Districts**

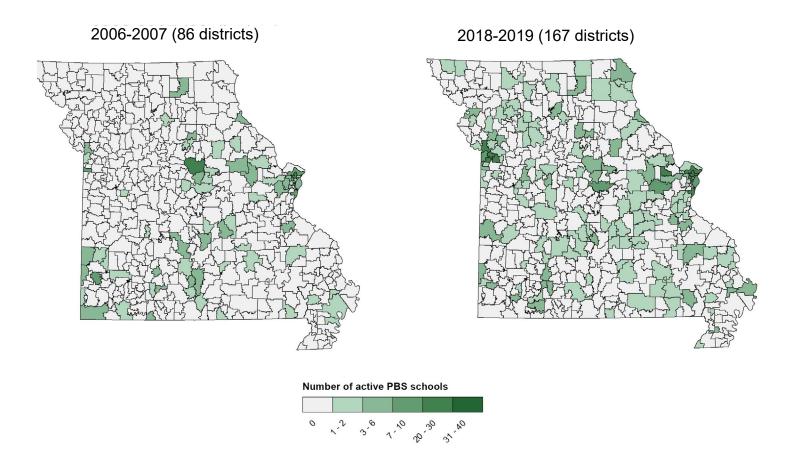


Figure 11b

Over time, MO SW-PBS has expanded to provide training and technical assistance to schools located across the state of Missouri. Additionally, participating schools across all three tiers can be found in every RPDC across the state, providing exemplars for regional schools to visit and opportunities for within region training and networking.

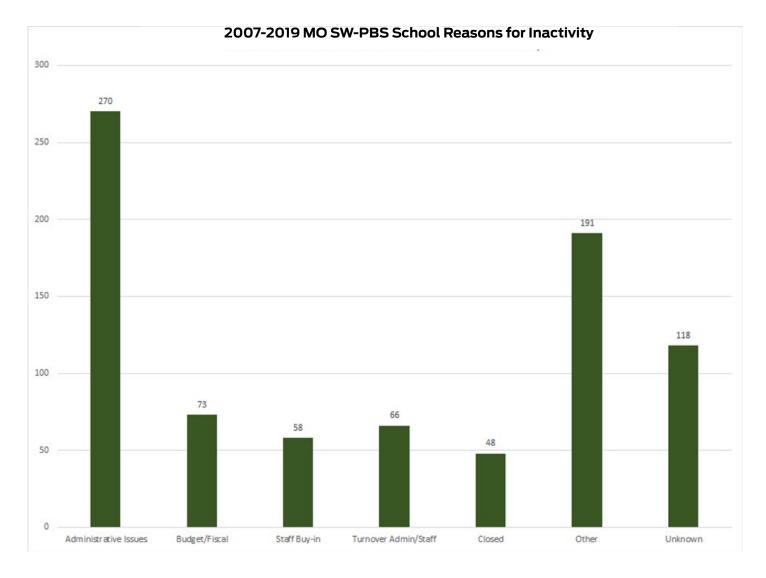


Figure 11c

During 13 years of MO SW-PBS implementation, 758 of the 1261 schools initially committing to the initiative chose to discontinue training at least once between 2007 and 2019 (63 schools were marked inactive twice, and 2 were marked inactive 3 times, for a total number of "Inactives" marked in the system of 825). Regional Consultants were surveyed regarding reasons for schools not re-committing. Of the known reasons, "Administrative Issues" was the primary reason for schools discontinuing SW-PBS implementation. This factor has been well established in literature as a driver and barrier for sustainability (Mcintosh, Predy, Upreti, Hume, Turri, & Matthews, 2014).

The next most frequently cited reasons were "Other" and "Unknown." "Other" included reasons such as school/district hit by a tornado, district-mandated withdrawal, or limited resources for numerous initiatives. "Unknown" occurred when schools simply stopped communicating with the Consultant(s).

The category for "Closed" included schools that closed or were merged with other schools.

Data indicate that 87 schools that had previously discontinued implementing SW-PBS were training again in 2018-2019. Removing the 48 "Closed" schools from the calculation, the retention of MO SW-PBS schools across 13 years stands at 46%. Schools that completed all training and are now self-sustaining implementation may be included in the "inactive" category as they are no longer partnering with regions. This may artificially depress the retention rate, because these schools may still be implementing SW-PBS even though they are no longer partnering with MO SW-PBS.

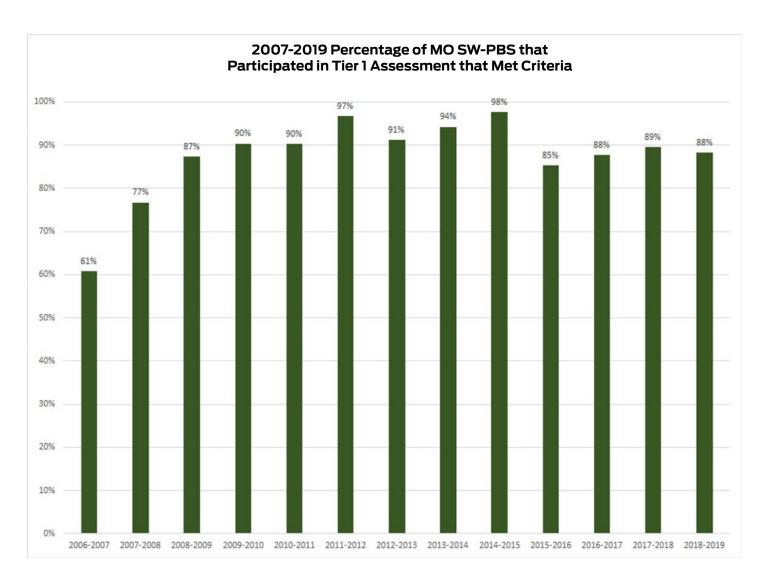


Figure 11d

Sustainability of MO SW-PBS is demonstrated by continued high scores on the SET or BoQ/TFI. The percentage of schools that participated in Tier 1 fidelity evaluation and achieved the threshold for meeting criteria on either the SET or BoQ/TFI has remained above the 80% goal since 2008–2009.

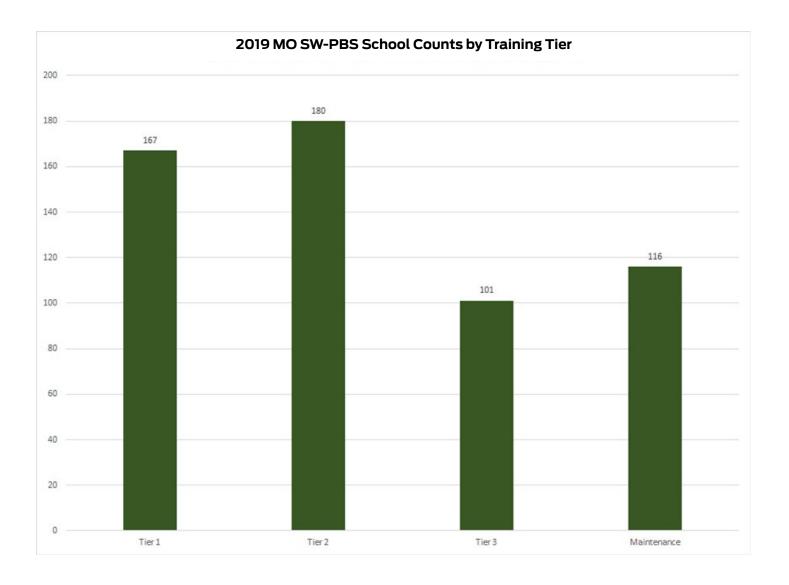


Figure 11f

Sustainability of MO SW-PBS is demonstrated by continued growth in the number of schools that are eligible for and participate in Tier 2 and Tier 3 training. Standardized Tier 2 training began in 2008–2009 with 50 schools. In 2018-2019 there were 167 Tier 1 schools, 180 schools in Tier 2 training, and 101 schools in Tier 3 training. In addition, there were 116 Maintenance schools.



Figure 11f

The MO SW-PBS website (http://pbismissouri.org) continues to be a valued resource in the community. The website was redesigned and a new website launched in late June of 2017. As a result of this launch, there was a decrease in site visits from previous years during the 2017-2018 school year. Google Analytics for 2018-2019 shows that visits to the website have since recovered. Google Analytics data for 2018-2019 are as follows:

- 57,098 visits, up from 45,060 visits in 2017–2018 (a 27% increase)
- 32,323 individual users, up from 23,099 in 2017– 2018 (a 40% increase)
- 209,845 unique page views, up from 153,825 in 2017-2018 (a 36% increase)

Visitors to the website were from 131 countries and all 50 states and the District of Columbia. 84.6% of all visitors were from the United States. 36.47% of all visitors were from the state of Missouri.

The most frequently viewed pages were the home page (18.41%), the Tier 1 Effective Classroom Practices Page (8.38%), the Tier 1 Workbook and Resources page (6.74%), and the Tier 2 Workbook and Resources page (5.59%). These were also the most frequently visited pages during the 2017-2018 school year, albeit in a different order.

The vast majority of visitors continue to access the site using desktop (83.51%). The number of individuals who accessed the site using mobile devices (phone or tablet) increased from 8,441 in 2017–2018 to 9418 in 2018-2019, for an 11.6% increase.

At the beginning of May of 2019, Google Analytics was set to monitor downloads from the website. The most frequently downloaded resources from the website were the Summer Institute Brochure, the Tier 1 Workbook, and the May 2019 Positive Focus Newsletter. It should be no surprise that the Summer Institute Brochure and the May Positive Focus Newsletter were two of the top three downloads from the

website, since this data was only monitored during the months of May and June. However, we anticipate better data in the future.

MO SW-PBS continues to expand into online learning. As mentioned above, just prior to the beginning of the 2017–2018 fiscal year, MO SW-PBS, in collaboration with Evan Courtney of Creative Courtney, launched a new website that included a Learning Management System and several online courses. The new website was launched on June 25, 2017. In addition, MO SW-PBS continued to post content on the Mo Edu-Sail website (http://www.moedu-sail.org/) in partnership with The DESE SSOS.

During the 2018–2019 school year, MO SW-PBS Consultants used learning modules posted to the website for "flipped" instruction. This helped to build background knowledge prior to training, decreased the amount of time Consultants engaged in lecture-style content delivery, and increased the amount of time participants were able to apply learning.

MO SW-PBS continued to expand communication through social media. MO SW-PBS began communicating via Twitter in 2015-2016 and added Facebook and MailChimp in 2016-2017. The website, Facebook, Twitter, mass emails from the moswpbs@ missouri.edu email account, and monthly coaching newsletters developed and sent through MailChimp were part of a multi-pronged communication plan designed to reach a broader audience. Currently MailChimp emails have a 36.3% open rate (industry "education and training" average open rate is 16.1%). During RPDC Center training events and Summer Institute, Consultants and participants are urged to use Twitter to share learning. For example, during the 2018 Summer Training Institute, partici-pants were reminded to use #moswpbs18 to follow the event live and share information and inspiration with other attendees.

Recent research and publications have indicated that

Social Media Platform	2018-2019	2017-2018
@MOSWPBS Twitter Followers	2093 followers (as of 11/25/19)	1,867
Facebook Followers	335 followers (as of 10/24/2019)	222
MailChimp Subscribers	2023 (as of 11/21/19)	1904

SW-PBS is a promising practice and meets multiple criteria for classification as "evidence-based" (Epstein, Atkins, Cullinan, Kutash, & Weaver, 2008; Horner, Sugai, & Anderson, 2010; McIntosh, Filter, Bennett, Ryan, & Sugai, 2010). These criteria have provided information to assess impact and sustainability and to guide the MO SW-PBS staff and Leadership Team in monitoring the state action plan. A national study designed by McIntosh et al. (2013) was conducted to study these sustainability factors in tandem utilizing the School-wide Universal Behavior Support Sustainability Index, School Teams (SUBSIST), and Missouri was selected to participate based on the long-term implementation of SW-PBS across the state.

MO SW-PBS data available to date indicate a correlation between implementation of SW-PBS and improved social/emotional, behavioral, and (to a lesser extent) academic outcomes for students (see Questions 9 and 10 above). However, multi-year data analysis will be necessary to identify the strength and significance of any relationships.

> MO SW-PBS Goals: 1, 2, 3, 4, 5, 6; MO. Dept. Goal: 3, 4; SPP Indicator: 5, 8, 9, 10

## **Question 12**

To what extent did SW-PBS implementation change educational/behavioral policy?

Missouri School Improvement Plan (MSIP) and State Performance Plan (SPP) indicators help to shape the content of school district policy through their Comprehensive School Improvement Plans (CSIP). These multi-year plans identify goals and indicators to guide areas of improvement and determine desired outcomes to demonstrate achievement.

Participating Missouri school districts are increasingly including SW-PBS in these plans. Currently, 43 districts, approximately 26% of participating districts, have committed to a district-wide implementation, either by having a district level team that meets at least twice yearly to address SW-PBS implementation, or by participating in the DCI or the School Climate Transformation Grant (SCG). Some schools use SW-PBS to address CSIP indicators including:

- orderly and safe schools
- school climate
- Data-Based Decision-Making
- professional development
- appropriate services for all children
- high school transition
- support of parental involvement

MO SW-PBS staff members have been actively involved in the state-level alignment group that

is working to develop guidance for all schools and districts in District Continuous Improvement (DCI). The purpose of this group is to enhance the collaboration as outlined through the SSOS work. One of the outcomes of this work group has been to develop and pilot online training content. MO SW-PBS has been at the forefront of online course development in the state of Missouri.

MO SW-PBS actively supports the "Show Me Success" goals of The DESE. The implementation of MO SW-PBS includes work in early childhood education and secondary transition. Training, networking opportunities, and resource development were areas of focus for the MO SW-PBS team during the 2018-2019 school year. Training across all three tiers supports best instructional practice by Missouri educators. MO SW-PBS has systematically worked to streamline and align training with all other initiatives of The DESE in an effort to maximize resource utilization. MO SW-PBS personnel have been active participants in state level dialogue and development of a framework for Multi-Tiered Systems of Support (MTSS) in an effort to outline best practice in supports across behavioral and academic domains.

> MO SW-PBS Goals: 1, 2, 3, 4, 5, 6; MO DESE Goal: 1, 2, 3, 4; SPP Indicator: 1, 2, 4, 5, 6, 7, 8, 9, 10, 13, 14

# SUMMARY

## **Question 13**

To what extent did SW-PBS implementation affect systemic educational practice?

The implementation of SW-PBS in Missouri as a statewide initiative began in 2006. As such, the bulk of our evaluation data to date reflect process evaluation, with a growing ability to provide impact evaluation. From process evaluation data we can answer "yes" to the question, "Can Missouri schools implement essential features of SW-PBS, and have they sustained this implementation over time?"

Currently available impact data indicate that when MO SW-PBS is implemented with fidelity over multiple years, students experience decreased office discipline referrals, lower dropout rates, increased attendance, and improved academic achievement. Evaluation of this initiative is a process that needs to be replicated each year. We are pleased with the increasing evidence of positive outcomes presented in this report and will strive to continually demonstrate annual improvement.

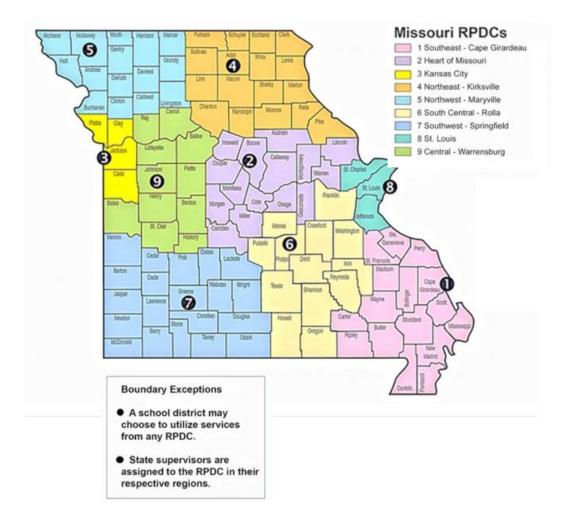
The ultimate goal of MO SW-PBS is to help schools establish a process guided by research (McIntosh, McKay, Hume, Doolittle, Vincent, Horner, & Irvin, 2011)

for continuous regeneration, leading to all students graduating with college and/or career ready skills. Recent national publications emphasize the critical importance of implementing high school programs that focus on improving students' social and behavioral skills (Dynarski, Clarke, Cobb, Finn, Rumberger & Smink, 2008; National High School Center, 2010). Research also continues to uphold the viability of SW-PBS as an effective means to achieve these goals, including the importance of intervening well before high school to best impact these outcomes (McIntosh, Flannery, Sugai, Braun, & Cochrane, 2008). As such, we will monitor our progress from preschool through high school to ensure we are providing the highest quality training and support across all developmental stages.

We look forward to continuing to serve Missouri schools, thereby helping to ensure that all Missouri students graduate ready for success.

## REGIONAL PROFESSIONAL DEVELOPMENT CENTER

## **CONTACT INFORMATION**



**REGION 1: SOUTHEAST RPDC** www.semo.edu/rpdc/

**REGION 2: HEART OF MISSOURI** www.homrpdc.com/

**REGION 3: KANSAS CITY RPDC** education.umkc.edu/community centers and programs/regional professional development center/

**REGION 4: NORTHEAST RPDC** http://rpdc.truman.edu/

**REGION 5: NORTHWEST RPDC** nwmissouri.edu/rpdc

**REGION 6: SOUTH CENTRAL-**RPDC

https://rpdc.mst.edu/

**REGION 7: AGENCY FOR TEACH-**ING, LEADING AND LEARNING education.missouristate.edu/atll

**REGION 8: EDPLUS RPDC** https://www.edplus.org/

**REGION 9: CENTRAL RPDC** ucmo.edu/rpdc

## MO SW-PBS State Team Members 2018-2019

#### MO SW-PBS State Team Members 2018-2019

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SW-PBS Coaches: Jody Baker, Jamie Grieshaber, Deanna

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All costs associated with creating and printing this report were supported through the MU Center for SW-PBS.

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### **2018-2019 ANNUAL REPORT RESOURCES**

#### SUPPORTING RESOURCES

- Missouri DESE "Show-Me Success" (https:// dese.mo.gov/top-10-by-20)
- Missouri State Performance Plan (SPP) (https://dese.mo.gov/special-education/ state-performance-plan)

#### **CONTEXT**

- What are/were the goals and objectives for MO SW-PBS implementation? MO SW-PBS Action Plan Goals (http://pbismissouri.org/what-is-swpbs/)
- 2. Who provided support for MO SW-PBS implementation?
  - MO SW-PBS Personnel listed online (http://pbismissouri.org/about/personnel)
- 3. Who received support during SW-PBS implementation?
  - MO SW-PBS schools (http://pbismissouri. org/about/participating-schools)
  - Race & Ethnicity Guide from U. S. Department of Education (https://www2.ed.gov/policy/rschstat/guid/raceethnicity/index.html)

#### **INPUT**

- 4. What professional development was part of SW-PBS implementation support?
  - Training Materials, Tier 1 Workbook, Tier 2 Workbook, and Tier 3 workbook
  - (http://pbismissouri.org/tier-1-workbook-resources/)
  - (http://pbismissouri.org/tier-2-workbook-resources/)
  - (http://pbismissouri.org/tier-3-workbook-resources/)
- 5. Who participated in the professional development?
  - MO SW-PBS Schools (http://pbismissouri.org/about/participating-schools)
- 6. What was the perceived value of the professional development?

#### **FIDELITY**

- 7. To what extent was SW-PBS implemented as designed?
  - What is SW-PBS? (http://pbismissouri.org/what-is-swpbs/)
  - Training Materials, Tier 1 Workbook, Tier 2 Workbook, and Tier 3 workbook
  - (http://pbismissouri.org/tier-l-workbook-resources/)
  - (http://pbismissouri.org/tier-2-workbook-resources/)
  - (http://pbismissouri.org/tier-3-workbook-resources/)

- 8. To what extent was SW-PBS implemented with fidelity?
  - MO SW-PBS Recognition Program Awards (http://pbismissouri.org/exemplar-schools/ exemplar-schools/)
  - MO SW-PBS Exemplar Schools for 2017-2018 (http://pbismissouri.org/exemplar-schools/)
  - PBIS Assessments (https://www.pbisapps. org/Pages/Default.aspx)
  - Missouri Student Information System (MOSIS) (https://dese.mo.gov/data-system-management/core-datamosis)

#### **IMPACT**

- 9. To what extent is SW-PBS associated with changes in student (behavioral) outcomes?
  - Missouri Assessment Program (https://dese. mo.gov/college-career-readiness/assessment)
  - State Performance Plan, Missouri Part B; 2005-2006 through 2012-2013 (https://dese.mo.gov/special-education/state-performance-plan)
- 10. To what extent is SW-PBS associated with changes in academic performance, dropout rates, and other areas of schooling?

# REPLICATION, SUSTAINABILITY, AND IMPROVEMENT

- 11. To what extent did SW-PBS implementation improve capacity for the state/region/district to replicate SW-PBS practices, sustain SW-PBS practices, and improve social and academic outcomes for students?
- 12. To what extent did SW-PBS implementation change educational/behavioral policy?
  - Why it's Prudent and Practical to Implement SW-PBS (http://pbismissouri.org/wp-content/uploads/2018/02/2.1-Prudent\_Practical\_010117.pdf?x30198)
  - Missouri School Improvement Plan (https:// dese.mo.gov/quality-schools/mo-school-improvement-program)
  - State Performance Plan Indicators (https:// dese.mo.gov/special-education/state-performance-plan)
- 13. To what extent did SW-PBS implementation affect systemic educational practice?