2017-2018

ANNUAL REPORT

MISSOURI SCHOOLWIDE
POSITVE BEHAVIOR SUPPORT

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CONTENTS

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 2017-2018 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 con-tributed to the success of MO SWPBS during the 2017-2018 school year.

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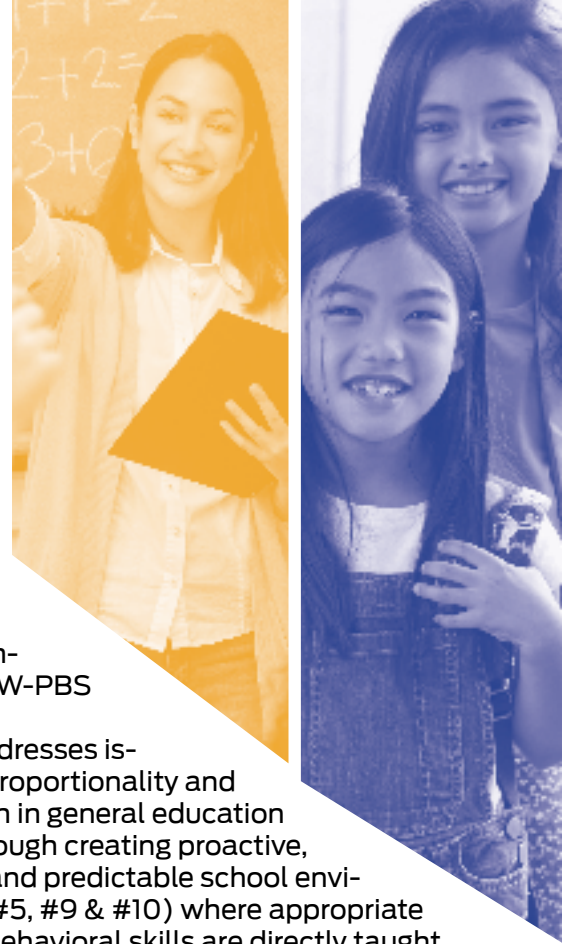
MO SW-PBS
Missouri Schoolwide
Positive Behavior Support
pbismissouri.org

Missouri EDUCATION
dese.mo.gov

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

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

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

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

- SW-PBS helps to create school environments in which students are more likely to be successful in general education classroom environments (#5), to graduate (#1), and to be successful in meeting their post-secondary goals (#13 & #14)
- SW-PBS decreases the likelihood of students being suspended or expelled or dropping out of school (#2 & #4)
- SW-PBS includes programs for preschool aged children (#6 & #7)

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

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

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

CONTEXT

Evaluation of the context details the goals, objectives, and activities of the program. Context serves as a foundation for identifying required resources, assessing expected and actual implementation, and analyzing expected and actual outcomes and evidence of performance (Algozzine et al., 2010, p. 3). The answers to the following questions show evidence of our action plan and the people who provided and received support through MO SW-PBS for 2017–2018. This annual report is guided by the framework laid out in the "Evaluation Blueprint for School-Wide Positive Behavior Support." Questions and categories are taken directly from this document.

Question 1

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

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

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 and/or district teams and administrators.
4. MO SW-PBS utilizes a systematic process for data collection and evaluation of implementation fidelity and student outcomes.
5. MO SW-PBS implements systems for replication, sustainability, and improvement.
6. MO SW-PBS utilizes a communication plan targeted to stakeholders.

MO DESE Goals: 1, 2, 3, 4

Question 2

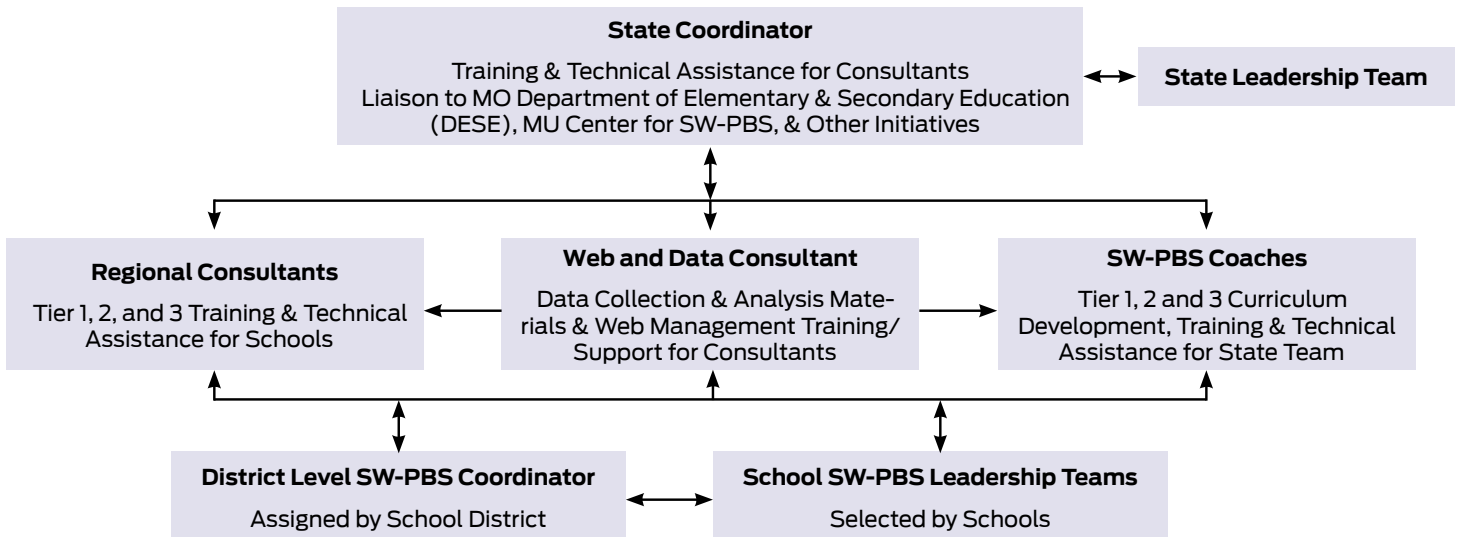### Who provided support for MO SW-PBS implementation?

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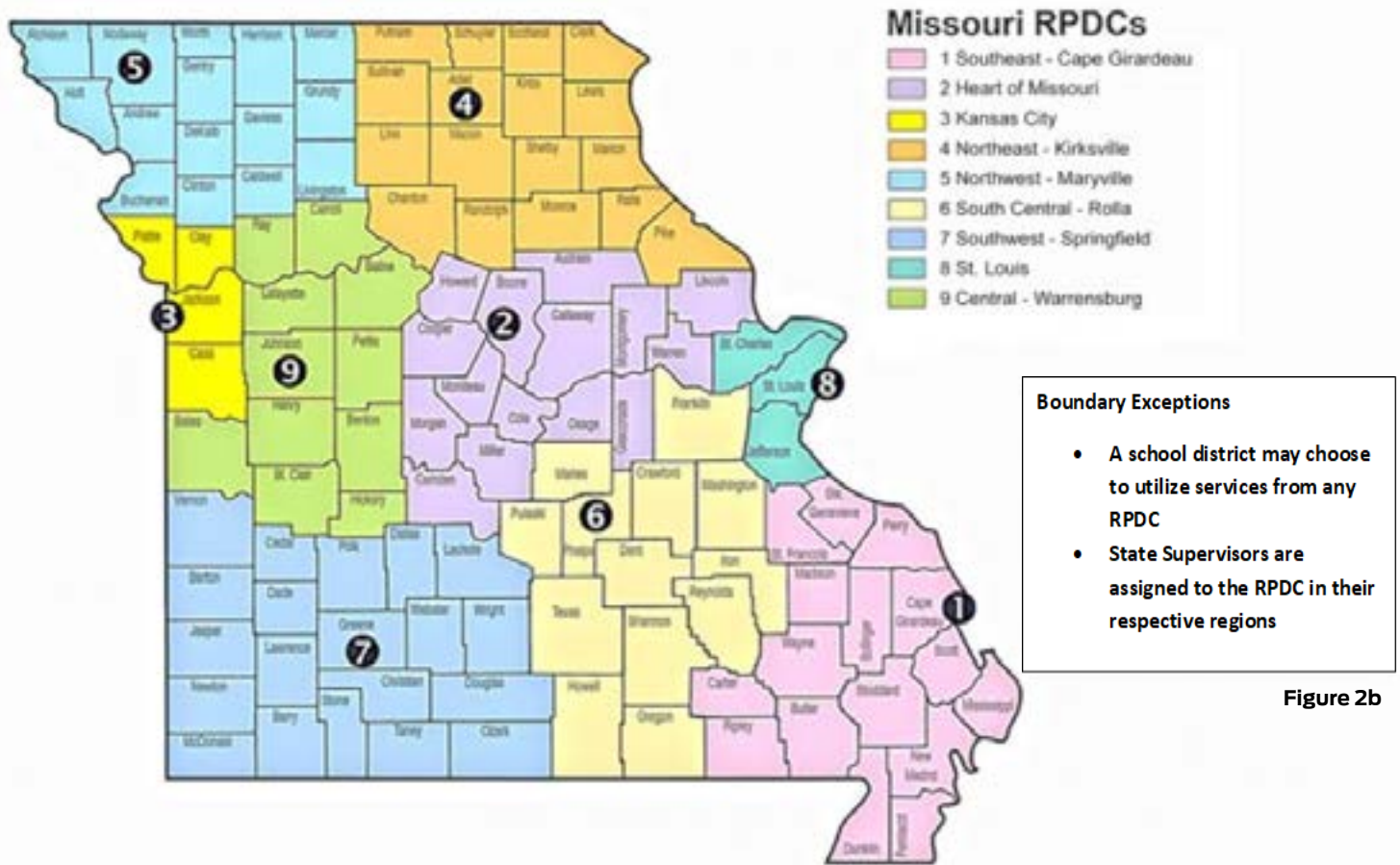

Missouri RPDCs
- 1 Southeast - Cape Girardeau
- 2 Heart of Missouri
- 3 Kansas City
- 4 Northeast - Kirksville
- 5 Northwest - Maryville
- 6 South Central - Rolla
- 7 Southwest - Springfield
- 8 St. Louis
- 9 Central - Warrensburg

Boundary Exceptions
- A school district may choose to utilize services from any RPDC
- State Supervisors are assigned to the RPDC in their respective regions

Figure 2b

Twenty-six Consultants with a total of 18.2 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 Tiers 2 and 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 a 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.

2012-2018 MOSW-PBS State Personnel Education & Professional Credentials

	Admin/Program Dir	Classroom Tchr	Special Educator	Specialist/ Counselor	Researcher	College Instructor	Curric. Coordin.	Internal Coach	External Coach	Sports Coach
2011-2012	16	25	14	17	5	8	4	13	30	10
2012-2013	15	24	13	15	5	8	4	12	28	11
2013-2014	14	24	13	14	5	7	3	13	28	10
2014-2015	17	25	7	10	3	7	11	12	32	4
2015-2016	19	27	7	10	3	7	3	13	12	5
2016-2017	18	31	7	10	3	1	6	16	10	10
2017-2018	20	27	7	6	5	10	6	13	10	9
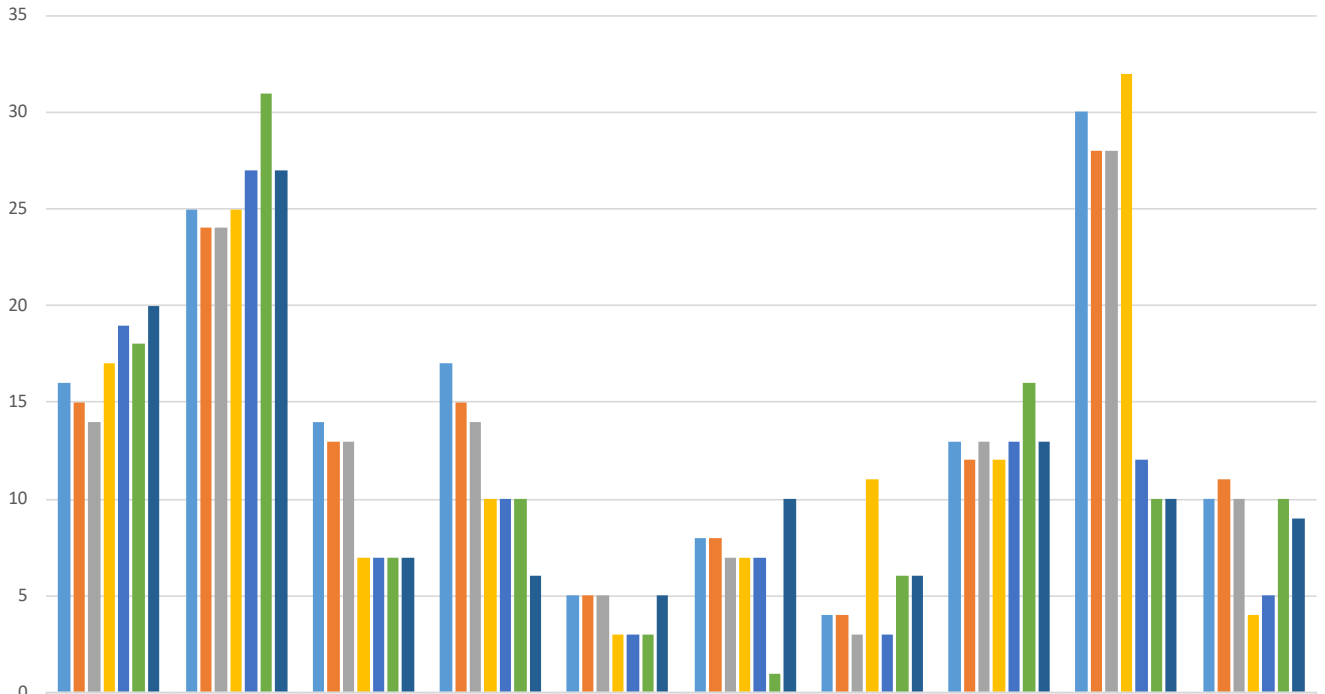
Figure 2c

 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 2017–2018 implementation year, Consultants had a combined total of 765 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 273,895 (30.5% of all Missouri students) in the 2017–2018 school year.
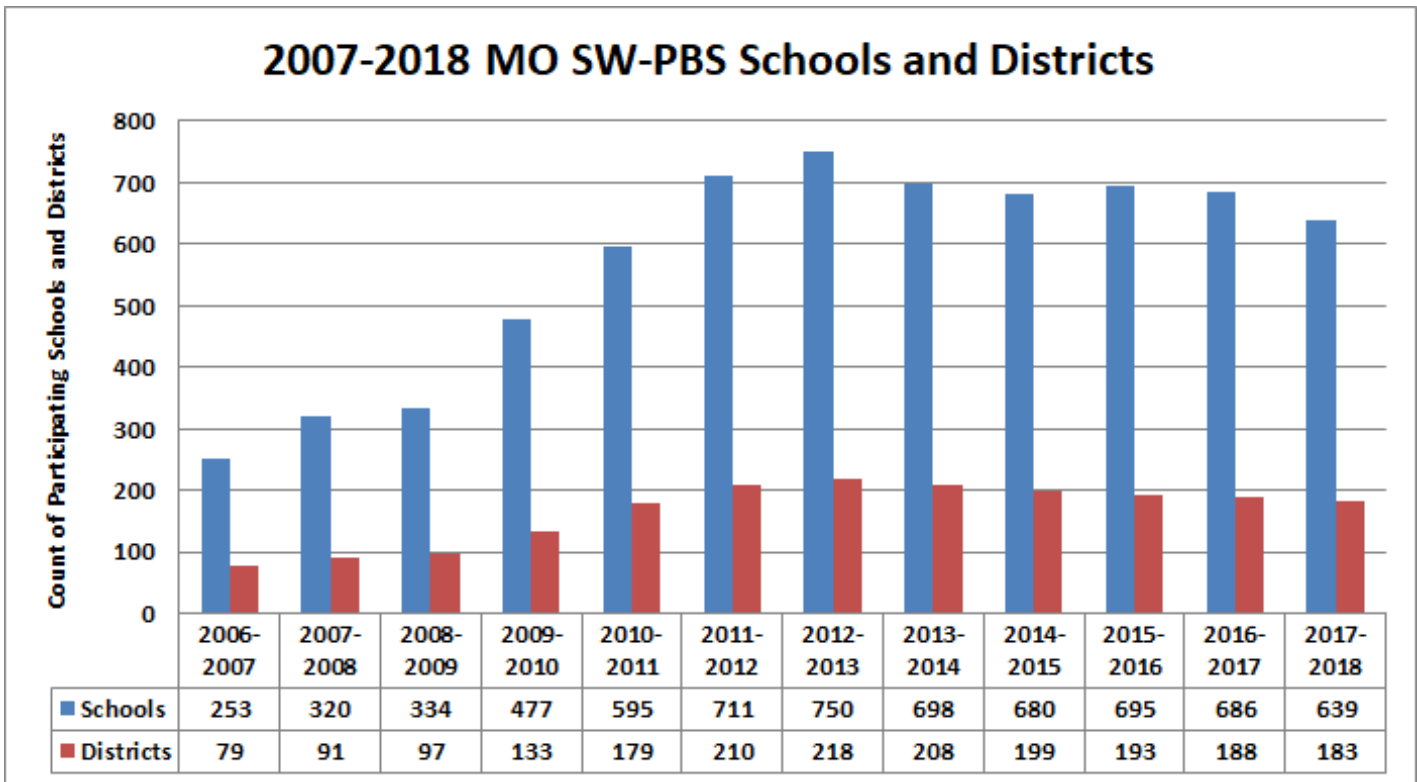
2007-2018 MO SW-PBS Schools and Districts

	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018
■ Schools	253	320	334	477	595	711	750	698	680	695	686	639
■ Districts	79	91	97	133	179	210	218	208	199	193	188	183

Figure 3a

The number of schools and districts working with MO SW-PBS increased from 2006–2007 school year through the 2012– 2013 school year, when the count peaked at 750 schools in 218 districts. The number of schools and districts served by MO SW-PBS has since decreased. It is important to note that beginning with the 2011–2012 school year, there was a 50% reduction in Tier 1 full time equivalent (FTE) for MO SW-PBS personnel. This resulted in fewer FTE to recruit and retain participating schools for Tier 1 work in 2012–2013 and beyond. During the 2017–2018 school year 639 schools were active participants, accounting for 26.9% of all Missouri public and charter schools. These schools were from 183 districts or 32.8% of all Missouri districts.

2007-2018 MO SW-PBS Schools by Grade Level

	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018
Early Child	8	11	13	18	17	29	29	27	30	33	27	27
Elementary	167	207	211	299	367	429	458	449	428	438	433	405
Middle / Jr. High	44	59	60	84	108	127	132	110	107	114	114	109
High School	21	25	30	49	66	75	77	69	68	69	67	60
Alternative	10	11	12	14	23	36	37	30	29	26	33	28
K-8 / K-12	2	3	5	6	7	13	15	12	11	12	10	8
Career / Technical	0	1	1	1	1	1	1	1	3	3	2	2

Figure 3b

The majority of MO SW-PBS participating schools continue to be those serving elementary grade levels. While the number of schools has decreased in all categories except Early Childhood, the proportion of participating schools represented by the different grade configurations has remained relatively constant.
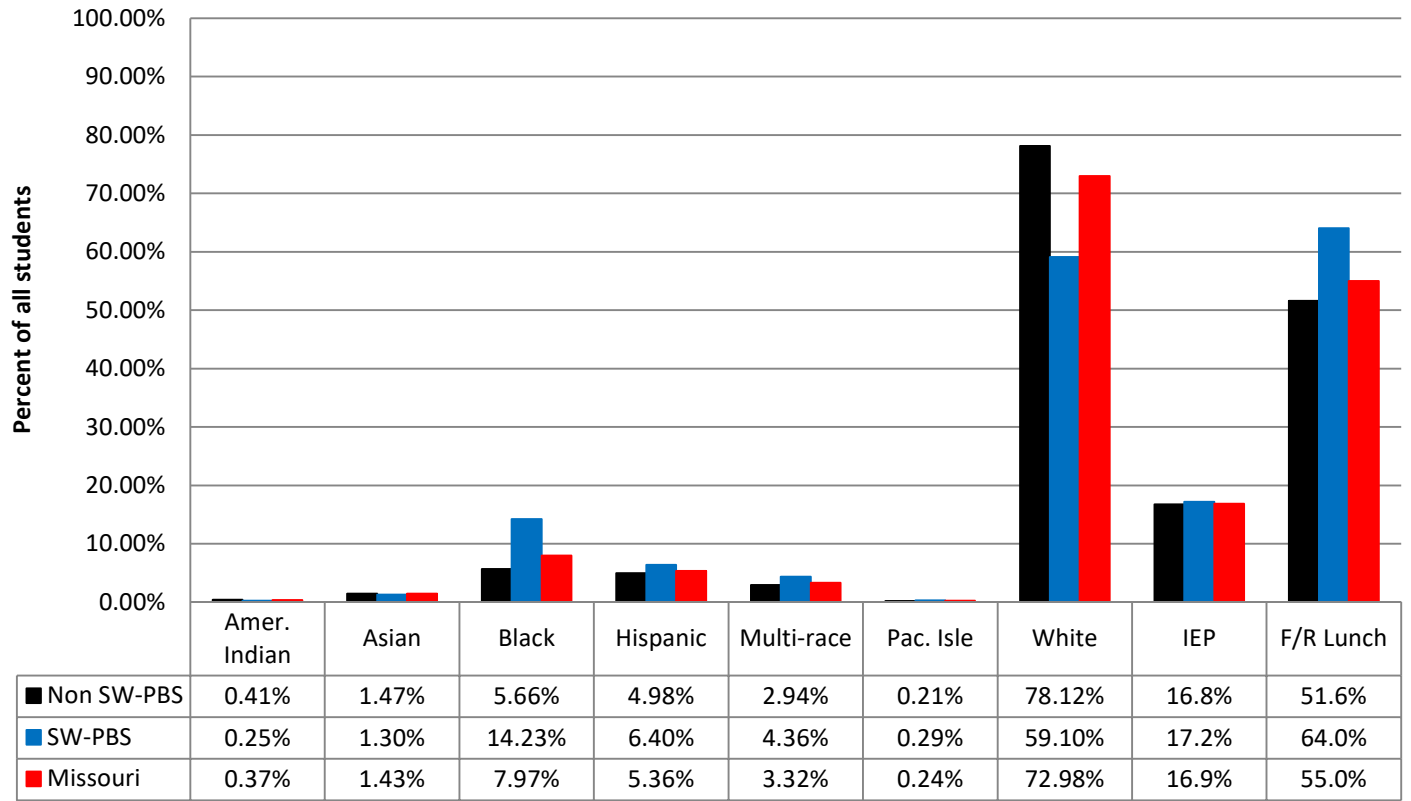
2018 Student Demographics, by SW-PBS Status

	Amer. Indian	Asian	Black	Hispanic	Multi-race	Pac. Isle	White	IEP	F/R Lunch
■ Non SW-PBS	0.41%	1.47%	5.66%	4.98%	2.94%	0.21%	78.12%	16.8%	51.6%
■ SW-PBS	0.25%	1.30%	14.23%	6.40%	4.36%	0.29%	59.10%	17.2%	64.0%
■ Missouri	0.37%	1.43%	7.97%	5.36%	3.32%	0.24%	72.98%	16.9%	55.0%

Figure 3c

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

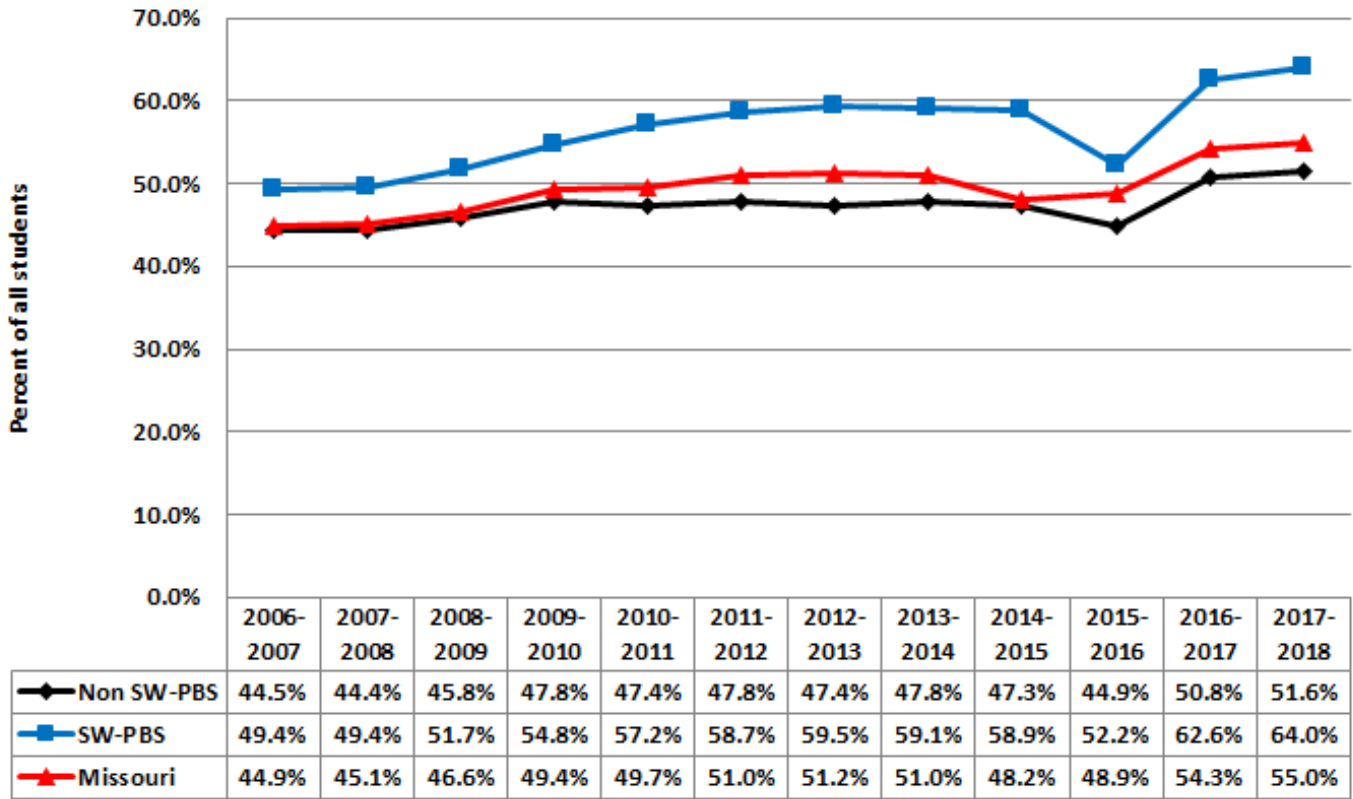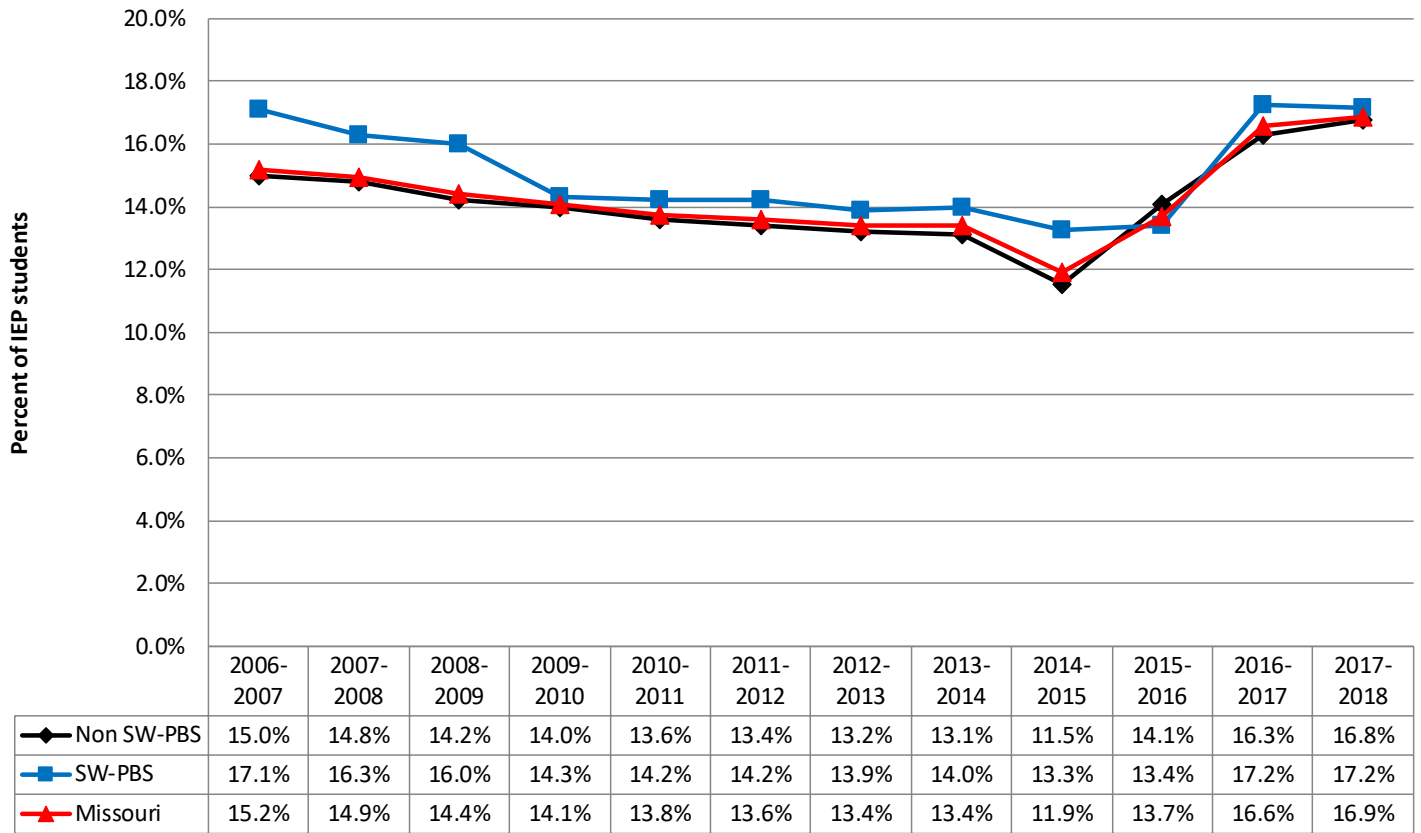## 2007-2018 Students w/ F/R Lunch, by SW-PBS Status

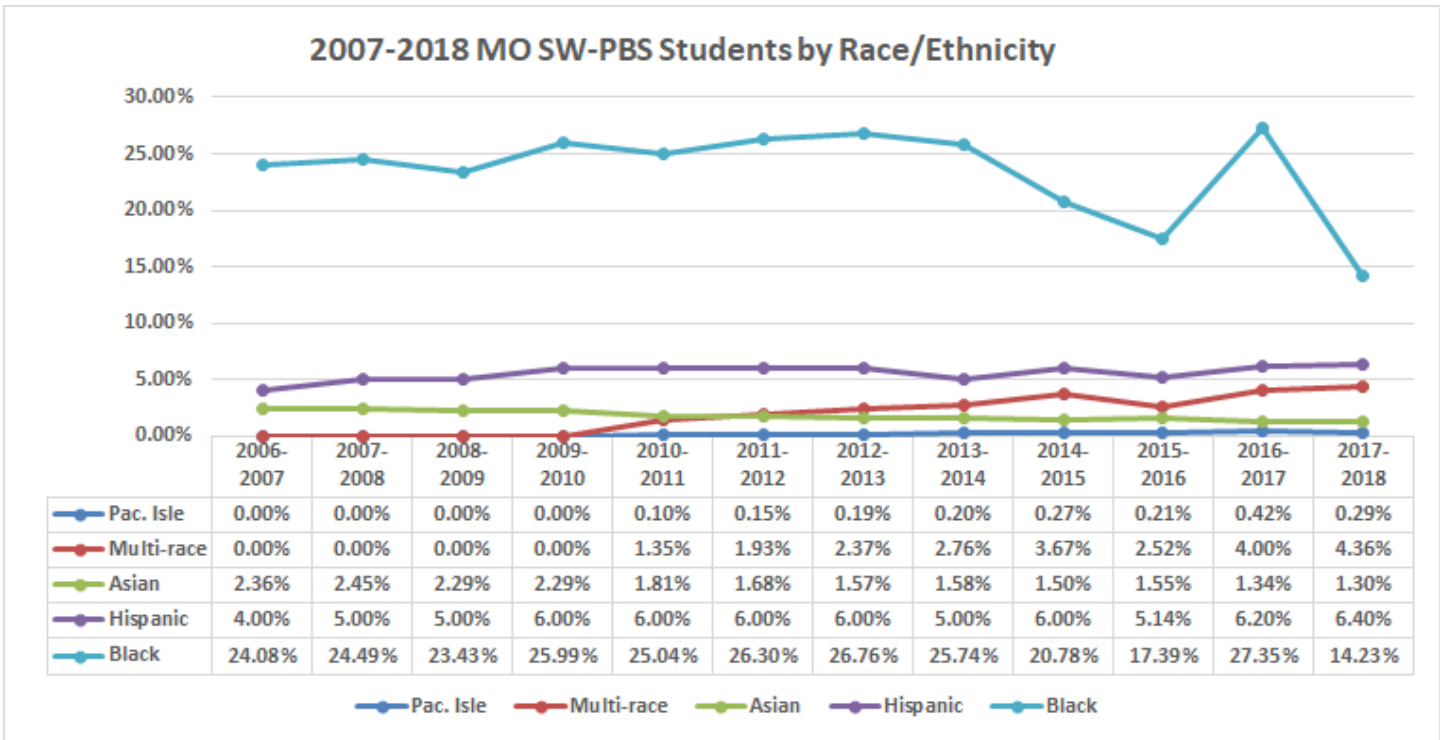|	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018
Non SW-PBS	44.5%	44.4%	45.8%	47.8%	47.4%	47.8%	47.4%	47.8%	47.3%	44.9%	50.8%	51.6%
SW-PBS	49.4%	49.4%	51.7%	54.8%	57.2%	58.7%	59.5%	59.1%	58.9%	52.2%	62.6%	64.0%
Missouri	44.9%	45.1%	46.6%	49.4%	49.7%	51.0%	51.2%	51.0%	48.2%	48.9%	54.3%	55.0%

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. While it appears that all Missouri schools are serving more students on Free and Reduced Lunch, the gap between MO SW-PBS schools and both Non-MO SW-PBS schools and all Missouri schools widened during both the 2016–2017 and 2017–2018 school years.

2007-2018 Students w IEPs, by SW-PBS Status

	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018
Non SW-PBS	15.0%	14.8%	14.2%	14.0%	13.6%	13.4%	13.2%	13.1%	11.5%	14.1%	16.3%	16.8%
SW-PBS	17.1%	16.3%	16.0%	14.3%	14.2%	14.2%	13.9%	14.0%	13.3%	13.4%	17.2%	17.2%
Missouri	15.2%	14.9%	14.4%	14.1%	13.8%	13.6%	13.4%	13.4%	11.9%	13.7%	16.6%	16.9%

Figure 3e

IEP rates were calculated for all PK-12 students. Figure 3e shows that SW-PBS schools have historically served more students with disabilities than have 1) all Missouri schools, and 2) Non-SW-PBS schools. 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.

2007-2018 MO SW-PBS Students by Race/Ethnicity

	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018
Pac. Isle	0.00%	0.00%	0.00%	0.00%	0.10%	0.15%	0.19%	0.20%	0.27%	0.21%	0.42%	0.29%
Multi-race	0.00%	0.00%	0.00%	0.00%	1.35%	1.93%	2.37%	2.76%	3.67%	2.52%	4.00%	4.36%
Asian	2.36%	2.45%	2.29%	2.29%	1.81%	1.68%	1.57%	1.58%	1.50%	1.55%	1.34%	1.30%
Hispanic	4.00%	5.00%	5.00%	6.00%	6.00%	6.00%	6.00%	5.00%	6.00%	5.14%	6.20%	6.40%
Black	24.08%	24.49%	23.43%	25.99%	25.04%	26.30%	26.76%	25.74%	20.78%	17.39%	27.35%	14.23%

Figure 3f

During the 2017–2018 school year, MO SW-PBS continued to serve a slightly more diverse student population than the rest of the state. MO SW-PBS schools serve a smaller proportion of White students and larger pro- portions of African American, Multi-Racial, and Hispanic students than all other Missouri schools. However, with the exception of the 2016–2017 school year, there has been a steady decline in the percentage of African American students in MO SW-PBS schools, a trend that continued in 2017–2018.
MO SW-PBS Goal: 1, 5; MO DESE Goal: 2; SPP Indicator 6, 7

INPUT

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

Question 4

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

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

The MO SW-PBS Consultants continued to improve and refine professional development curriculum and activities during 2017–2018 , ensuring a logical and meaningful progression of knowledge and skill acquisition across all three tiers. Training and technical assistance was provided regionally by consultants for school teams at the Exploration Phase, the three phases of Tier 1 (Preparation, Emerging, and Emerging Advanced), and the four training phases of Tiers 2 and 3. The training curriculum is provided across the 3 tiers with a focus on distinct preparation/piloting and implementation phases at each tier. The logic for the structure was aligned with the evidence-based phases identified by the National Implementation Research Network, or NIRN (Fixsen, Naoom, Blasé, Friedman, & Wallace, 2005). As NIRN (2009) reminds us, "The failure to utilize research rests in large part on a faulty or non-existent implementation infrastructure." MO SW-PBS training and technical assistance are designed to support fidelity of implementation and long-term sustainability.
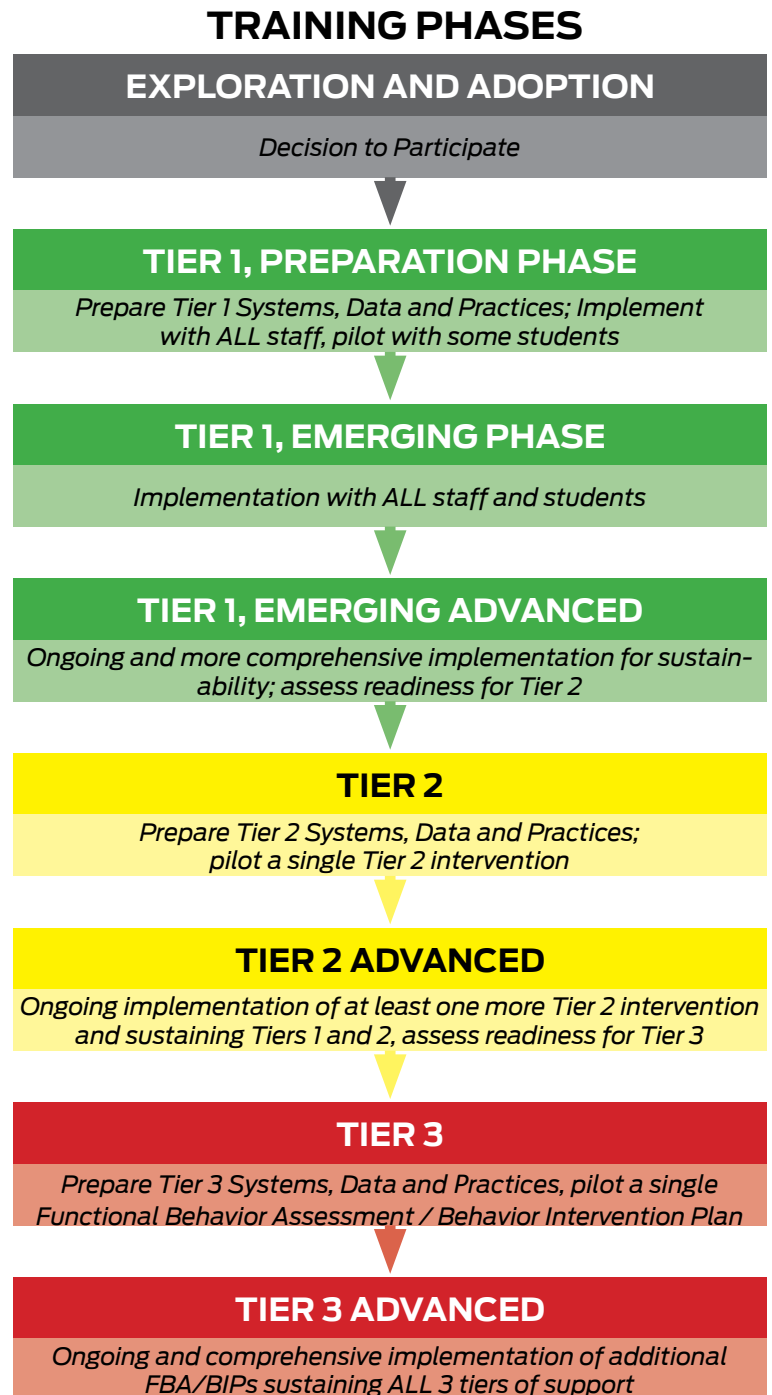
TRAINING PHASES

EXPLORATION AND ADOPTION

Decision to Participate

TIER 1, PREPARATION PHASE

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

TIER 1, EMERGING PHASE

Implementation with ALL staff and students

TIER 1, EMERGING ADVANCED

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

TIER 2

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

TIER 2 ADVANCED

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

TIER 3

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

TIER 3 ADVANCED

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

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% 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.

Administer Overview — School/District Survey of Staff — Faculty & Staff Support Attained — Application Submitted

JANUARY — FEBRUARY — MARCH — APRIL

Administrator Agreement Secured — Overview/ Introduction to Staff
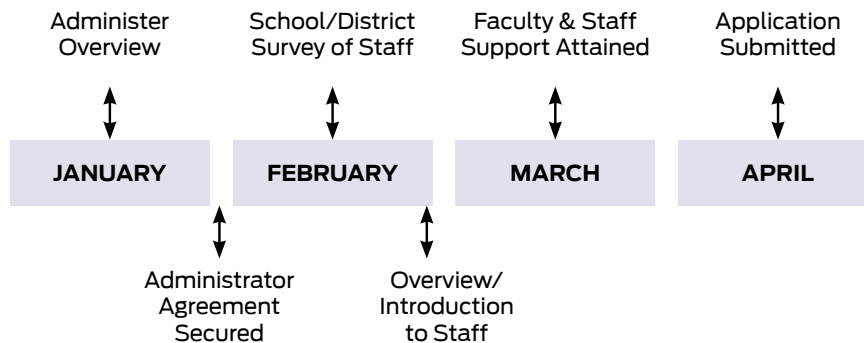
Figure 4b

Tier 1 Processional 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://pbismissouri. org/tier-1-workbook-resources/.

Approximately 160 standardized, regional Tier 1 training sessions were conducted throughout the 2017–2018 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 Webex were also employed to increase consultants' opportunities to participate in school-based activities.

Tier 2 Professional Development

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

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

During the 2017–2018 implementation year MO SW-PBS provided 82 standardized Tier 2 training sessions across 9 RPDCs. All Tier 2 resources can be accessed at http://pbismissouri.org/tier-2-workbook-resources/.

Tier 3 Professional Development

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

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

During the 2017–2018 implementation year MO SW-PBS provided 66 Tier 3 standardized training sessions in all RPDCs. All Tier 3 resources can be accessed at http://pbismissouri.org/tier-3-workbook-resources/.

Summer Training Institute

In addition to the regional trainings at Tiers 1, 2 & 3 the Twelfth Annual Summer Training Institute (STI), **MO SW-PBS and MTSS: Bridging the Gaps** 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 Institute traditionally ends the implementation year and kicks off the upcoming training year. As such, Summer Institute 2017 set the stage for training during the 2017–2018 school year. Over 966 participants attended the 2017 summer event.
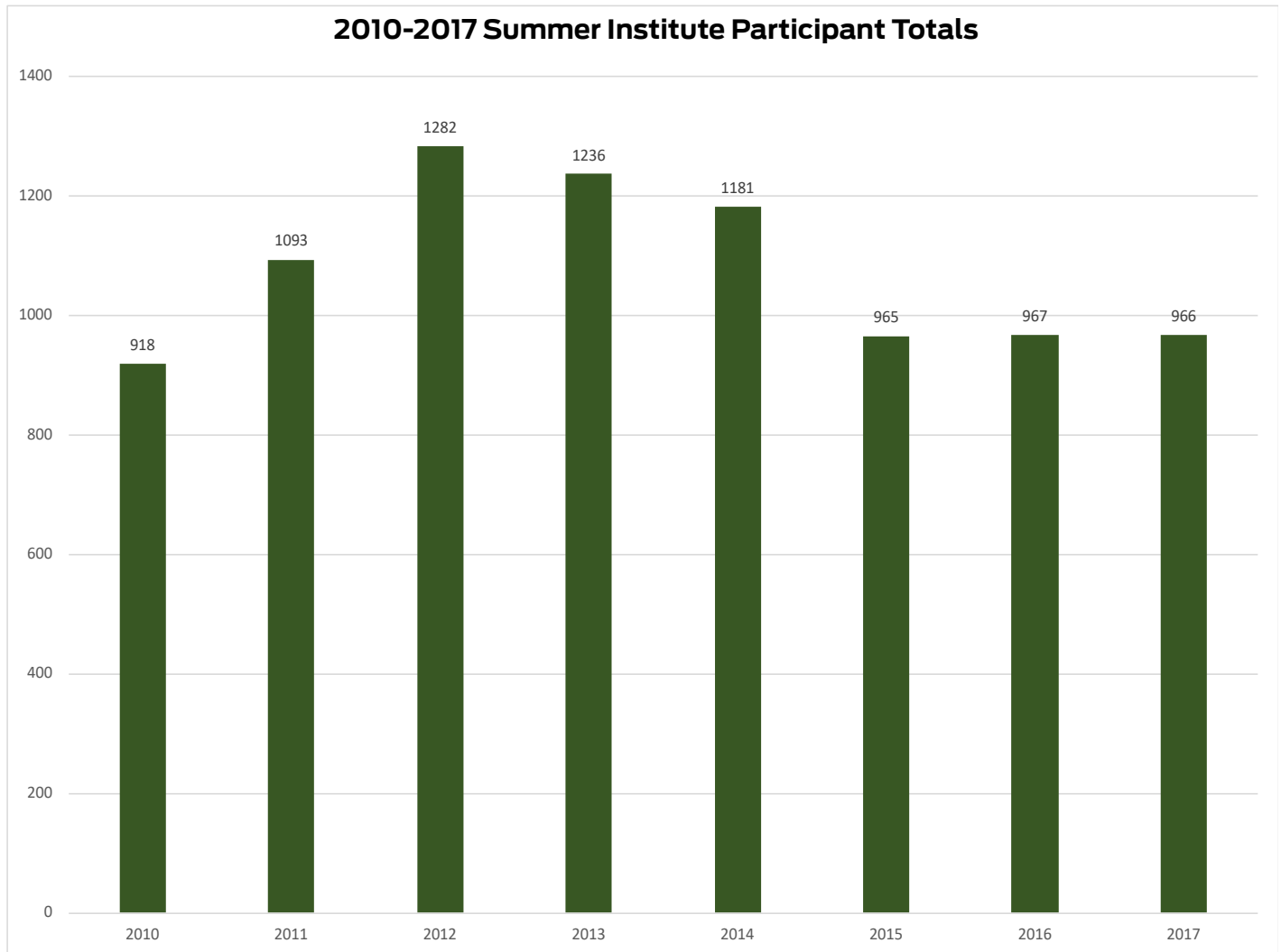
2010-2017 Summer Institute Participant Totals

Year	Participants
2010	918
2011	1093
2012	1282
2013	1236
2014	1181
2015	965
2016	967
2017	966

Figure 5a

Additionally, over 4,666 participants attended 4 to 6 standardized regional training sessions throughout the 2017-2018 year for each phase and/or level. Preparation and Emerging teams attended six total sessions, each, while Emerging Advanced teams and teams at all phases of Tier 2 and Tier 3 attended four sessions each. Over time, we have experienced an increase in the numbers of schools training at Tiers 2 and 3, even as we have experienced a decrease in Tier 1 training. Because the number of participants we report is the sum of participants at each training session (as opposed to individuals who were trained at least once), some of the decrease in participants is explained by the shift in the number of schools from Tier 1, where there are six training sessions, to Emerging Advanced and Tiers 2 and 3, where there are only four training sessions, each.
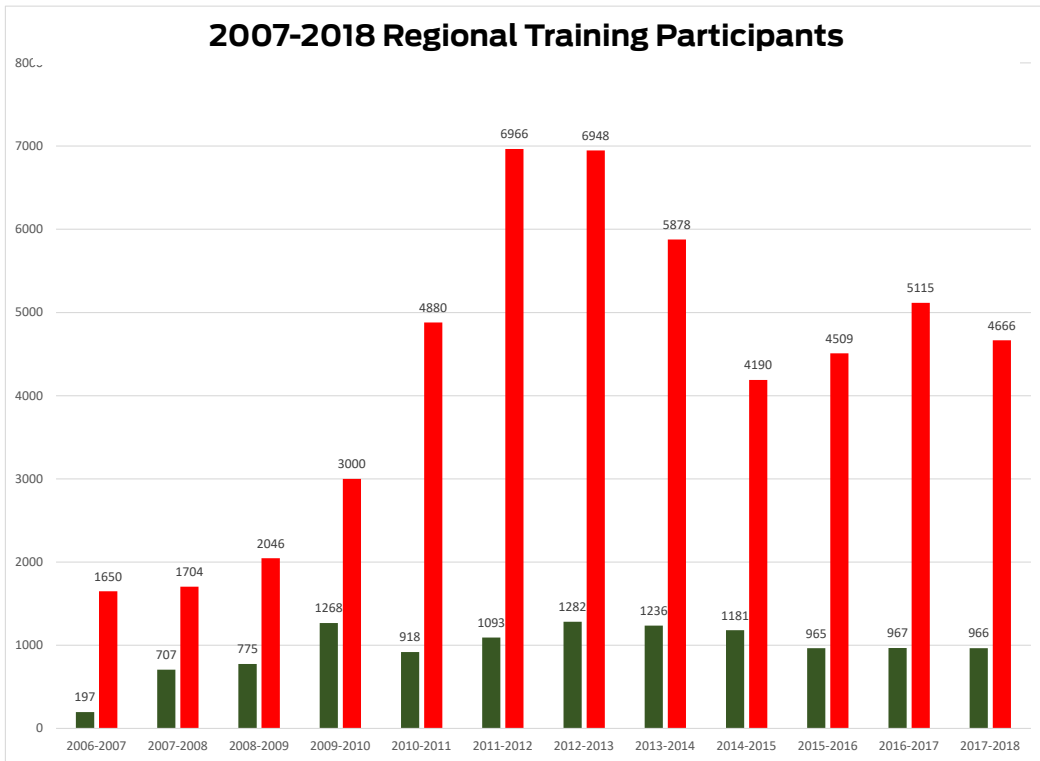
2007-2018 Regional Training Participants

	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018
Green	197	707	775	1268	918	1093	1282	1236	1181	965	967	966
Red	1650	1704	2046	3000	4880	6966	6948	5878	4190	4509	5115	4666

Figuure 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, and 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 2017 Summer Training Institute.
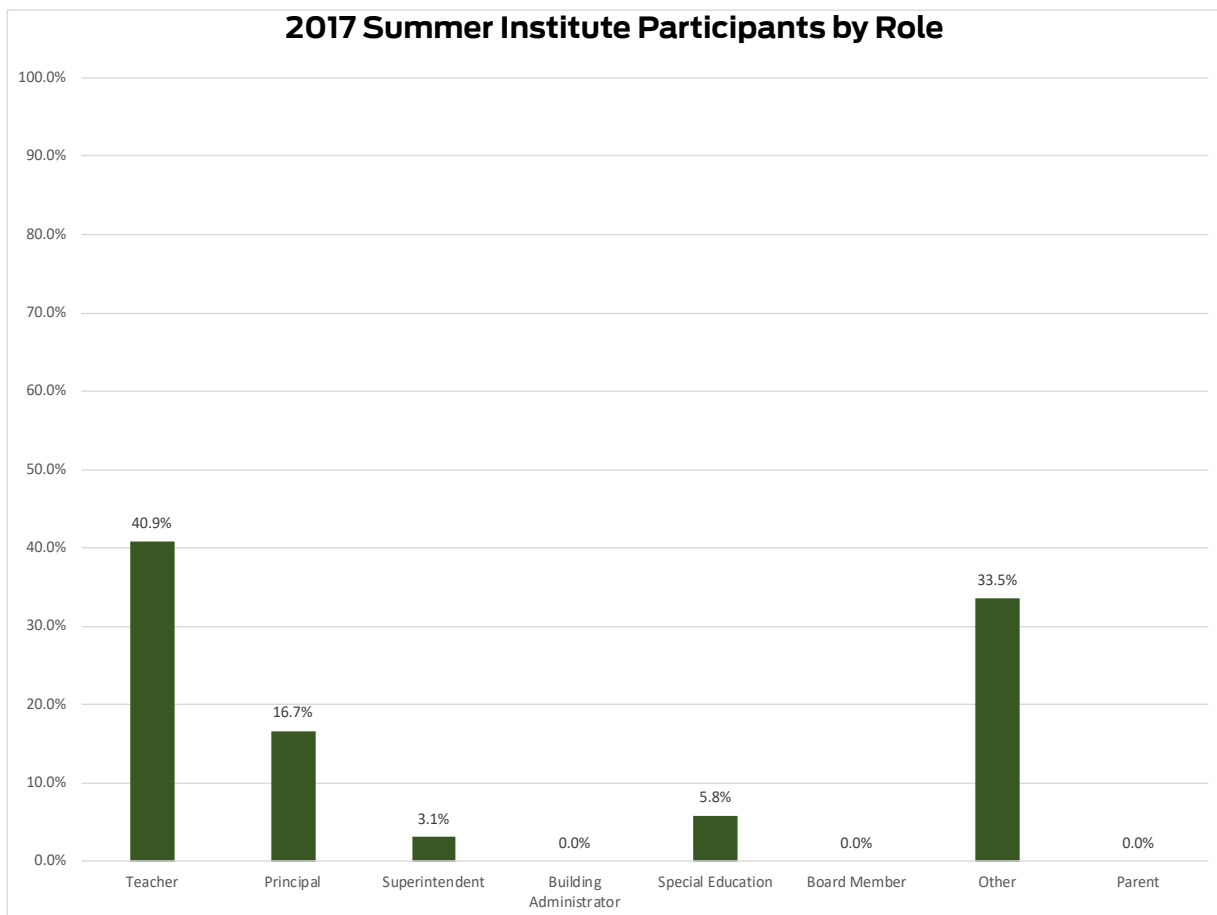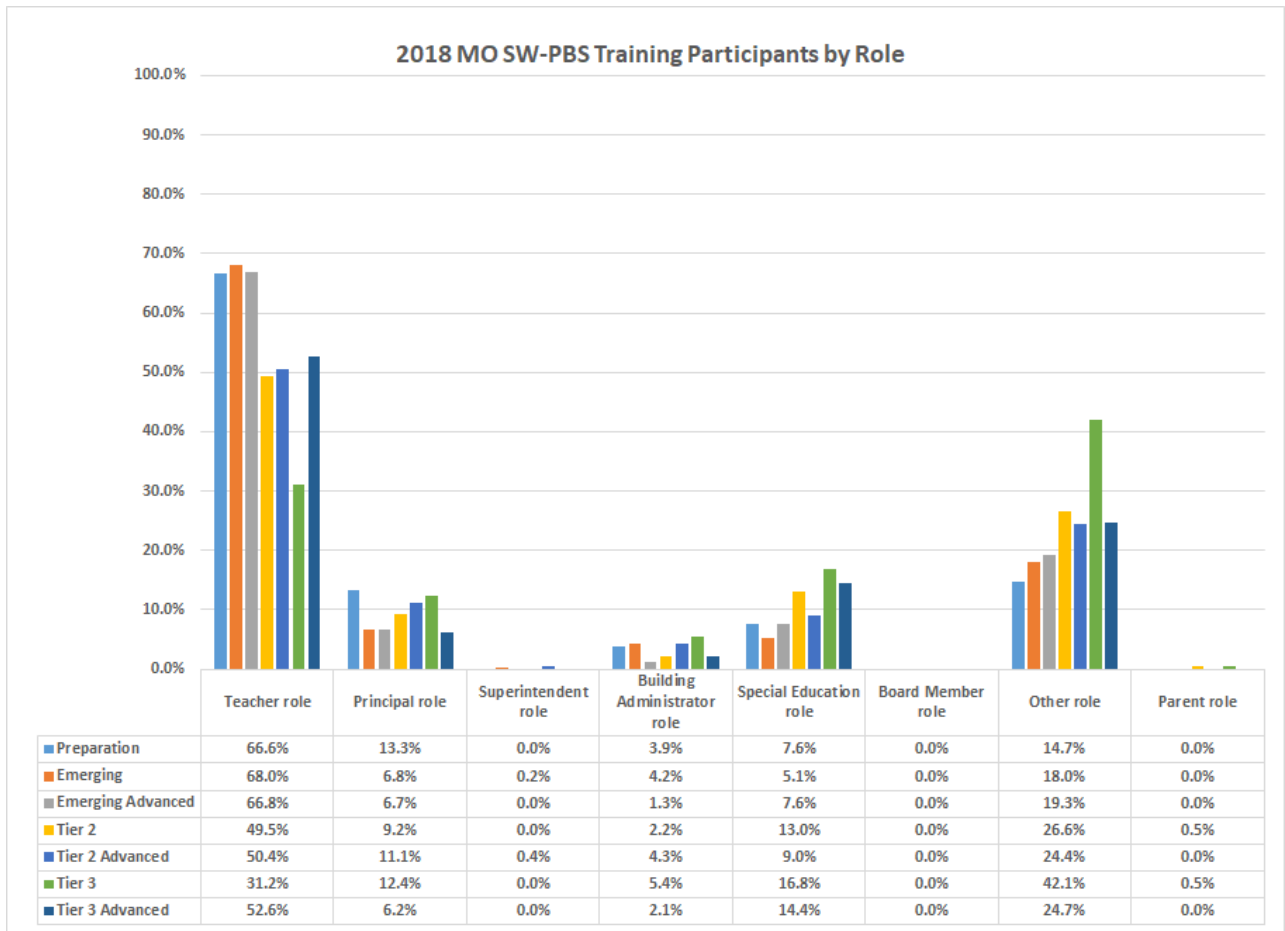
2017 Summer Institute Participants by Role

Teacher	Principal	Superintendent	Building Administrator	Special Education	Board Member	Other	Parent
40.9%	16.7%	3.1%	0.0%	5.8%	0.0%	33.5%	0.0%

Figure 5c

2018 MO SW-PBS Training Participants by Role

	Teacher role	Principal role	Superintendent role	Building Administrator role	Special Education role	Board Member role	Other role	Parent role
Preparation	66.6%	13.3%	0.0%	3.9%	7.6%	0.0%	14.7%	0.0%
Emerging	68.0%	6.8%	0.2%	4.2%	5.1%	0.0%	18.0%	0.0%
Emerging Advanced	66.8%	6.7%	0.0%	1.3%	7.6%	0.0%	19.3%	0.0%
Tier 2	49.5%	9.2%	0.0%	2.2%	13.0%	0.0%	26.6%	0.5%
Tier 2 Advanced	50.4%	11.1%	0.4%	4.3%	9.0%	0.0%	24.4%	0.0%
Tier 3	31.2%	12.4%	0.0%	5.4%	16.8%	0.0%	42.1%	0.5%
Tier 3 Advanced	52.6%	6.2%	0.0%	2.1%	14.4%	0.0%	24.7%	0.0%

Figure 5d

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

Question 6

What was the perceived value of the professional development?

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

2017 Summer Institute Participant Feedback

Category	Percentage
The presenter was knowledgeable about this subject.	99.2%
Overall breakout session materials were clear and well organized.	96.0%
Overall the instructional/presentation skills were effective & appropriate.	94.3%
Overall the ideas, skills, and strategies will be useful in improving student learning.	93.5%
Overall the information and/or strategies presented will impact my teaching and/or leadership role.	92.3%

Figure 6a

The 2017 Summer Training Institute Feedback reports the percentage of all participants who either agreed or strongly agreed with the survey questions. In addition, comments from participants who attended the Summer Institute shared the value of the event and how it related to their SW-PBS work:

"The administrator breakfast was great — loved getting to hear a speaker discuss an admin topic. This is definitely something to do next year!"

"I learned a lot about how to identify the function of behavior and adult errors in responding to these behaviors."

"Good introduction and the overview of the must-knows of PBS."

"Received info that can take back and use in school. Behavior is functionally related to the teaching environment."

"I was able to share several ideas with my team on how to regenerate buy-in."

"I'm so excited about the new, updated website! Super excited about the online courses as a way to supplement training of our new staff. :)"

"I got a better theoretical understanding of the PBS system and how I can implement it in my classroom."

"Presenter did a great job of aligning all theories and practices into an applicable context. I also appreciate [that] she surveyed the group at the start to ensure she hit the most important questions."

2018 MO SW-PBS Participant Feedback by Training Level

	The presenter was knowledgable about this subject.	Workshop materials were clear and well organized.	Instructional/presentation skills were effective and appropriate.	Ideas, skills, and stategies will be useful in improving student learning.	The information and/or strategies presented will impact my teaching and/or leadership role.
Preparation	98.9%	97.5%	97.5%	92.6%	96.8%
Emerging	99.5%	98.4%	95.3%	94.4%	97.7%
Emerging Advanced	99.0%	99.0%	99.2%	92.9%	98.5%
Tier 2	98.5%	96.3%	96.6%	94.4%	96.5%
Tier 2 Advanced	100.0%	99.1%	99.3%	97.9%	99.5%
Tier 3	100.5%	97.9%	99.8%	96.1%	96.2%
Tier 3 Advanced	99.3%	99.3%	99.3%	91.1%	100.0%

Figure 6b

Figure 6b reports the percentage of participants from regional trainings who either agreed or strongly agreed with the statements. These evaluations refer to content, presentation, and applicability of the MO SW-PBS curriculum. Feedback from participants indicates that they found the overall content and presentation style to be beneficial.

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 re-sources that were directed to it (Algozzine et al., 2010, p. 12). The answers to the following questions provide evidence that the Missouri SW- PBS essential components were in place.

Question 7

To what extent was SW-PBS implemented as designed?

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

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

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

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

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

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

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

Question 8

To what extent was SW-PBS implemented with fidelity?

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

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

Tier 1

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

Schools in the Emerging phase and beyond were expected to continue consistent data collection and analysis and to report data quarterly to consultants, with a statewide goal of 80% or better reporting. Participation by schools in the collection and submission of data (Big 5 data reports and team meeting minutes) to regional consultants remained just below 50% for both Big 5 Data Reports (48.8%) and Team Meeting Minutes, respectively. Beginning in the 2016–2017 school year, schools were expected to submit a "Solution Plan" (an action plan demonstrating that they used discipline data to make schoolwide decisions) rather than a Big 5 Data Report and Team Meeting Minutes. However, Big 5 Data Reports and Team Meeting Minutes were still accepted for those schools trained in Tier 1 Data Based Decision-Making prior to the 2016–2017 school year. The percentage of schools taking the School Safety Survey (Sprague, Colvin, & Irvin, 2002) declined from 74.4% of participating schools in 2016–2017 to 58.8% of participating schools in 2017–2018. Finally, 69.5% of participating schools took the EBS/SAS, an increase from 51.5% of participating schools from the previous school year. 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.
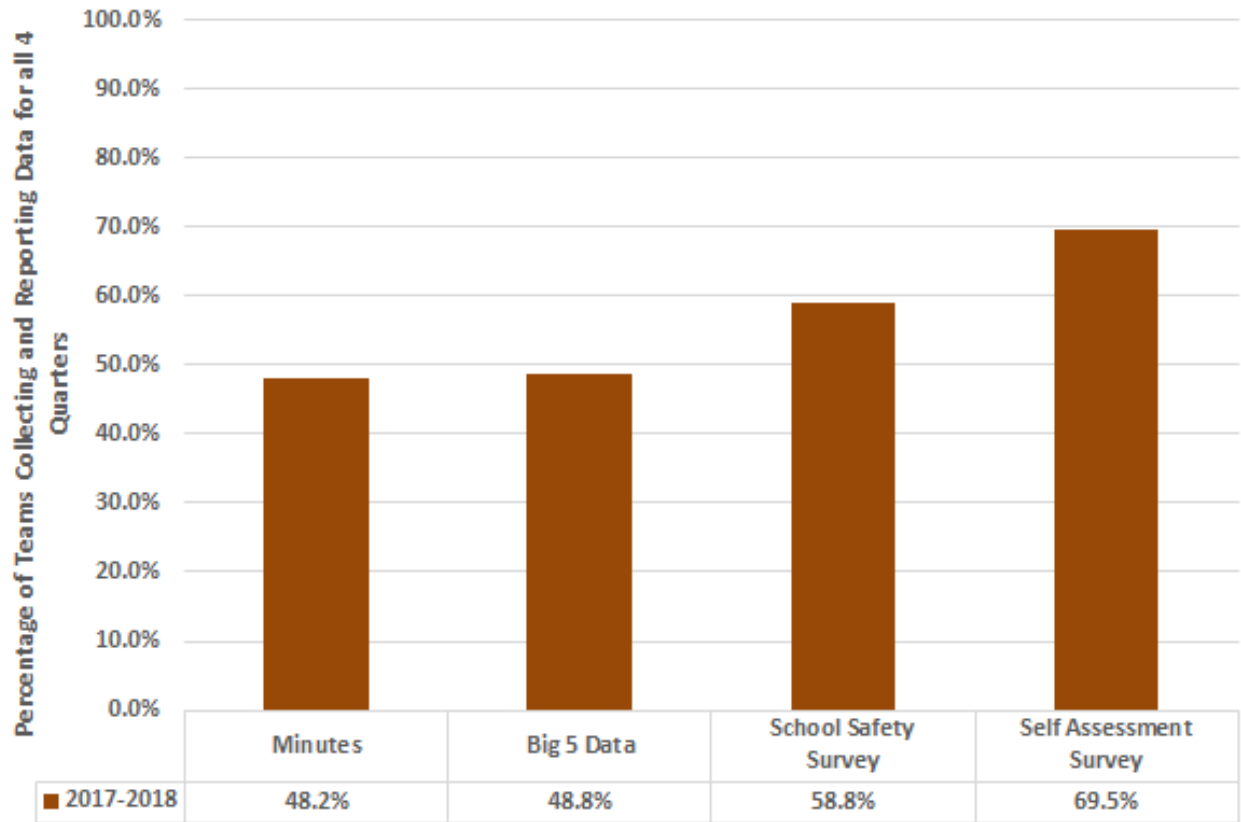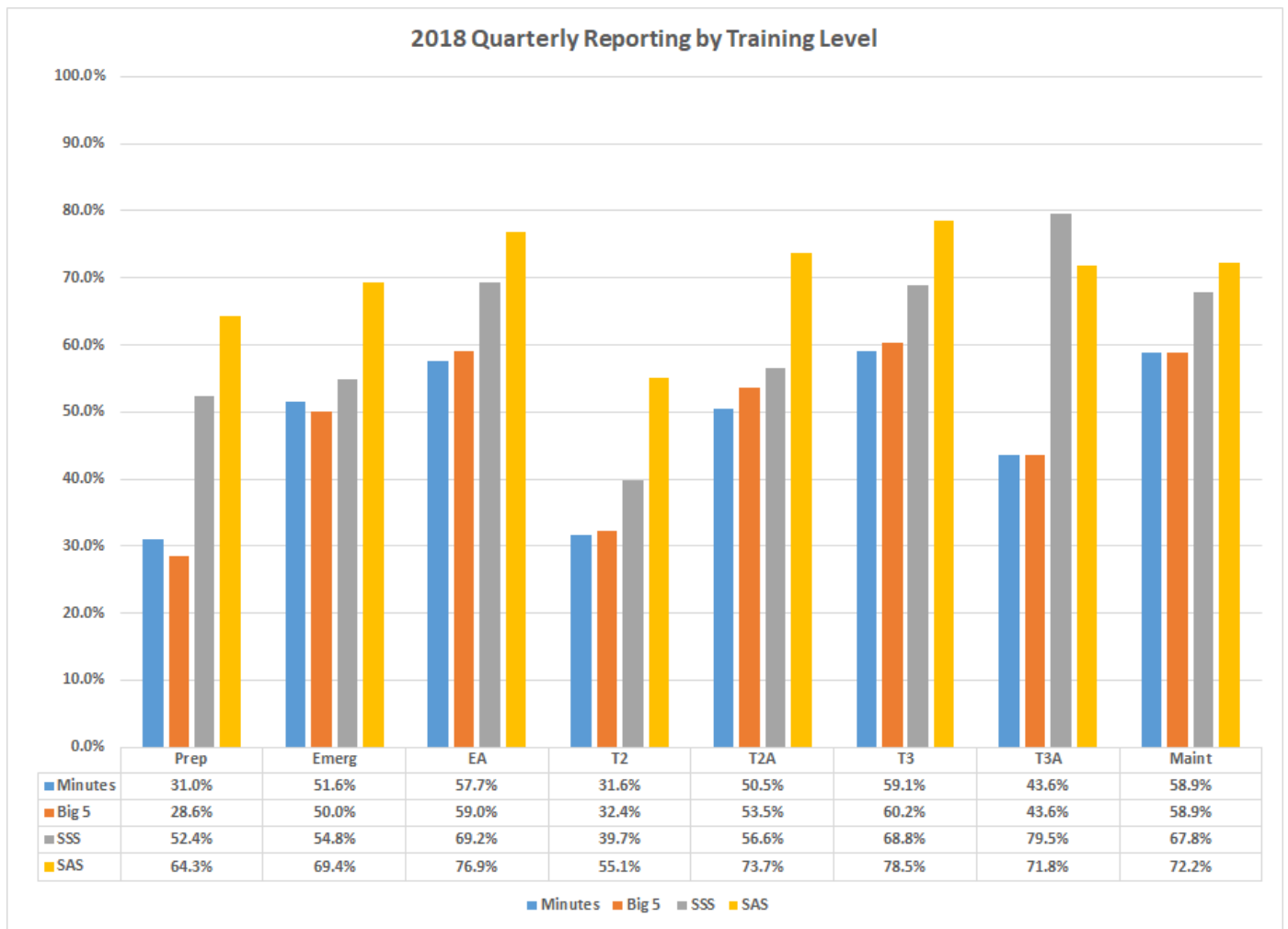
2018 Tier 1 Team Data Collection & Reporting

	Minutes	Big 5 Data	School Safety Survey	Self Assessment Survey
2017-2018	48.2%	48.8%	58.8%	69.5%

Figure 8a.1

2018 Quarterly Reporting by Training Level

	Prep	Emerg	EA	T2	T2A	T3	T3A	Maint
Minutes	31.0%	51.6%	57.7%	31.6%	50.5%	59.1%	43.6%	58.9%
Big 5	28.6%	50.0%	59.0%	32.4%	53.5%	60.2%	43.6%	58.9%
SSS	52.4%	54.8%	69.2%	39.7%	56.6%	68.8%	79.5%	67.8%
SAS	64.3%	69.4%	76.9%	55.1%	73.7%	78.5%	71.8%	72.2%

Figure 8a. 2

Figure 8a. 2 shows quarterly reporting by training level. This chart shows that as schools progress through training, they are more reliable in submitting Tier 1 data.
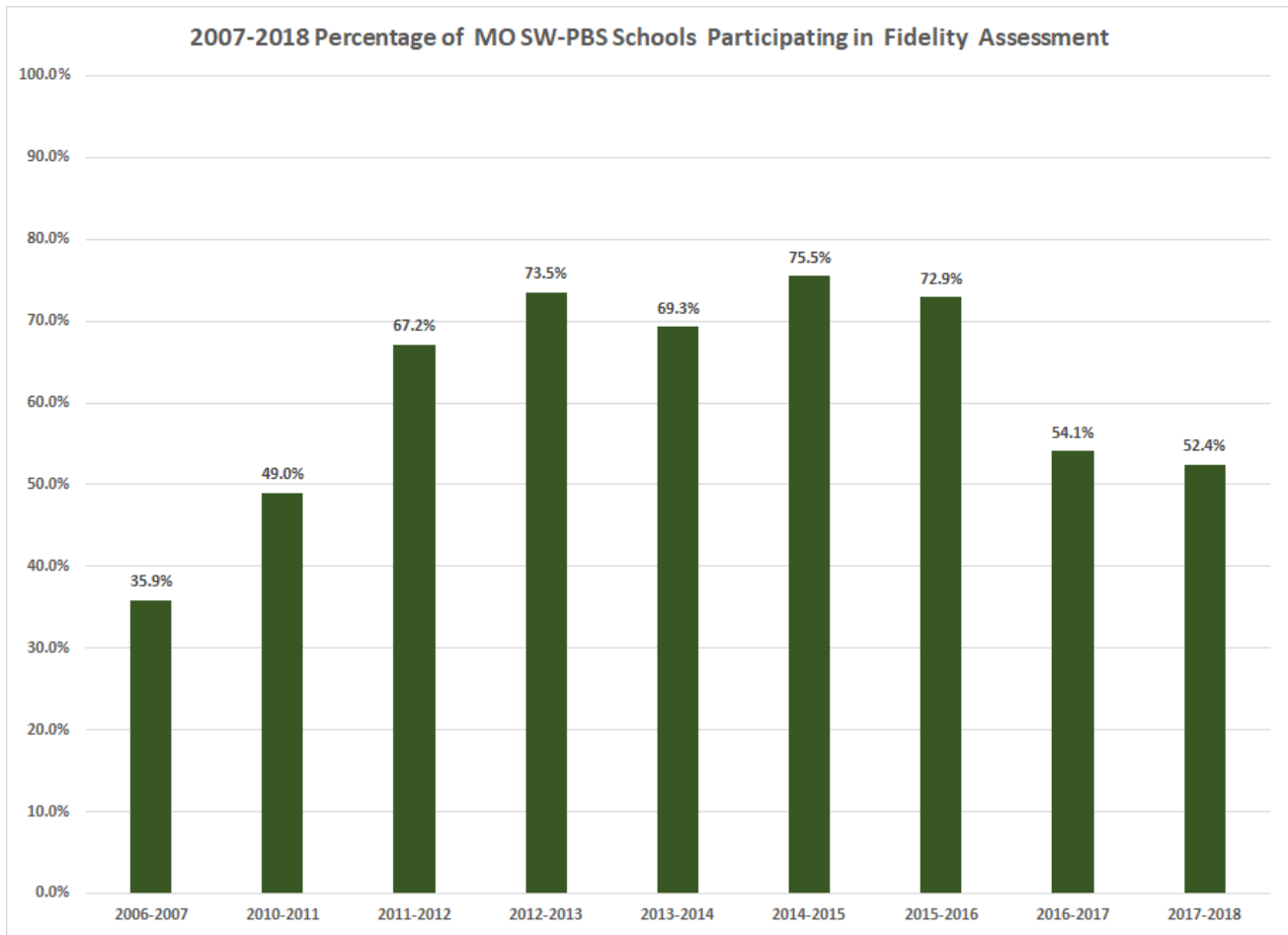
Figure 8b

2007–2018 MO SW-PBS Schools Participating in Fidelity Assessment

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 use 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 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 Schoolwide Positive Behavior Support. The SET was designed to determine:

- The extent to which schools are already implementing SW-PBS,
- The extent to which technical assistance efforts result in change 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 schoolwide implementation. Schools scoring 80% / 80% or above are implementing Schoolwide Positive Behavior Support at the Universal (or Tier 1) level with fidelity (Todd, Lewis-Palmer, Horner, Sugai, Sampson, & Phillips, 2003).
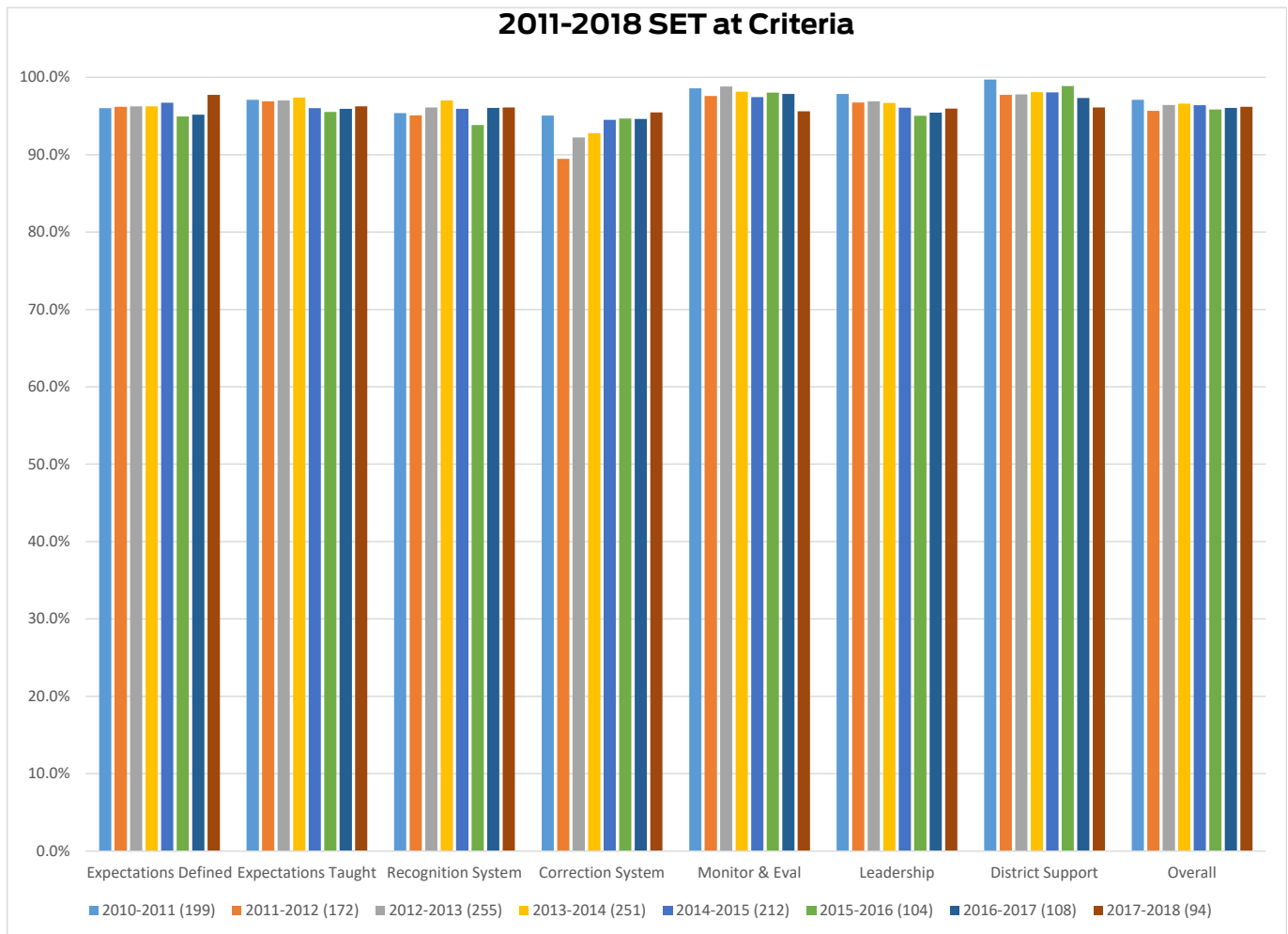

2011-2018 SET at Criteria

Legend: 2010-2011 (199), 2011-2012 (172), 2012-2013 (255), 2013-2014 (251), 2014-2015 (212), 2015-2016 (104), 2016-2017 (108), 2017-2018 (94)

Figure 8c

94 schools training at Emerging or beyond participated in a SET during 2017–2018. 77 of those schools (82%) 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
2017-2018	94	77	82%	17

2011-2018 SET Not at Criteria

Legend: 2010-2011 (21), 2011-2012 (13), 2012-2013 (13), 2013-2014 (11), 2014-2015 (7), 2015-2016 (15), 2016-2017 (15), 2017-2018 (17)
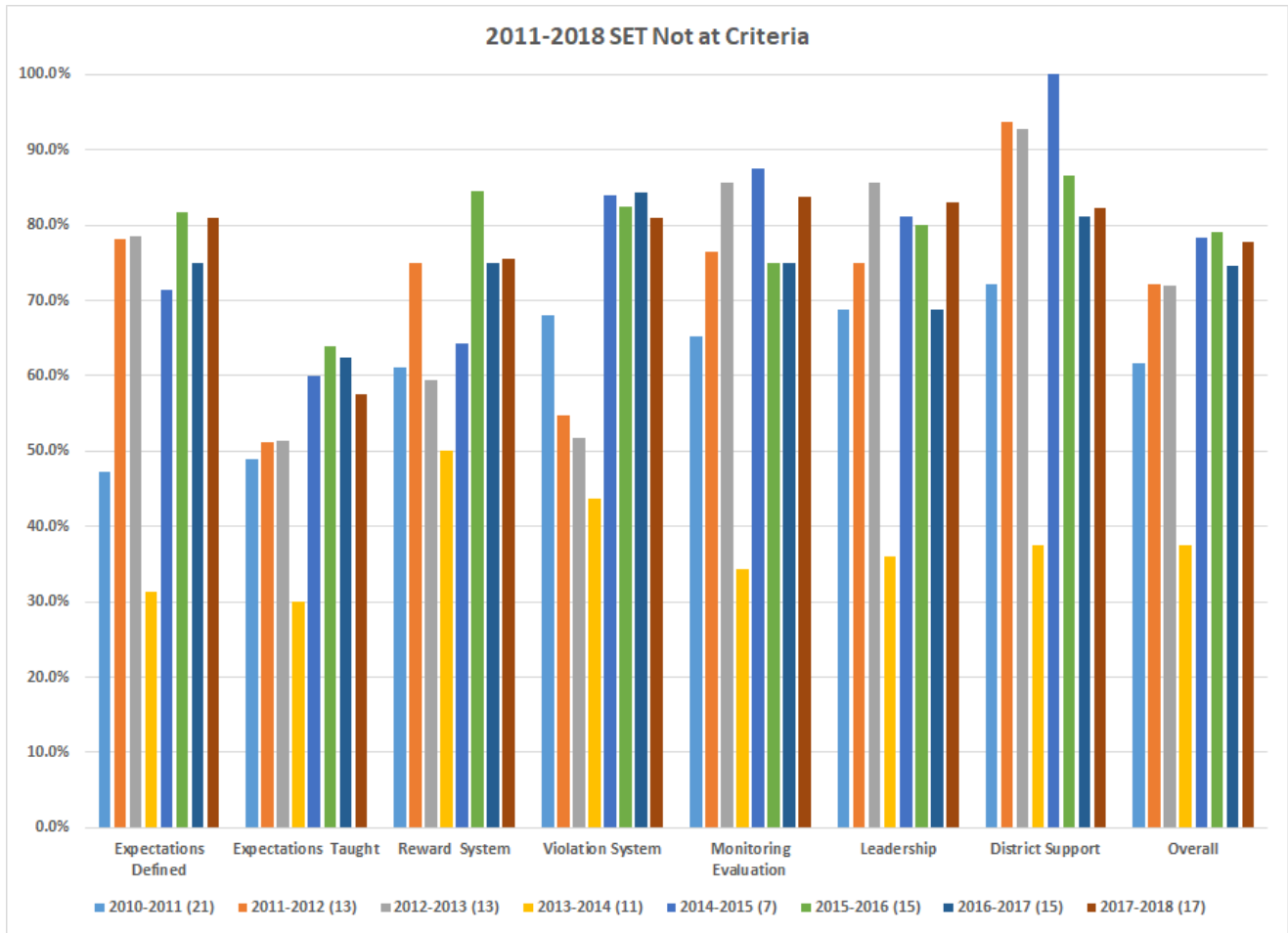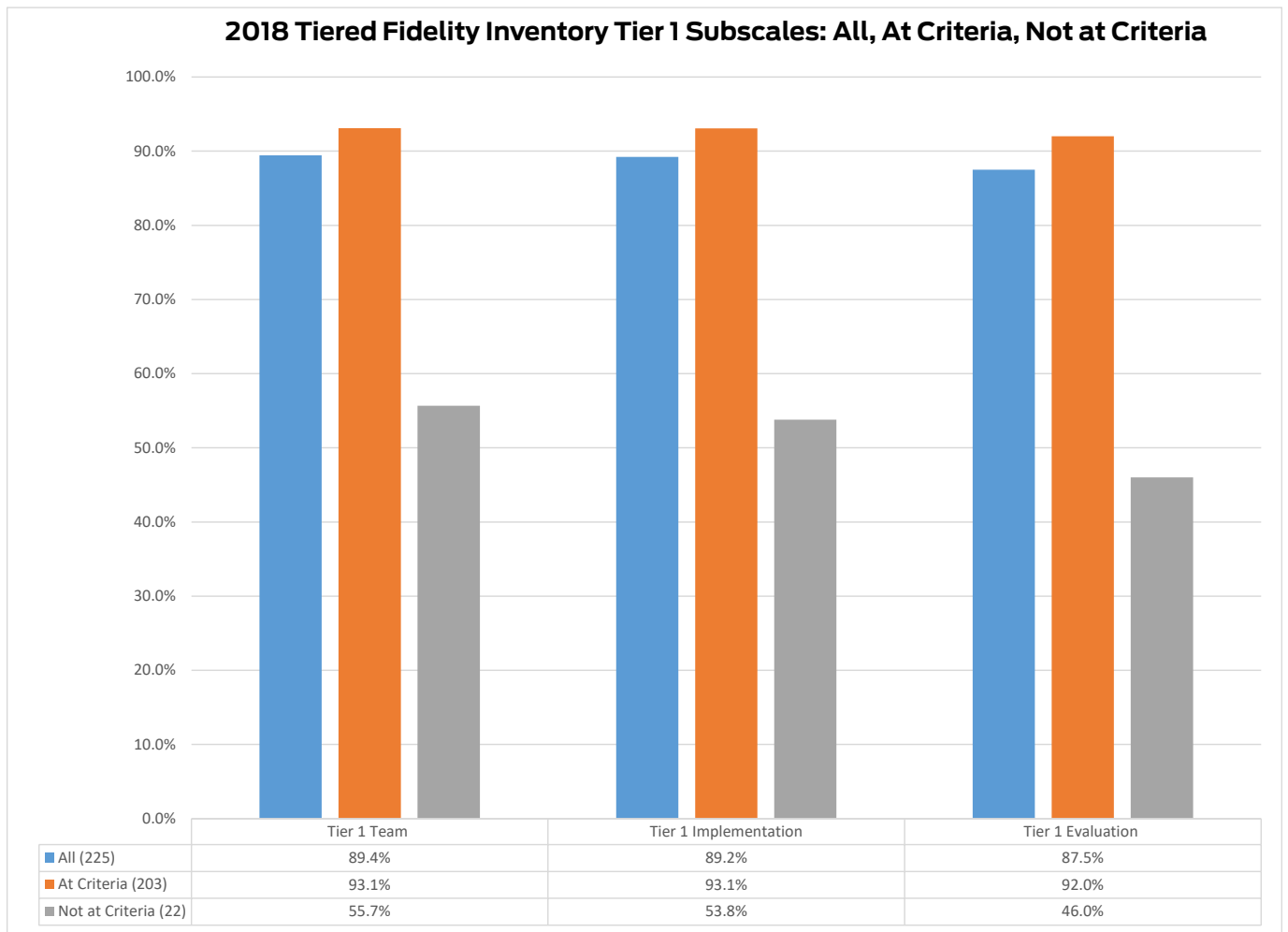
Figure 8d

In the remaining 17 schools that participated in a SET, but did not attain fidelity criteria of 80% / 80%, only one achieved the 80% criteria for part B, Expectations Taught. Feature areas with average scores below 80% (Part B Expectations taught and Part C Reward System) 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.

2018 Tiered Fidelity Inventory Tier 1 Subscales: All, At Criteria, Not at Criteria

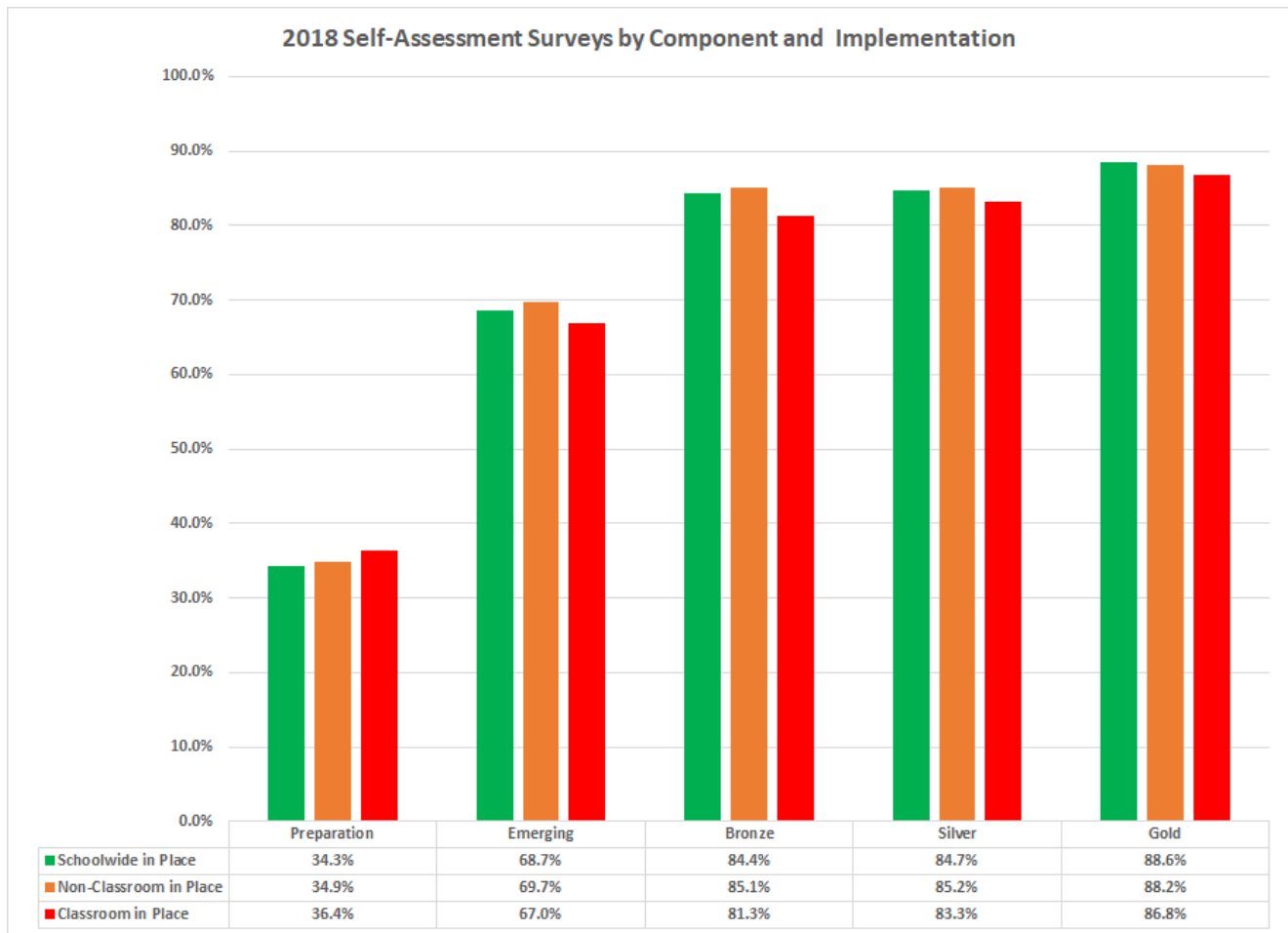|	Tier 1 Team	Tier 1 Implementation	Tier 1 Evaluation
All (225)	89.4%	89.2%	87.5%
At Criteria (203)	93.1%	93.1%	92.0%
Not at Criteria (22)	55.7%	53.8%	46.0%

Figure 8e

225 veteran MO SW-PBS schools used the TFI (Algozzine et al., 2014) at least one time for evaluation of Tier 1 fidelity. Of these, 203 (93.1%) 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 89.4%. 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 89.4%, 89.2%, and 87.5% 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.

2018 Self-Assessment Surveys by Component and Implementation

	Preparation	Emerging	Bronze	Silver	Gold
Schoolwide in Place	34.3%	68.7%	84.4%	84.7%	88.6%
Non-Classroom in Place	34.9%	69.7%	85.1%	85.2%	88.2%
Classroom in Place	36.4%	67.0%	81.3%	83.3%	86.8%

Figure 8f.1

Each year, MO SW-PBS recognizes participating schools that meet rigorous criteria. Schools that earned Bronze level recognition have met criteria for implementing Tier 1 with fidelity. Schools that earned Silver level recognition met criteria for implementing Tiers 1 and 2 with fidelity. Schools that earned Gold level recognition met criteria for implementing Tiers 1, 2, and 3 with fidelity. In addition to the three recognition categories, MO SW-PBS also designates schools that did not apply for or earn recognition as either Preparation or Emerging. Preparation schools were in their first year of training, not yet implementing and therefore, Preparation schools are not 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.
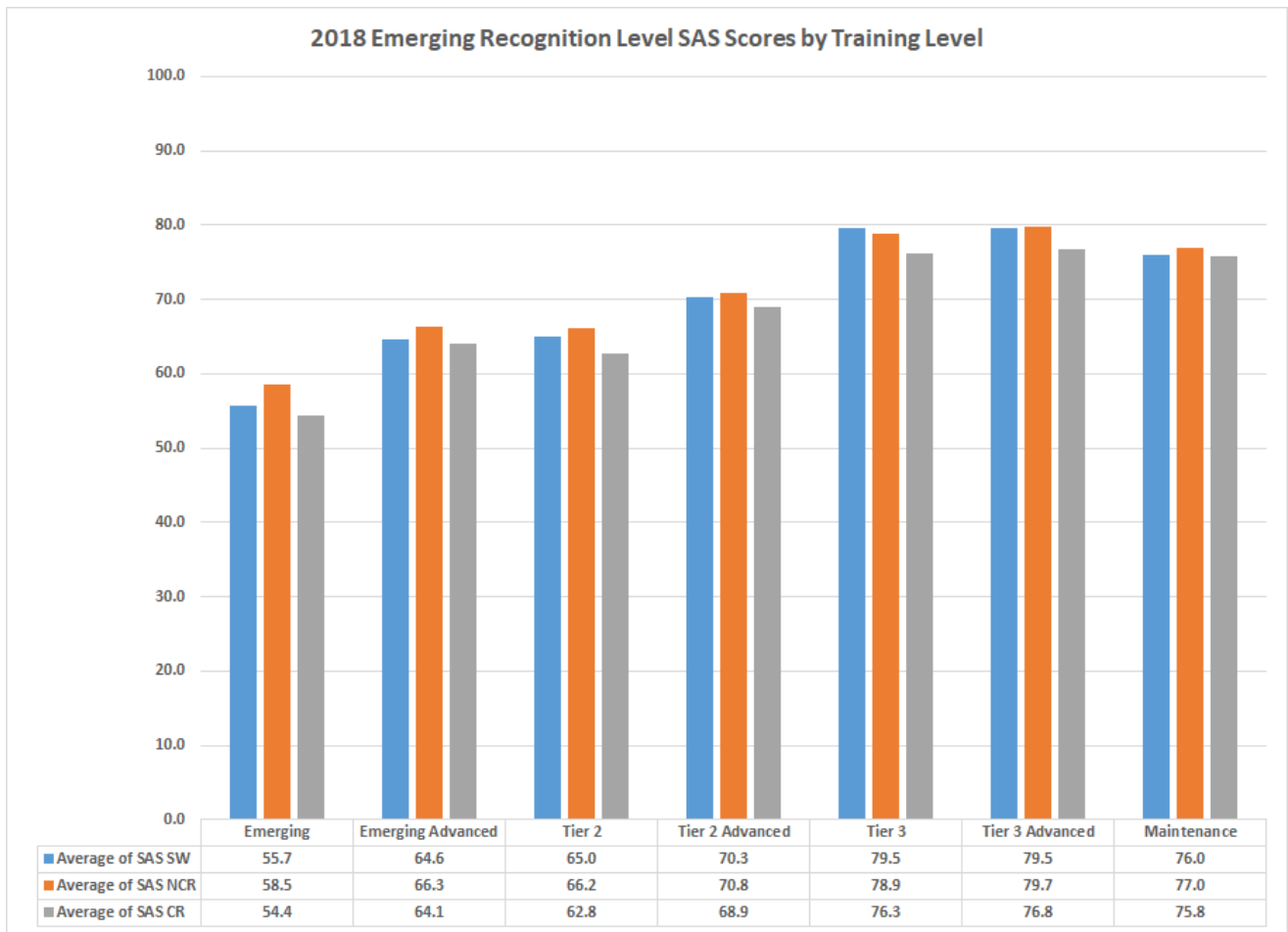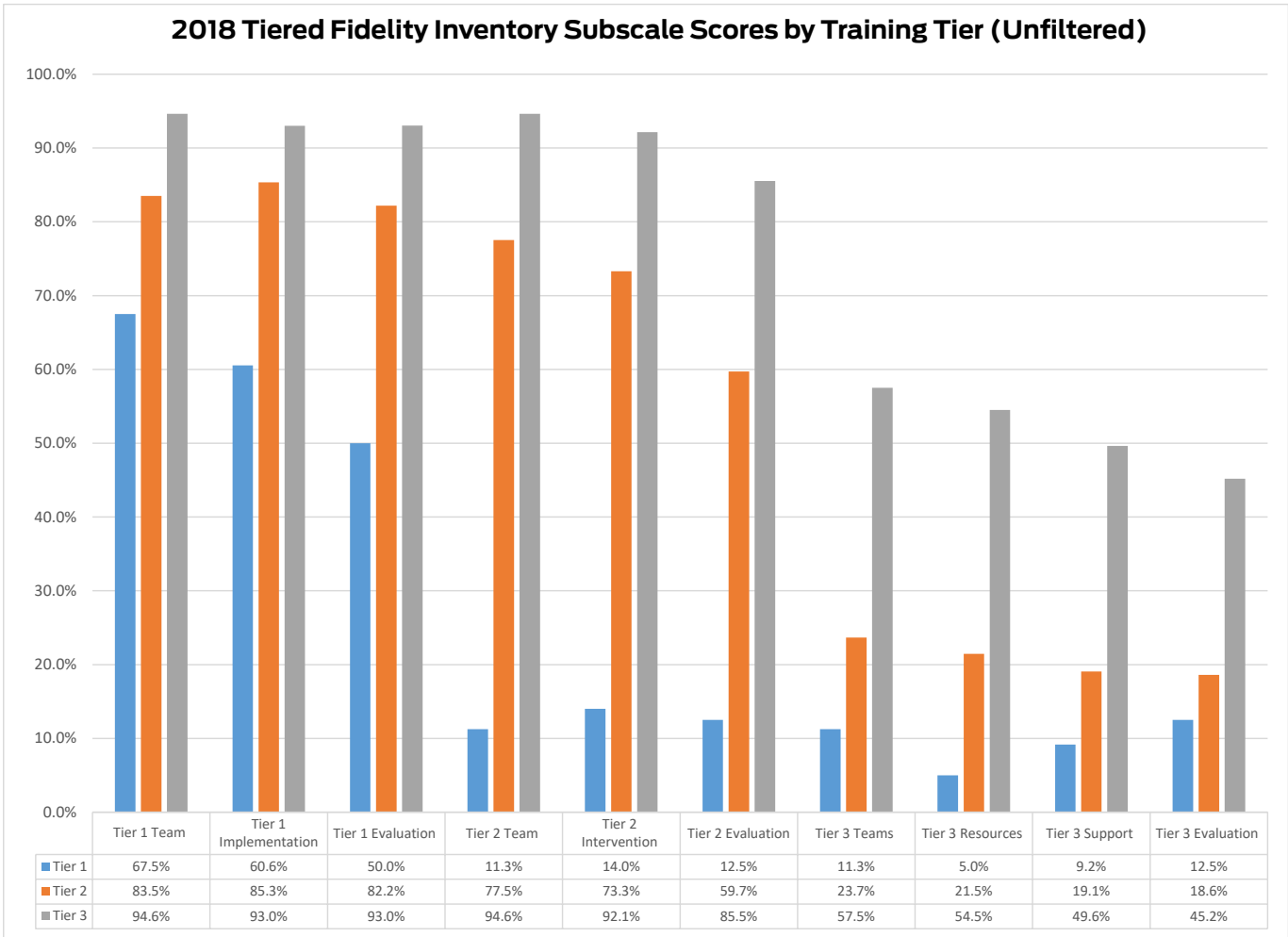
2018 Emerging Recognition Level SAS Scores by Training Level

	Emerging	Emerging Advanced	Tier 2	Tier 2 Advanced	Tier 3	Tier 3 Advanced	Maintenance
Average of SAS SW	55.7	64.6	65.0	70.3	79.5	79.5	76.0
Average of SAS NCR	58.5	66.3	66.2	70.8	78.9	79.7	77.0
Average of SAS CR	54.4	64.1	62.8	68.9	76.3	76.8	75.8

Figure 8f. 2

Figure 8f.2 disaggregates SAS scores of 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, with the exception of a slight dip in scores for Maintenance schools.

Tier 2 and Tier 3

Tier 2 and Tier 3 implementation and training content is less well defined, nationally. This is also reflected in the limited number of fidelity measurement tools for Tier 2 and Tier 3. The Tier 2 and Tier 3 Readiness Checklists were developed by MO SW-PBS to guide Consultants and participating schools in determining when schools were "ready" to begin the Tier 2 or Tier 3 training process. Historically, MO SW-PBS Tier 2 and Tier 3 Teams used the BAT for fidelity assessment. However, following recent guidance from the PBIS National Technical Assistance Center, MO SW-PBS has begun using the TFI (Algozzine et al., 2014) to guide Tier 2 and Tier 3 teams in self-reflection, ongoing monitoring, and action planning at all three tiers. Beginning in 2015–2016, all MO SW-PBS Schools that were training and/or implementing at Tier 2 and Tier 3 began using the TFI to monitor Tier 2 and Tier 3 implementation fidelity. The use of the TFI to monitor Tier 2 and Tier 3 fidelity was continued in the years following, including 2017–2018.

2018 Tiered Fidelity Inventory Subscale Scores by Training Tier (Unfiltered)

	Tier 1 Team	Tier 1 Implementation	Tier 1 Evaluation	Tier 2 Team	Tier 2 Intervention	Tier 2 Evaluation	Tier 3 Teams	Tier 3 Resources	Tier 3 Support	Tier 3 Evaluation
Tier 1	67.5%	60.6%	50.0%	11.3%	14.0%	12.5%	11.3%	5.0%	9.2%	12.5%
Tier 2	83.5%	85.3%	82.2%	77.5%	73.3%	59.7%	23.7%	21.5%	19.1%	18.6%
Tier 3	94.6%	93.0%	93.0%	94.6%	92.1%	85.5%	57.5%	54.5%	49.6%	45.2%

Figure 8g. 1

Results for Tier 2 and Tier 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.
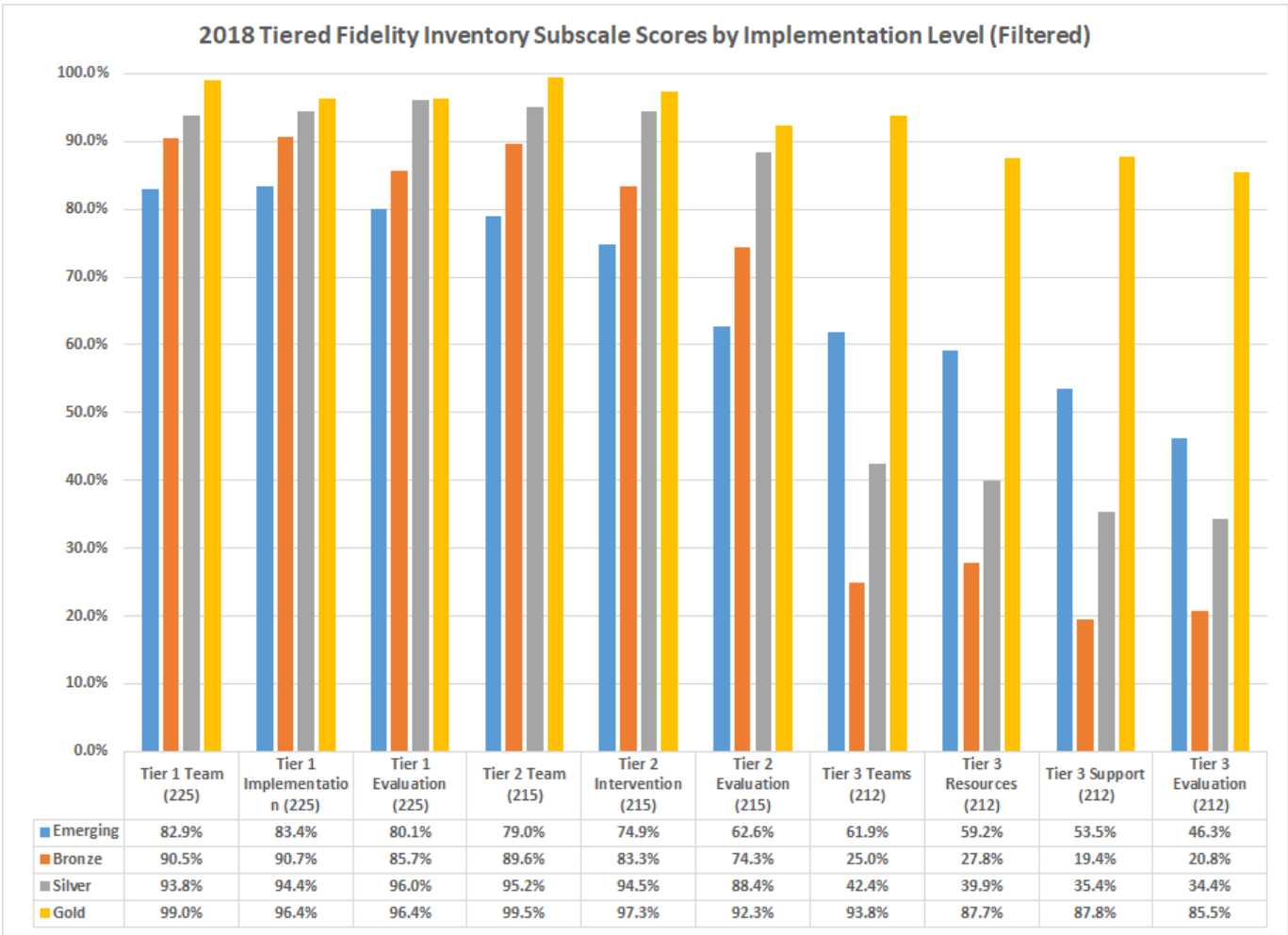
2018 Tiered Fidelity Inventory Subscale Scores by Implementation Level (Unfiltered)

	Tier 1 Team	Tier 1 Implementation	Tier 1 Evaluation	Tier 2 Team	Tier 2 Intervention	Tier 2 Evaluation	Tier 3 Teams	Tier 3 Resources	Tier 3 Support	Tier 3 Evaluation
■ Emerging	92.2%	90.6%	89.1%	90.6%	87.5%	78.5%	55.1%	53.1%	46.1%	38.7%
■ Bronze	100.0%	98.1%	91.7%	100.0%	90.0%	100.0%	25.0%	27.8%	19.4%	20.8%
■ Silver	93.1%	94.8%	98.6%	95.8%	95.0%	90.3%	36.8%	34.3%	32.9%	29.9%
■ Gold	100.0%	94.8%	94.9%	100.0%	98.2%	91.2%	89.7%	83.3%	79.4%	77.9%

Figure 8g. 2

Figure 8g.2 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.

2018 Tiered Fidelity Inventory Subscale Scores by Implementation Level (Filtered)

	Tier 1 Team (225)	Tier 1 Implementation (225)	Tier 1 Evaluation (225)	Tier 2 Team (215)	Tier 2 Intervention (215)	Tier 2 Evaluation (215)	Tier 3 Teams (212)	Tier 3 Resources (212)	Tier 3 Support (212)	Tier 3 Evaluation (212)
Emerging	82.9%	83.4%	80.1%	79.0%	74.9%	62.6%	61.9%	59.2%	53.5%	46.3%
Bronze	90.5%	90.7%	85.7%	89.6%	83.3%	74.3%	25.0%	27.8%	19.4%	20.8%
Silver	93.8%	94.4%	96.0%	95.2%	94.5%	88.4%	42.4%	39.9%	35.4%	34.4%
Gold	99.0%	96.4%	96.4%	99.5%	97.3%	92.3%	93.8%	87.7%	87.8%	85.5%

Figure 8g. 3

Figure 8g.3 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.

2007-2018 MO SW-PBS Implementation

	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018
■ Preparation	7	18	38	171	150	175	101	52	46	62	55	42
■ Emerging	212	224	155	127	223	268	335	310	350	415	461	448
■ Bronze	32	59	124	136	170	176	199	204	146	83	43	43
■ Silver	2	15	13	35	42	72	79	79	84	83	66	51
■ Gold		4	4	8	10	20	36	53	54	52	58	55
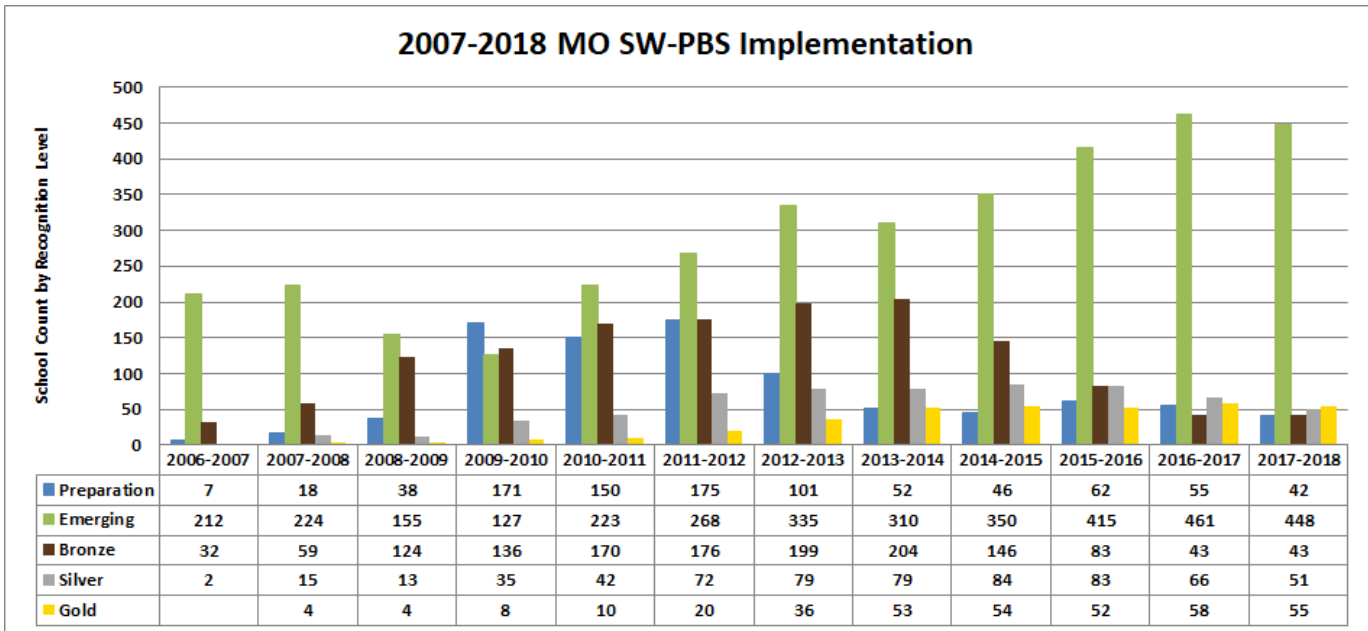
Figure 8h

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 2017–2018, 16% (43/276) of eligible MO SW-PBS participating schools (Emerging, Emerging Advanced, and Tier 2 training levels) earned Bronze recognition; 27% (51/192) of eligible schools (Tier 2 Advanced and Tier 3 training levels) earned Silver recognition; and 43% (55/129) of eligible schools (Tier 3 Advanced and Maintenance Training Levels) earned Gold recognition.

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

IMPACT

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

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

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

INPUTS / CAUSE
Student Demographics
    · Student Race
    · Student Ethnicity
    · Student Gender
    · Free and Reduced Lunch Status
    · IEP, Non-IEP or All Students
Building Demographics
    · RPDC Region
    · Location (Rural, Suburban, Urban)
    · Enrollment Number
    · Grade Level
Staff Headcount New & Transfer Staff
	OUTPUTS / EFFECTS
	Attendance
	
	Missouri Assessment Program (MAP)
	    · Communication Arts
	    · Math

PBIS Assessments from PBIS National Center	
INPUTS / CAUSE / FIDELITY *School Safety Survey (SSS)* *Self Assessment Survey (SAS)* *Schoolwide Evaluation Tool (SET)* *Tiered Fidelity Inventory (TFI)*	OUTPUTS / EFFECTS *School Safety Survey (SSS)*
Other Recommended Data Sources	

INPUTS / CAUSE / FIDELITY
Classroom Walk Through
	OUTPUTS / EFFECTS
	Academic Progress Monitoring
	Graduation / Dropout Rates
	ISS / OSS
	Minor Discipline Referrals
	Office Discipline Referrals (ODRs)
	    · By Grade Level (IEP & Non-IEP)*
	    · By Student* (non-identifiable)
	Assistance Referrals & Special Education Identification / Eligibility* Tier 2 Intervention Outcomes
	Tier 3 Intervention Outcomes

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 the annual report. For reporting purposes 1) any SW-PBS implementation groups that had fewer than 10 schools were omitted from the reporting to protect anonymity of schools and to avoid introducing bias into the reports; 2) trends must be analyzed with caution due in part to a small number of schools in some SW-PBS groups in some years, particularly in relation to the ALL Missouri schools group and 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.

2017-2018 Attendance by SW-PBS Implementation Level (All Students)

	Preparation	Emerging	Bronze	Silver	Gold	Non SW-PBS	Missouri
2016-2017	92.2%	90.3%	92.3%	94.8%	91.6%	90.6%	90.7%
2017-2018	92.4%	91.6%	90.3%	91.0%	91.6%	90.6%	90.8%

Figure 9a.1

2010-2018 Attendance by SW-PBS Implementation Level (All Students)

	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018
Preparation	85.4%	83.3%	86.4%	88.6%	89.1%	87.6%	92.2%	92.2%	92.4%
Emerging	87.3%	85.5%	85.1%	86.7%	87.3%	88.4%	92.0%	90.3%	91.6%
Bronze	90.1%	88.7%	88.1%	89.4%	89.6%	90.4%	92.3%	92.3%	90.3%
Silver	90.0%	88.8%	90.5%	90.7%	89.9%	90.6%	93.3%	94.8%	91.0%
Gold	94.0%	94.8%	88.4%	91.8%	90.3%	91.6%	91.2%	91.6%	91.6%
Non SW-PBS	86.9%	86.5%	87.5%	88.4%	88.3%	89.4%	91.9%	90.6%	90.6%
Missouri	87.0%	86.4%	87.4%	88.4%	88.4%	89.2%	92.1%	90.7%	90.8%

Figure 9a. 2

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

The data shows that attendance rates remained stable or increased very slightly for all categories except for Bronze and Silver recognition schools, which showed slight decreases in attendance from 2016–2017 to 2017–2018.

2017-2018 Attendance by SW-PBS Implementation Level (Students w/ IEPs)

	Preparation	Emerging	Bronze	Silver	Gold	Non SW-PBS	Missouri
2016-2017	91.3%	89.3%	91.3%	93.8%	90.6%	89.2%	89.5%
2017-2018	91.3%	90.5%	89.3%	90.0%	90.6%	89.3%	89.6%

Figure 9b. 1

2010-2018 Attendance by SW-PBS Implementation Level (Students w/ IEPs)

	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018
Preparation	81.9%	79.3%	82.2%	83.2%	84.7%	81.4%	91.3%	91.3%	91.3%
Emerging	82.6%	80.9%	80.1%	82.3%	82.5%	83.8%	90.8%	89.3%	90.5%
Bronze	85.8%	83.7%	84.0%	85.0%	84.9%	85.9%	91.2%	91.3%	89.3%
Silver	85.2%	82.4%	85.1%	85.4%	85.5%	86.2%	92.3%	93.8%	90.0%
Gold	90.3%	93.9%	82.5%	87.4%	84.9%	87.4%	91.2%	90.6%	90.6%
Non SW-PBS	82.7%	81.9%	83.4%	84.4%	83.8%	84.8%	90.7%	89.2%	89.3%
Missouri	82.6%	81.8%	83.0%	84.1%	83.8%	88.6%	90.9%	89.5%	89.6%

Figure 9b. 2

Similarly, attendance for students with IEPs remained stable for all categories, except for Emerging, Bronze, and Silver recognition levels. Emerging schools improved attendance by 1.2 percentage points, while attendance at Bronze and Silver schools decreased by 2 and 3.8 percentage points, respectively. In addition, attendance rates for students with IEPs remained slightly higher for all MO SW-PBS implementation levels except Bronze than in 1) Non-SW-PBS and 2) All Missouri schools.

2015-2018 ODRs per Day, per Month, per 100 Students, Missouri Elementary and Middle Compared to National Norms

	2014-2015	2015-2016	2016-2017	2017-2018
Missouri Elementary	0.32	0.35	0.36	0.35
Missouri Middle	0.49	0.64	0.43	0.46
National Elementary	0.2	0.2	0.2	0.2
National Middle	0.33	0.31	0.3	0.31
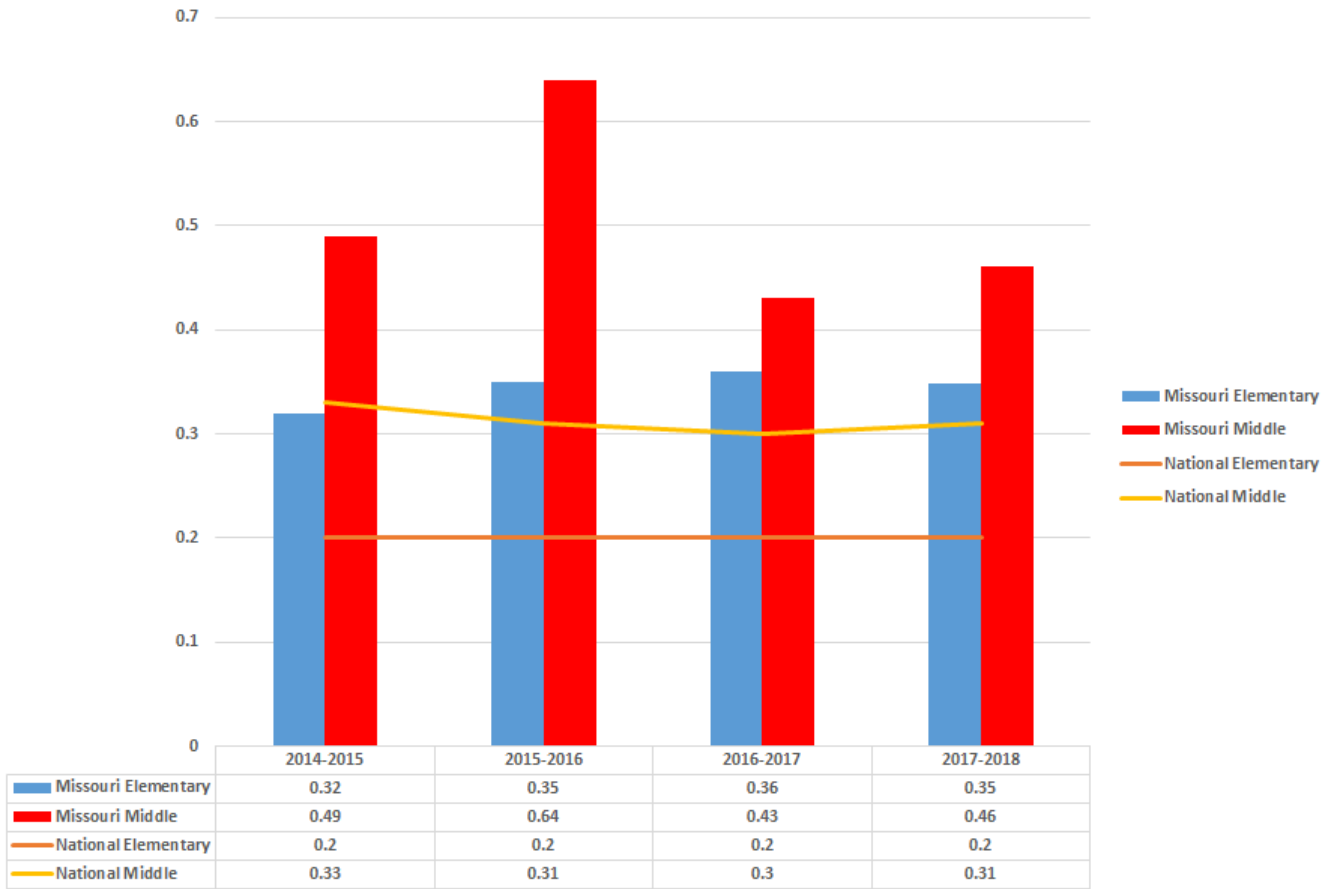
Figure 9c

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 2017–2018 school year, 89 (14%) 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 2017–2018 SWIS national norms.

2018 MO SW-PBS SWIS User Triangle Data by School Configuration

	Elementary	SWIS Norms Elementary	Middle	SWIS Norms Middle
■ Average of ODR 6+	2.7%	2.6%	3.4%	3.8%
■ Average of ODR 2-5	7.4%	5.7%	11.9%	8.9%
■ Average of ODR 0-1	89.9%	91.8%	84.7%	87.3%
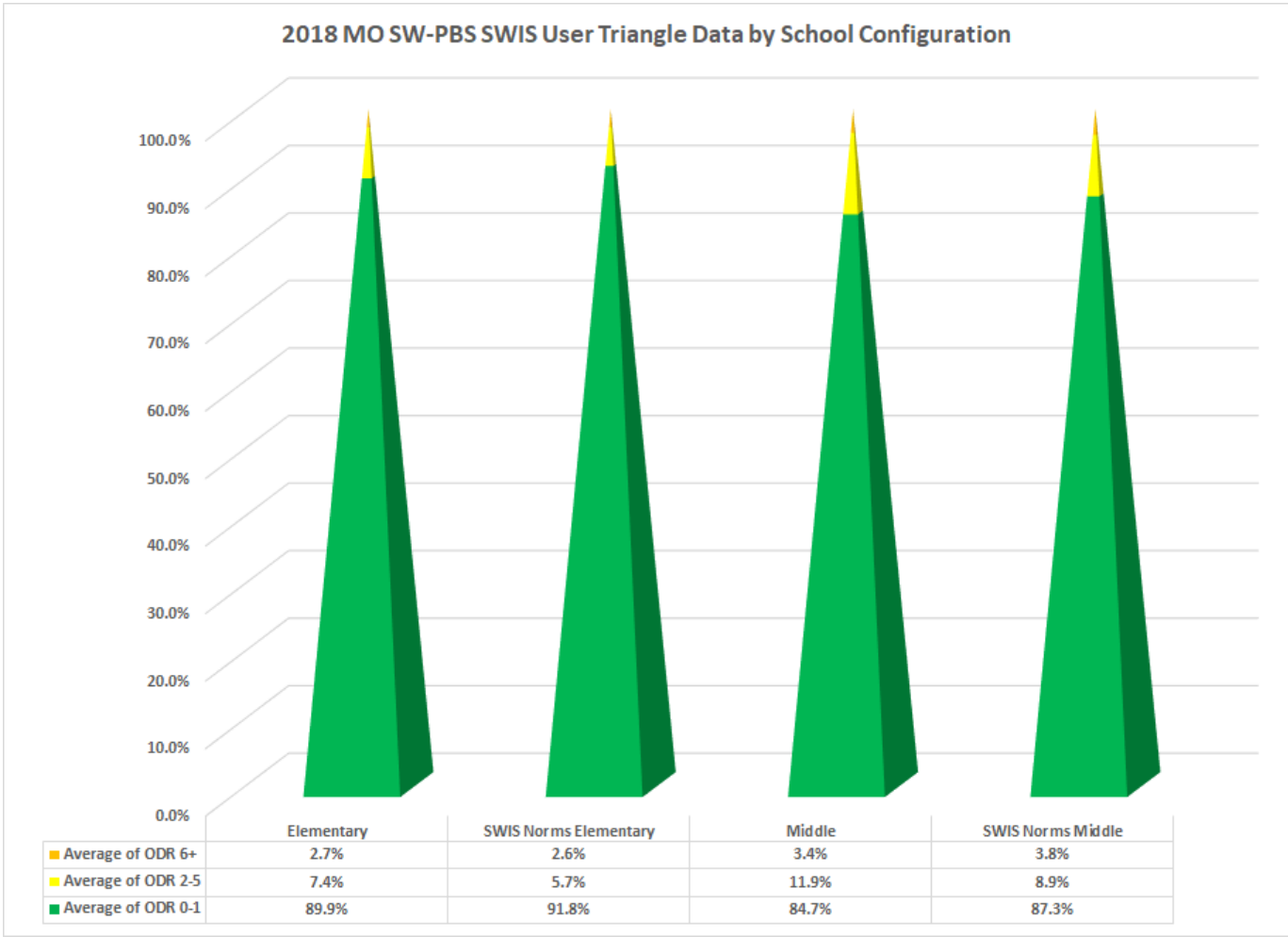
Figure 9d.1

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.

2018 MO SW-PBS Self-Reported Triangle Data by Recognition Status

	Emerging	Bronze	Silver	Gold
■ Average of ODRs 6+	6.6%	4.2%	4.8%	4.1%
■ Average of ODRs 2-5	11.1%	10.0%	11.0%	6.4%
■ Average of ODRs 0 or 1	82.3%	86.4%	86.5%	91.2%
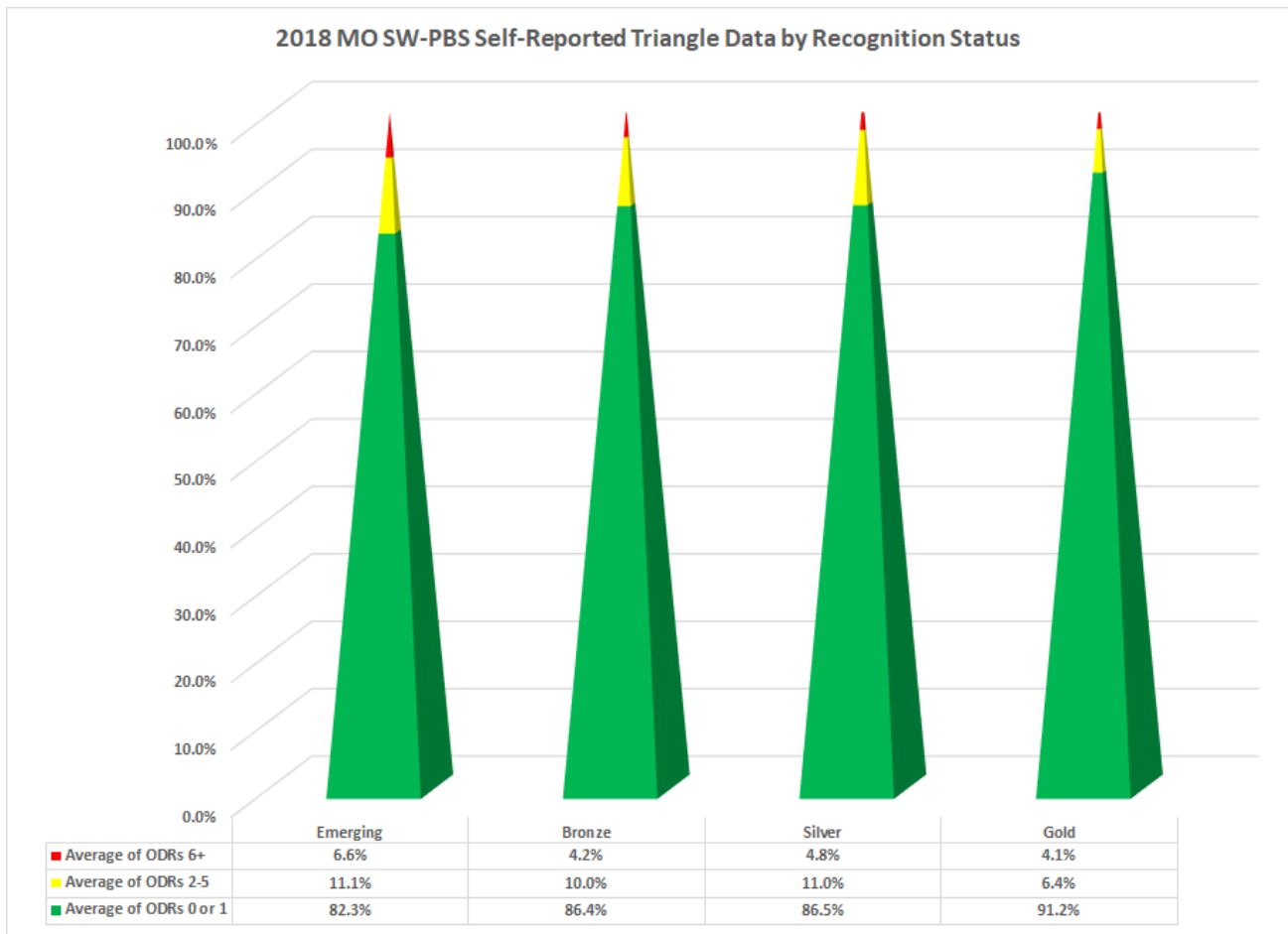
Figure 9d. 2

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

2018 ODR Per Day, Per Month, Per 100 Students

	Emerging	Silver	Gold
ODR Per Day Per 100 Students	0.36	0.48	0.25
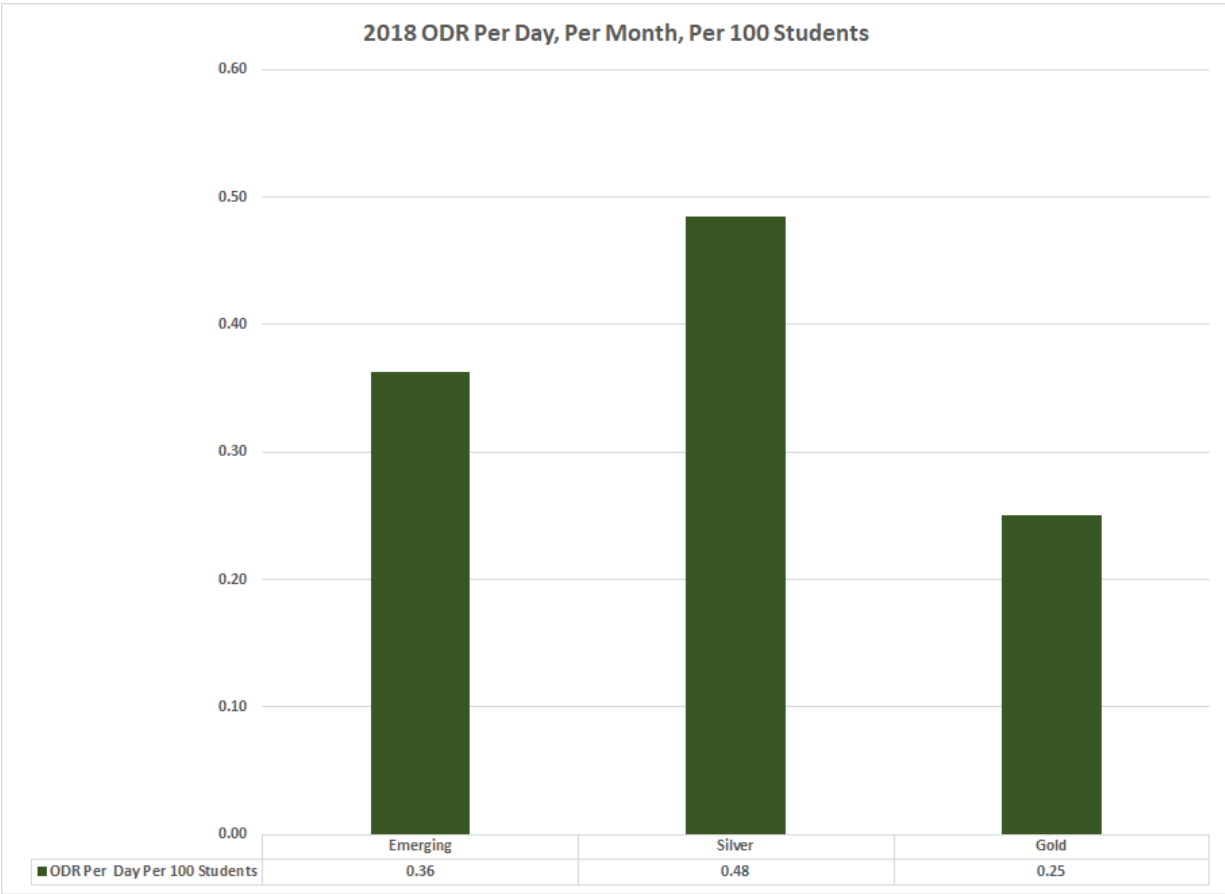
Figure 9e

2018 ODR Per, Per Month, Day Per 100 Students by Implementation

Finally, 2018 average ODRs per day, per month, per 100 students by implementation level indicates that Gold level schools average fewer ODRs than either Emerging or Silver recognition level, although Emerging schools average fewer ODRs than Silver. Comparisons could not be drawn from Preparation or Bronze level schools, as they had fewer than 10 schools that subscribed to SWIS, respectively.

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

Question 10

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

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

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

istered 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 DESE continued with this new format for 2015–2016 and 2016–2017 but changed the test again in 2017–2018, making multi-year comparisons problematic. As such we are sharing only 2017–2018 MAP data in this report.

2018 Percent of Student MAP Scoring in Advanced & Proficient Categories, in Communication Arts by SW-PBS Implementation (All Students)

	CA Preparation	CA Emerging	CA Bronze	CA Silver	CA Gold	CA Non SW-PBS	CA Missouri
2017-2018	41.4%	36.6%	41.9%	40.8%	41.5%	43.9%	42.3%
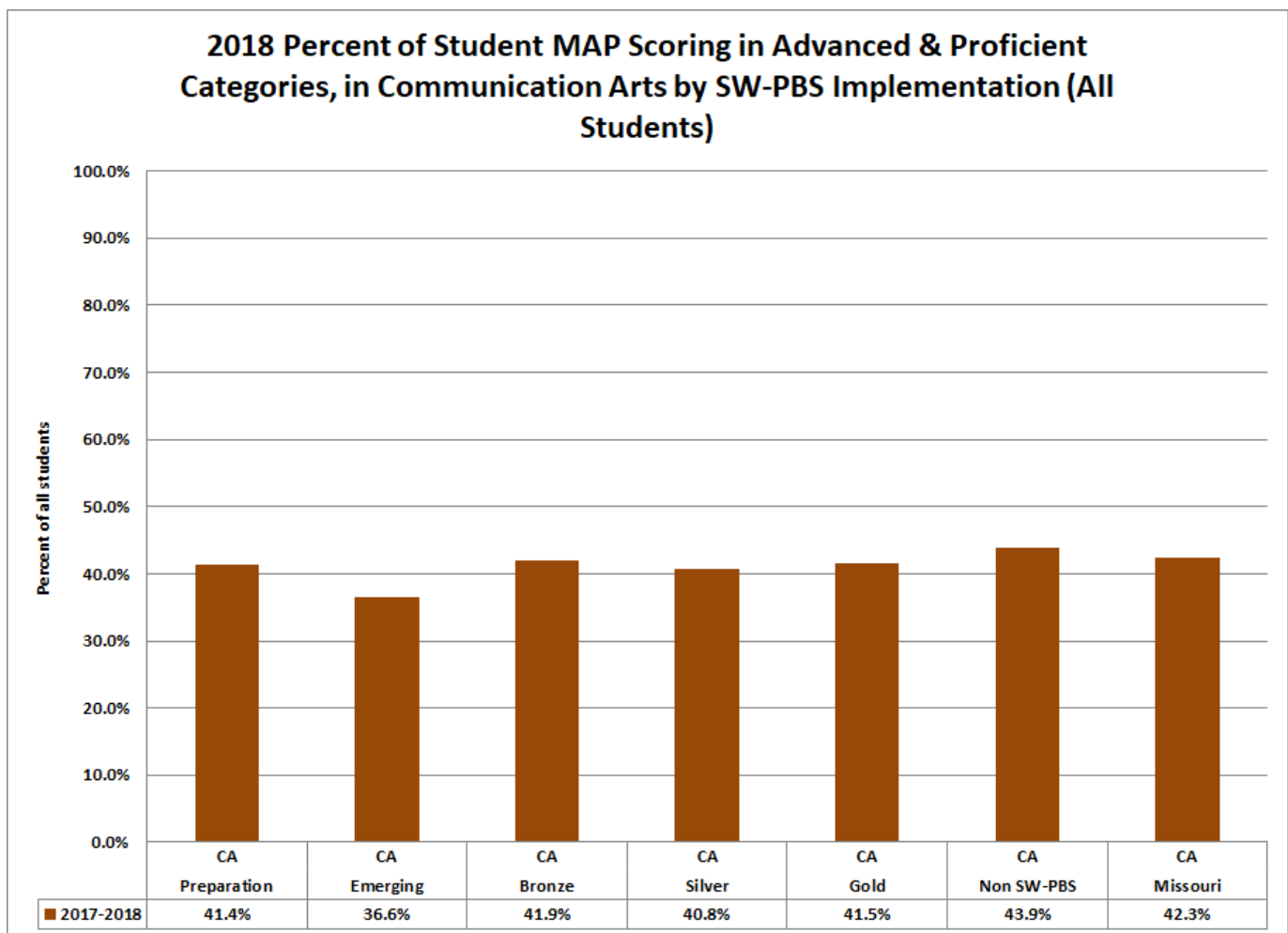
Figure 10a

All MO SW-PBS recognition levels had higher MAP scores than did schools in the Emerging category. However, both 1) Non MO SW-PBS, and 2) All Missouri schools had larger percentages of students scoring proficient and advanced in Communication Arts than all MO SW-PBS recognition levels. This chart obviously does not take into account the magnitude of growth. More in-depth statistical analysis is needed to determine whether there was statistically significant growth related to the level of SW-PBS implementation.

2018 Percent of Student MAP Scoring in Advanced & Proficient Categories in Math, by SW-PBS Implementation (All Students)

	MAT Preparation	MAT Emerging	MAT Bronze	MAT Silver	MAT Gold	MAT Non SW-PBS	MAT Missouri
2017-2018	38.6%	29.8%	36.3%	36.9%	37.9%	36.3%	35.2%
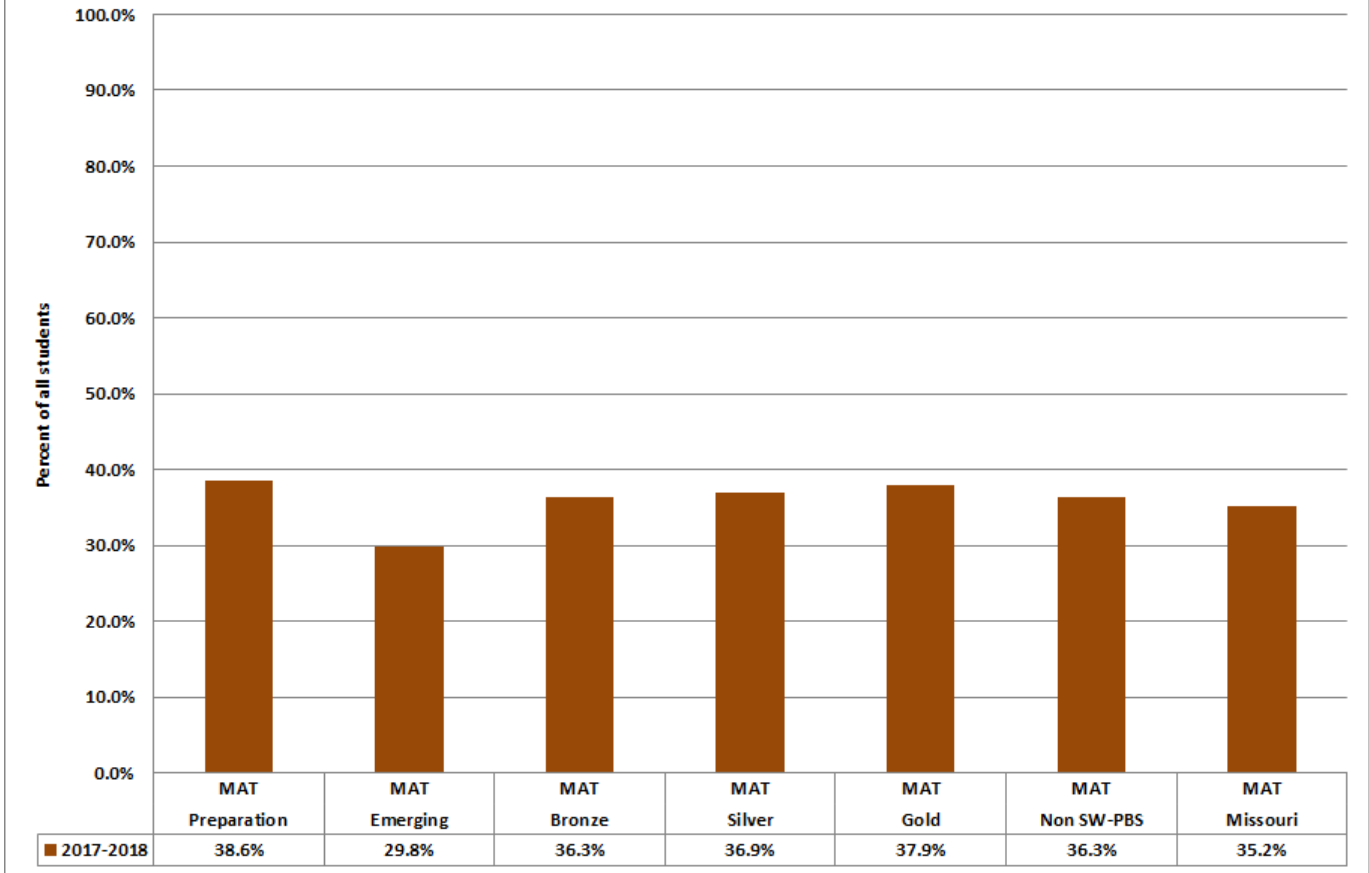
Figure 10b

In Mathematics, the percentage of students scoring proficient and advanced was equal to or slighter higher in Preparation, Bronze, Silver, and Gold recognition schools than in 1) Emerging schools, 2) Non MO SW-PBS, and 3) All Missouri schools.

**2018 Communication Arts MAP,
by SW-PBS Implementation Level (Students w/ IEPs)**

	CA Preparation	CA Emerging	CA Bronze	CA Silver	CA Gold	CA Non SW-PBS	CA Missouri
■ 2017-2018	17.3%	14.3%	15.5%	16.2%	17.7%	17.2%	16.6%
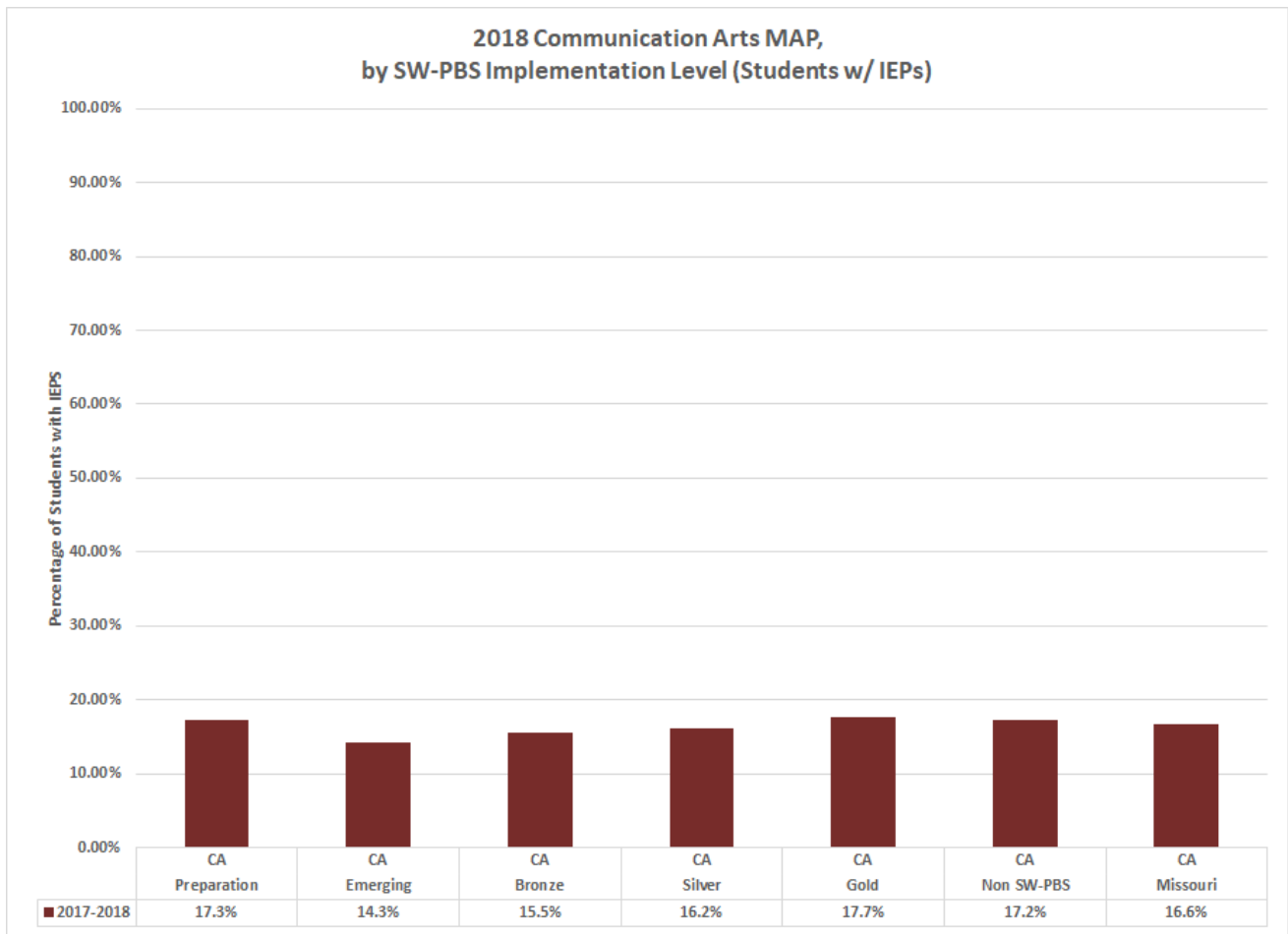
Figure 10c

Students with IEPs scoring proficient and advanced in communication arts increased as implementation fidelity increased in all MO SW-PBS recognition levels except Preparation schools, which had a higher percentage of students scoring proficient and advanced than in all categories except Gold. In addition, a larger proportion of students with disabilities scored in the proficient and advanced for Gold level schools than did students in any other category, including 1) Non MO SW-PBS, and 2) All Missouri schools.

2018 Math MAP,
by SW-PBS Implementation Level (Students w/ IEPs)

	MAT Preparation	MAT Emerging	MAT Bronze	MAT Silver	MAT Gold	MAT Non SW-PBS	MAT Missouri
■ 2017-2018	14.3%	11.0%	11.5%	13.6%	14.9%	13.0%	12.7%
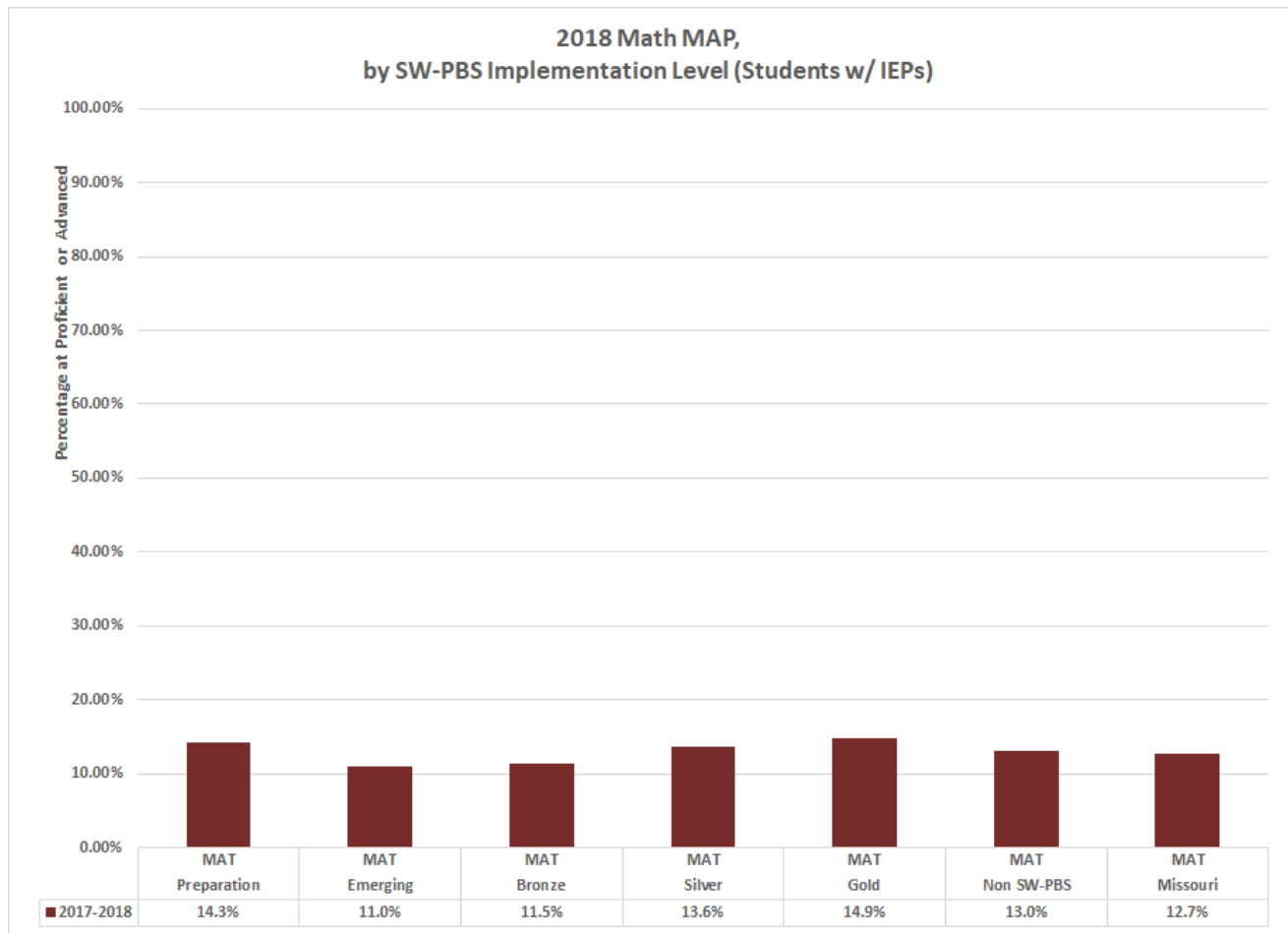
Figure 10d

Similarly, the percentage of students with IEPs scoring proficient and advanced in mathematics also appears to have increased as fidelity improved, again, with the exception of students at Preparation schools. In addition, students in Preparation, Silver, and Gold schools had a higher proportion of students with IEPs scoring proficient and advanced in mathematics than did 1) Non MO SW-PBS, and 2) All Missouri schools. More students with IEPs in Gold level schools scored proficient and advanced in mathematics than in any other school category.

2017-2018 Students with IEPs Time in Regular class > 79%, by SW-PBS Implementation Level

	Preparation	Emerging	Bronze	Silver	Gold	Non SW-PBS	Missouri
■ 2016-2017	49.2%	57.5%	63.7%	59.2%	51.5%	57.0%	56.9%
■ 2017-2018	49.0%	56.9%	56.9%	53.9%	51.1%	58.1%	57.4%
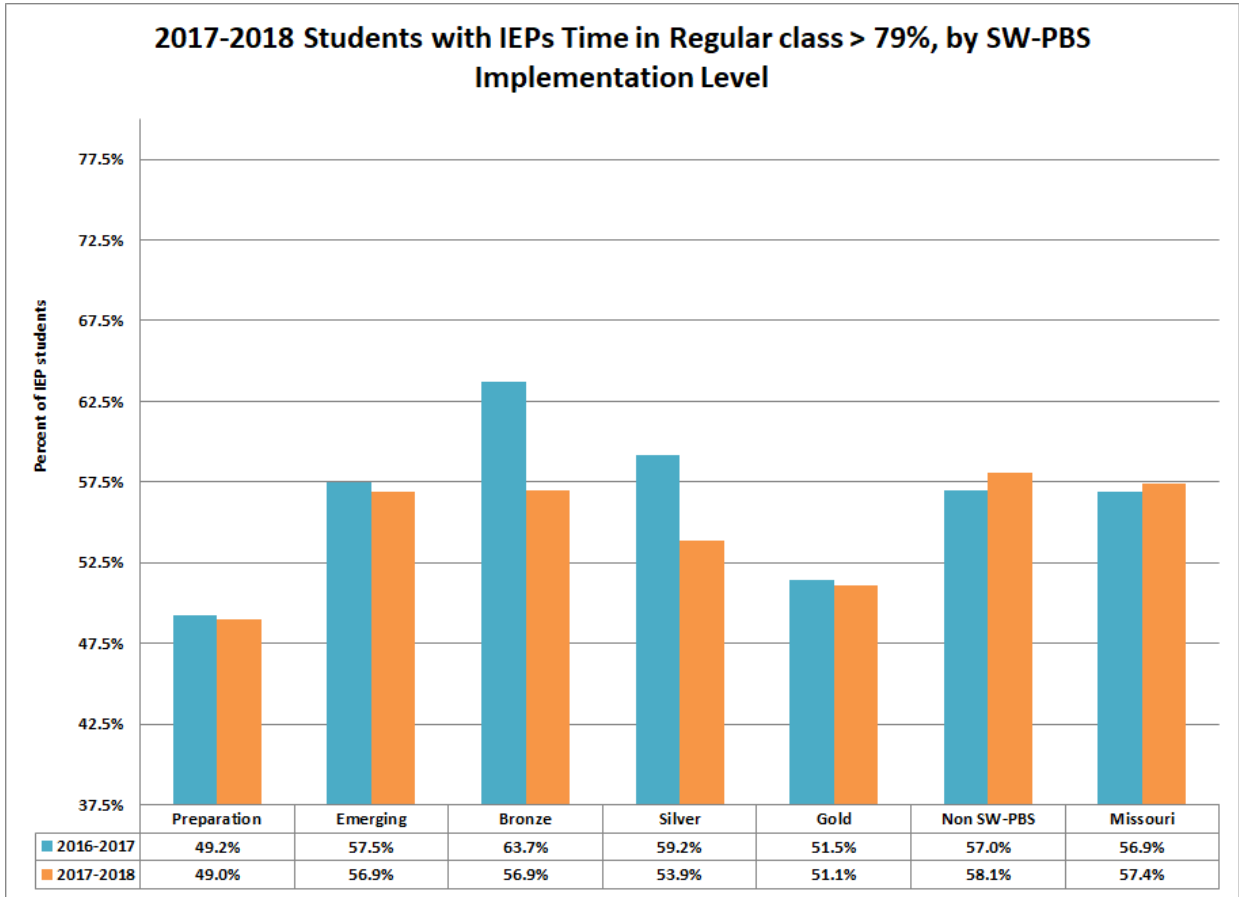
Figure 10e

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, all MO SW-PBS school categories had lower percentages 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. Although dropout data would be another way to measure outcomes for students, because only 6 high schools 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 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.

2007-2018 MO SW-PBS State Supported Full Time Equivalent (FTE)

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
■ Tier 1 Consultants	6.0	9.0	11.0	13.0	24.0	11.3	12.0	11.0	11.0	11.3	10.9	10.0
■ Tier 2/ 3 Consultants	0.0	0.0	2.0	2.0	5.0	5.0	6.0	6.0	10.0	9.5	10.3	9.7
■ MO SW-PBS State Coach											2.5	2.5
■ Web & Data Consultant	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
■ Coordinator / Assistant	0.0	1.0	1.0	1.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
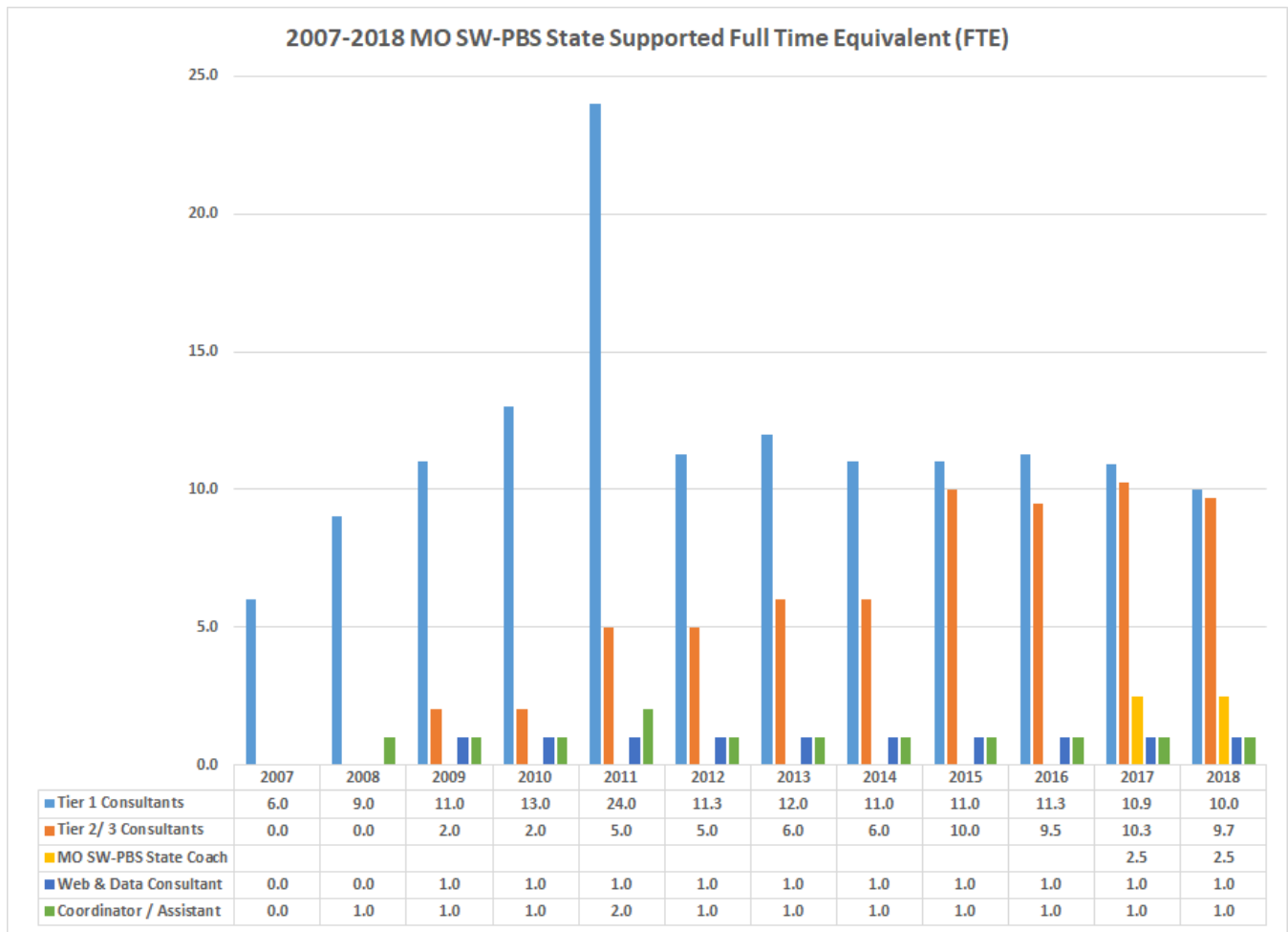
Figure 11a

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 Tier 2 and Tier 3 increased, The DESE increased the FTE dedicated to training and technical assistance for schools at those tiers. In total, the DESE assigned 24.2 FTE to the MO SW-PBS work in 2017–2018, with this FTE distributed among 31 personnel across the state. MO SW-PBS is committed to assisting The DESE in furthering the SSOS work.

Missouri SW-PBS School Counts by Districts

2006-2007 (86 districts)

2017-2018 (183 districts)

Number of active PBS schools

0   1-2   3-6   7-19   20-30   31-40
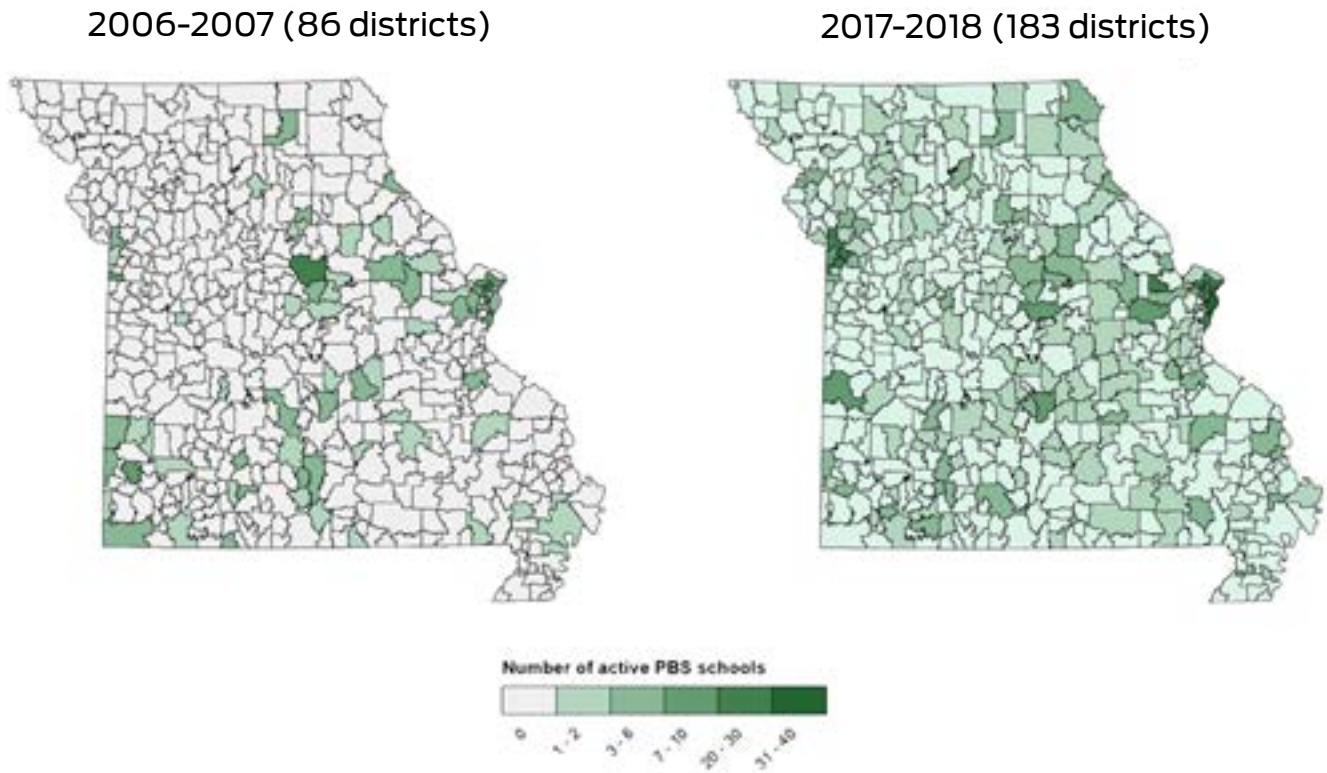
Over time, MO SW-PBS has expanded to provide training and technical assistance to schools located across the state of Missouri. Additionally, participating schools across all three tiers can be found in every RPDC across the state, providing exemplars for regional schools to visit and opportunities for within region training and networking.

2007-2018 MO SW-PBS School Reasons for Inactivity
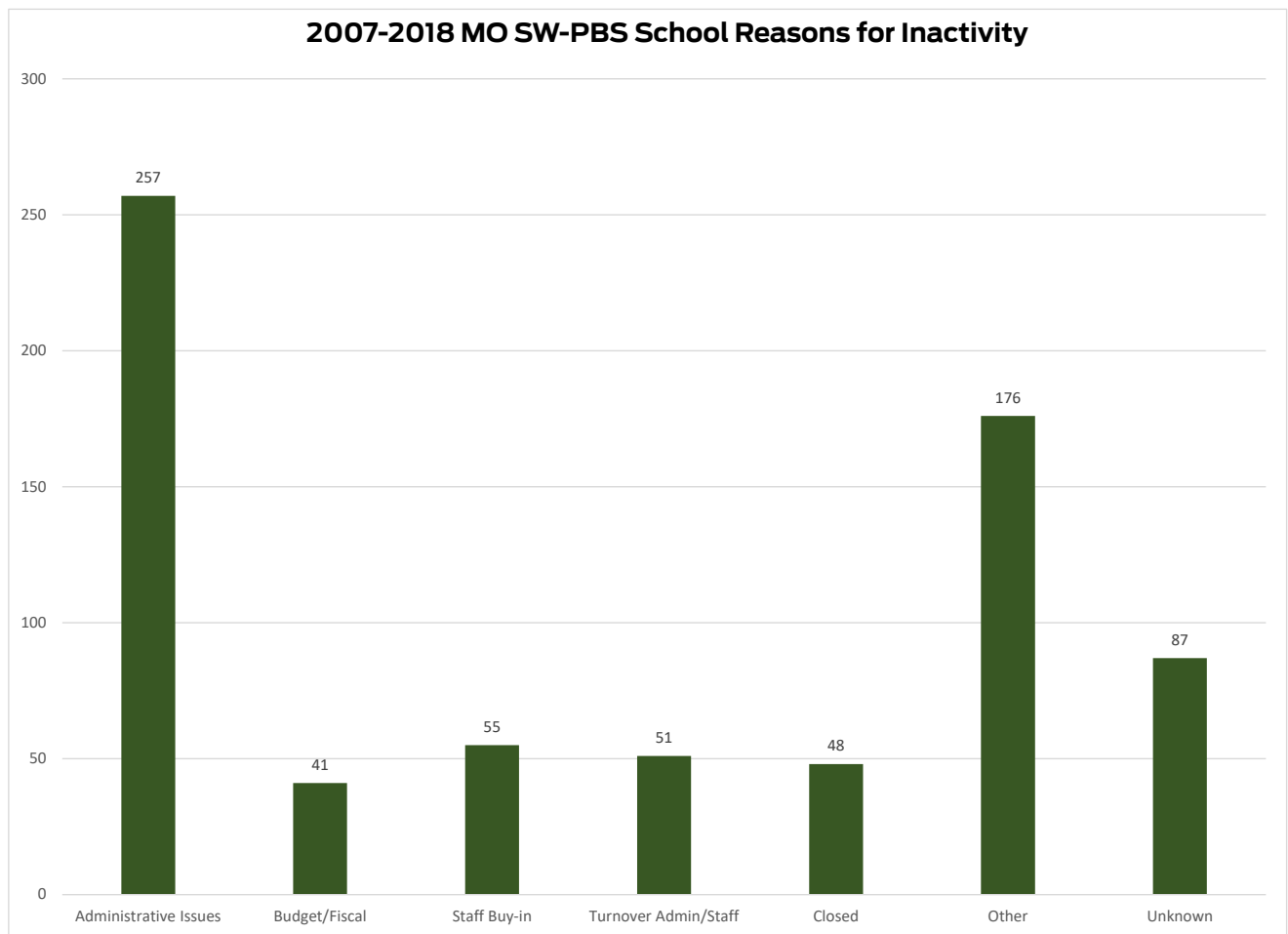
Figure 11c

During 12 years of MO SW-PBS implementation, 658 of the 1,232 schools initially committing to the initiative chose to discontinue training at least once between 2007 and 2018 (59 schools were marked inactive twice, and one marked inactive 3 times, for a total number of "Inactives" marked in the system of 718; three schools had no reason indicated). Regional Consultants were surveyed regarding reasons for schools not re-committing. Of the known reasons, "Administrative Issues" was the primary reason for schools discontinuing SW-PBS implementation. This factor has been well established in literature as a driver and barrier for sustainability (Mcintosh, Predy, Upreti, Hume, Turri, & Matthews, 2014).

The next most frequently cited reasons were "Other" and "Unknown." "Other" included reasons such as school/district hit by a tornado, district-mandated withdrawal, or limited resources for numer-

ous initiatives. "Unknown" occurred when schools simply stopped communicating with the Consultant(s).

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

Data indicate that 99 schools that had previously discontinued implementing SW-PBS were training again in 2017–2018. Removing the 48 "Closed" schools, the retention of MO SW-PBS schools across 12 years stands at 58.5%. 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 may artificially depress the retention rate, because these schools may still be implementing SW-PBS even though they are no longer partnering with MO SW-PBS.

2007-2018 Percentage of MO SW-PBS that Participated in Tier 1 Assessment that Met Criteria
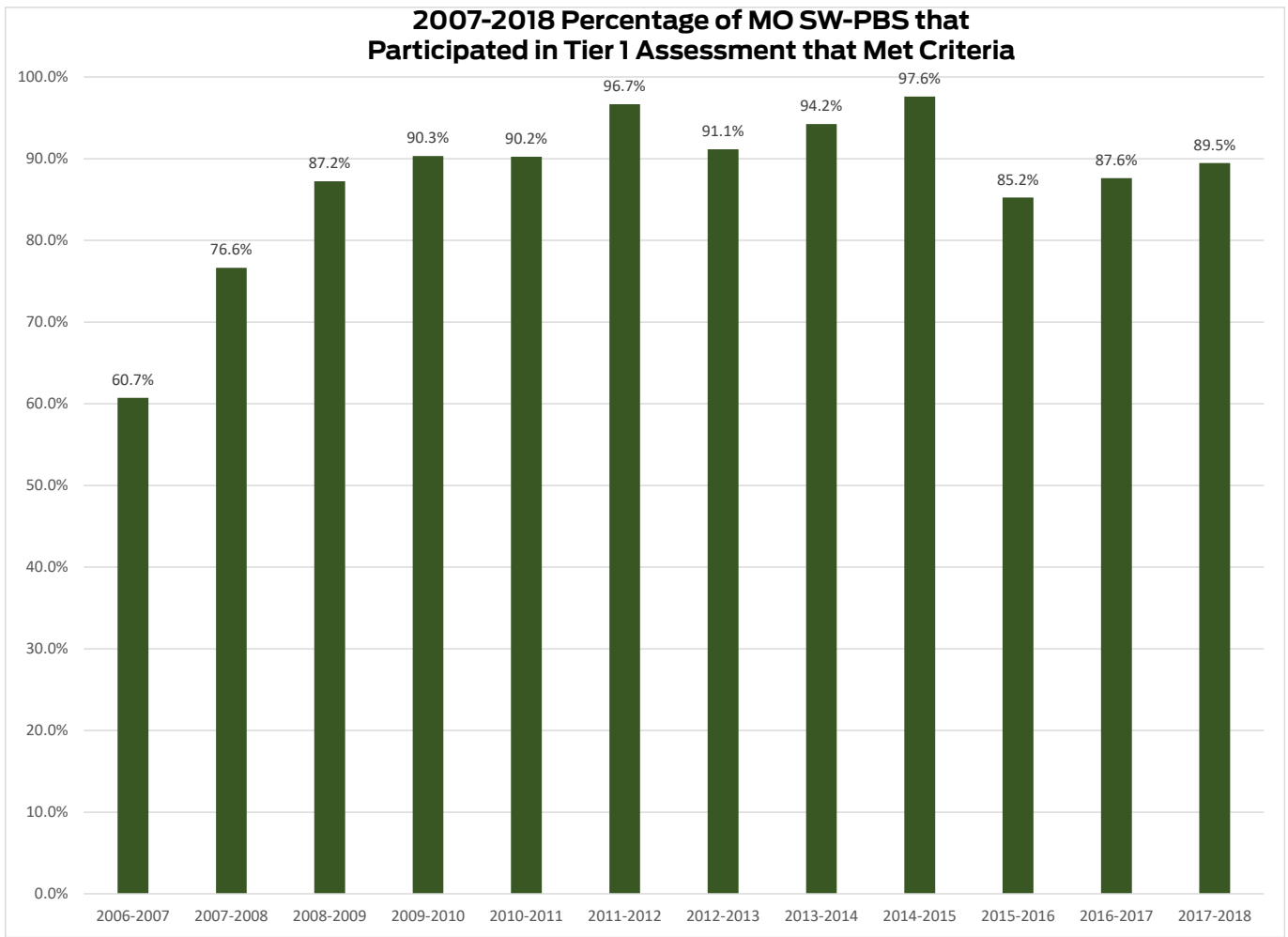
Figure 11d

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.

2018 MO SW-PBS School Counts by Training Tier
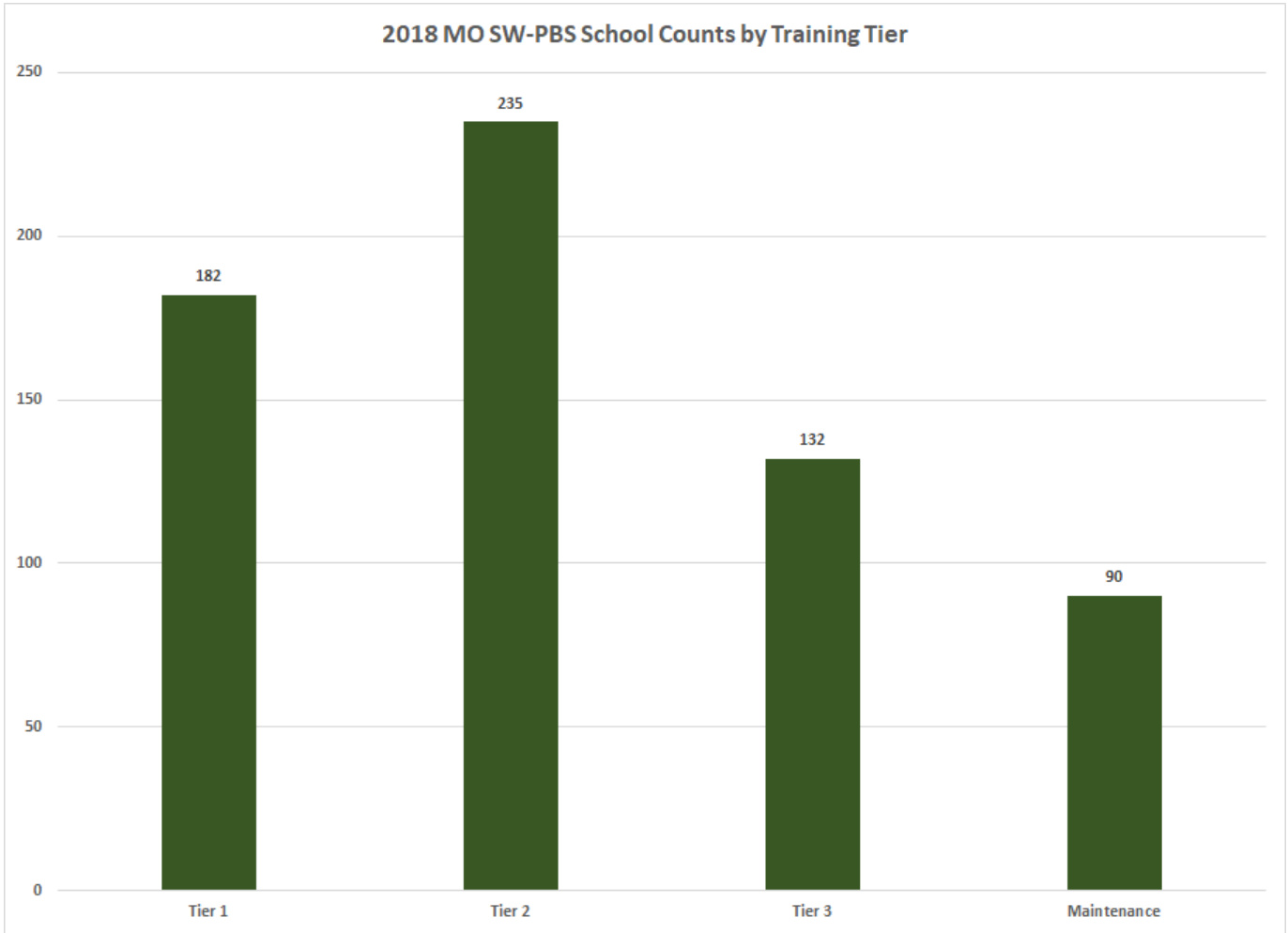
Figure 11e

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 2017–2018 there were 182 Tier 1 schools, 235 schools in Tier 2 training, and 132 schools in Tier 3 training. In addition, there were 90 Maintenance schools.

Figure 11f

The MO SW-PBS website (http://pbismissouri.org) continues to be a valued resource in the community. A new website was launched in late June of 2017. As a result, a number of links that visitors had bookmarked were no longer active. In addition, page loading times were very slow, initially. Consequently, Google Analytics data for the 2017–2018 school year (July 1, 2017, through June 30, 2018) show decreases for all visitor indicators:

- 45,060 visits, down from 56,323 visits, in 2016–2017 (a 25% decrease from 2016–2017)
- 23,099 individual visitors, down from 34,309 in 2016–2017 (a 49% decrease from 2016–2017)
- 153,825 page views, down from 225,148 in 2016–2017 (a 46% decrease over 2016–2017)

Visitors to the website were from 105 countries and all 50 states and the District of Columbia. 87.4% of all visitors were from the United States. 54.5% of all visitors were from the state of Missouri.

The most frequently viewed pages were the home page (22.9%), the Tier 1 Workbook and Resources Page (8.7%), the Tier 2 Resources and Modules page (6.14%), and the Tier 1 Effective Classroom Practices page (5.8%).

The vast majority of visitors continue to access the site using desktop (83.5%). As with all other data for 2017–2018, the number of individuals who accessed the site using mobile devices (phone or tablet) decreased from 10,367 in 2016–2017 to 8,441 in 2017–2018 for a decrease of 19%.

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

During the 2017–2018 school year, MO SW-PBS Consultants used learning modules posted to the website for "flipped" instruction. This helped to build background knowledge prior to training, decreased the amount of time Consultants delivered lecture style content, and increased the amount of time participants were able to apply learning.

MO SW-PBS continued to expand communication through social media. MO SW-PBS began communicating via Twitter in 2015-2016 and added Facebook and MailChimp in 2016–2017. The website, Facebook, Twitter, mass emails from the moswpbs@missouri.edu email account, and monthly coaching newsletters developed and sent through MailChimp were part of a multi-pronged communication plan designed to reach a broader audience. Currently MailChimp emails have a 36.3% open rate (industry "education and training" average open rate is 16.1%). During RPDC Center training events and Summer Training Institute, Consultants and participants are urged to use Twitter to share learning. For example, during the 2017 Summer Training Institute, participants were reminded to use #moswpbs17 to follow the event live and share information and inspiration with other attendees.

Social Media Platform	2017–2018	2016–2017
@MOSWPBS Twitter Followers	1,867 followers (as of 3/14/19)	1,414
Facebook Followers	222 as of June 30, 2018	138
MailChimp Subscribers	1,904 (as of 3/14/19)	1,502

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, & Sugai, 2010). These criteria have provided information to assess impact and sustainability and to guide the MO SW-PBS staff and Leadership Team in monitoring the state action plan. A national study designed by McIntosh et al. (2013) was conducted to study these sustainability factors in tandem utilizing the School-wide Universal Behavior Support Sustainability Index, School Teams (SUBSIST), and Missouri was selected to participate based on the long-term implementation of SW-PBS across the state.

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

MO SW-PBS Goals: 1, 2, 3, 4, 5, 6;
MO DESE 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, approximately 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 Missouri Model District (MMD). The purpose of this group is to enhance the collaboration as outlined through the SSOS work. One of the outcomes of this work group has been to develop and pilot online training content. MO SW-PBS has been at the forefront of online course development in the state of Missouri.

MO SW-PBS actively supports the "Show Me Success" goals of The DESE. The implementation of MO SW-PBS includes work in early childhood education and secondary transition. Training, networking opportunities, and resource development were areas of focus for the MO SW-PBS team during the 2017–2018 school year. Training across all three tiers supports best instructional practice by Missouri educators. MO SW-PBS has systematically worked to streamline and align training with all other initiatives of The DESE in an effort to maximize resource utilization. MO SW-PBS personnel have been active participants in state level dialogue and development of a framework for Multi-Tiered Systems of Support (MTSS) in an effort to outline best practice in supports across behavioral and academic domains.

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

SUMMARY

Question 13

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

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

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

The ultimate goal of MO SW-PBS is to help schools establish a process guided by research (McIntosh, McKay, Hume, Doolittle, Vincent, Horner, & Irvin, 2011) for continuous regeneration, leading to all students graduating with college and/or career ready skills. Recent national publications emphasize the critical importance of implementing high school programs that focus on improving students' social and behav-

ioral skills (Dynarski, Clarke, Cobb, Finn, Rumberger & Smink, 2008; National High School Center, 2010). Research also continues to uphold the viability of SW-PBS as an effective means to achieve these goals, including the importance of intervening well before high school to best impact these outcomes (McIntosh, Flannery, Sugai, Braun, & Cochrane, 2008). As such, we will monitor our progress from preschool through high school to ensure we are providing the highest quality training and support across all developmental stages.

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

REGIONAL PROFESSIONAL DEVELOPMENT CENTER
CONTACT INFORMATION

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

Boundary Exceptions
- A school district may choose to utilize services from any RPDC
- State Supervisors are assigned to the RPDC in their respective regions

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

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

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

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

REGION 5: NORTHWEST RPDC
nwmissouri.edu/rpdc

REGION 6: SOUTH CENTRAL-RPDC
https://rpdc.mst.edu/

REGION 7: AGENCY FOR TEACHING, LEADING AND LEARNING
education.missouristate.edu/atll

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

REGION 9: CENTRAL RPDC
ucmo.edu/rpdc

MO SW-PBS State Team Members 2017–2018

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Region 3 Jody Baker, Renee Black, Jeff Freeland, Kathy Growney, and Kelly Nash

Region 4 Sandy Daniels

Region 5 Debbie Lyons and Karen Wigger

Region 6 Jeanie Carey, Janet Crafton, and Rebecca Roberts

Region 7 Julie Germann, Susanna Hill, Jordan Politte, and Andrea Rockney

Region 8 Deb Childs, Jeff Burkett, Michael McCann, Shaw-Hoon Teo, and Karen Westhoff

Region 9 Joe Beydler and Nancy Rogers

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2017-2018 ANNUAL REPORT RESOURCES

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

CONTEXT
1. What are/were the goals and objectives for MO SW-PBS implementation?
   - ▶ MO SW-PBS Action Plan Goals (http://pbismissouri.org/what-is-swpbs/)

2. Who provided support for MO SW-PBS implementation?
   - ▶ MO SW-PBS Personnel listed online (http://pbismissouri.org/about/personnel)

3. Who received support during SW-PBS implementation?
   - ▶ MO SW-PBS schools (http://pbismissouri.org/about/participating-schools)
   - ▶ Race & Ethnicity Guide from U. S. Department of Education (https://www2.ed.gov/policy/rschstat/guid/raceethnicity/index.html)

INPUT
4. What professional development was part of SW-PBS implementation support?
   - ▶ Training Materials, Tier 1 Workbook, Tier 2 Workbook, and Tier 3 workbook
     - (https://pbismissouri.org/tier-1-workbook-resources/)
     - (https://pbismissouri.org/tier-1-workbook-resources/)
     - (https://pbismissouri.org/tier-3-workbook-resources/)

5. Who participated in the professional development?
   - ▶ MO SW-PBS Schools (http://pbismissouri.org/about/participating-schools)

6. What was the perceived value of the professional development?

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

8. To what extent was SW-PBS implemented with fidelity?
   - ▶ MO SW-PBS Recognition Program Awards (http://pbismissouri.org/exemplar-schools/exemplar-schools/)

- ▶ MO SW-PBS Exemplar Schools for 2017-2018 (http://pbismissouri.org/exemplar-schools/
- ▶ PBIS Assessments (https://www.pbisapps.org/Pages/Default.aspx)
- ▶ Missouri Student Information System (MOSIS) (https://dese.mo.gov/data-system-management/core-datamosis)

IMPACT

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

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

REPLICATION, SUSTAINABILITY, AND IMPROVEMENT

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

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

   - ▶ Why it's Prudent and Practical to Implement SW-PBS (http://pbismissouri.org/wp-content/uploads/2018/02/2.1-Prudent_Practical_010117.pdf?x30198)
   - ▶ Missouri School Improvement Plan (https://dese.mo.gov/quality-schools/mo-school-improvement-program)
   - ▶ State Performance Plan Indicators (https://dese.mo.gov/special-education/state-performance-plan)

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