



# 2016-2017 ANNUAL REPORT

MISSOURI SCHOOLWIDE  
POSITIVE BEHAVIOR SUPPORT

**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 2016-2017 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 2016-2017 school year.



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# MISSOURI SCHOOLWIDE POSITIVE BEHAVIOR SUPPORT 2016-2017 ANNUAL REPORT

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**T**he **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. 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, 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 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, 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 2016-2017. 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.
3. 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?

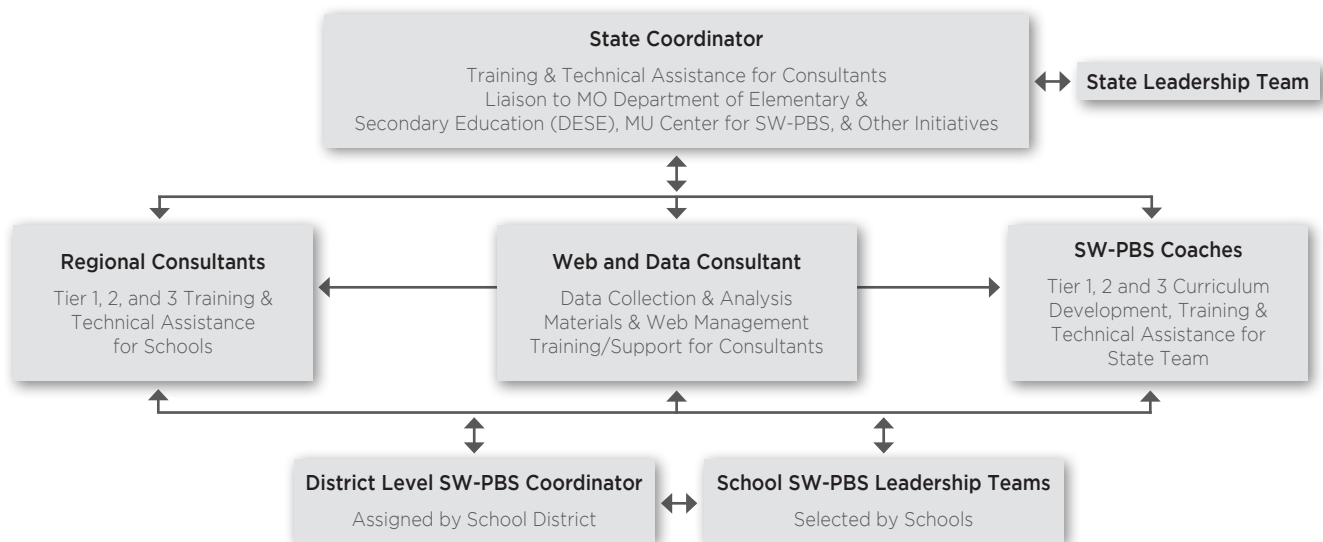


Figure 2a

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 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.

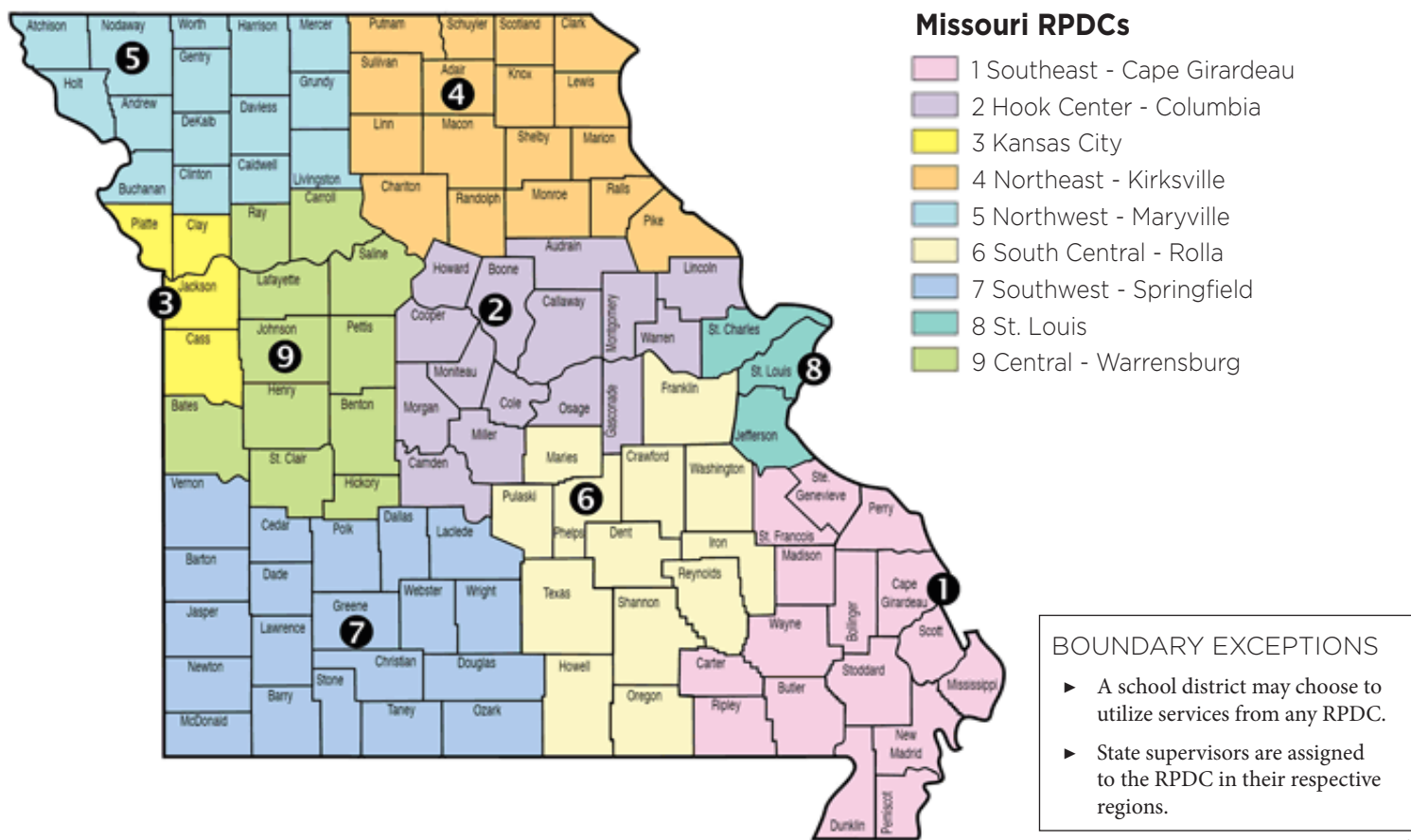


Figure 2b

Twenty-eight Consultants with a total of 22 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. Three additional SW-PBS Coaches with 2.5 FTE provided training and mentoring to new Consultants (primarily those providing Tier 2-3 training and support) 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 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.

## 2012-2017 MO SW-PBS State Personnel Education & Professional Credentials

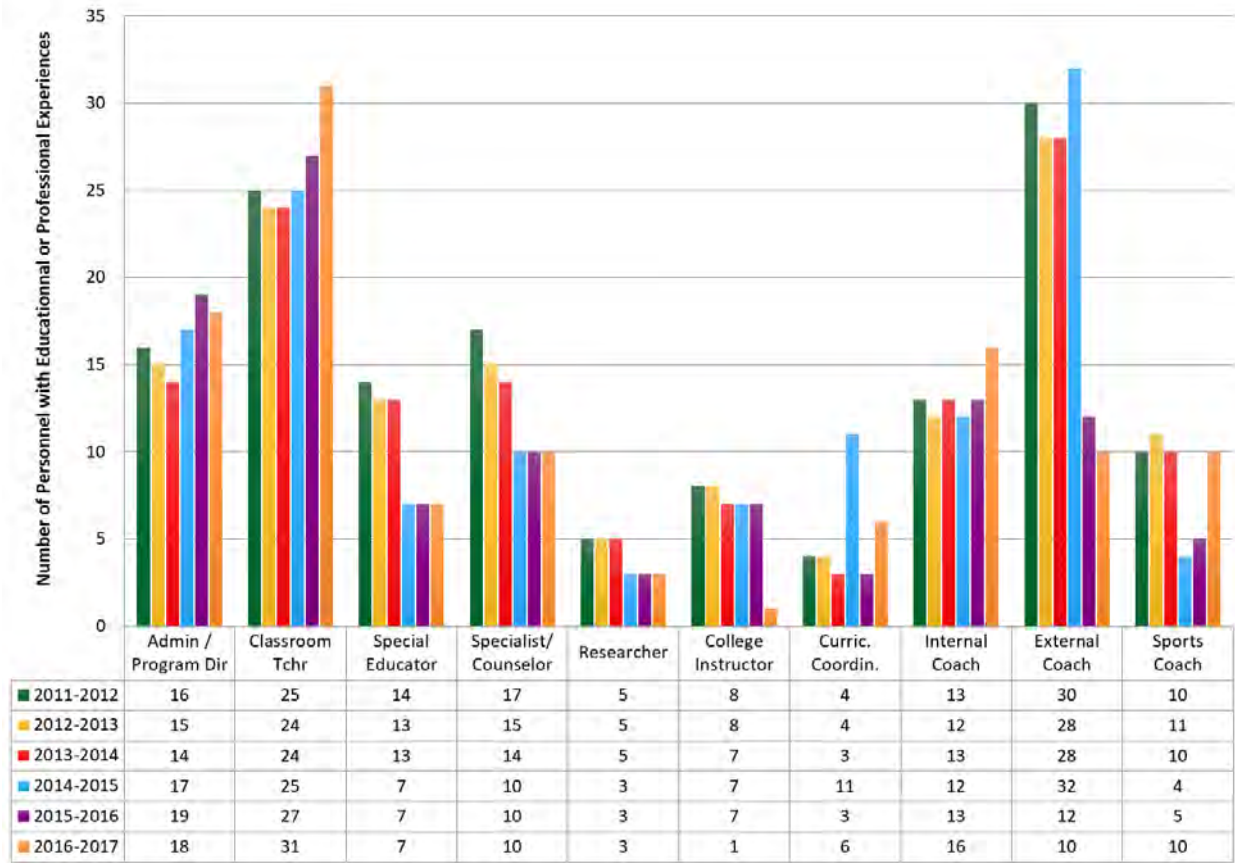


Figure 2c

The MO SW-PBS State and Regional Consultants began reporting educational and professional credentials once a year 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 2016-2017 implementation year, Consultants had a combined total of 745 years of educational experience.

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 290,420 (32.2% of all Missouri students) in the 2016-2017 year.

2007-2017 MO SW-PBS Schools and Districts

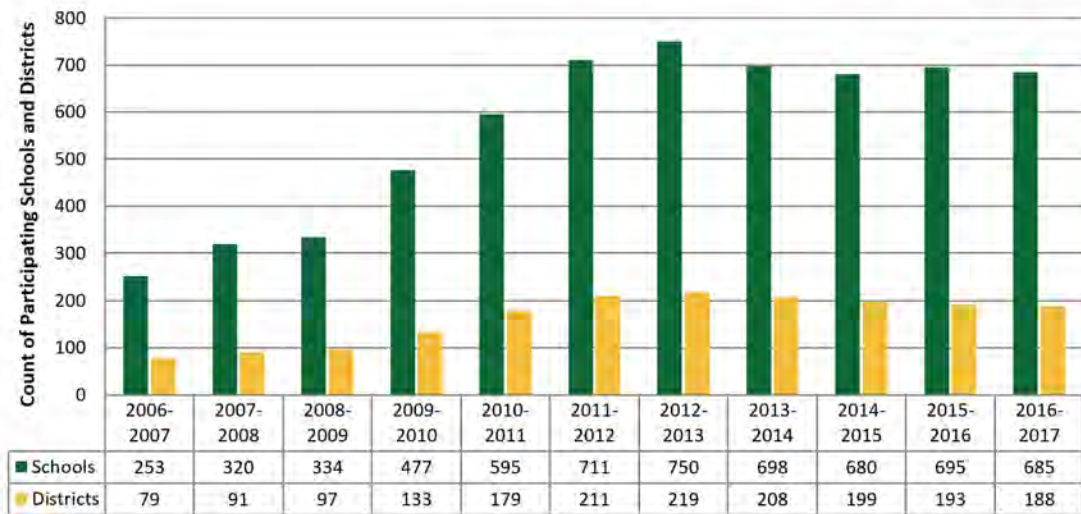


Figure 3a

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. Counts decreased in 2014-2015 to 679, and have held relatively steady since then. 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. While this would not have been expected to impact the number of schools recruited for the 2011-2012 school year, it did result in fewer FTE to recruit and retain participating schools for Tier 1 work in 2012-2013 and beyond. During the 2016-2017 school year 685 schools were active participants, accounting for 29% of all Missouri public and charter schools. These schools were from 188 districts or 34% of all Missouri districts.

2007-2017 MO SW-PBS Schools by Grade Level

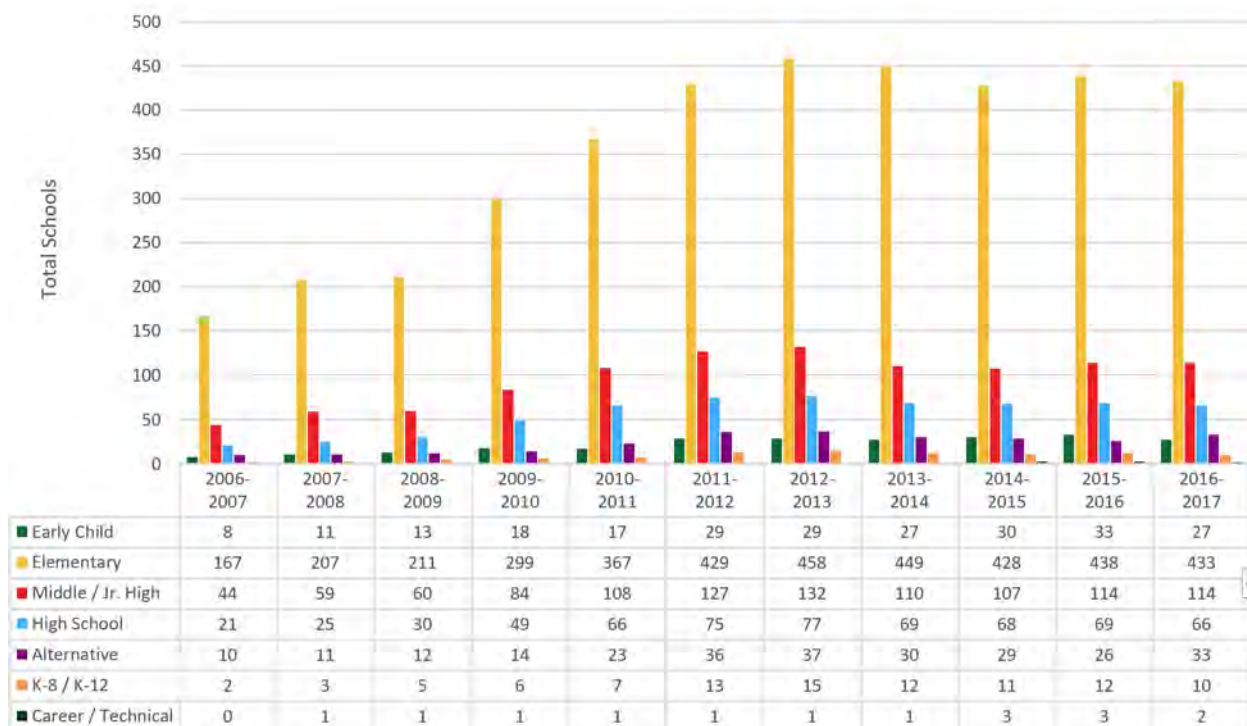


Figure 3b



The majority of MO SW-PBS participating schools continues to be those serving elementary grade levels. However, the number of secondary, early childhood, alternative, K-8/K-12 and career/technical schools has remained consistent since around the 2013-2014 school year.

### 2016 -2017 Student Demographics, by SW-PBS Status

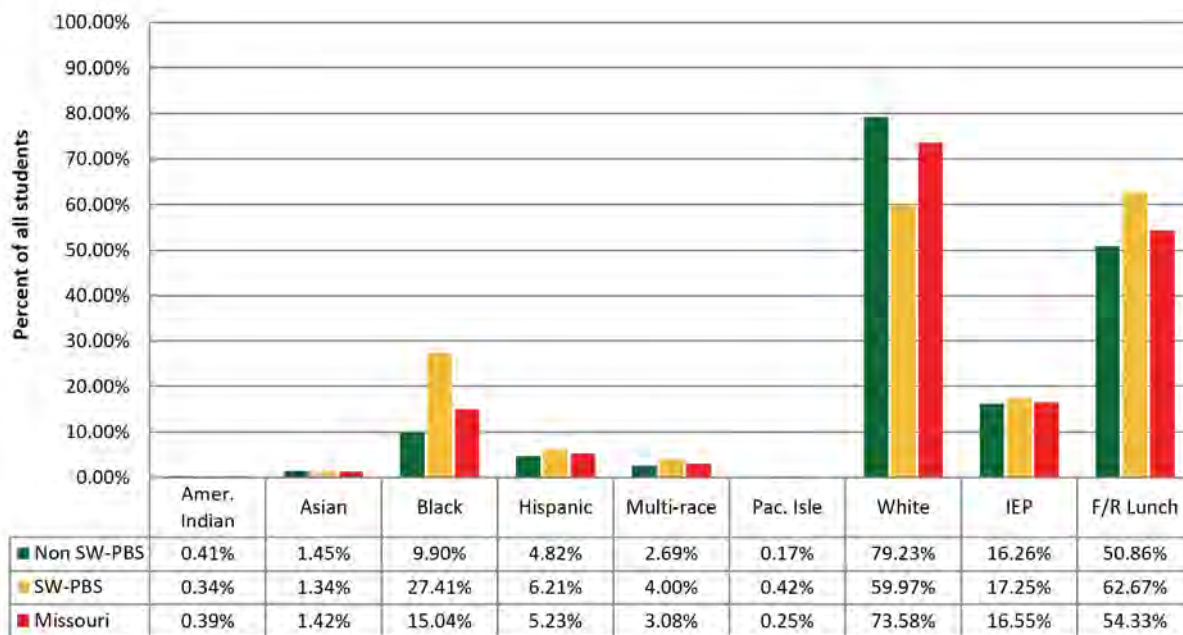


Figure 3c

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

### 2007-2017 Students w/ F/R Lunch, by SW-PBS Status

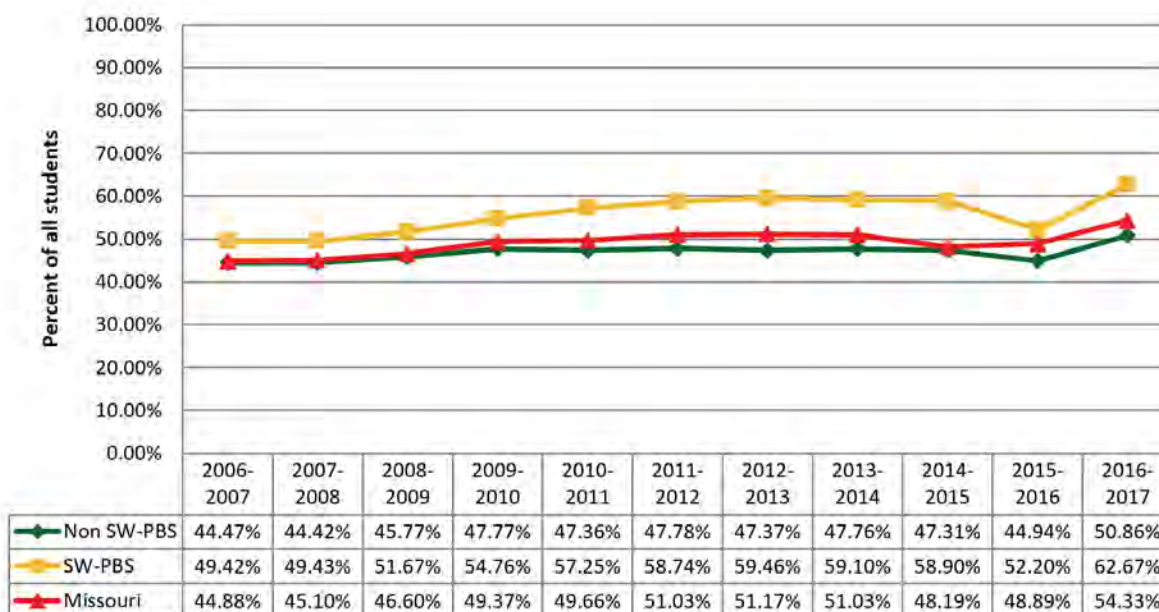


Figure 3d

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. This trend continued in 2016-2017.

### 2007-2017 Students w/ IEPs, by SW-PBS Status

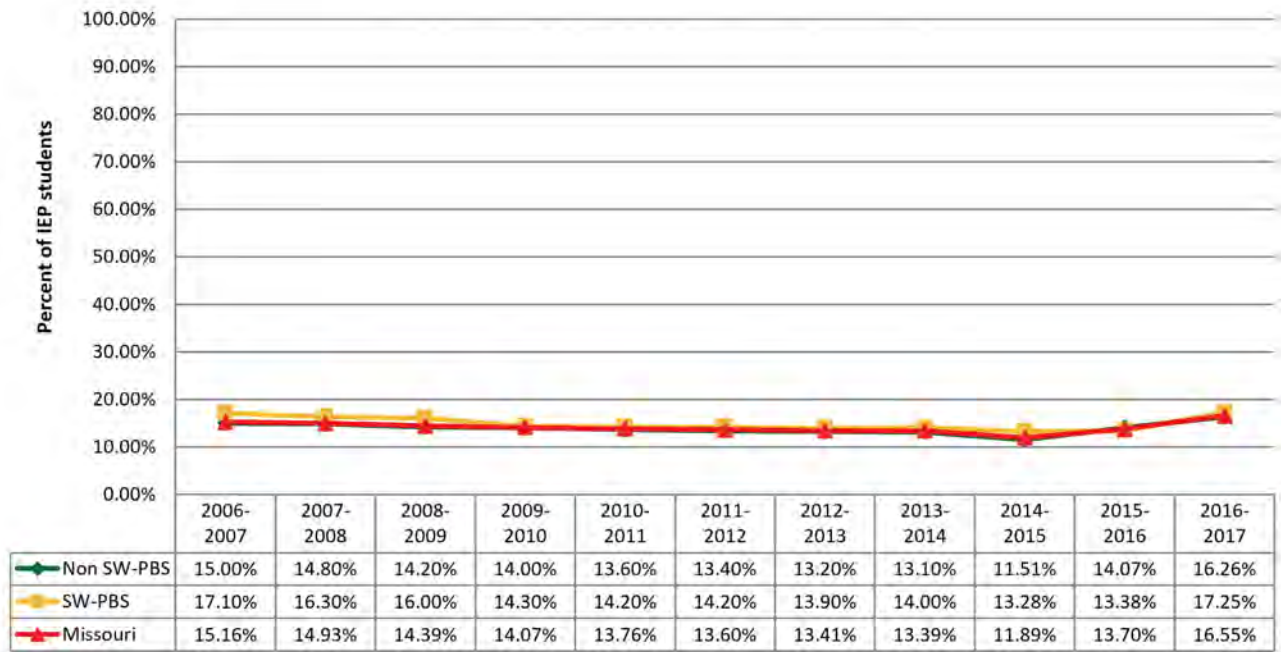


Figure 3e

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 1) all Missouri schools, and 2) Non SW-PBS schools. The IEP rates have converged over the past few years, and MO SW-PBS schools have only a slightly higher disability rate than Non SW-PBS schools and Missouri schools.

### 2007-2017 MO SW-PBS Students by Race/Ethnicity

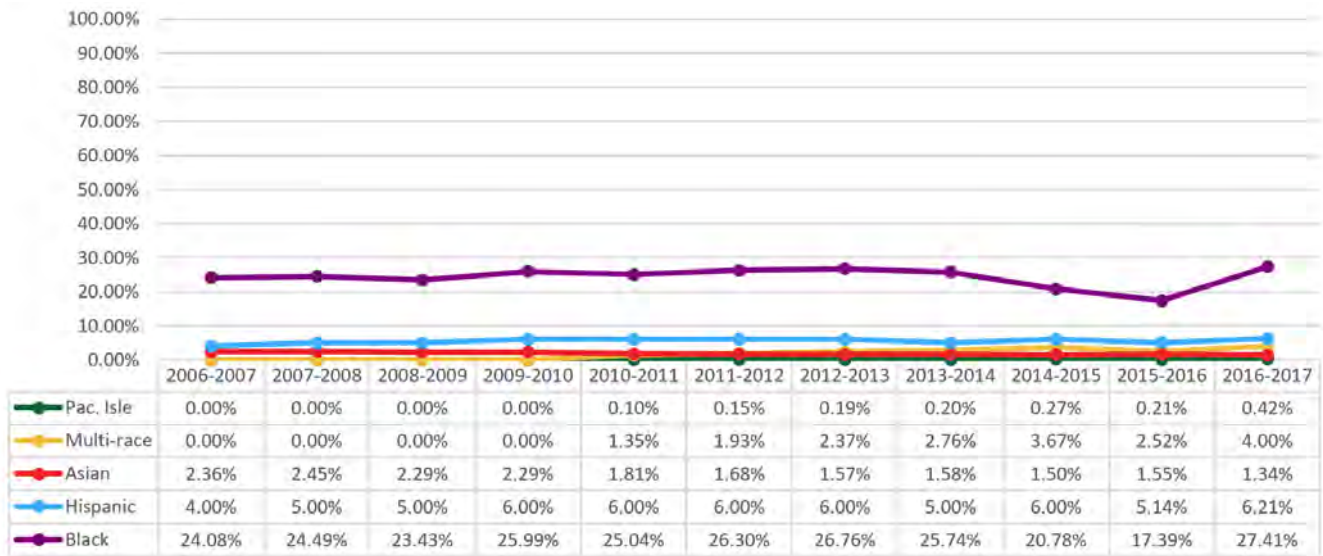


Figure 3f

Although there was a slight dip in the percentage of African American students attending MO SW-PBS schools during the 2014-2015 and 2015-2016 school years, these numbers rebounded in 2016-2017 to be more in line with historical data. In addition, there continued a small but steady increase in the percentages Hispanic and multiracial students in MO 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, 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.

The MO SW-PBS Consultants continued to improve and refine professional development curriculum and activities during 2016-2017, 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 is designed to support fidelity of implementation and long-term sustainability.

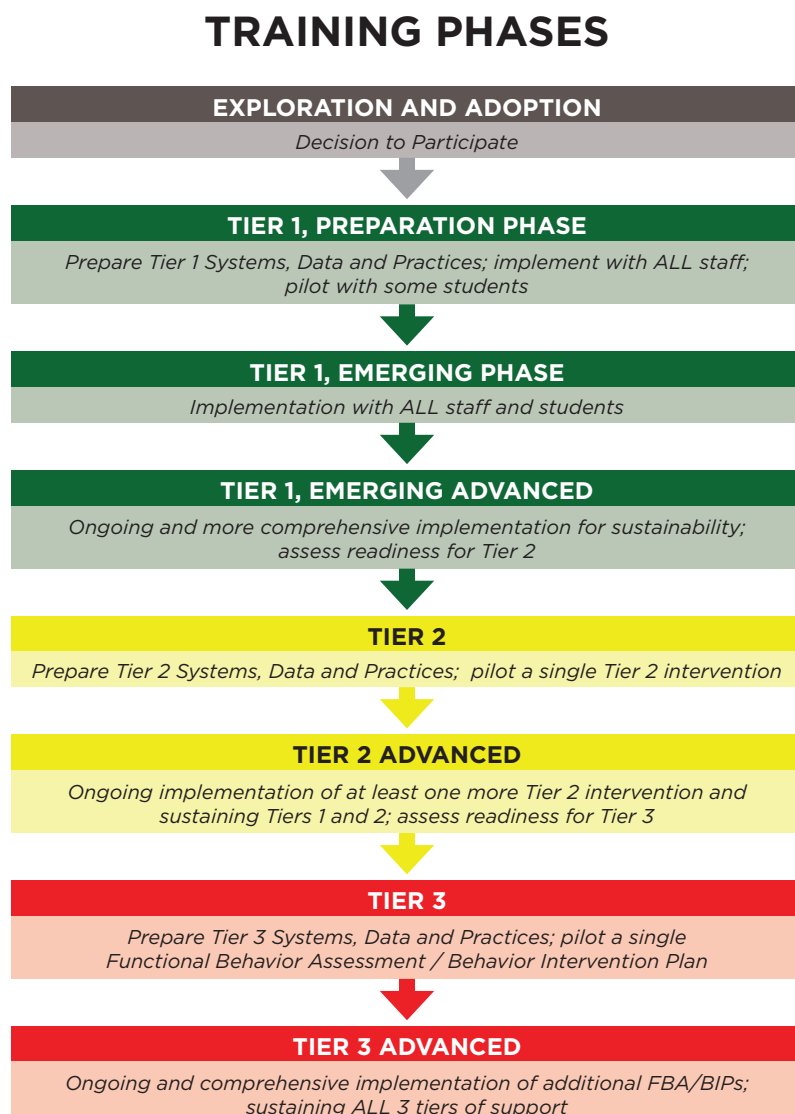


Figure 4a

## EXPLORATION AND ADOPTION PHASE PROFESSIONAL DEVELOPMENT

Activities for schools and districts in the Exploration and Adoption Phase were conducted in 7 of 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% commitment. 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.

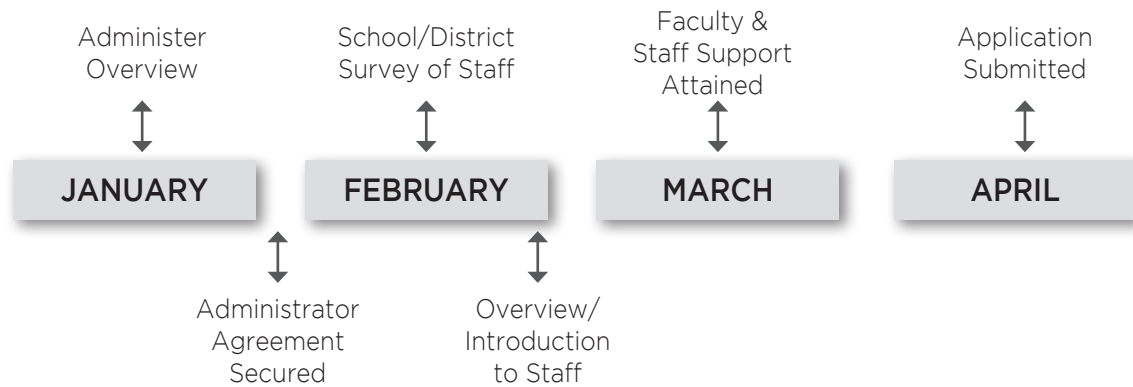


Figure 4b

## TIER 1 PROFESSIONAL DEVELOPMENT

During the 2009-2010 year, MO SW-PBS developed a Tier 1 scope and sequence to guarantee 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 <http://pbissmissouri.org/tier-1-workbook-resources/>.

Approximately 157 standardized, regional Tier 1 training sessions were conducted throughout the 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 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 for teams to 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)



(Anderson, et. al., 2010) indicators (utilized from 2009-2015) and the *Tiered Fidelity Inventory* (TFI) (Algozzine, et.al., 2014) (first utilized in 2015-2016).

During the 2015-2016 implementation year MO SW-PBS provided 89 Tier 2 standardized training sessions across 9 RPDCs. All Tier 2 resources can be accessed at <http://pbissmissouri.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 supports. 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 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 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 2016-2017 implementation year MO SW-PBS provided 74 Tier 3 standardized training sessions in all RPDCs. All Tier 3 resources can be accessed at <http://pbissmissouri.org/tier-3-workbook-resources/>.

### SUMMER TRAINING INSTITUTE

In addition to the regional trainings at Tiers 1, 2 & 3 the Eleventh Annual Summer Training Institute (STI), **Leading the Way for Student Engagement** 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?

Summer Training Institute traditionally ends the implementation year and kicks off the upcoming training year. As such, Summer Training Institute 2016 set the stage for training during the 2016-2017 school year. Over 965 participants attended 2016 event.

**2011-2017 Summer Training Institute Participants**

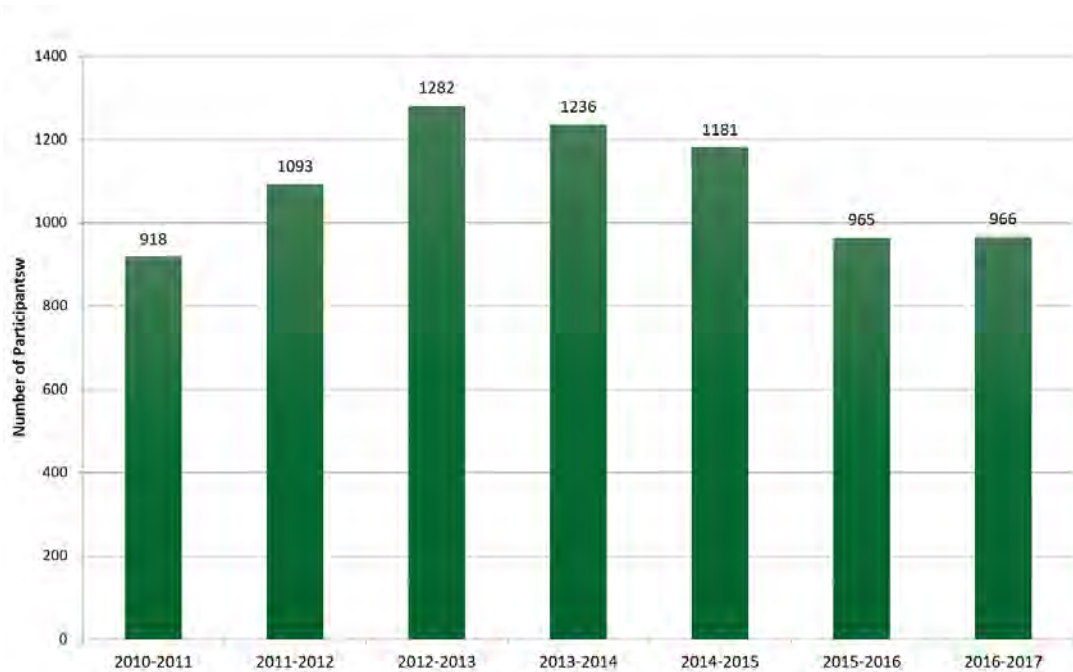


Figure 5a

Additionally, over 5115 participants (some of whom were repeat attendees) attended 4 to 6 standardized sessions of regional trainings throughout the 2016-2017 year for each phase and/or level. Preparation and Emerging teams attended 6 total sessions, while Emerging Advanced teams and teams at all phases of Tier 2 and Tier 3 attended 4 sessions each.

**2007-2017 MO SW-PBS Training Participants**



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. In addition, representatives from The DESE, SW-PBS personnel from other states, Regional Professional Development Center Directors and personnel from other initiatives (e.g., Special Education, Professional Learning Communities, etc.) also attended the 2016 Summer Training Institute.

2016 Summer Training Institute Participant Role

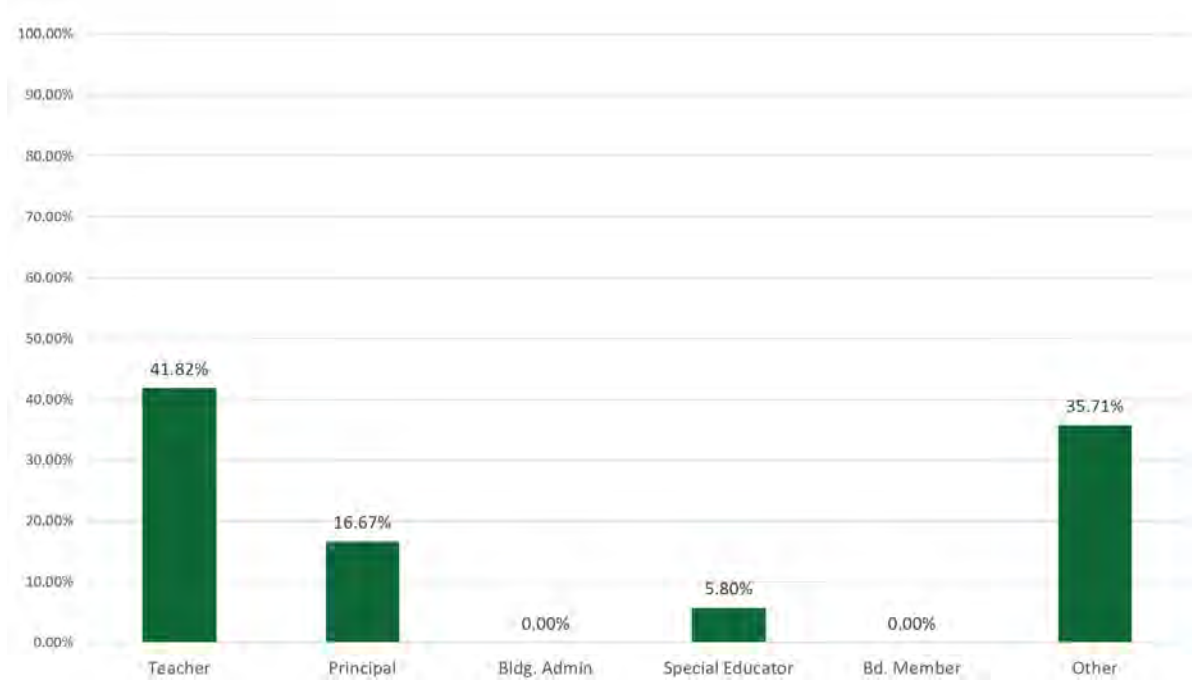


Figure 5c

2016-2017 MO SW-PBS Participants by Role

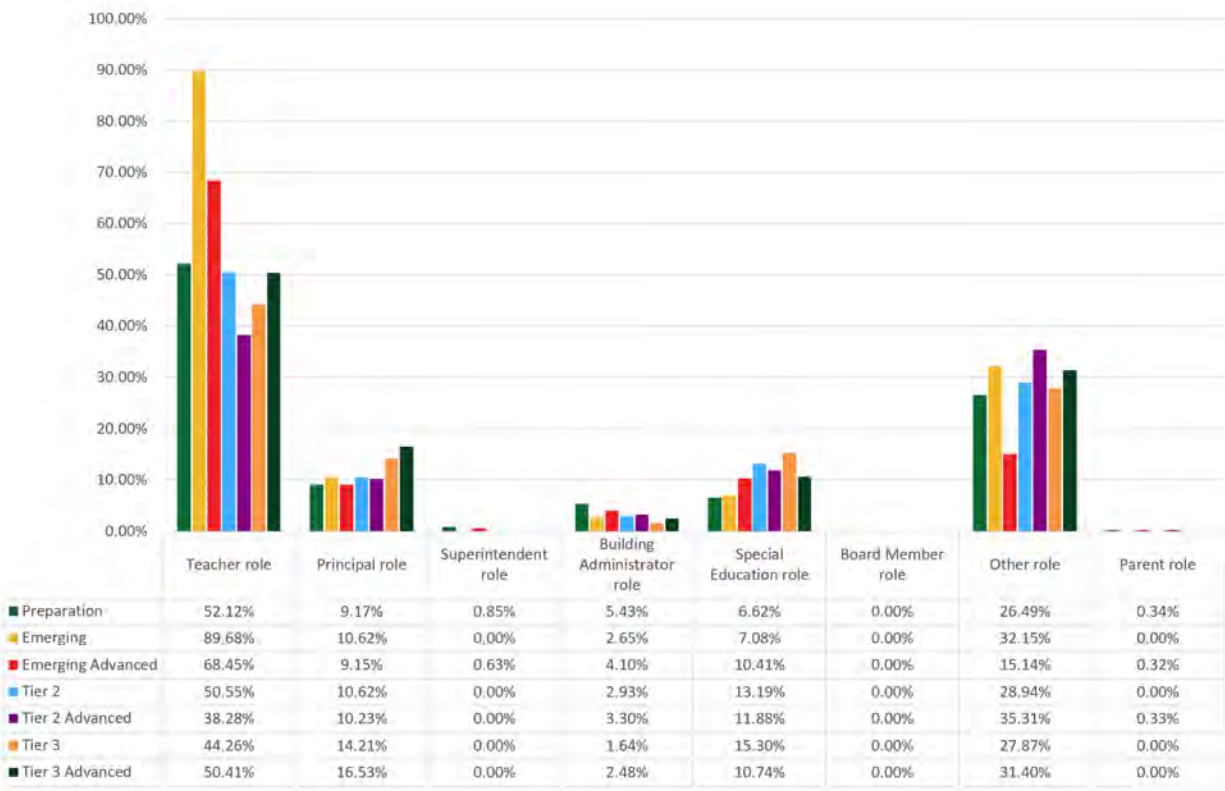


Figure 5d

## ? Question 6

What was the perceived value of the professional development?

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

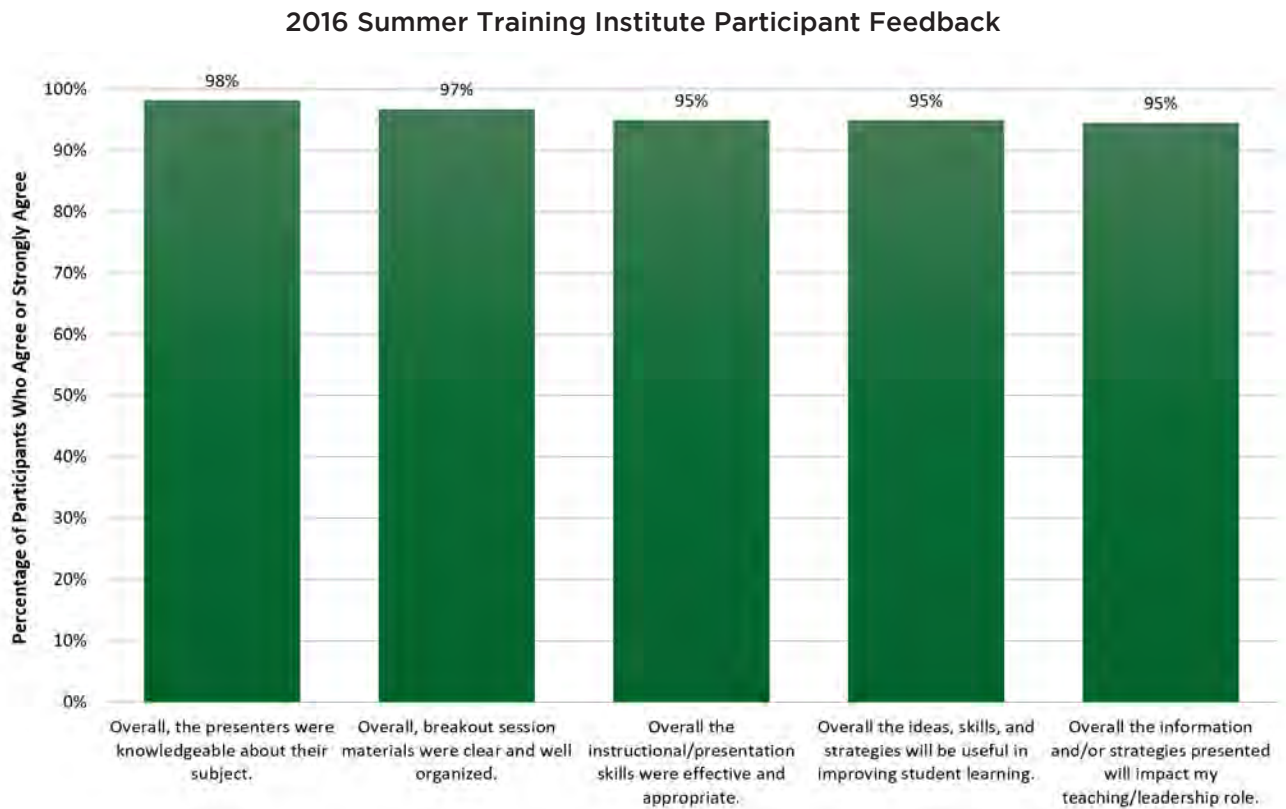


Figure 6a

The 2016 Summer Training Institute Feedback reports 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:

- ▶ “The Cultural Responsive Workshops were excellent and allowed for hands on activities with other educators. This also allowed us to network and share ideas.”
- ▶ “Everything went very smoothly. This was a well-organized conference. Thank you so much!!”
- ▶ “I enjoyed the conference more than I anticipated, and I learned from every session I attended.”
- ▶ “Enjoyed listening to other schools.”
- ▶ “It is always wonderful to get ideas and to see what has worked and what didn’t work.”
- ▶ “Great ideas on coaching process to keep PBS practices sustained.”
- ▶ “Excellent strategies shared! I can’t wait to share these with my team.”



## 2016-2017 Evaluations by Training Level

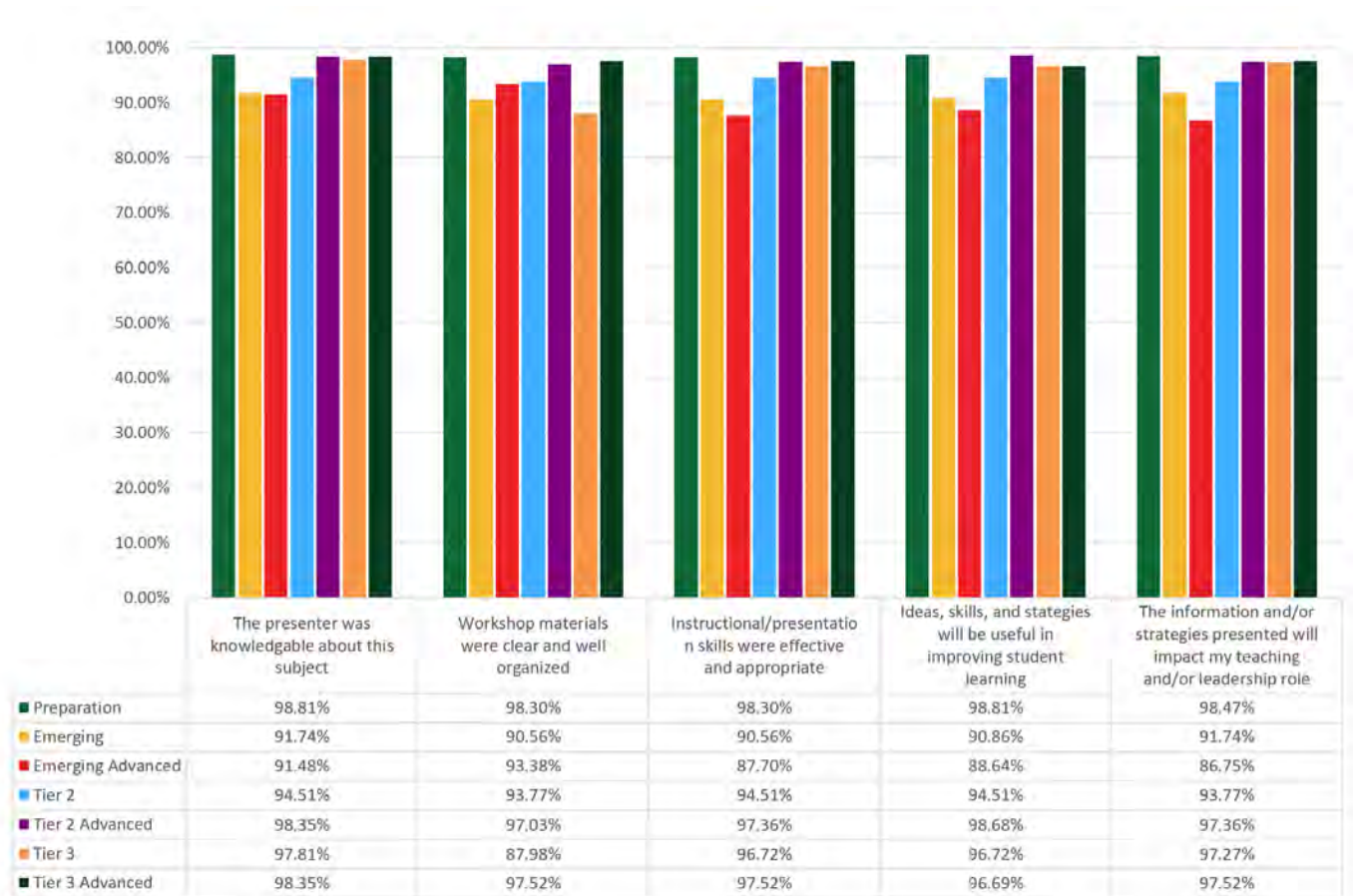


Figure 6b

Figure 6b reports 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.

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

# FIDELITY

*Fidelity details how faithfully the program was implementation [sic] based on its original design 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 Inappropriate Behavior
- ▶ Ongoing Monitoring
- ▶ Effective Classroom Practice

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 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 or 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, 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* and *Intensive/Individual 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 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

## ? 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. Participation by schools in the collection and submission of data (Big 5 data reports and team meeting minutes) to regional consultants dropped to just below 50% for both Big 5 Data Reports and Team Meeting Minutes, respectively; 74.4% of participating schools took the School Safety Survey (Sprague, Colvin & Irvin, 2002) and 69.4% of participating schools took the EBS/SAS. Typically, schools' data reporting has decreased during the spring of the school year when standardized testing and other year-end reporting were also expected. MO SW-PBS utilizes automated emails to school coaches at each training tier and communication via social media platforms Twitter and Facebook to remind school teams and coaches regarding data collection timelines. MO SW-PBS builds time into monthly meetings for data review and updates with all state members to monitor status of data collection.

2014-2017 Quarterly Data Reporting

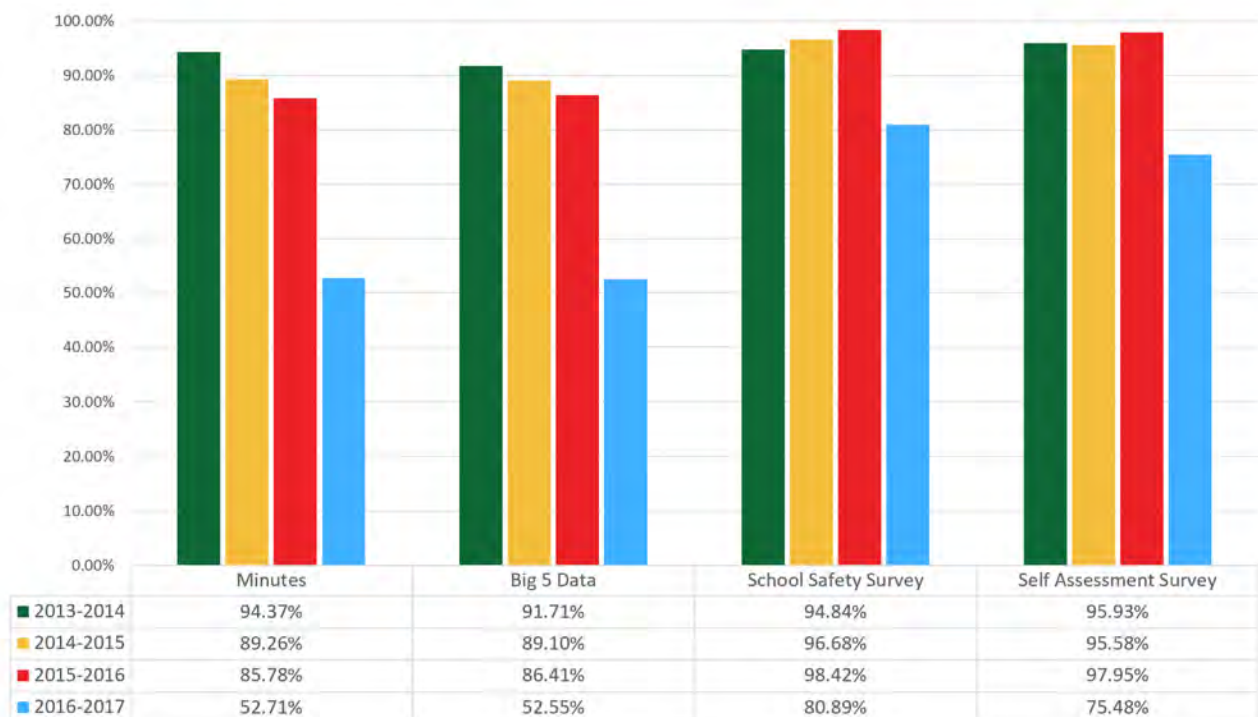


Figure 8a

## 2007-2017 MO SW-PBS Schools Participating in Fidelity Assessment

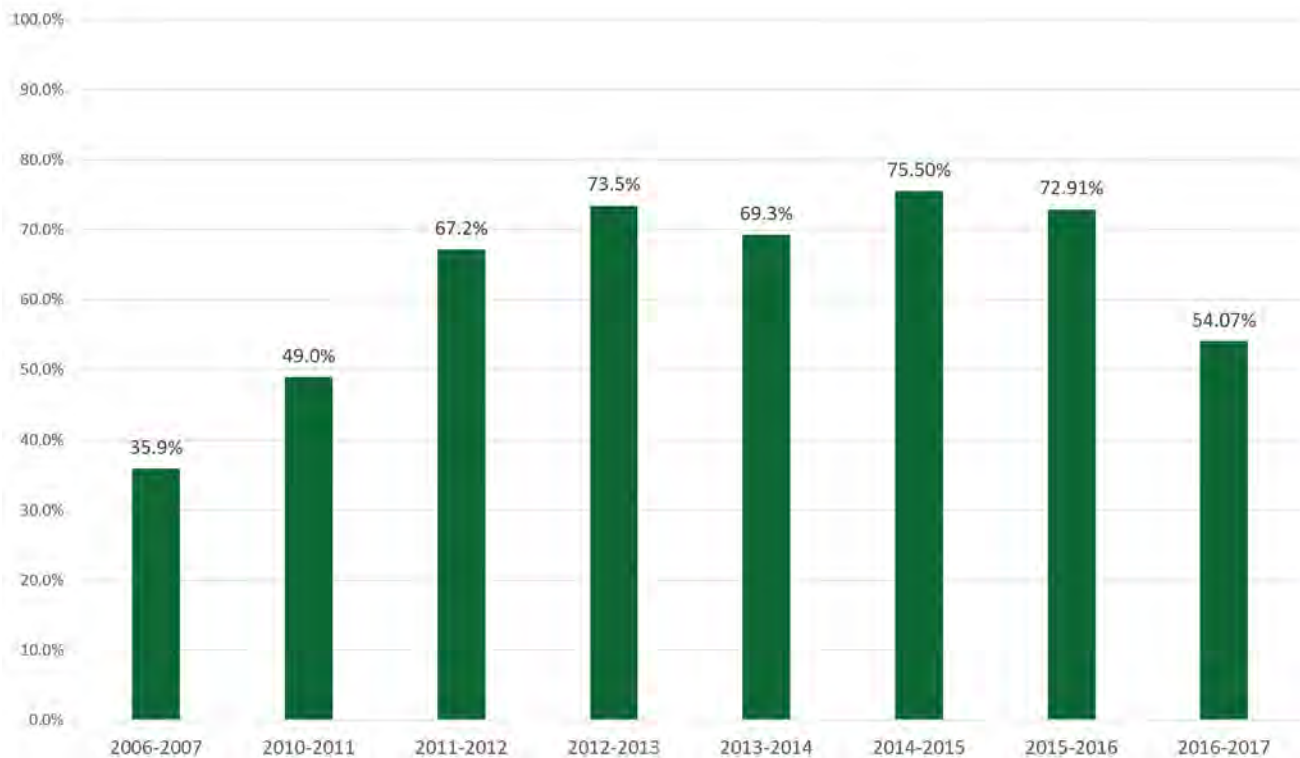


Figure 8b

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 (SET scores are typically expressed using two metrics: percent in place for subsection B-Expectations Taught / and the total score). 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 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 8b 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 the level of implementation of 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. 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).



2011-2017 SET at Criteria

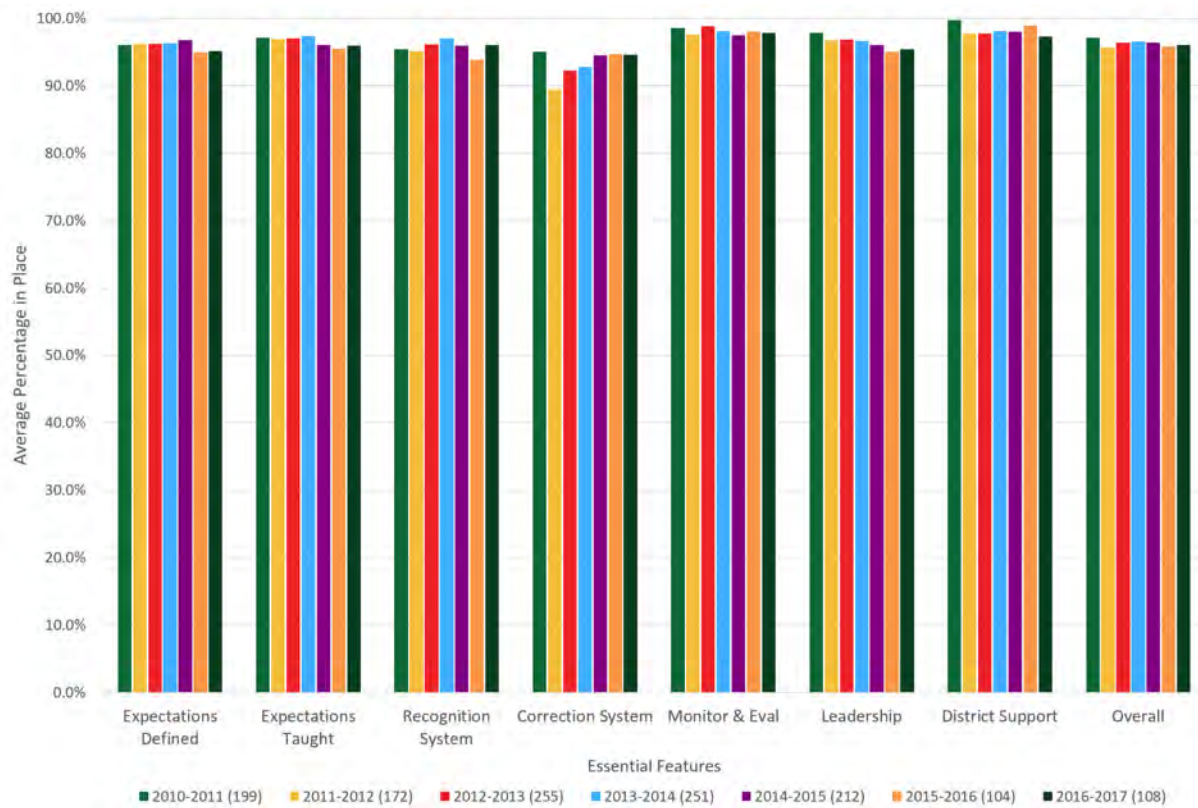


Figure 8c

108 schools training at Emerging or beyond participated in the SET process during 2016-2017. 93 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.

	Total SETs	At Criteria	Percent at Criteria	Not at Criteria
2010-2011	199	178	89%	21
2011-2012	172	159	92%	13
2012-2013	255	242	95%	13
2013-2014	251	240	96%	11
2014-2015	212	205	97%	7
2015-2016	104	89	86%	15
2016-2017	108	93	86%	15

## 2011-2017 SET Not at Criteria

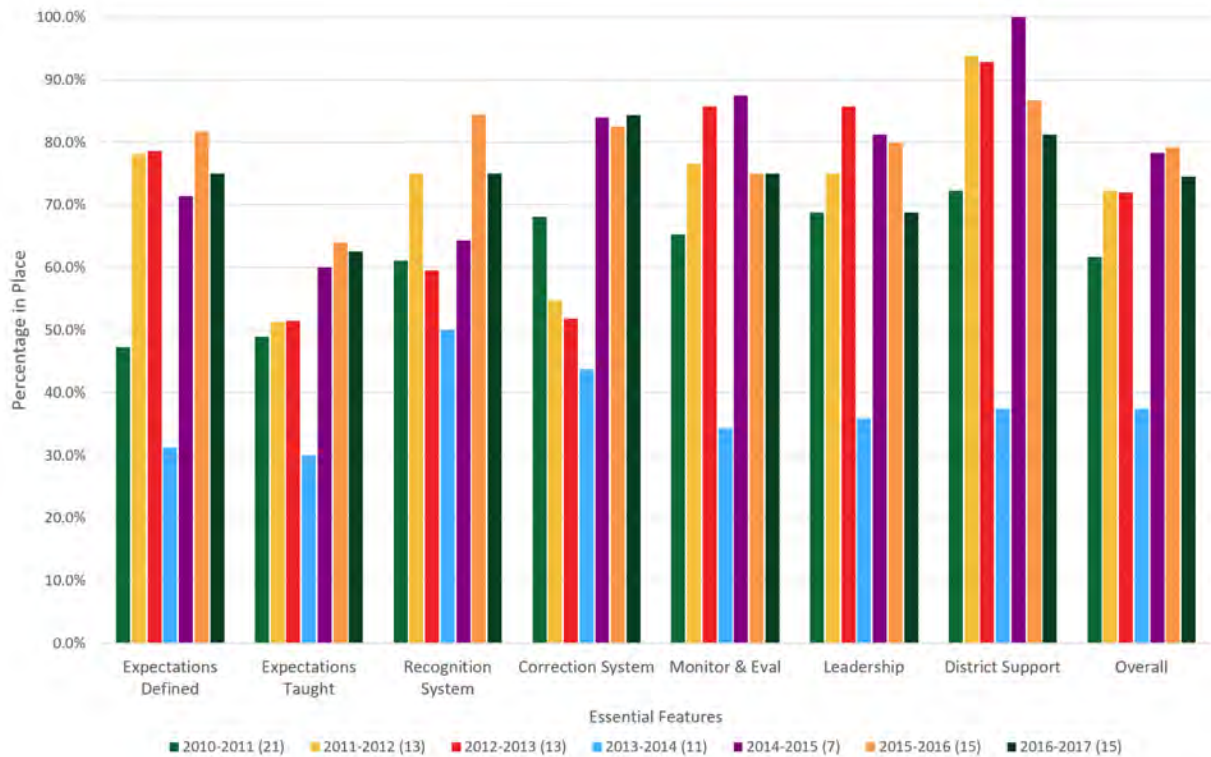


Figure 8d

In the remaining 15 schools that participated in a SET, but did not attain fidelity criteria of 80%/80%, none achieved the 80% criteria for part B, Expectations Taught. In addition, there was a slight decrease across most of the SET essential features. Feature areas with averages scores 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 survey in PBIS Assessments (Algozzine, et al., 2014). The TFI also includes an option for an external schoolwide walk-through component.

## 2016-2017 MO SW-PBS Tiered Fidelity Inventory Tier 1 Subscales: All, At Criteria, Not at Criteria

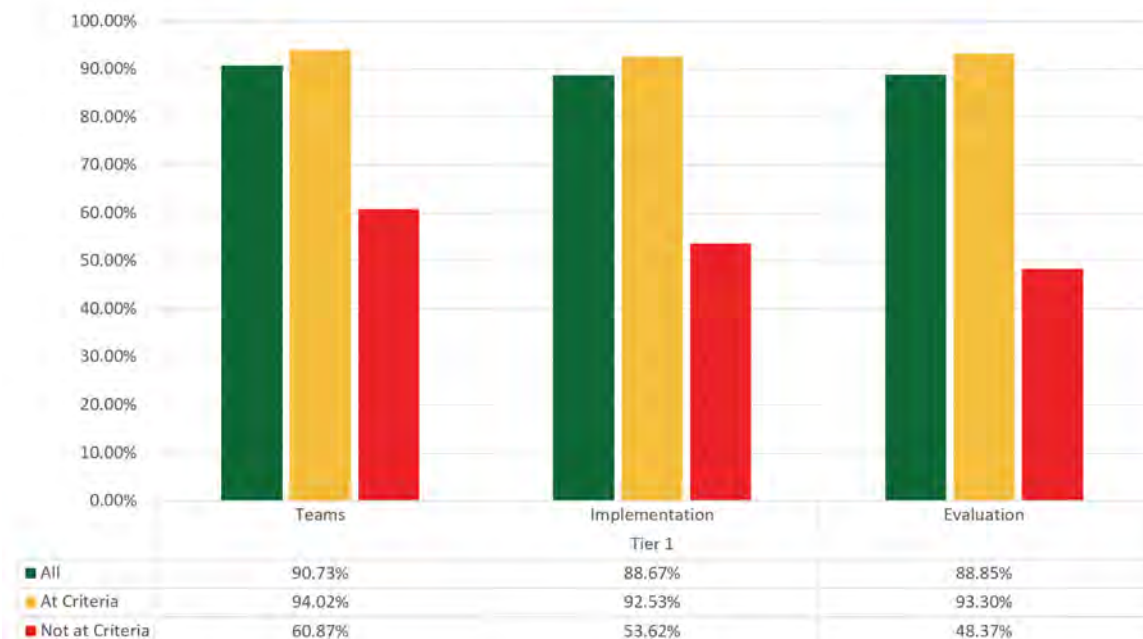


Figure 8e

232 veteran MO SW-PBS schools used the TFI (Algozzine, et al., 2014) at least one time for evaluation of Tier 1 fidelity. Of these, 209 (90%) scored at or above the 70% criteria in the Tier 1 Scale, indicating fidelity of implementation, with a Tier 1 Scale score average for all schools of 89%. Researchers have found that scores at or above 70% on the Tier 1 scale were comparable to other measures of Tier 1 implementation fidelity (Mercer, McIntosh, & Hoselton, 2017).

When viewing the TFI results by subscales, the average scores were 91%, 89%, and 89% for the subscales of 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 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). Over 90 Missouri SW-PBS partner schools volunteered for and participated in the sustainability research conducted by McIntosh and colleagues, upon which the current literature has been written.

**2016-2017 Self-Assessment Survey by Component and Recognition Level**

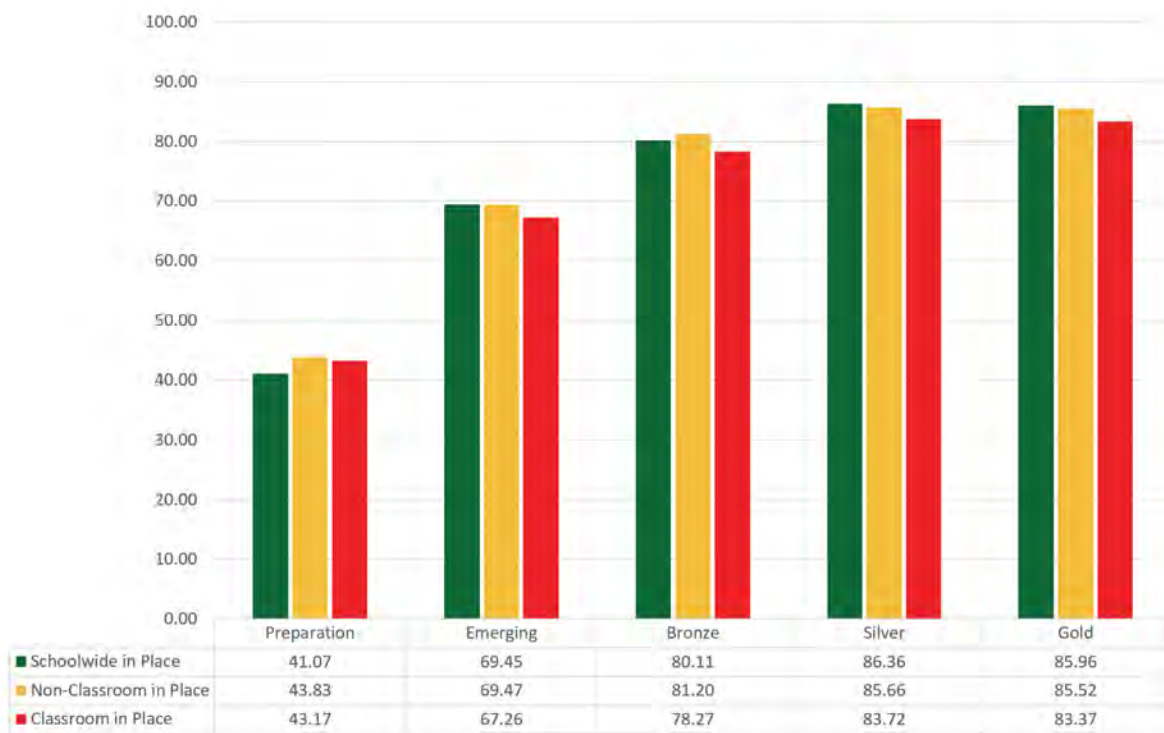


Figure 8f

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 apply for or 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, but were at or beyond their Emerging Training year.

When sorting SAS outcomes across the survey subscales of Schoolwide, Non-Classroom, and Classroom and comparing to MO SW-PBS recognition/implementation fidelity levels, the data suggest 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.

## 2016-2017 SAS Scores for Emerging Recognition Level by Training Level

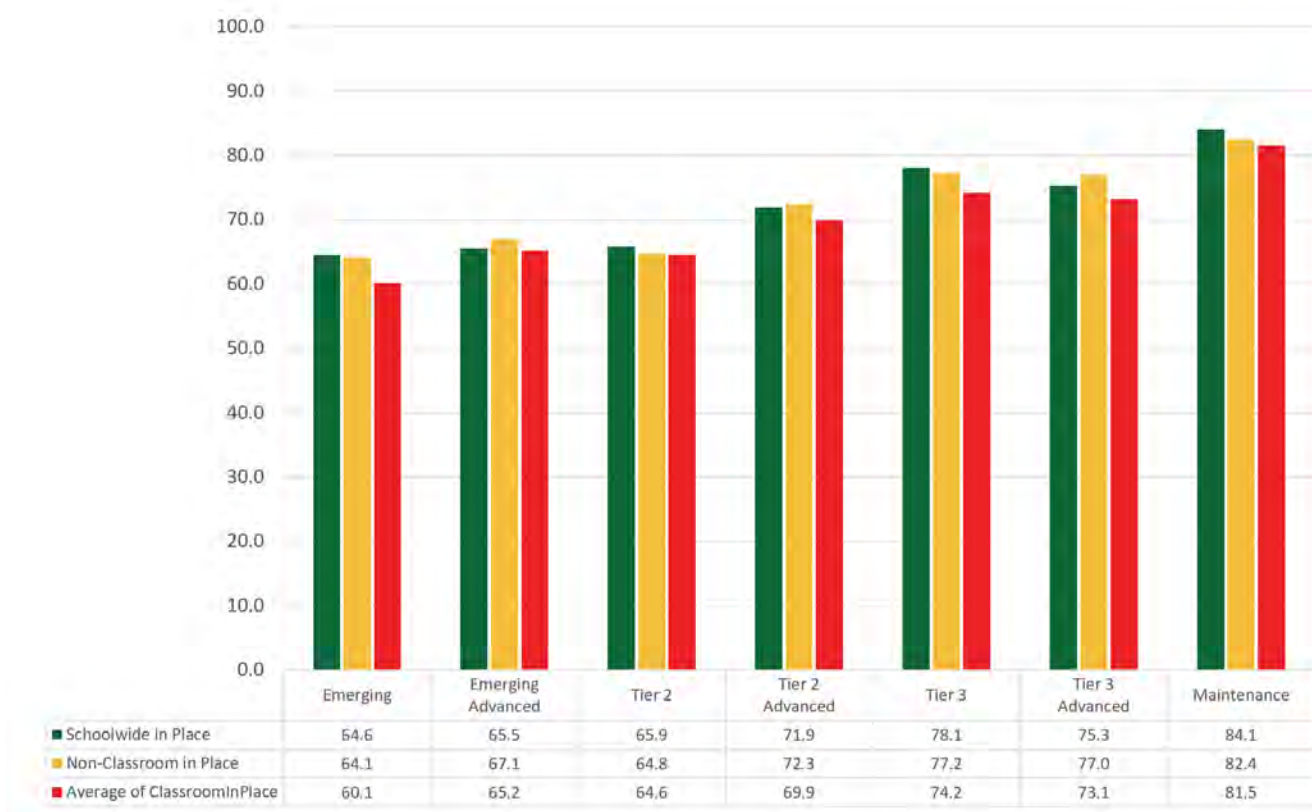


Figure 8f.1

Figure 8f.1 disaggregates the Emerging recognition level by training level. This data shows that within the Emerging recognition level, as the training level progresses, scores on the SAS improve for all three subscales.

### TIER 2 AND TIER 3

Tier 2 and 3 implementation and training content is less well 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 MO SW-PBS to guide Consultants and participating schools 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, 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 2-3 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. The use of the TFI to monitor Tier 2-3 fidelity was continued in 2016-2017.



## 2016-2017 Tiered Fidelity Inventory Subscales by Training Level

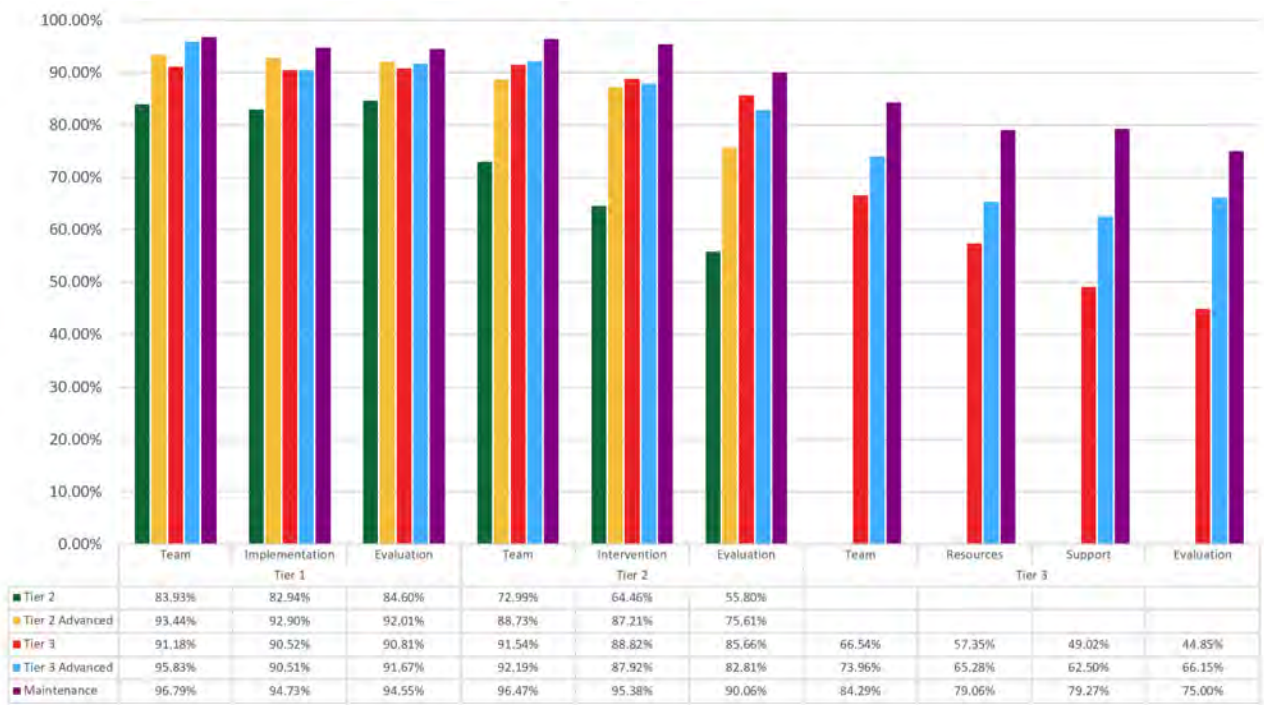


Figure 8g

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.

## 2016-2017 Tiered Fidelity Inventory Subscale Scores by Implementation Level

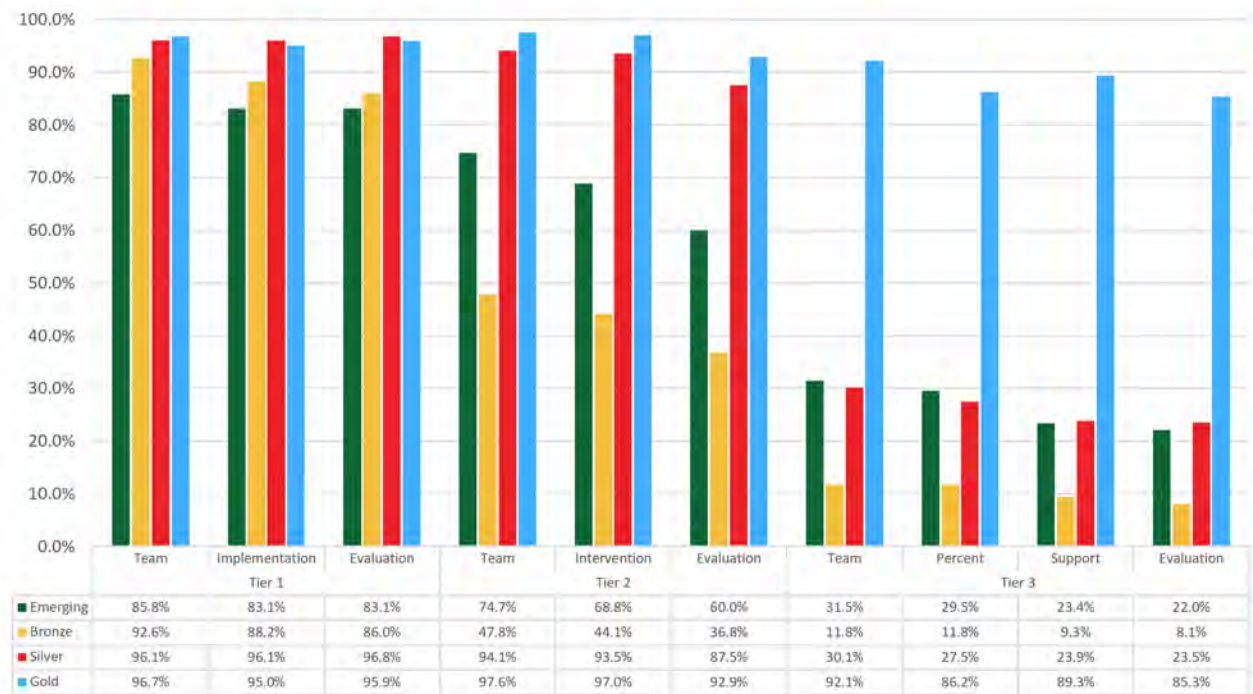


Figure 8g.1

Figure 8g.1 shows TFI subscale scores by implementation level. The preparation level was excluded from this report because Preparation schools are not required to take the TFI in Missouri, and therefore the number of schools in this category were so small as to potentially introduce bias into the sample. When interpreting the chart, keep in mind that both the recognition levels and the TFI scales correspond to a Tier of implementation. Results suggest that fidelity of implementation as measured by each of the scales and subscales of the TFI improve as schools move through the phases of implementation.

## 2016-2017 TFI by Recognition, Filtered by Training Level

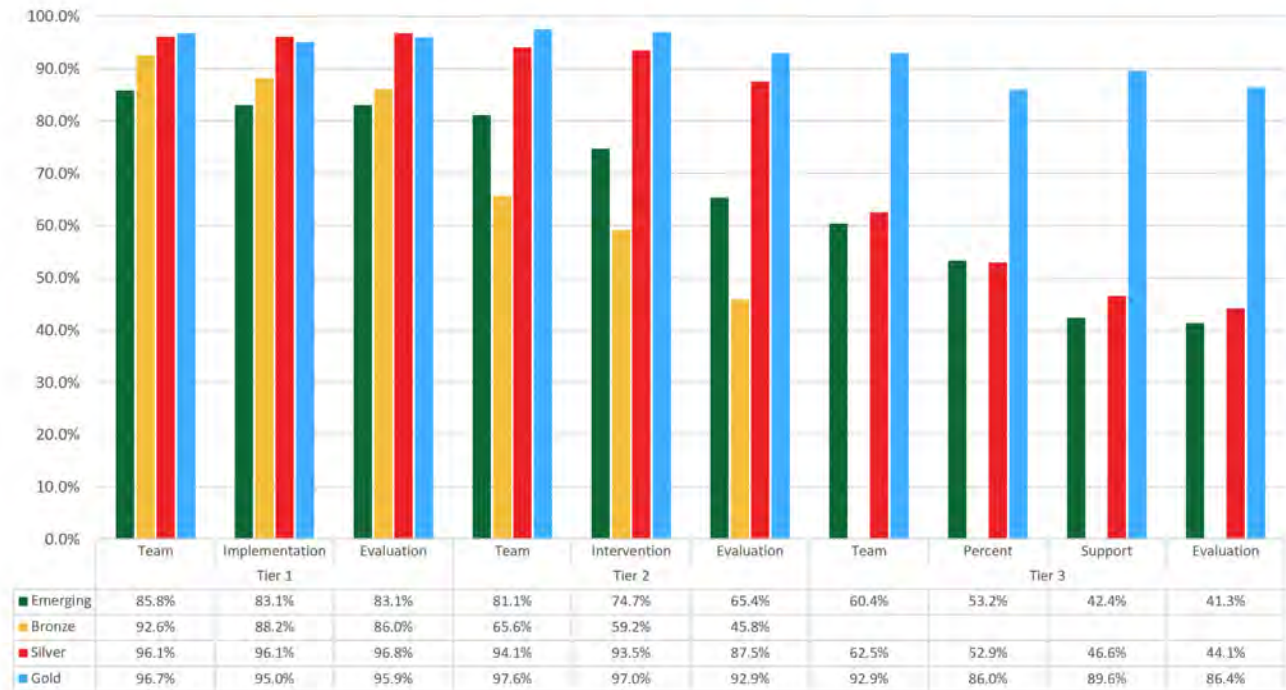


Figure 8g.2

Figure 8g.2 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 after Figure 8h regarding recognition/implementation fidelity categories.

## 2007-2017 MO SW-PBS Implementation

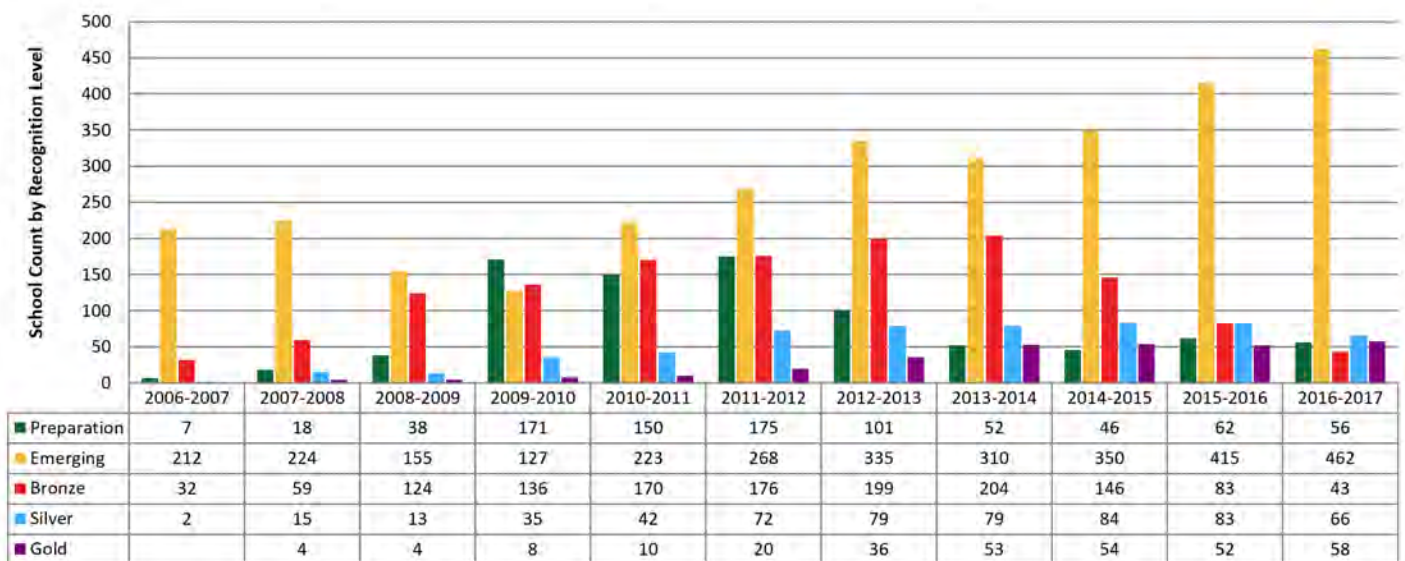


Figure 8h

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 SAS predicted sustainability, and to ensure that truly exemplary schools were identified. 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 areas of Schoolwide, Non-Classroom, and Classroom. In 2015- 2016 these criteria were increased, again, so that the school must score at least 70% in the areas of Schoolwide, Non- Classroom, and Classroom.

In 2016-2017, 15% (43/288) of eligible MO SW-PBS participating schools (Emerging, Emerging Advanced and Tier 2 training levels) earned Bronze level recognition, 28% (66/235) of eligible schools (Tier 2 Advanced and Tier 3 training levels) earned Silver Recognition, and 55% (58/105) 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

# IMPACT

Information from impact evaluation indicators reflects the extent to which targeted outcomes are being and/or [sic] 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, 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., 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 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.

Table 1

Missouri Schoolwide Positive Behavior End of Year Report MO DESE of Elementary and Secondary Education CORE Data	
<b>INPUTS / CAUSE</b> Student Demographics <ul style="list-style-type: none"> <li>• Student Race</li> <li>• Student Ethnicity</li> <li>• Student Gender</li> <li>• Free and Reduced Lunch Status</li> <li>• IEP, Non-IEP or All Students</li> </ul> Building Demographics <ul style="list-style-type: none"> <li>• RPDC Region</li> <li>• Location (Rural, Suburban, Urban)</li> <li>• Enrollment Number</li> <li>• Grade Level</li> </ul> Staff Head Count New & Transfer Staff	<b>OUTPUTS / EFFECTS</b> Attendance  Missouri Assessment Program (MAP) <ul style="list-style-type: none"> <li>• Communication Arts</li> <li>• Math</li> </ul>
PBIS Assessments from PBIS National Center	
<b>INPUTS / CAUSE / FIDELITY</b> <u>School Safety Survey (SSS)</u> <u>Self Assessment Survey (SAS)</u> <u>Schoolwide Evaluation Tool (SET)</u> <u>Tiered Fidelity Inventory (TFI)</u>	<b>OUTPUTS / EFFECTS</b> <u>School Safety Survey (SSS)</u>
Other Recommended Data Sources	
<b>INPUTS / CAUSE / FIDELITY</b> Classroom Walk Through	<b>OUTPUTS / EFFECTS</b> Academic Progress Monitoring Graduation / Dropout Rates ISS / OSS Minor Discipline Referrals <u>Office Discipline Referrals (ODRs)</u> <ul style="list-style-type: none"> <li>• <u>By Grade Level (IEP &amp; Non-IEP)*</u></li> <li>• <u>By Student*</u></li> </ul> <u>Assistance Referrals &amp; Special Education Identification / Eligibility*</u> <u>Tier 2 Intervention Outcomes</u> <u>Tier 3 Intervention Outcomes</u>

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.



## ? 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 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 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 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.

**2015-2017 Attendance by SW-PBS Implementation Level**



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 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 remained stable or decreased slightly for all categories except Gold implementation levels. Additionally, all MO SW-PBS implementation levels reported slightly higher attendance than the 1) Non SW-PBS and 2) All Missouri schools.

### 2015-2017 Attendance by SW-PBS Implementation Level (Students w/ IEPs)

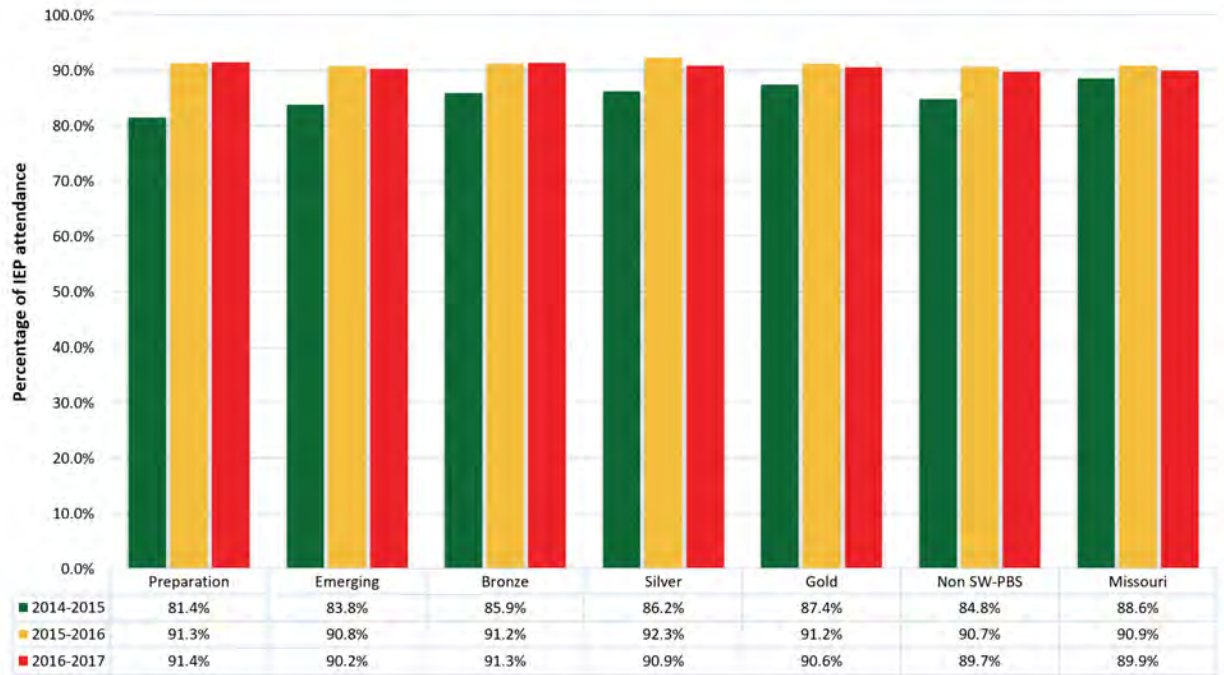


Figure 9b

Similarly, attendance for students with IEPs remained stable or decreased slightly in all SW-PBS implementation levels, Non SW-PBS schools and Missouri schools. In addition, attendance rates for students with IEPs was slightly higher for all MO SW-PBS implementation levels than in 1) Non-SW-PBS and 2) All Missouri schools.

### 2012-2017 ODRs Per Day, Per Month, Per 100



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 2016-2017 school year, 114 (17%) 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” performed comparably to 2016-2017 SWIS national norms.

**2016-2017 MO SW-PBS SWIS Users Triangle Charts by School Configuration**

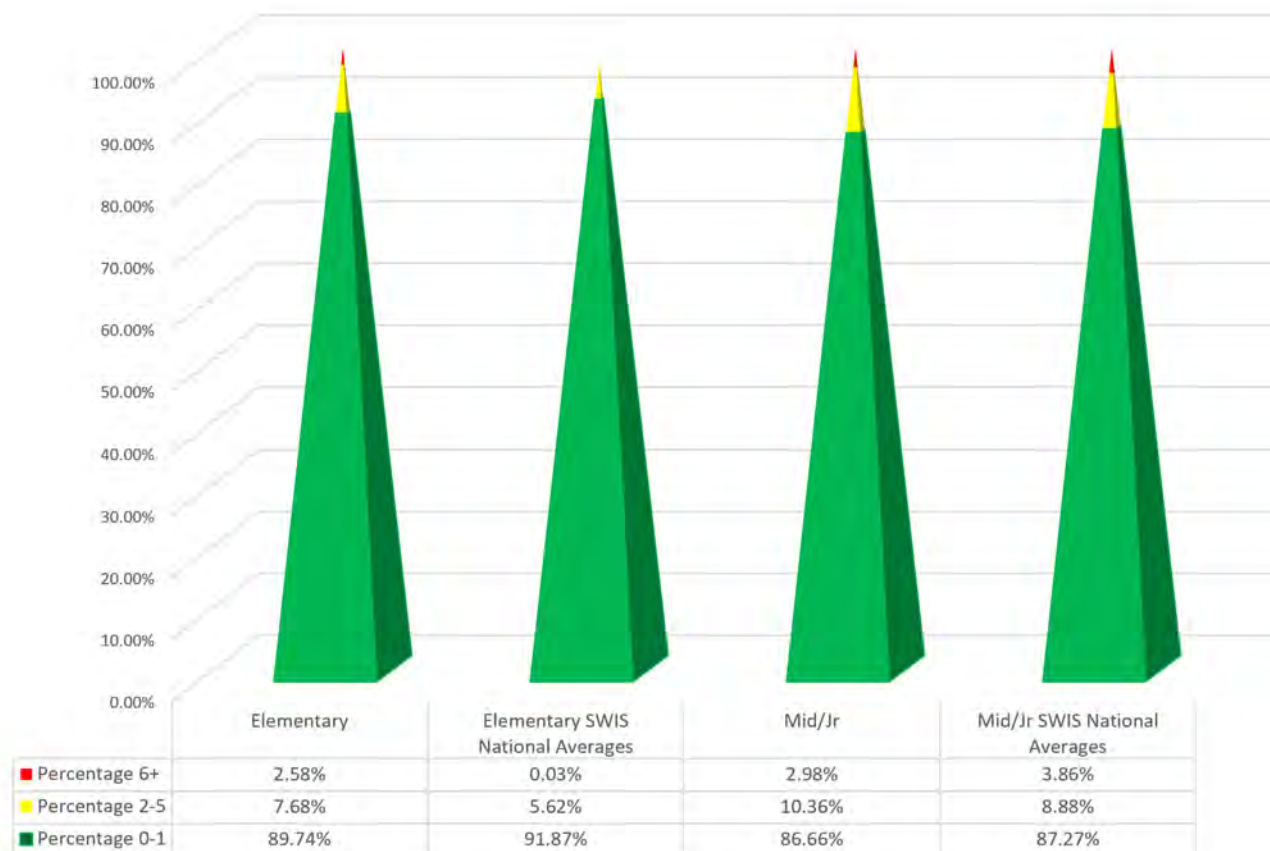


Figure 9d

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 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 performed comparably to Elementary and Middle Schools in the National SWIS database.

## 2016-2017 ODR Per, Per Month, Day Per 100 Students by Implementation

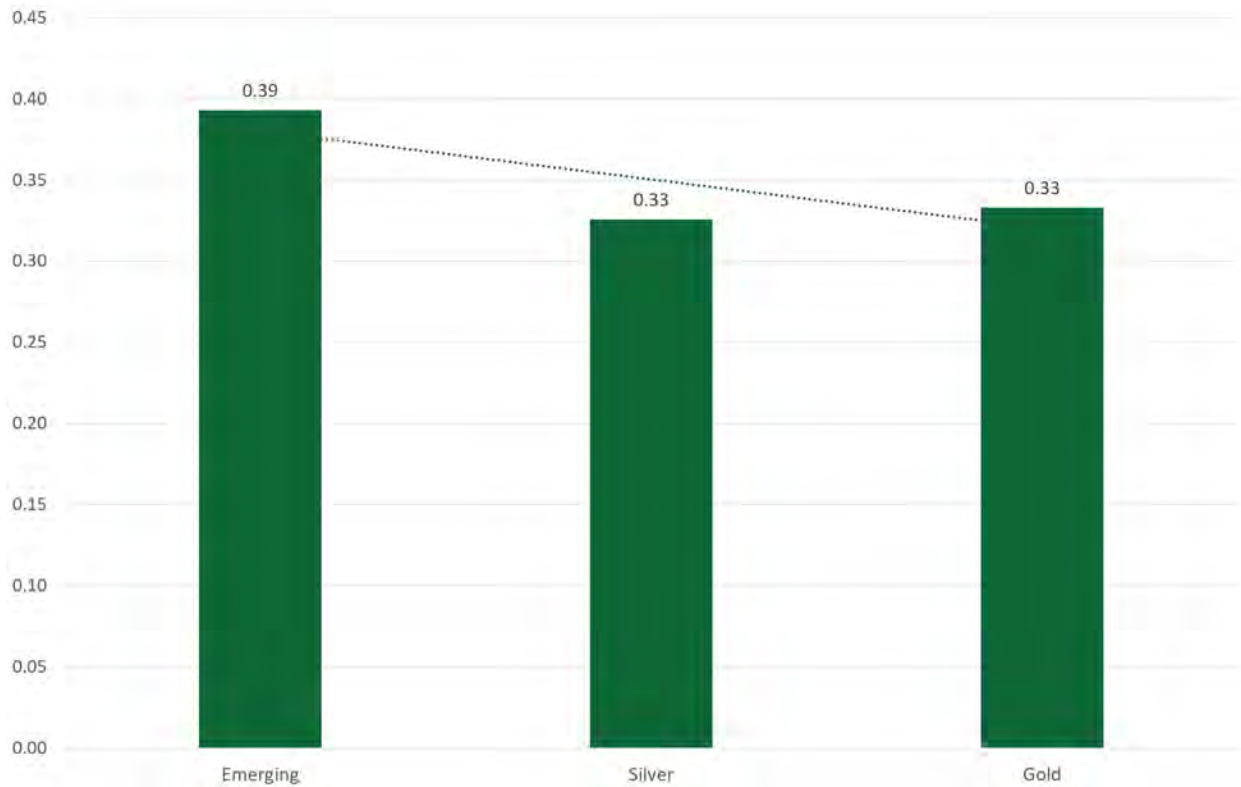


Figure 9e

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. Because of the small numbers of Preparation and Bronze level schools that used SWIS, these recognition levels have been omitted from the data set.

While this chart does suggest a negative correlation between implementation with 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



## ? 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 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. In 2015-2016 and 2016-2017 The DESE continued with the new online testing procedures and updated questions. Therefore, the following charts compare SW-PBS schools to Non SW-PBS schools for the 2014-2015 through 2016-2017 school years.

**2015-2017 Percent of Student MAP Scoring in Advanced & Proficient Categories, in Communication Arts, by SW-PBS Implementation (All Students)**

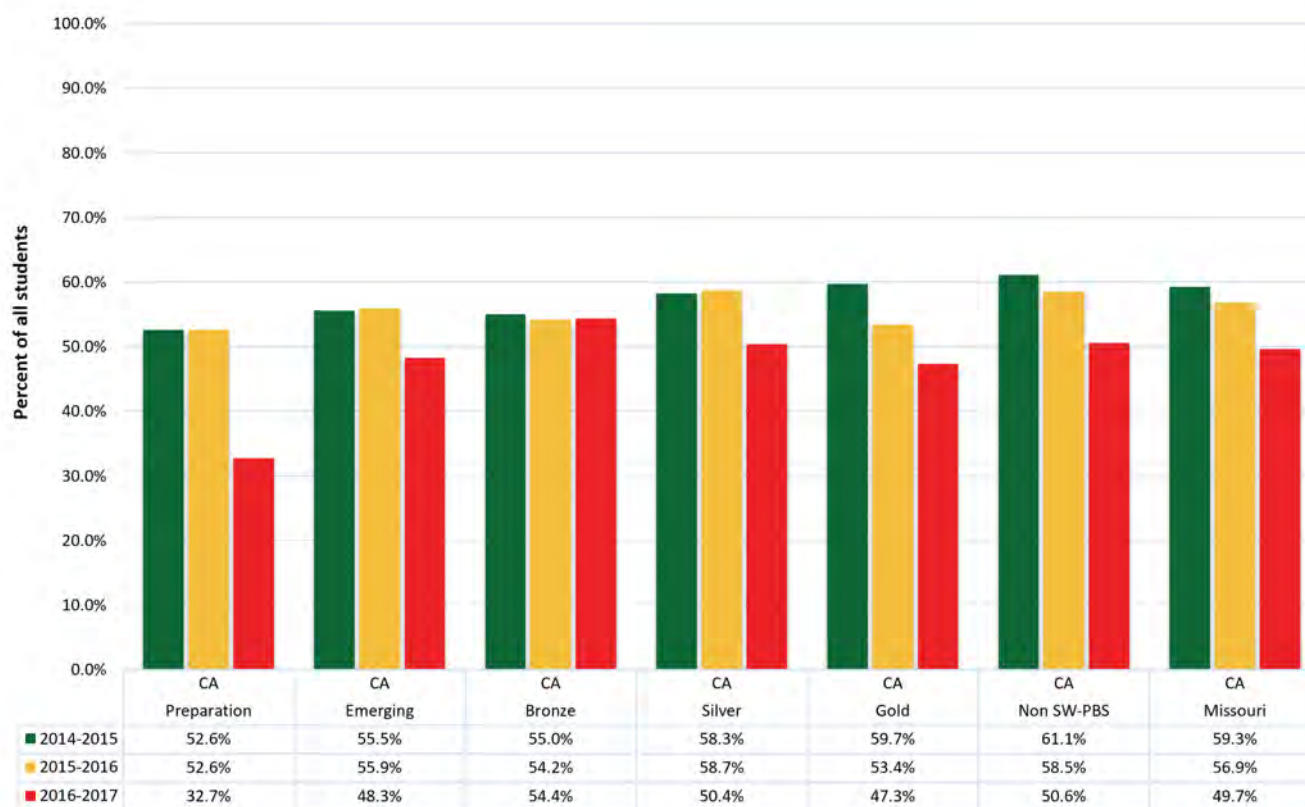


Figure 10a

Results of the 2016-2017 Communication Arts portion of the MAP suggest a downward trend in all school categories. Furthermore, it appears that new Preparation schools performed lower than any other school category. This is consistent with a trend over the past three years. MO SW-PBS Bronze level schools actually improved slightly, and had more students score proficient and advanced than did any other school category. Statistical analysis is currently underway to determine whether there is a relationship between the percentage of students scoring proficient and advanced in communication arts in the schools within each recognition cohort.

### 2015-2017 Percent of Student MAP Scoring in Advanced & Proficient Categories in Math, by SW-PBS Implementation (All Students)



Figure 10b

As with Communication Arts MAP results, the percentage of students scoring proficient and advanced in the Mathematics portion of the MAP test continued a downward trend in 2016-2017 in all school categories. Also, similar to Communication Arts, MO SW-PBS Preparation schools had a smaller proportion of students scoring proficient and advanced than did any other school category. Descriptive statistics suggest that there may be a relationship between the percentage of students scoring proficient and advanced in the Math portion of the MAP test and implementation fidelity of SW-PBS. Furthermore, all MO SW-PBS recognition categories had slightly higher proportions of students scoring proficient and advanced in the Math portion of the MAP than in 1) Non-SW-PBS schools, or 2) all Missouri schools. Statistical analysis is currently underway to determine whether such a relationship exists.

### 2015-2017 Percent of Student MAP Scoring in Advanced & Proficient Categories, in Communication Arts, by SW-PBS Implementation (Students w/ IEPs)

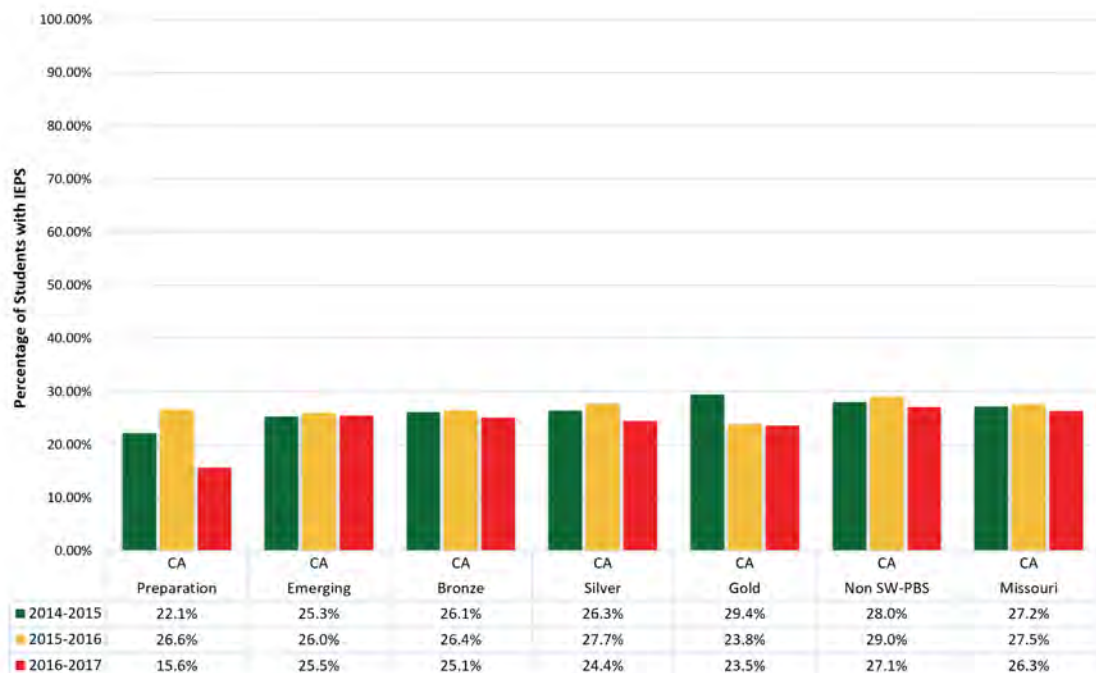


Figure 10c

For the most part, all categories showed small decreases in the percentage of students with IEPs that scored proficient and advanced in the communication arts portion of the MAP test. As with the descriptive statistics depicting all students, MO SW-PBS Preparation schools had a smaller proportion of students with IEPs scoring proficient and advanced than any other school category. Statistical analysis is currently underway to determine whether there is a statistically significant relationship between the percentage of students with disabilities scoring proficient and advanced in the Communication Arts portion of the MAP test as implementation fidelity increases.

**2015-2017 Percent of Student MAP Scoring in Advanced & Proficient Categories in Math, by SW-PBS Implementation (Students w/ IEPs)**

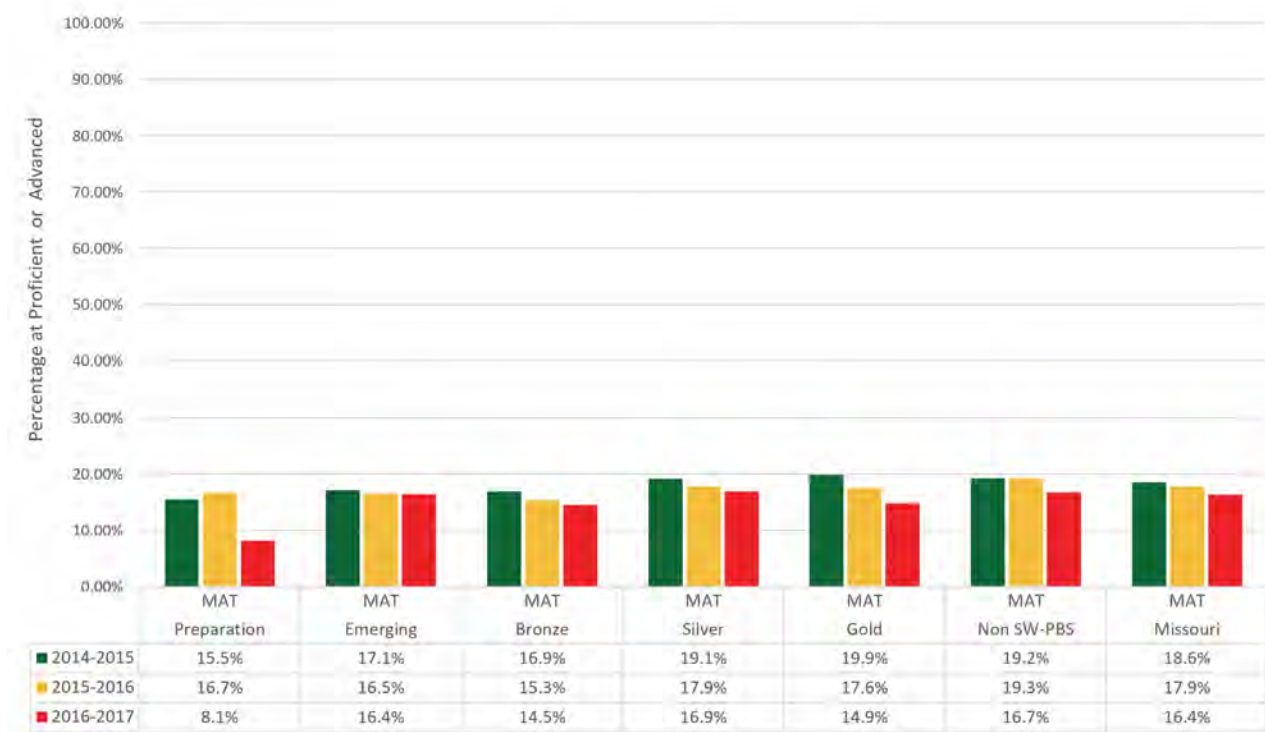


Figure 10d

As in all other categories, the percentage of students with IEPs that scored proficient and advanced on the mathematics section of the MAP continued a downward trend during the 2016-2017 school year. Also similar to the other categories, MO SW-PBS Preparation schools had a lower proportion of students with IEPs scoring proficient and advanced on the Mathematics portion of the MAP test than did any other school category. Statistical analysis is currently underway to determine if there is a statistically significant relationship between implementation fidelity and the percentage of students with IEPs scoring proficient and advanced on the Mathematics section of the MAP test.

## 2015-2017 Students with IEPs Time in Regular class > 79% by SW-PBS Implementation Level

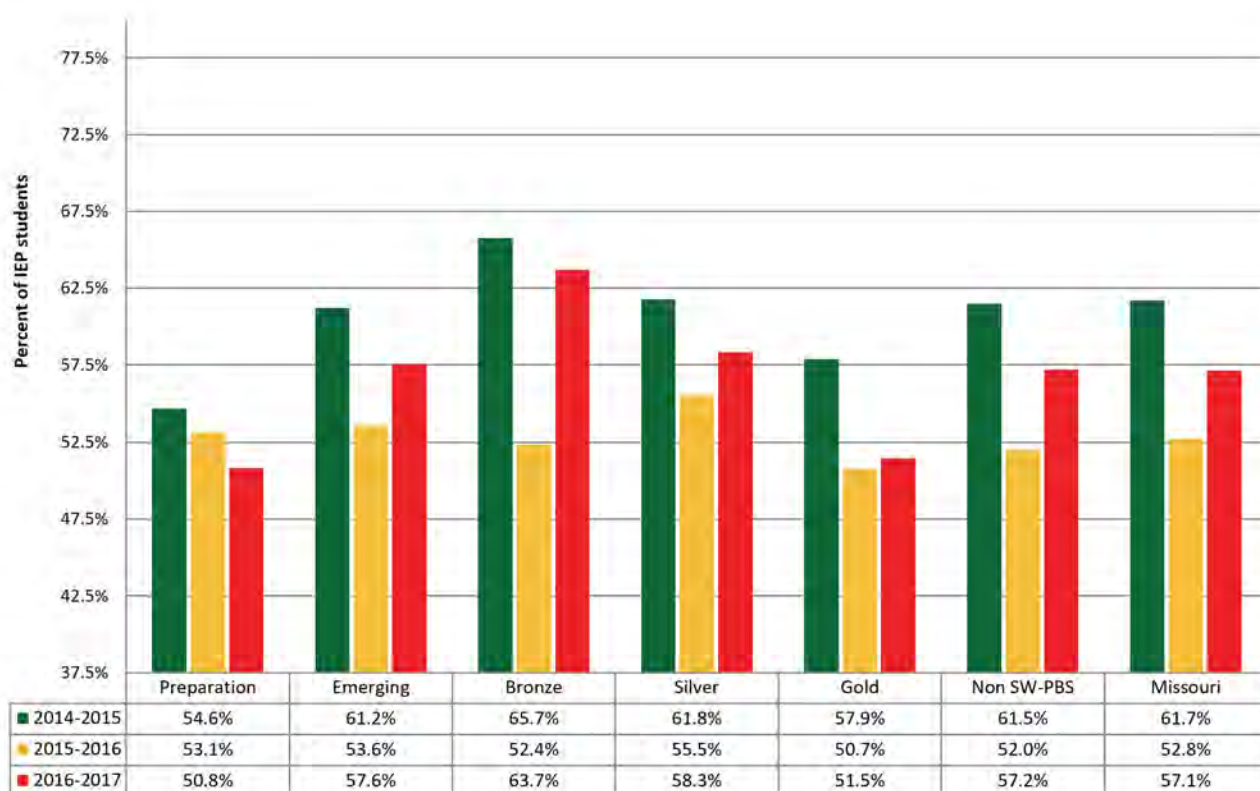


Figure 10e

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. Descriptive statistics show that MO SW-PBS Preparation level schools had the lowest percentage of students with IEPs spending more than 79% in the regular environment. Furthermore, with the exception of Preparation and Gold level schools, all MO SW-PBS school categories had a higher percentage of students with IEPs spending 79% or more time in the regular education setting than 1) Non MO SW-PBS, and 2) All Missouri schools. Statistical analysis is currently underway to determine if there is a statistically significant relationship between the percentage of students with IEPs that spend more than 79% of the time in the regular education classroom and implementation fidelity of SW-PBS.

Although dropout data would be another way to measure outcomes for students, because there are fewer than 8 high schools that achieved Bronze, Silver and Gold levels of recognition, combined, this data is not reported.

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 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 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.

2007-2017 MO SW-PBS State Supported Full Time Equivilant (FTE)

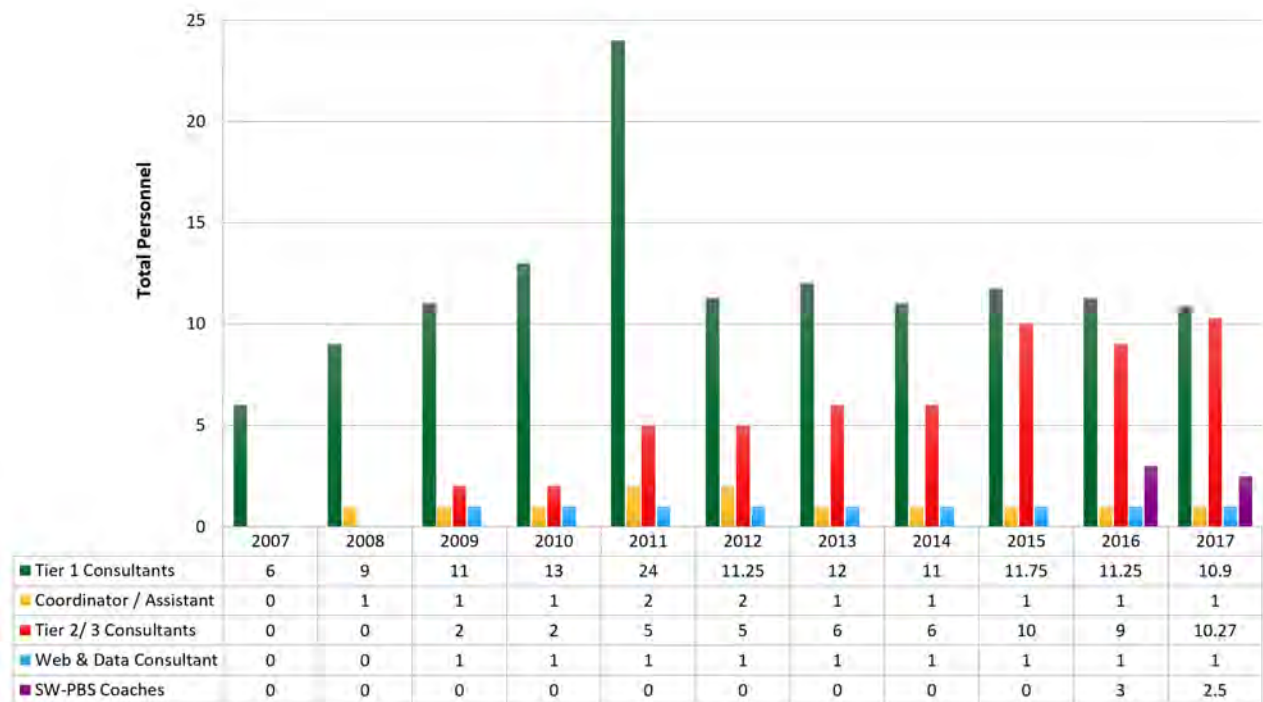


Figure 11a

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, 32 personnel had the designation of SW-PBS Consultant across 25 FTE dedicated to MO SW-PBS work in 2016-2017. MO SW-PBS is committed to assisting The DESE in furthering the SSOS work.

## Missouri SW-PBS School Counts by District

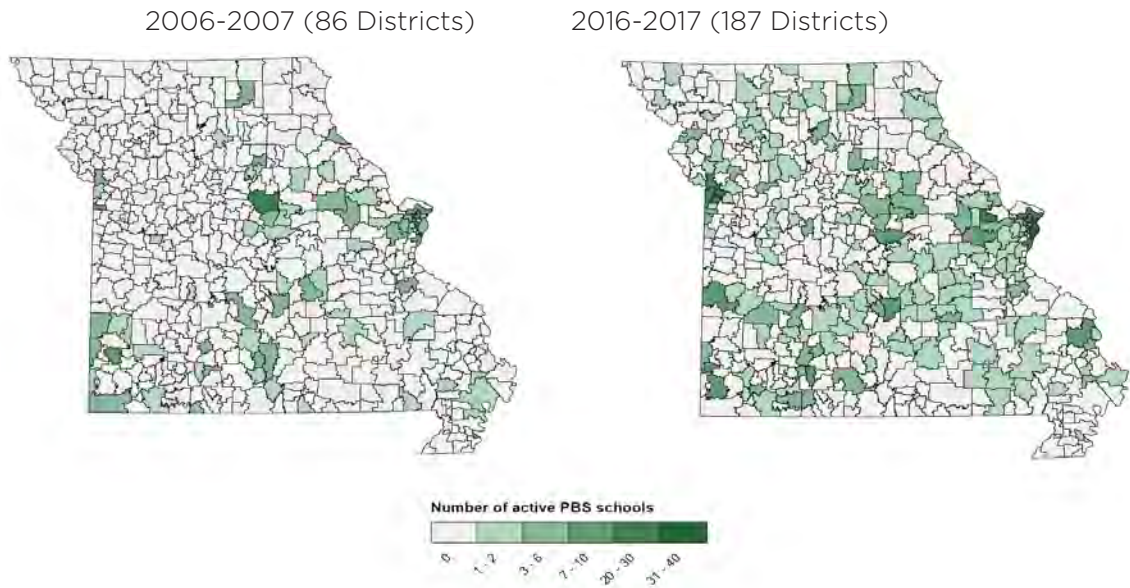


Figure 11b

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.

## 2007-2017 MO SW-PBS School Reasons for Inactivity

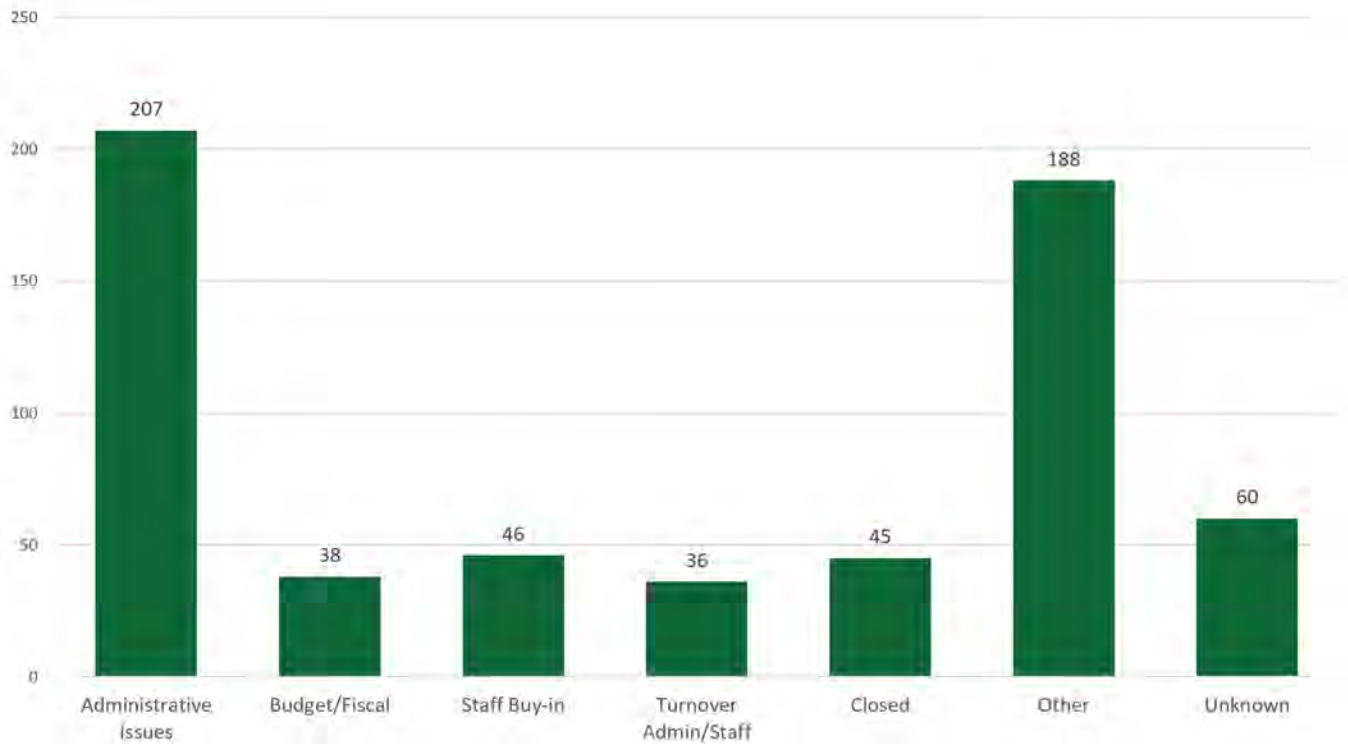


Figure 11c

During 11 years of MO SW-PBS implementation, 506 of the 1224 schools initially committing to the initiative chose to discontinue training at least once between 2007 and 2017 (40 schools were marked inactive 2 or more times; these were likely schools that expressed the intent to train with MO SW-PBS, but dropped out before their second training session of the year). 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 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 indicate that 89 schools that had previously discontinued implementing SW-PBS were training, again, in 2016-2017. Removing the 44 “Closed” schools, the retention of MO SW-PBS schools across 11 years stands at 69.5%. 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 potentially depresses the retention rate.

**2007-2017 Percentage of MO SW-PBS Schools that Participated in Tier 1 Fidelity Assessment that Met Criteria**

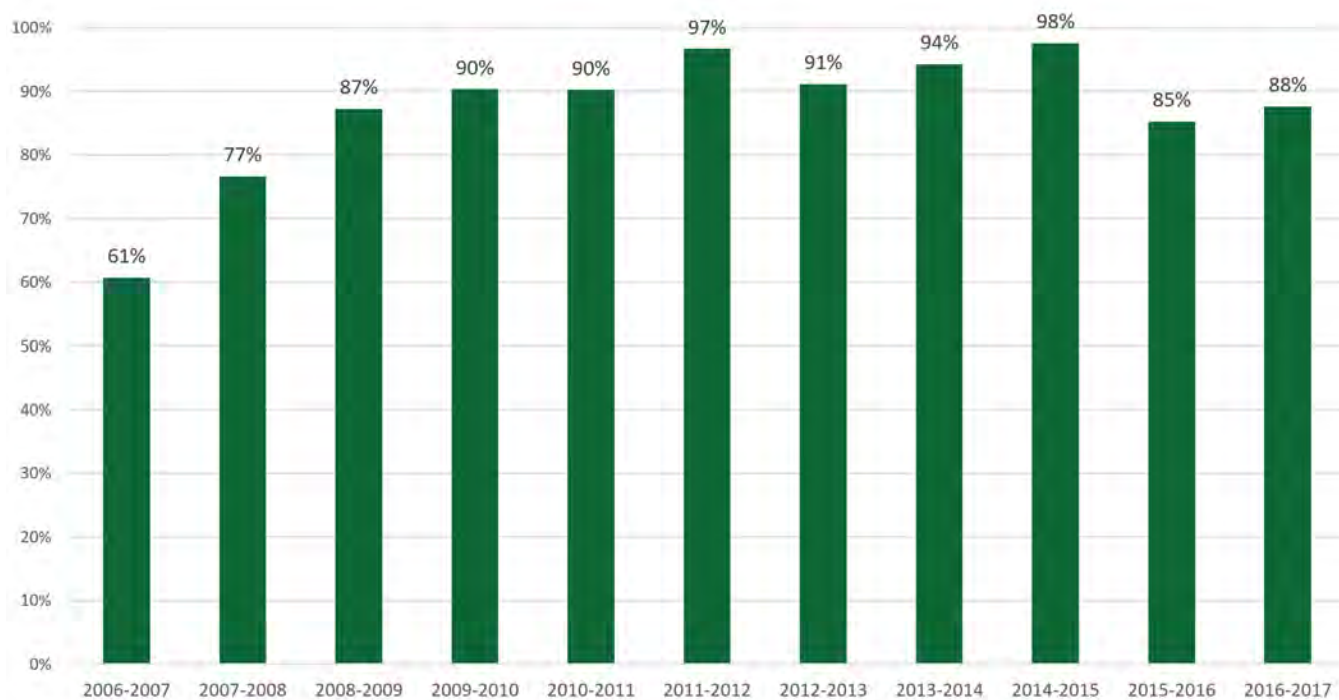


Figure 11d

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.

## 2016-2017 MO SW-PBS Counts by Training Tier

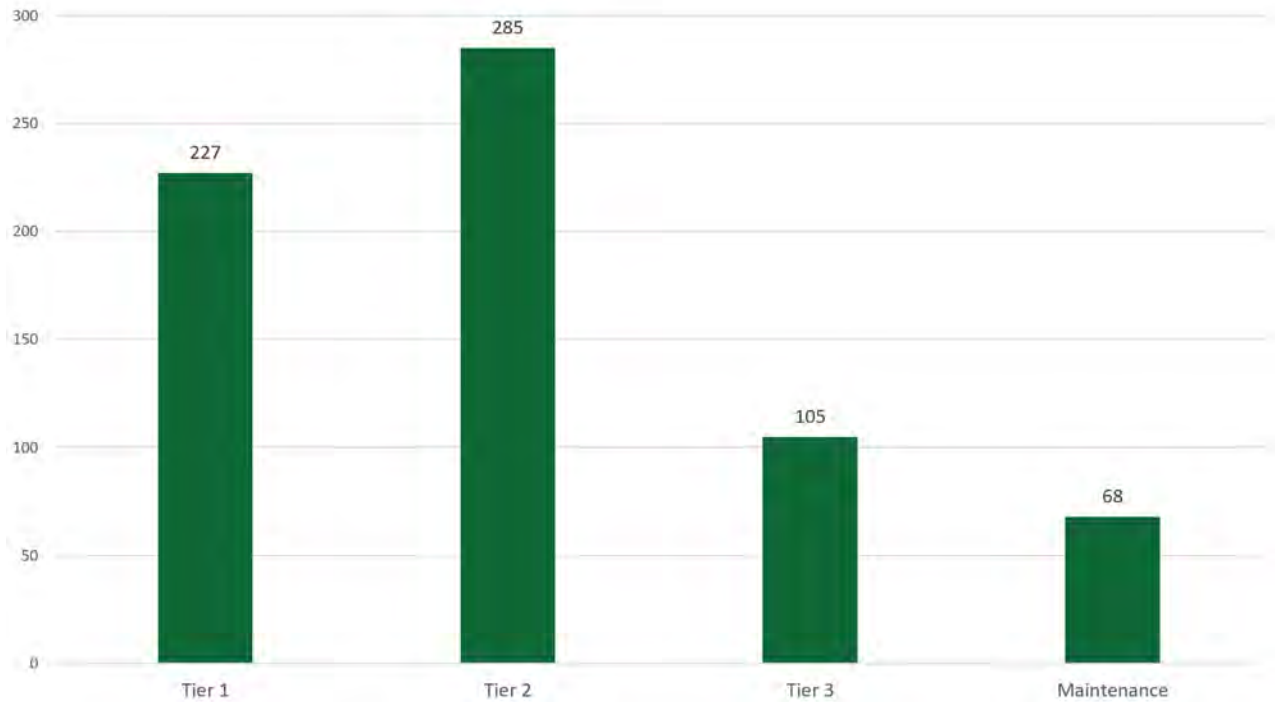


Figure 11e

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 2016-2017 there were 227 Tier 1 schools, 285 schools in Tier 2 training and 105 in Tier 3. In addition, there were 68 Maintenance schools.

Behavior Support Framework | moswpbs@missouri.edu

MO SW-PBS  
Missouri School Wide Positive Behavior Support

Home About Tier 1 Tier 2 Tier 3 Topics SI Profile

**Improving outcomes for all students.**  
Positive, proactive, preventative behavior supports.

**New to MO SW-PBS?**  
[GET STARTED NOW!](#)

Figure 11f



The MO SW-PBS website (<http://pbissmissouri.org>) continues to be a valued resource in the community. Google Analytic data for the 2016-2017 school year (July 1, 2016 through June 30, 2017) show increases in all visitor indicators:

- ▶ 56,323 visits, up from 54158 visits, in 2015-2016 (a 4% increase over 2015-2016)
- ▶ 34,309 individual visitors, up from 34,274 in 2015-2016 (a 0.1% increase over 2015-2016)
- ▶ 225,148 Page views, up from 208,588 in 2015-2016 (a 7.9% increase over 2015-2016)

Visitors to the website were from 154 countries and all 50 states and the District of Columbia. 87.8% of all visitors were from the United States. 41.1% of all visitors were from the state of Missouri.

The most frequently viewed pages were the home page (13.3%), the Tier 1 Resources and Modules Page (7.8%), Tier 2 Resources and Modules page (6.4%) and the Summer Training Institute Schedule (5.0%). It should be noted that the Summer Training Institute page was not posted until second semester. Peak traffic to the website came on June 15, 2017, the second day of Summer Training Institute, with 1547 visits. While this date is consistent with past years, the total number of visitors was less than the previous year, when there were 5634 visitors to the website on the second day of the 2016 Summer Training Institute.

Visitors to the website using mobile devices (i.e. phones and tablets) continued to rise with 10,367, up from 10,277 visits in 2015-2016 (a 0.48% increase).

MO SW-PBS continues to expand into online learning. During the 2016-2017 school year, narrated PowerPoints and ancillary documents were developed and posted online. In collaboration with the DESE, Modules were posted on the MoEdu-Sail website (<http://www.moedu-sail.org/>). In addition, MO SW-PBS contracted with Evan Courtney of *Creative Courtney* to develop a new site that incorporated the new learning modules into a Learning Management System. The new website was launched June 25, 2017.

In addition, MO SW-PBS continued to post brief training modules to be used for “flipped” instruction, and hosted a number of webinars over topics such as procedures for applying for state recognition. Some of these webinars were recorded and posted to the website, allowing individuals who may have missed the webinars to access this information.

MO SW-PBS continued to expand communication through social media. While MO SW-PBS utilized *Twitter* in 2015-2016, in 2016-2017 *Facebook* and *MailChimp* were added. The website, *Facebook*, *Twitter*, mass emailings 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 33.6% open rate (industry education and training average open rate is 16.2%). During RPDC Center training events and Summer Training Institute Consultants and participants are urged to use Twitter to share learning. For example, during the 2016 Summer Training Institute, participants were reminded to use #moswpbs16 to follow the event live and share information and inspiration with other attendees.

Social Media Platform	2016-2017	2015-2016
@MOSWPBS Twitter Followers	1414	973
Facebook Followers	138	NA
MailChimp Subscribers	Tier 1 > 814; Tier 2 > 483; Tier 3 > 205	NA

Recent research and publications have indicated that 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, & Suagi, 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 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 Systems 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 at the forefront of online course development in the state of Missouri.

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 2016-2017 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, 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 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

## NORTHWEST RPDC MEETINGS

Register: <http://www.nwmissouri.edu/rpdc/>

## NORTHEAST RPDC MEETINGS

Register: <http://rpdc.truman.edu/>

## Missouri RPDCs

- 1 Southeast - Cape Girardeau
- 2 Hook Center - Columbia
- 3 Kansas City
- 4 Northeast - Kirksville
- 5 Northwest - Maryville
- 6 South Central - Rolla
- 7 Southwest - Springfield
- 8 St. Louis
- 9 Central - Warrensburg

## ST. LOUIS RPDC MEETINGS

Register: <http://www.edplus.org/>

## KANSAS CITY RPDC MEETINGS

Register:  
<http://education.umkc.edu/kcrpdc/>

## CENTRAL RPDC MEETINGS

Register: <http://www.ucmo.edu/rpdc>

## SOUTHWEST RPDC MEETINGS

Register: <http://education.missouristate.edu/rpdc/>

## SOUTH CENTRAL RPDC MEETINGS

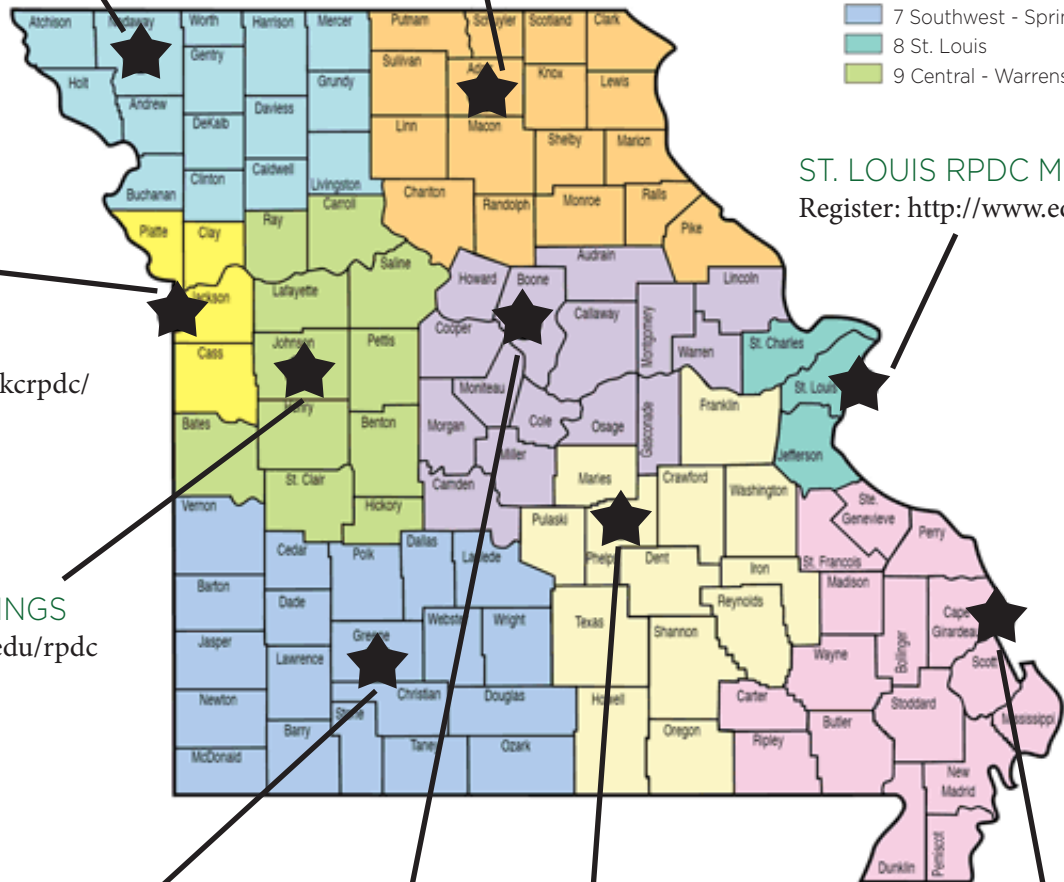
Register: <http://rpdc.mst.edu/>

## SOUTHEAST RPDC MEETINGS

Register: <http://www.semo.edu/rpdc/>

## HOOK CENTER FOR EDUCATIONAL LEADERSHIP AND DISTRICT RENEWAL

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





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Sarah Moore – Research Assistant  
Danielle Starkey - Research Assistant

#### Missouri Department of Elementary & Secondary Education

Kimberly Luebbering – Assistant Director of Effective Practices

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# 2016-2017 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/state-performance-plan>)

## CONTEXT

1. What are/were the goals and objectives for MO SW-PBS implementation?
  - ▶ MO SW-PBS Action Plan Goals (<http://pbissmissouri.org/what-is-swpbs/>)
2. Who provided support for MO SW-PBS implementation?
  - ▶ MO SW-PBS Personnel listed online (<http://pbissmissouri.org/about/personnel>)
3. Who received support during SW-PBS implementation?
  - ▶ MO SW-PBS schools (<http://pbissmissouri.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://pbissmissouri.org/tier-1-workbook-resources/>)
    - (<http://pbissmissouri.org/tier-2-workbook-resources/>)
    - (<http://pbissmissouri.org/tier-3-workbook-resources/>)
5. Who participated in the professional development?
  - ▶ MO SW-PBS Schools (<http://pbissmissouri.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://pbissmissouri.org/what-is-swpbs/>)
  - ▶ Training Materials, Tier 1 Workbook, Tier 2 Workbook, and Tier 3 workbook
    - (<http://pbissmissouri.org/tier-1-workbook-resources/>)
    - (<http://pbissmissouri.org/tier-2-workbook-resources/>)
    - (<http://pbissmissouri.org/tier-3-workbook-resources/>)
8. To what extent was SW-PBS implemented with fidelity?
  - ▶ MO SW-PBS Recognition Program Awards (<http://pbissmissouri.org/exemplar-schools/exemplar-schools/>)
  - ▶ MO SW-PBS Exemplar Schools for 2016-2017 (<http://pbissmissouri.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://pbissmissouri.org/wp-content/uploads/2018/02/2.1-Prudent\\_Practical\\_010117.pdf](http://pbissmissouri.org/wp-content/uploads/2018/02/2.1-Prudent_Practical_010117.pdf))
- ▶ 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?