

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 2015-2016 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 SW-PBS during the 2015-2016 school year.



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## MISSOURI SCHOOLWIDE POSITIVE BEHAVIOR SUPPORT

## 2015-2016 ANNUAL REPORT

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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 "Top 10 by 20" goal of Missouri's students being within the top ten states in educational performance by 2020 (https://dese.mo.gov/top-10-by-20). The four strategic goals of the Top 10 by 20 are:

- 1. All Missouri students will graduate college and career ready.
- 2. All Missouri children will enter kindergarten prepared to be successful in school.
- 3. Missouri will prepare, develop, and support effective educators.
- 4. The Missouri Department of Elementary and Secondary Education will improve The DESE efficiency and operational effectiveness.

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, expelled or dropping out of school (#2 & #4)
- ► SW-PBS includes programs for pre-school 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 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 multi-tiered behavioral frameworks 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 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, B., 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 2015-2016. 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 indicates appropriate. Each goal is addressed in more detail within this report. They are:

- 1. 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.
- MO SW-PBS provides standardized professional development and technical assistance for school 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

## **Question 2**

Who provided support for MO SW-PBS implementation?

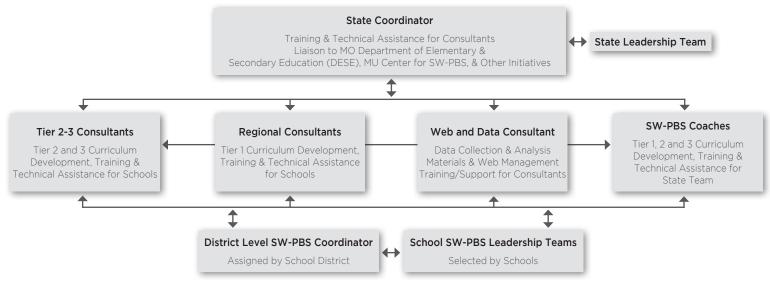


Figure 2a

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 and state-level Consultants, 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 National PBIS 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.

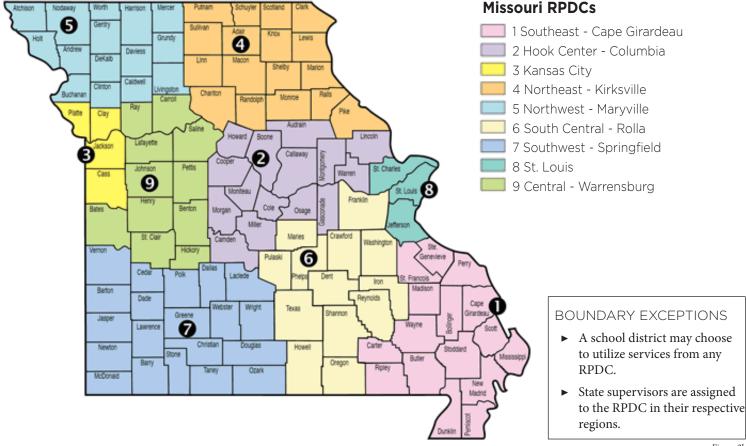


Figure 2b

Eighteen Regional Consultants with a total 11.25 full time equivalents (FTEs) were based in eight out of nine state Regional Professional Development Centers (RPDCs) and primarily served school districts within those boundaries. They assisted in the continued development of standardized training modules across levels and topics as well as provided training and technical assistance based upon the needs of schools in their region. 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. Seven Tier 2-3 Consultants provided regional trainings in building Tier 2 and 3 systems of student support and assisted the Regional Consultants by providing ongoing technical support to schools being trained at these levels. Two additional Tier 2-3 Consultants provided training and mentoring to new Tier 2-3 Consultants and conducted state level administrative tasks. The Web and Data Consultant developed data training curriculum and provided data training to consultants and school districts. 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.

## 2011-2016 MO SW-PBS State Personnel Education & Professional Credentials

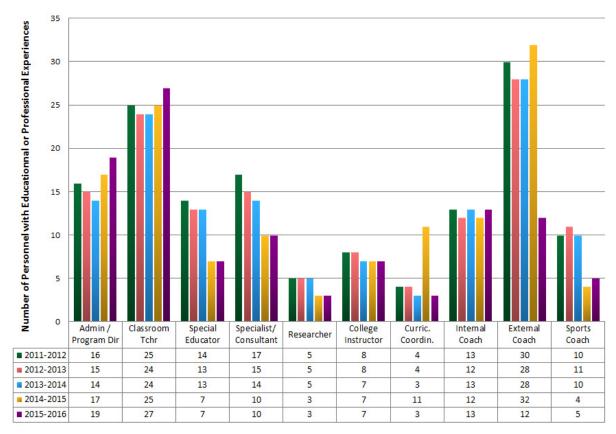


Figure 2c

The MO SW-PBS State and Regional Consultants began reporting educational and professional credentials once a year in 2010. The results show evidence of educational credentials and professional experience necessary to provide exemplary support to Missouri schools. During the 2015-2016 implementation year, Consultants had a combined total of 628 years of educational experience.

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



100

■ Schools

Districts

0

2006-2007

253

2007-2008

320

2008-2009

334

97

2009-2010

477

133

## 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 498,000 (54% of all Missouri students) in the 2015-2016 year.

## 800 Count of Participating Schools and Districts 700 600 500 400 300 200

2010-2011

595

2011-2012 2012-2013

750

218

712

2013-2014

696

207

2014-2015

631

2006-2016 MO SW-PBS Schools and Districts

Figure 3a

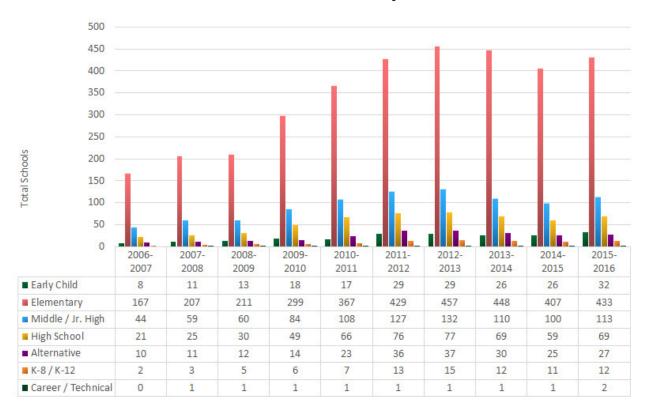
2015-2016

695

192

The number of schools and districts working with MO SW-PBS has been increasing, although there was a slight drop in 2013-2014 and 2014-2015. It is important to note that there was a 50% reduction in Tier 1 full time equivalent (FTE) for personnel at the end of the 2010-2011 school year. This resulted in less FTE to recruit and retain participating schools for Tier 1 work in 2012-2013 and beyond. During the 2015-2016 school year 695 schools were active participants, accounting for 29% of all Missouri public and charter schools. These schools were from 192 districts or 34% of all Missouri districts.

## 2006-2016 MO SW-PBS Schools by Grade Level



MO SW-PBS training and support has expanded beyond K-12 schools to include early childhood, alternative school programs and career/technical schools.

2015-2016 Student Demographics, by SW-PBS Status

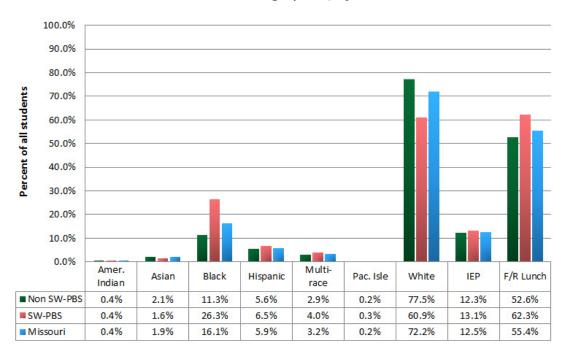


Figure 3c

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

2006-2016 Students w/ F/R Lunch, by SW-PBS Status

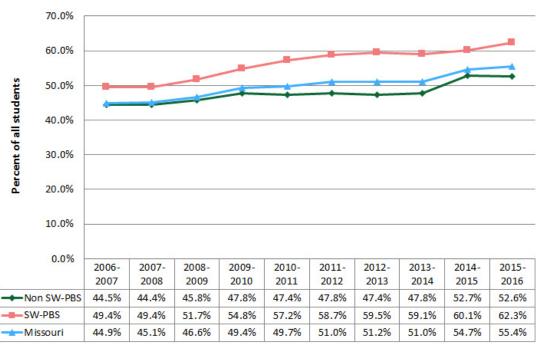


Figure 3d

MO SW-PBS continues to have a higher percentage of students qualifying for F/R Lunch than Non SW-PBS Schools, or all Missouri schools.

### 2007-2016 Students with IEPs, by SW-PBS Status

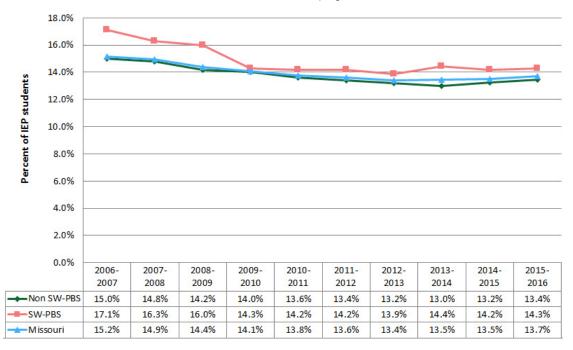


Figure 3e

IEP rates were calculated for all PK-12 students. Figure 3e shows the SW-PBS schools have historically served more students with disabilities than have non SW-PBS schools, or Missouri schools in general. This trend continued during the 2015-2016 school year.

## 2006-2016 MO SW-PBS Students by Race/Ethnicity

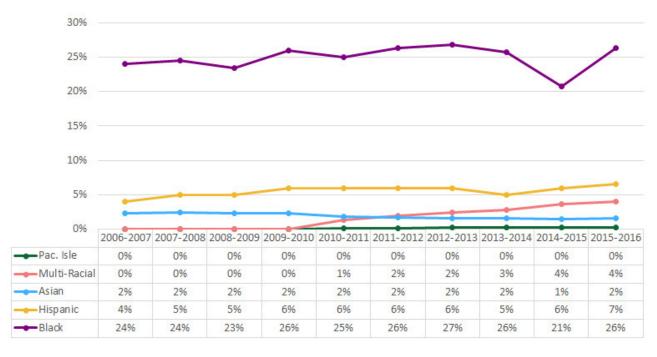


Figure 3f

Although there was a slight dip in the percentage of African American students during the 2014-2015 school year, these numbers rebounded to be more in line with historic data. In addition, there continued a small but steady increase in the percentages of all other demographic categories in SW-PBS schools.

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, B., et al., 2010, p. 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?

Providing quality technical assistance to schools, professional development and training for all Consultants has been a priority. The State Coordinator structured training and support to the Regional and Statewide Consultants through formal two-day monthly meetings. These meetings included review and analysis of current research and policy, presentation and training content/skill development, practice with assessment of training curriculum, data-based decision-making related to establishing priorities for future MO SW-PBS projects and understanding of application of the content of the PBIS National Center Blueprints (Algozzine, B., et al., 2010; Sugai, et al., 2005). Particular emphasis was placed on aligning and integrating the SW-PBS training curriculum with other state training and initiatives to assure continuity.

The MO SW-PBS Consultants continued to improve and refine professional development curriculum and activities during 2015-2016, 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 and Emerging/Emerging Advanced), and the levels 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 is 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

Figure 4a

## EXPLORATION AND ADOPTION PHASE PROFESSIONAL DEVELOPMENT

Activities for schools and districts in the Exploration and Adoption Phase were conducted in all 9 regions. Beginning in January, superintendents and principals were invited to attend an overview of SW-PBS. Once the administrator agreement was secured and school or district staff surveyed, consultants provided staff overviews to individual schools to obtain 80% buy-in. The process for this phase is depicted in the timeline below. These activities provided a clear and consistent process for schools throughout Missouri to successfully initiate their professional development and to support staff in making informed decisions regarding their readiness to begin SW-PBS. After completing this Phase, schools began participation in Tier 1 Preparation Phase professional development.

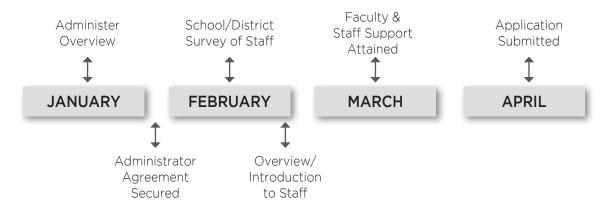


Figure 4b

## TIER 1 PROFESSIONAL DEVELOPMENT

During the 2009-2010 year, MO SW-PBS developed a Tier 1 scope and sequence to guarantee the training content of 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 http://pbismissouri.org/teams/.

Approximately 155 standardized, regional Tier 1 training sessions were conducted throughout the school year for teams in the Preparation and Emerging 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), 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 Web-Ex 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 team training is to have teams develop knowledge and fluency with accurate identification of students who are at risk for, but not yet experiencing, chronic problem 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 problem behaviors and prevent more extreme problem 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, including the Benchmark of Advanced Tiers (BAT) indicators (utilized from 2009-2015) and the Tiered Fidelity Inventory (TFI) (first utilized in 2015-2016).

During the 2015-2016 implementation year MO SW-PBS provided 102 Tier 2 standardized training sessions across all RPDCs. All Tier 2 resources can be accessed at http://pbismissouri.org/tier-2-workbook/.

## TIER 3 PROFESSIONAL DEVELOPMENT

Similar to the Tier 1 and Tier 2 curricula, the Tier 3 curriculum articulates participant learning at two 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 supports. These teams also learned 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 problem behaviors and prevent more extreme problem behaviors from occurring in the future.

The first Tier 3 training content was developed and pilot schools were identified 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 Tier 2-3 Consultants, 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 2015-2016 implementation year MO SW-PBS provided 56 Tier 3 standardized training sessions in all RPDCs. All Tier 3 resources can be accessed at http://pbismissouri.org/tier-3-workbook/.

## SUMMER TRAINING INSTITUTE

In addition to the regional trainings at Tiers 1, 2 & 3 the Tenth Annual Summer Training Institute (STI), Sustaining Effective Practices for Student Outcomes provided extended learning, sharing, and networking opportunities for MO SW-PBS schools. The STI provided structured team time with the regional 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, anti-bullying, multi-tiered systems of support, 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



## Who participated in the professional development?

Summer Training Institute (STI) traditionally ends the implementation year and kicks off the upcoming training year. As such, STI 2015 set the stage for training during the 2015-2016 school year. Over 970 participants attended STI 2015. Additionally, over 4,500 participants (some of whom were repeat attendees) attended 4 to 6 standardized sessions of regional trainings throughout the 2015-2016 year for each phase and/or level. Preparation and Emerging Teams attended 6 total sessions, while Emerging Advanced and both phases of Tier 2 and Tier 3 had 4 sessions each.

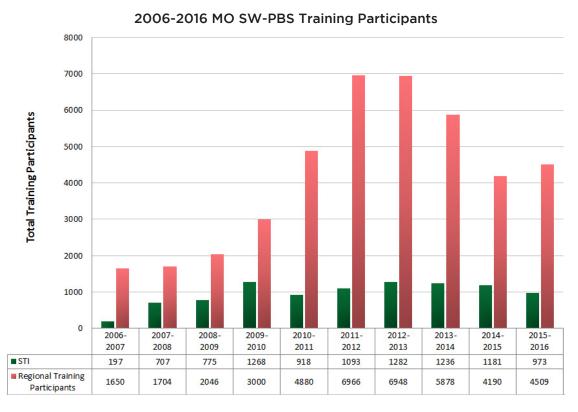


Figure 5a

There are several possible reasons why there have been a reduction in participants at MO SW-PBS Regional trainings in recent years. First, as the numbers of Preparation and Emerging Phase teams have decreased, the number of participants attending six sessions per year has dropped the most. Second, as funding to underwrite summer team training for the first two sessions of the Preparation and Emerging Phases ended, the numbers of participants that attended decreased. Finally, the team size for Tiers 2 and 3 tends to be smaller than those for Tier 1.



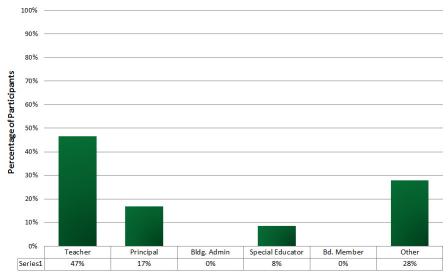


Figure 5b

MO SW-PBS professional development participants included but were not limited to school level coaches, classroom teachers, special education teachers, school counselors, administrators, school board members, parents, The DESE personnel, SW-PBS personnel from other states, Regional Professional Development Center Directors and personnel from other initiatives (e.g., Special Education, Professional Learning Communities, etc.).

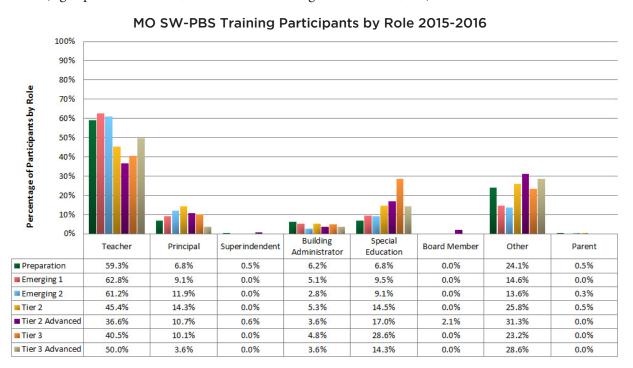


Figure 5c

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?

Participants expressed a high level of satisfaction with all MO SW-PBS trainings.

## Summer Training Institute 2015 Participant Feedback

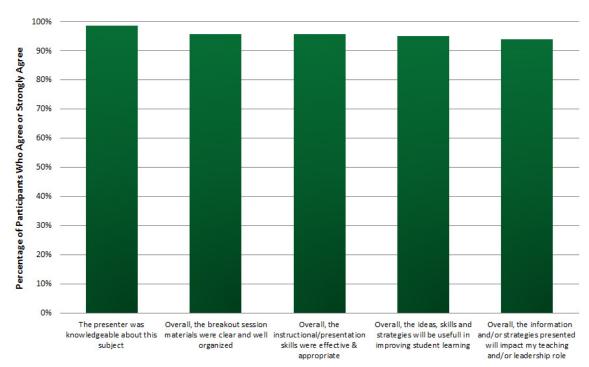


Figure 6a

The 2015 STI Feedback indicates the participants who agreed or strongly agreed with the survey questions. Feedback from participants who attended the Summer Training Institute shared the value of the event and how it related to their SW-PBS work:

"Practical high impact presentations at all levels that focus on effective classroom strategies, 4:1 Positive Specific Feedback, the Continuum of Corrective Feedback, how to incorporate families and community, student teams, linking [SW-PBS] to other school initiatives especially teacher evaluation, and presentations on each tier that are helpful and leave attendees feeling they can go back and utilize the information."

"I've attended STI since 2009. This year's conference had great organization, food, breakout sessions, and networking sessions."

"I am looking forward to next year and I hope the number of posters increase."

"I learned a lot and am anxious to begin implementing in August."

"All the presentations I went to were awesome!!!!! Cannot brag enough about the organization and all the work each region and consultants put into making a great conference for us!"

"I liked all (sessions) that I attended, picked up a little piece of something from all of them that we will incorporate into our practice next year."

"The poster session was informative and resourceful. I enjoyed talking with other educators."

"I always learn a lot. Since we get to pick the sessions that are the most appropriate for us, I always get the most out of these meetings."

"The presenters were engaged, organized, and actively involved."

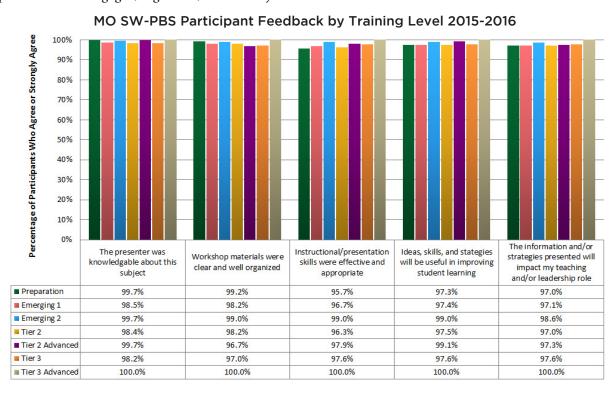


Figure 6b

Participants who attended the regional trainings completed a workshop evaluation in reference to content, presentation, and applicability of the MO SW-PBS curriculum. The feedback from the participants indicated that they agreed or strongly agreed that the overall content was beneficial.

## **FIDELITY**

Fidelity details how faithfully the program was implementation [sic] based on its original design and the resources that were directed to it (Algozzine, B., et al., 2010, p. 12). The answers to the following questions show evidence that the Missouri SW-PBS essential components were in place.



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 Inappropriate Behavior
- ▶ Ongoing Monitoring
- Effective Classroom Practice

The 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. The "Big 5" refers to graphic reports for each of the following questions: 1) what was the problem behavior, 2) where did the problem occur, 3) what time of day did the problem occur, 4) how many students were involved in problem behavior and 5) what was the rate of problem behavior. The resource Missouri Data-based Decision-making (DBDM) / Solution Plan provided a standardized format for schools to move from analysis of data to data-based decision-making. The MO SW-PBS website reinforced the importance of implementing all essential components through providing related information, exemplars and training materials.

School outcomes for all phases of the MO SW-PBS training sequence were identified and taught. Universal or Tier 1 outcomes were based on items from The School-wide 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) (Sugai, Horner, & Todd, 2003), the Schoolwide Evaluation Tool (Sugai, Lewis-Palmer, Todd, & Horner, 2005), the Benchmarks of Quality (BoQ) (Kincaid, Childs, George, 20015), and the Tiered Fidelity Inventory (TFI) (Algozzine, Barrett, Eber, George, Horner, Lewis, Putnam, Swain-Bradway, McIntosh, & Sugai, 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 Tiered Fidelity Inventory (TFI) (Algozzine, et al., 2014). This scope and sequence guided the content, structure and scaffolding of Tiers 2 and 3. MO SW-PBS conducts annual assessment of school progress and adjusts Tier 2 and 3 scope and sequence content, readiness criteria guidelines and projected need for technical assistance per site, accordingly.

MO SW-PBS Goals: 1, 3, 4, 5; MO Dep't Goal: 1, 2, 3, 4; SPP Indicator: 1, 2, 4, 5, 6, 7, 9, 10



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

This question references what essential components are schools in the process of implementing and which of those elements 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 regional consultants. Ongoing progress monitoring of fidelity was assessed using the *Effective Behavior Support Self-Assessment Survey* (EBS/SAS) (Sugai, Horner & Todd, 2003). For schools newly implementing with students, an on-site evaluation was completed by external personnel using the *Schoolwide 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 at 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.

### 100.0% 90.0% Percentage of Teams Collecting and Reporting Datafor all 4 Quarters 80.0% 70.0% 60.0% 50.0% 40.0% 30.0% 20.0% 10.0% 0.0% School Safety Self Assessment Minutes Big 5 Data Survey Survey 2013-2014 84.2% 86.9% 87.9% 86.6% 2014-2015 89.5% 89.4% 97.0% 95.7% 2015-2016 78.1% 78.7% 89.8% 89.4%

2013-2016 Tier 1 Team Data Collection & Reporting

Figure 8a

Schools in the Emerging phase and above were expected to continue consistent data collection and analysis, and report data quarterly to Regional Consultants, with a statewide goal of 80% or better reporting. Participation by schools in the collection and submission of data (Big 5 data reports and team meeting minutes) to regional consultants was close to 80% (with a range of 49%-92% for minutes and 50%-87% for Big 5 Data reports). Participation in the School Safety Survey (Sprague, Colvin & Irvin, 2002) was 90% and the EBS/SAS was also above the 80% goal (89.4%). Typically, schools' data reporting has decreased during the spring of the school year when standardized testing and other year-end reporting were also expected.

### 100.0% 90.0% 80.0% Percentage of MO SW-PBS Schools 70.0% 60.0% 50.0% 40.0% 30.0% 20.0% 10.0% 0.0% 2006-2007 2010-2011 2011-2012 2012-2013 2013-2014 2014-2015 2015-2016 ■ Percent 35.9% 49.0% 67.2% 73.5% 69.3% 72.91% 75.50%

## 2006-2016 MO SW-PBS Schools Participating in Fidelity Assessment

Figure 8b

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 had the option to utilize 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 use of the TFI (Algozzine, et al., 2014), which is a researchvalidated 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. The chart depicts the percentage of MO SW-PBS schools that have participated in Tier 1 fidelity assessments.

## EXTERNAL FIDELITY MEASURE

Missouri schools in the first year of implementation with students (typically Emerging) can request a SET. The SET is a research- validated instrument that is designed to assess and evaluate the critical features of school-wide 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 when using SW-PBS, 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 school-wide implementation. SET scores are typically expressed using two metrics: percent in place for subsection B-Expectations Taught; and the total score. Schools scoring 80%/80% or above are implementing schoolwide positive behavior support at a universal or Tier 1 level with fidelity (Todd, Lewis-Palmer, Horner, Sugai, Sampson & Phillips, 2003).

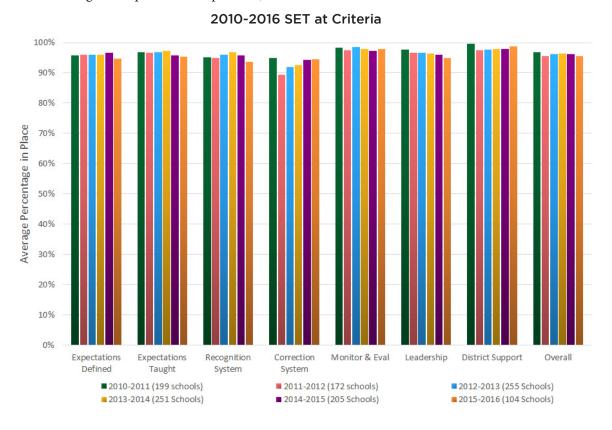


Figure 8c

104 schools training at Emerging or above participated in the SET process during 2015-2016. 89 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 slightly from years past.

### 2010-2016 SET Not at Criteria

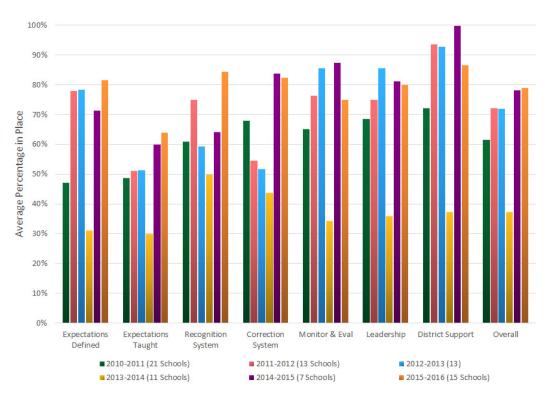


Figure 8d

In the remaining 15 schools that did not attain fidelity criteria of 80%/80%, some of the SET features demonstrated small decreases compared to the 2014-2015 school year. However, the essential features of Expectations Defined, Expectations Taught, and Recognition System demonstrated moderate to large increases, and overall implementation was higher than in the 2014-2015 school year. Feature areas scored below 80% were considered by the statewide team as areas for improvement.

## INTERNAL/EXTERNAL FIDELITY MEASURE

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

### 2015-2016 TFI Tier 1 Subscales

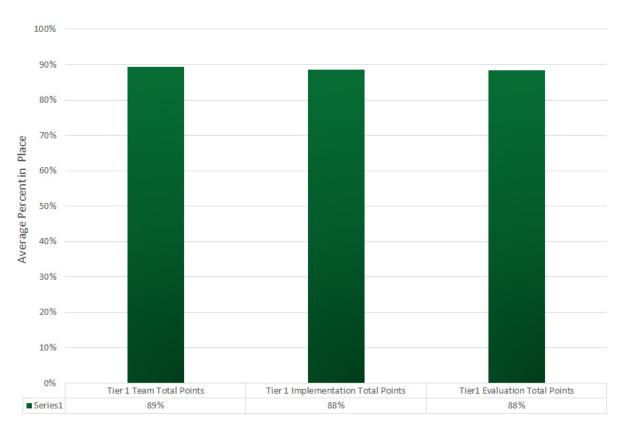


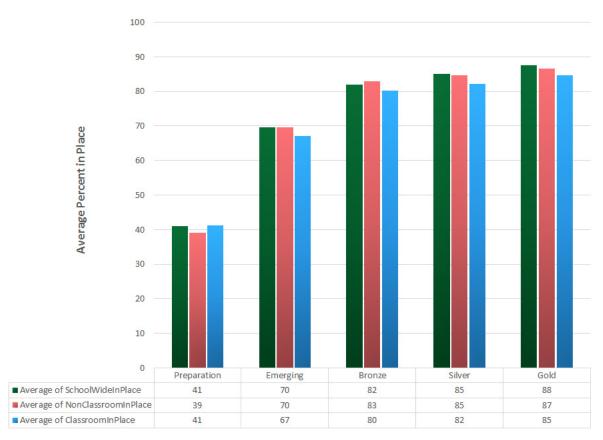
Figure 8e

403 veteran MO SW-PBS schools used the TFI (Algozzine, et al., 2014) for evaluation of Tier 1 fidelity. Of these, 363 (90%) scored above the 70% overall score threshold for fidelity, with an overall average for all schools of 89%. MO SW-PBS considers scores at or above 70% as implementing Tier 1 with fidelity (Mercer, McIntosh, & Hoselton, 2016, forthcoming).

When viewing the TFI results by subscales, the average for each of the three Tier 1 subscales were 89%, 88%, and 88% for the subscales of Tier 1 Teams, Implementation, and Evaluation, respectively.

### INTERNAL MEASURE

The Self-Assessment Survey (EBS/SAS), which is the only survey taken by all staff members to measure their perception 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 been proven to be a measure of predictability for sustainable implementation of SW-PBS (Matthews, McIntosh, Frank, & May, 2014). Numerous Missouri schools volunteered for and participated in the sustainability research upon which the current literature has been written.



2015-2016 Self Assessment Survey by Component & Recognition Level

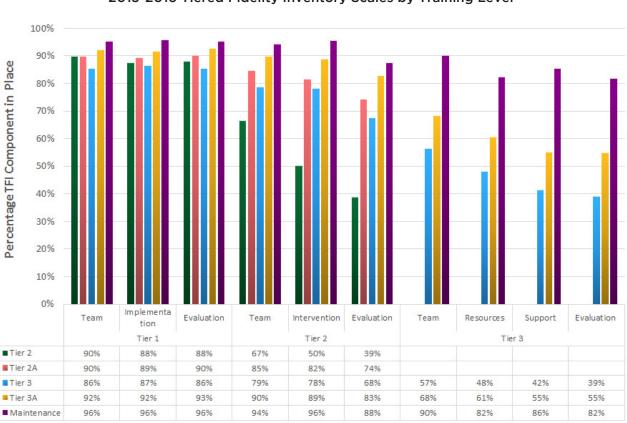
Figure 8f

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. And, 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 that did not earn recognition as either Preparation or Emerging. Preparation schools were in their first year of training, and, therefore, not yet implementing, nor eligible to participate in MO SW-PBS recognition. Schools designated as Emerging either did not apply for, or did not earn recognition.

When sorting EBS/SAS outcomes across the survey subscales of Schoolwide, Non-Classroom, and Classroom and comparing to MO SW-PBS recognition/implementation fidelity levels, the data suggests that as schools demonstrate fidelity of implementation as measured by the MO SW-PBS Recognition process the perceptions of staff and other stakeholders regarding implementation increased.

## TIER 2 AND TIER 3

Tier 2 and 3 implementation and training content is less defined nationally. This is also reflected in the limited number of fidelity measurement tools for Tiers 2 and 3. The Tier 2 and Tier 3 Readiness Checklists were developed by the Tier 2-3 Consultants as guides for teams and Regional Consultants in determining when schools were "ready" to begin the Tier 2 or 3 training process. Historically MO SW-PBS Tier 2-3 Teams used the BAT for fidelity assessment; however, MO SW-PBS has followed the recent guidance from the PBIS National Technical Assistance Center and has begun using the TFI (Algozzine, et al., 2014) to guide Tier 2-3 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 Tiers 2 and 3 began using the TFI to monitor Tier 2-3 implementation fidelity.



2015-2016 Tiered Fidelity Inventory Scales by Training Level

Figure 8g

Results for Tier 2-3 schools indicating the average for subscales "in place" on the TFI suggest that fidelity of implementation of each of the subscales improves as schools move through the phases of implementation.

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 after Figure 8h regarding recognition/implementation fidelity categories.

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

### 2006-2016 MO SW-PBS Implementation School Count by Recognition Level 2006-2007 2007-2008 2008-2009 2009-2010 2010-2011 2011-2012 2012-2013 2013-2014 2014-2015 2015-2016 ■ Preparation Emerging Bronze Silver

Figure 8h

In 2015-2016, 29% (83/287) of eligible MO SW-PBS participating schools (Emerging, Emerging Advanced and Tier 2 training levels) earned Bronze level recognition, 34% (83/243) of eligible schools (Tier 2 Advanced and Tier 3 training levels) earned Silver Recognition, and 51% (52/102) of eligible schools (Tier 3 Advanced and Maintenance Training Levels) earned Gold Level 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

■ Gold

## 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-ofgrade 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, B., 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., 2005). These factors can be categorized as Inputs and Outputs. These factors, which were envisioned to be a combined report have been labeled the MO SW-PBS End of Year Report (EoY) (formerly called the School Data Profile or SDP) (Table 1). 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 reported all but three of the EoY factors to The DESE (see items with an "\*"). These three factors are now also reported annually directly to MO SW-PBS. Currently MO SW-PBS provides a combined EoY Report of items underlined below if submitted to MO SW-PBS or completed online at PBISApps.org.

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

## **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 Head Count

New & Transfer Staff

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)

## 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\*

Assistance Referrals & Special Education Identification / Eligibility\*

Tier 2 Intervention Outcomes

Tier 3 Intervention Outcomes

NOTE: The underlined items, above, are those data sources that are actually combined into an End of Year (EoY) summary report that is made available to MO SW-PBS participating schools. This information will be available on the report, provided the school submitted the relevant information to MO SW-PBS and completed relevant surveys on PBISApps.org.



## 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 this 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, 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 to the Non SW-PBS schools group which encompasses 70% of Missouri schools (e.g., differences may be a product of group sizes only, see figure 8h), and 3) students with individualized education plans (IEPs) are not included in the "all" students reporting category in this report.

### 95.0% 94.0% 93.0% 92.0% Percent of all attendance 91.0% 90.0% 89.0% 88.0% 87.0% 86.0% 85.0% 84.0% Preparation Silver Gold Non SW-PBS Emerging Bronze Missouri 2014-2015 87.6% 91.6% 89.4% 88.4% 90.4% 90.6% 89.2% 2015-2016 92.6% 92.1% 91.1% 93.0% 93.7% 92.0% 92.1%

2009-2016 Attendance by SW-PBS Implementation Level (All Students)

Figure 9a

During the 2014-2015 school year, The DESE changed the way they ask schools to report attendance from an average daily rate of attendance to the percentage of students that have 90% or above attendance. However, the data available was in the form 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 has improved for all categories, across the board. In addition, as in years past, there appears to be a positive relationship between fidelity of implementation and attendance. The strength and significance of this relationship has yet to be determined.

2009-2016 Attendance by SW-PBS Implementation Level (Students w/ IEPs)

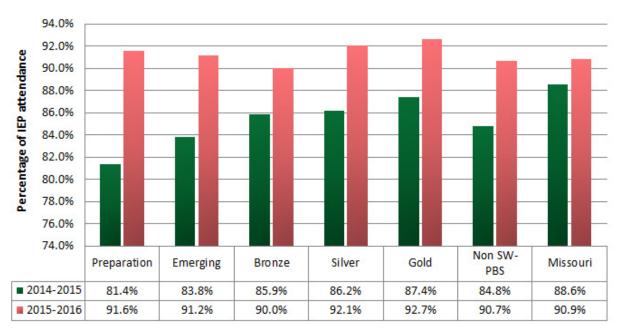


Figure 9b

Similarly, attendance has improved for students with IEPs in all school categories. In addition, attendance rates for students with IEPs is greater in MO SW-PBS Silver and Gold Level schools than in non SW-PBS schools and Missouri schools in general. Finally, there appears to be a relationship between attendance rates for students with IEPs and fidelity of implementation, as measured by MO SW-PBS recognition levels. The strength and significance of this relationship has not yet been determined.

2011-2016 MO SW-PBS SWIS Office Discipline Referrals Per Day Per Month Per 100 Student Mean

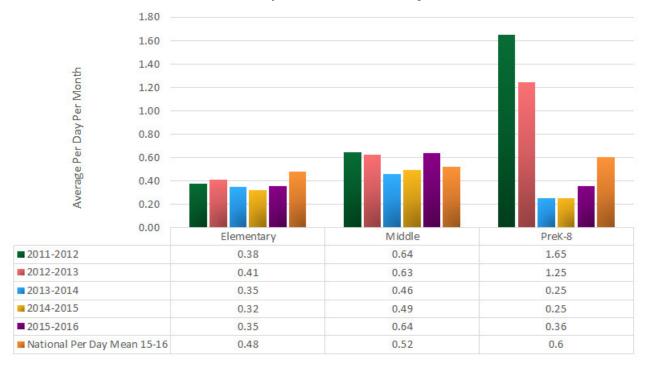
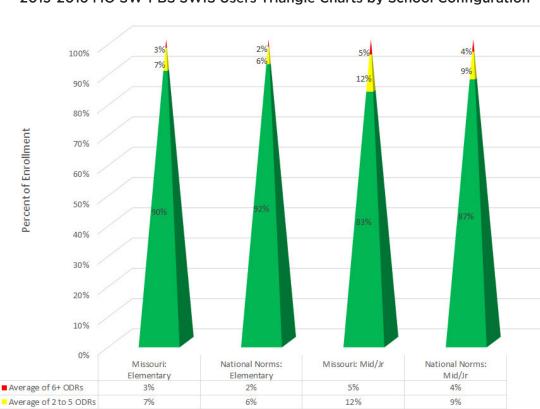


Figure 9c

School-wide Information System (SWIS) (Loika, 2005) is an online resource available to schools implementing SW-PBS from the PBIS National Technical Assistance Center. During the 2015-2016 school year 164 (24%) of MO SW-PBS schools utilized 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, to protect the identity of individual schools only elementary and middle school data are reported.

MO SW-PBS "SWIS schools" performed comparably at all grade levels to national norms, as determined by SWIS national data.



2015-2016 MO SW-PBS SWIS Users Triangle Charts by School Configuration

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 above compares these percentages to national norms based on all SWIS users. Because there were fewer than 10 schools using SWIS in the grade configurations of Preschool, High School, PreK-8/PreK-12, and alternative schools, to protect the identity of individual schools only elementary and middle school data are reported.

83%

87%

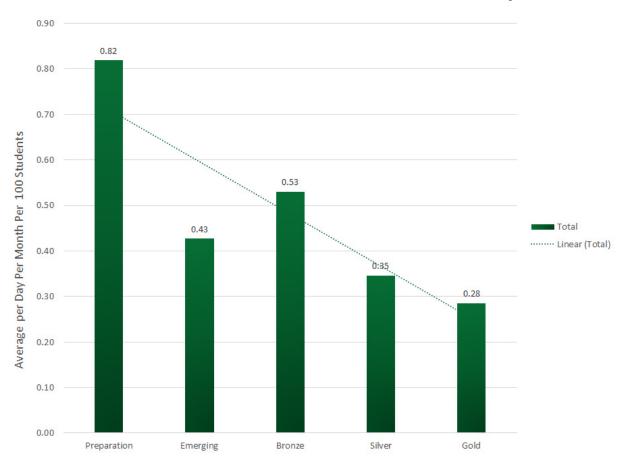
92%

■ Average of 0 to 1 ODRs

90%

Missouri SW-PBS using SWIS performed slightly below national norms for elementary and middle schools, respectively.

## 2015-2016 MO SW-PBS SWIS Schools ODRs Per 100 Per Day



Finally, when using MO SW-PBS state recognition as a measure of fidelity, student outcomes in terms of ODRs per day, per month, per 100 students can be compared to implementation fidelity. The data depicted in Figure 9e suggests a relationship between an increase in SW-PBS implementation fidelity and a decrease in ODRs per day per month per 100 students.

While this chart does suggest a negative correlation between implementation fidelity and ODRs per day, per month, per 100 students, the strength and significance of this relationship is not yet known.

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

Figure 9e



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. (Please see caveats regarding student outcome data in question 9 of this report.)

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 at grades 3-8, and science in grades 5 and 8 were administered fully online 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 2015-2016 school year data continued with the new testing online procedures and updated questions, but again The DESE encourages caution when comparing year to year results.

### 2014-2016 Percent of Student MAP Scoring in Advanced & Proficient Categories, by SW-PBS Implementation (All Students)

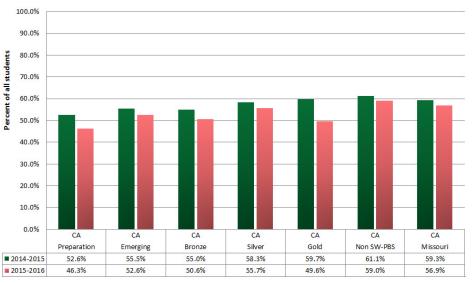


Figure 10a

2014-2015 and 2015-2016 MAP data generally show a relationship between implementation fidelity and the percentage of students scoring proficient and advanced in Communication Arts section of the MAP. The strength and significance of this relationship has not yet been determined.

### 2014-2016 Percent of Student MAP Scoring in Advanced & Proficient Categories, by SW-PBS Implementation (All Students)

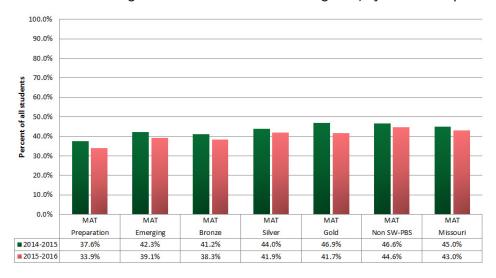


Figure 10b

2014-2015 and 2015-2016 MAP data appears to show a positive relationship between implementation fidelity and the percentage of students scoring proficient and advanced in the Math section of the MAP. The strength and significance of this relationship has not yet determined.

2014-2016 Percent of Student MAP Scoring in Advanced & Proficient Categories, by SW-PBS Implementation Level (Students w/ IEPs)

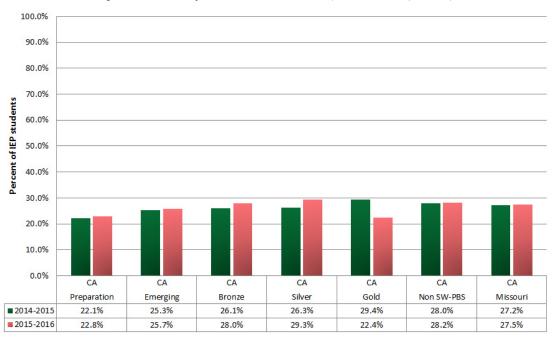


Figure 10c

2014-2015 and 2015-2016 MAP data appear to demonstrate a positive relationship between implementation fidelity and the percentage of students with disabilities scoring proficient and advanced in the Communication Arts section of the MAP. The strength and significance of this relationship has yet to be determined.

2014-2016 Percent of Student MAP Scoring in Advanced & Proficient Categories, by SW-PBS Implementation Level (Students w/ IEPs)

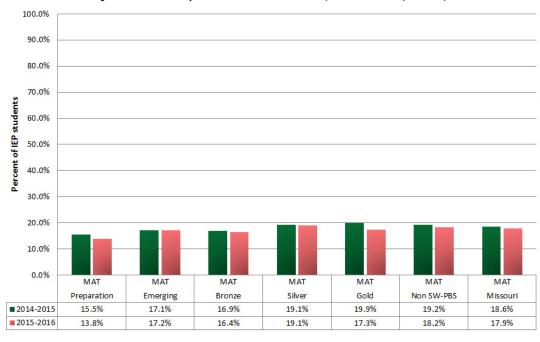


Figure 10d

2014-2015 and 2015-2016 MAP data suggest a relationship between implementation fidelity and the percentage of students with disabilities scoring proficient and advanced in the Math section of the MAP. The strength and significance of this relationship has yet to be determined.

## 2006-2016 Regular Time in Class Greater Than 79% by SW-PBS Implementation (Students w/ IEPs)

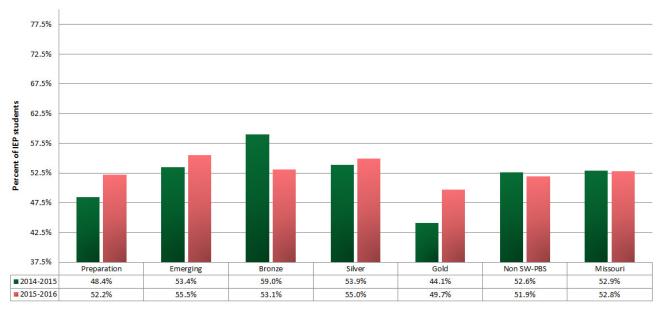


Figure 10e

Another outcome experienced by students with disabilities who attend MO SW-PBS schools is increased time in regular education classes. When reported to the US Department of Education the category is "greater than 79%". With the exception of Preparation and Gold level schools, MO SW-PBS schools typically had a greater proportion of students with special needs receiving instruction in general education settings compared to Missouri schools preparing to implement SW-PBS or those electing not to participate.

### 2014-2016 High School Dropout Rates, by SW-PBS Implementation (All Students)

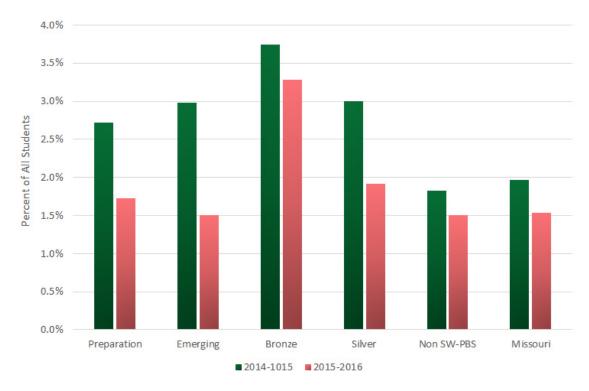


Figure 10f

MO SW-PBS schools appear to have higher dropout rates for all students than Non SW-PBS schools and all Missouri schools. Due to the small number of "Gold" level schools, these were not included in the data set.

## 2014-2016 High School Dropout Rates, by SW-PBS Implementation (Students w/ IEPs)

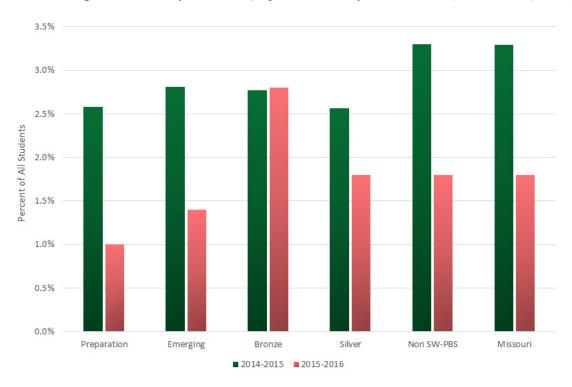


Figure 10g

2014-2015 and 2015-2016 data suggest that students with disabilities dropped out of school at lower rates in SW-PBS schools than in Non SW-PBS schools. The exception appears to be Bronze level schools during the 2015-20106 school year. Gold level schools were excluded from the data set. The strength and significance of this relationship has yet to be determined.

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**

Replication, sustainability, and improvement emphasize the extent to which efforts to implement SW-PBS can be replicated with sustained impact (Algozzine, B., et al., 2010, p. 32). 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 a strong level of support for implementation of evidence-based practices. The Missouri Department of Elementary and Secondary Education supports MO SW-PBS in many ways. Some of these are: 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 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.

## 2007-2016 MO SW-PBS State Supported Full Time Equivilant (FTE)

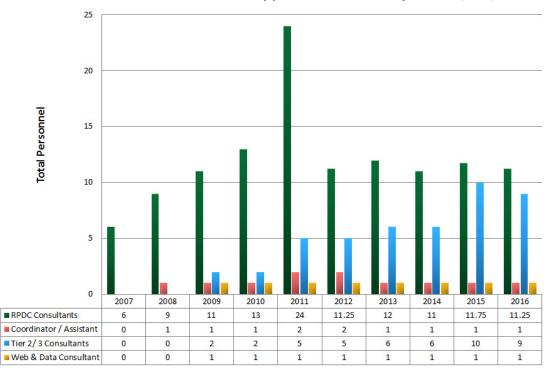


Figure 11a

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 SSOS content. As the number of schools implementing at Tiers 2 and 3 increased, The DESE increased the FTE dedicated to training and technical assistance for schools at those tiers. In total, 28 personnel had the designation of SW-PBS Consultant across 23.25 FTE dedicated to MO SW-PBS work in 2015-2016. MO SW-PBS is committed to assisting The DESE in furthering the SSOS work.

## Missouri SW-PBS School Counts by District

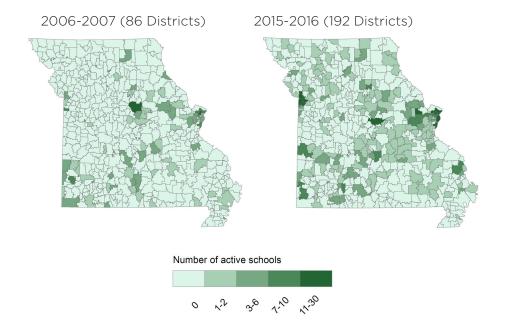


Figure 11b

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.

## MO SW-PBS School Reasons for Inactivity 2006-2016

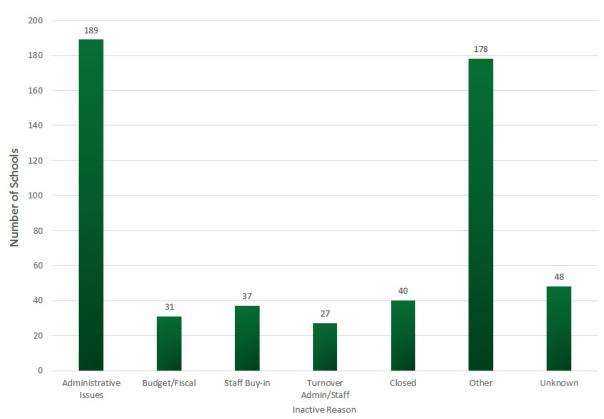


Figure 11c

During ten years of MO SW-PBS implementation, 461 of the 1153 schools initially committing to the initiative chose at some time to discontinue. 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, and Matthews, 2014).

The next most frequently cited 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.

Initial data for 2015-2016 indicate 54 schools that had previously discontinued have re-committed to implementing SW-PBS. Removing the 40 "Closed" schools, the retention of MO SW-PBS schools across 11 years stands at 64%. Schools that completed all training and are now self-sustaining implementation may be included in the "Other" category and potentially effecting this calculation.

2006-2016 Percentage of MO SW-PBS Schools Scoring At or Above 80%/80% on SET or 70% on BoQ/TFI

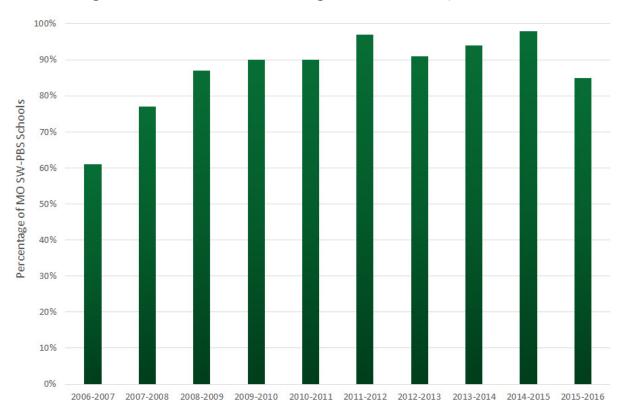


Figure 11d

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.

### MO SW-PBS Training Levels, 2015-2016

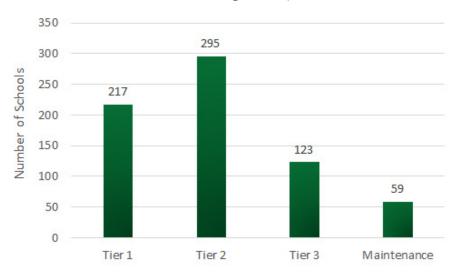


Figure 11e

Sustainability of MO SW-PBS is demonstrated by continued growth in the number of schools that are eligible for and remain participants in Tier 2 and Tier 3 training. Standardized Tier 2 training began in 2008-2009 with 50 schools. In 2015-2016 there were 217 Tier 1 schools, 295 schools in Tier 2 training and 123 in Tier 3 including an additional 59 Tier 3 Maintenance schools.

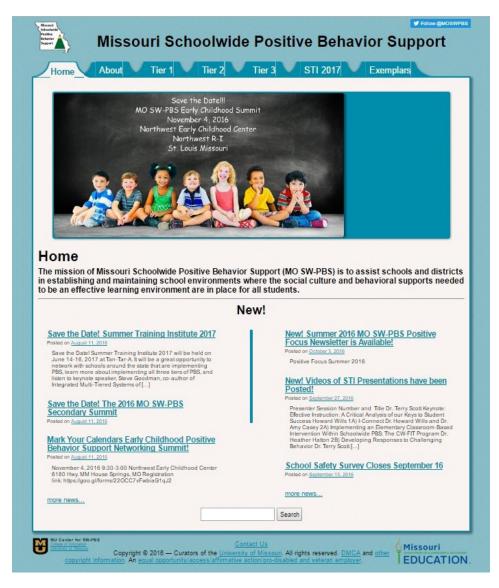


Figure 11f

The MO SW-PBS website (pbismissouri.org) continues to be a valued resource in the community. Google Analytic data for the 2015-2016 school year (July 1, 2015 through June 30, 2016) show increases in all visitor indicators:

- ► 54,158 visits, up from 49,170 in 2014-2015 (a 10.1 % increase over 2014-2015)
- ▶ 34,274 individual visitors, up from 30,794 in 2014-2015 (a 11.3% increase over 2014-2015)
- ► 208,588 page views, up from 204,150 in 2014-2015 (a 2.2% increase over 2014-2015)

Visitors to the website were from 155 countries and all 50 states. 87.0% of all visitors were from the United States. 44.33% of all visitors were from the state of Missouri.

The most frequently viewed pages were the home page (13.1%), the Tier 1 Resources and Modules Page (6.6%), the Effective Classroom Practices Resources and Modules page (5.3%) and the Summer Training Institute Page (4.7%). Peak traffic to the website came on June 14, 2016, the second day of Summer Training Institute, with 5634 visits. This is consistent with the previous year's data in which 5688 visitors visited the website on June 11, 2015, the first day of the 2015 Summer Training Institute.

Visitors to the website using mobile devices (i.e. phones and tablets) continued to rise with 10,277 visits in 2015-2016.

MO SW-PBS continues to expand into online learning. During the 2015-2016 school year, narrated PowerPoints and ancillary documents were posted online to allow consultants to "flip" training. For example, an overview of the Tiered Fidelity Inventory (TFI) was posted online, and teams were encouraged to watch this video on their own. This video supplemented face to face training over the TFI. In addition, MO SW-PBS hosted a number of webinars over such topics as applying for state recognition. Some of these webinars were recorded and posted on the website. This allowed individuals who may have missed the webinars to still access this information.

MO SW-PBS continued to expand communication through social media. The MO SW-PBS Twitter account, @MOSWPBS, now has 973 followers. This is an 83% increase from 2015. In addition, during the 2015-2016 Summer Training Institute, MO SW-PBS created a Summer Training Institute Twitter account (@STI\_2016, and hashtag #MOSWPBS16) to promote featured events and speakers, and share in professional learning experiences. Finally, consultants received ongoing training in the use of Twitter to tell the MO SW-PBS story.

Recent research and publications have indicated that SW-PBS is a promising practice and meets multiple criteria for classification as "evidence-based" (Epstein, M., Atkins, M., Cullinan, D., Kutash, K., and Weaver, R., 2008; Horner, Sugai, & Anderson, 2010; McIntosh, et al., 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. (SUBSIST) was conducted to study these factors in tandem 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 improvement in 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 the correlation.

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



## 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 Plan (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 9% of participating districts have district level teams that address SW-PBS through a minimum of twice yearly district level meetings. 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 Multi-Tiered System of Support (MTSS). The purpose of this group is to enhance the collaboration as outlined through the State System of Support (SSOS) work. One of the outcomes of this work group has been to develop and pilot online training content. MO SW-PBS has been on the forefront of online course development. An updated website featuring video lessons will launch in the Spring of 2017.

MO SW-PBS actively supports the Top 10 by 20 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 have been areas of focus for the MO SW-PBS team during the 2015-2016 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 dialog and development of a framework for 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**

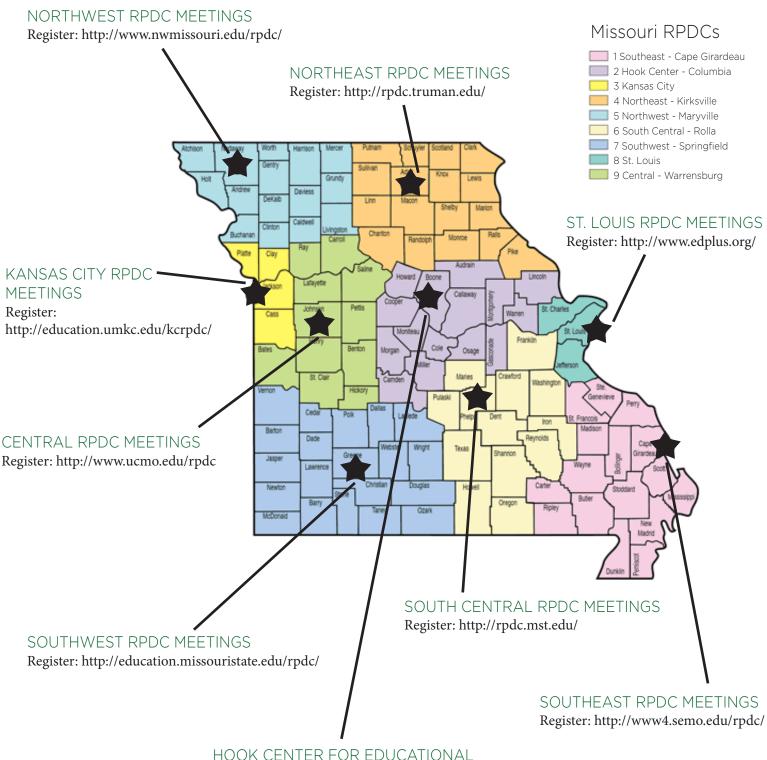
To what extent did SW-PBS implementation affect systemic educational practice?

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 and dropouts, and increased attendance, improved academic achievement and increased placement in least restrictive environments (LRE). 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, 2010) 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 assure we are providing the highest quality training and support across all developmental stages. We look forward to serving Missouri schools, thereby helping Missouri progress toward becoming one of the top 10 states in educational performance by 2020.

# REGIONAL PROFESSIONAL DEVELOPMENT CENTER CONTACT INFORMATION



LEADERSHIP AND DISTRICT RENEWAL

Register: https://education.missouri.edu/hook-center/

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## 2015-2016 ANNUAL REPORT RESOURCES

## SUPPORTING RESOURCES

- ► Top 10 By 20: Missouri Proud (https://dese.mo.gov/top-10-by-20)
- ▶ Missouri State Performance Plan (SPP) Part B indicators (https://dese.mo.gov/special-education/stateperformance-plan)

## CONTEXT

- 1. What are/were the goals and objectives for MO SW-PBS implementation?
  - ► MO SW-PBS Action Plan Goals (http://pbismissouri.org/about/leadership-team)
- 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 (http://www2.ed.gov/policy/rschstat/guid/raceethnicity/questions.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/teams, http://pbismissouri.org/tier-2-workbook, http://pbismissouri.org/tier-3-workbook)
- 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/about)
  - ► Training Materials, Tier 1 Workbook, Tier 2 Workbook, and Tier 3 workbook (http://pbismissouri.org/teams, http://pbismissouri.org/tier-2-workbook, http://pbismissouri.org/tier-3-workbook)
- 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 2015-2016 (http://pbismissouri.org/exemplar-schools/)
  - ▶ PBIS Assessments (https://www.pbisapps.org/Applications/Pages/PBIS-Assessment.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 (http://dese.mo.gov/college-career-readiness/assessment)
  - ▶ State Performance Plan, Missouri Part B; 2005-2006 through 2012-2013 (https://dese.mo.gov/sites/default/files/sespp-2010-11-B.pdf)
- 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/sw-pbs-prudent-practical/)
  - ► Missouri School Improvement Plan (http://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?