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 2010-11 school year. The report is a review of progress and a reflection on outcomes to guide continued improvement efforts. Thank you to all partners who contributed to the success of MO SW-PBS during the 2010-11 school year.
Missouri Schoolwide Positive Behavior Support (MO SW-PBS) is committed to serving all districts, schools, faculty, staff, and students and their families to realize positive behavioral and learning outcomes. In doing so, MO SW-PBS also assists the Missouri Department of Elementary and Secondary Education to meet the Top 10 by 20 state plan. The purpose of this plan is to position Missouri within the top 10 states in the U.S. in student performance by the year 2020. The four strategic Top 10 by 20 goals are:

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

MO SW-PBS also assists in meeting many of the Missouri State Performance Plan (SPP) Part B Indicators identified through the Department’s Office of Special Education in conjunction with the U.S. Department of Education, Office of Special Education Programs (OSEP). MO SW-PBS specifically addresses the following SPP Indicators:

- SW-PBS helps to create school environments in which students are more likely to be successful in general education classroom environments (Indicator 5), to graduate (Indicator 1), to be successful in meeting their postsecondary goals (Indicators 13 and 14) and who are less likely to be suspended, expelled or to drop out (Indicators 2 and 4).
- SW-PBS provides services to schools for preschool-aged children (Indicators 6 and 7).
- Parental involvement is an integral component of SW-PBS (Indicator 8).
- SW-PBS addresses issues of disproportionality and participation in general education settings by creating proactive school environments (Indicators 5, 9 and 10) where appropriate social and behavioral skills are directly taught and reinforced, and where inappropriate social behaviors are directly addressed and retaught.

The MO SW-PBS goals (see Question 1 on page 2) include outcomes to provide training, materials, technical support, collaboration with other state initiatives and capacity exploration. These goals ensure that the work aligns with and enhances the Department goals and SPP Indicators. The MO SW-PBS goals further serve as a framework to structure activities and to assess progress.
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 the MO SW-PBS state action plan and who provided and received support for SW-PBS implementation for 2010-11.

**Question 1: What are/were the goals and objectives for MO SW-PBS implementation?**

The 2010-11 MO SW-PBS three-year action plan included 11 primary goals that are reviewed annually. The goals and supporting objectives were revised and updated as data indicated. Each of these is addressed in more detail within this report. They include:

1. Continue development and revision of standardized training curriculum for state, district and school teams.
2. Continue development of a three-year training plan for MO SW-PBS consultants.
3. Review infrastructure for school and district coaches support.
4. Review state evaluation/data collection plan and complete development of MO SW-PBS school data profile.
5. Continue active communication with state leadership team and advisory group.
6. Intensify collaboration and integration with other Missouri state initiatives.
7. Revise incentives/recognitions for schools to implement and share data for 2010-11.
8. Upgrade MO SW-PBS website and dissemination activities.
9. Review and revise Tier Two training and technical assistance planning.
10. Develop Tier Three training and technical assistance planning.
11. Determine system for capacity exploration and annual progress review.

*(MO SW-PBS Goal 5; Department Goal 4)*

**Question 2: Who provided support for MO SW-PBS implementation?**

[Organizational Chart]

- **State Coordinator**
  - Training and Technical Assistance for Consultants
  - Liaison to Missouri Department of Elementary and Secondary Education, MU Center for SW-PBS and Other Initiatives

- **State Leadership Team**

- **State Advisory Group**

- **Assistant State Coordinator**
  - Assistance for State Activities
  - Training and Support for Consultants

- **Tier Two/Three Consultants**
  - Curriculum Development
  - Training and Technical Assistance

- **Regional Consultants**
  - Curriculum Development
  - Training and Technical Assistance for Schools

- **Web/Data Consultant**
  - Data Collection and Analysis
  - Materials and Web Management
  - Training and Support for Consultants

- **District Level SW-PBS Coordinator**
  - Assigned by School District

- **School SW-PBS Leadership Teams**
  - Selected by Schools
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 them with input from stakeholders. Members of the team represent the Department, regional- and state-level consultants, the state coordinator, the OSEP Technical Assistance Center on Positive Behavioral Interventions and Supports (PBIS) and the University of Missouri (MU) Center for SW-PBS. State coordinator Dr. Mary Richter directed the day-to-day activities of the initiative and provided ongoing training and technical assistance for MO SW-PBS staff. Team member Dr. Tim Lewis, co-director of the OSEP Technical Assistance Center on PBIS and director of the MU Center for SW-PBS, provided guidance from a national perspective. His input supported appropriate alignment with the OSEP Technical Assistance Center on PBIS objectives and ongoing access to a variety of national and international resources to enhance the quality of MO SW-PBS. Additionally, support from the Department commissioners, directors and staff members was invaluable in moving the initiative forward.

Twenty-four regional consultants were based in all 10 of the state’s Regional Professional Development Centers (RPDCs) and primarily served school districts within those boundaries (see map below). The regional consultants developed standardized training modules across levels and topics and provided training and technical assistance based upon the needs of schools in their region. Additionally, they worked closely with school and district SW-PBS leadership teams as requested. The consultants’ assessment of the ongoing work within their schools and districts guided the content and structure of their regional and district trainings. Five Tier Two/Three consultants assisted the regional consultants on curriculum, effective classroom practices and Tier Two systems of student support. The Web/data consultant developed data training curriculum, provided data training to consultants and school districts, and upgraded the quality and content of the MO SW-PBS website. The assistant state coordinator provided support and assistance to all MO SW-PBS staff. Additionally, St. Louis Special School District (SSD) PBIS facilitators provided training and technical assistance to the districts within their service area. The MO SW-PBS consultants and SSD facilitators actively collaborate and support each other’s work.
PROFESSIONAL ROLES

<table>
<thead>
<tr>
<th>Role/Position</th>
<th>Number of Consultants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrator/Program Director</td>
<td>15</td>
</tr>
<tr>
<td>Classroom Teacher</td>
<td>27</td>
</tr>
<tr>
<td>Special Educator</td>
<td>12</td>
</tr>
<tr>
<td>Specialist/Consultant</td>
<td>5</td>
</tr>
<tr>
<td>Researcher</td>
<td>6</td>
</tr>
<tr>
<td>College Instructor</td>
<td>11</td>
</tr>
<tr>
<td>Curriculum Coordinator</td>
<td>3</td>
</tr>
<tr>
<td>Internal Coach</td>
<td>10</td>
</tr>
<tr>
<td>External Coach</td>
<td>9</td>
</tr>
<tr>
<td>Sports Coach</td>
<td>12</td>
</tr>
</tbody>
</table>

EDUCATIONAL CREDENTIALS

<table>
<thead>
<tr>
<th>Highest Degree Earned</th>
<th>Number of Consultants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelors Degree</td>
<td>1</td>
</tr>
<tr>
<td>Masters Degree</td>
<td>19</td>
</tr>
<tr>
<td>Education Specialist</td>
<td>2</td>
</tr>
<tr>
<td>Doctoral Degree</td>
<td>5</td>
</tr>
</tbody>
</table>

The MO SW-PBS team has experience in many professional roles.

Question 3: Who received support during SW-PBS implementation?

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

The MO SW-PBS state and regional consultants also have educational credentials to provide exemplary support to Missouri schools. They have a combined total of 605 years of experience.

(MO SW-PBS Goals 2, 3; Department Goal 3; SPP Indicators 2, 4)
The number of students served in MO SW-PBS schools has increased from 116,000 during the 2006-07 school year to more than 252,000 in the past year. Student populations in MO SW-PBS schools were more ethnically/racially and economically diverse than all Missouri students or students in non-SW-PBS schools.

The percentage of student population with individualized education programs (IEPs) is similar among all Missouri schools, non-SW-PBS schools and schools implementing SW-PBS during the 2010-11 year. However, when viewing student populations with IEPs since 2007, SW-PBS schools have experienced a greater decrease in students with IEPs in comparison to non-SW-PBS schools.
The number of schools and districts working with MO SW-PBS has steadily increased. During the 2010-11 school year, 594 schools were active participants, accounting for 24.5 percent of all public and charter schools. These schools were from 176 districts or 31.6 percent of all Missouri districts.

![MO SW-PBS ACTIVE SCHOOLS AND DISTRICTS](image)

(MO SW-PBS Goal 11; Department Goal 2; SPP Indicators 6, 7)

**INPUT**

Input details what was done to meet the needs, address the problems and manage the opportunities of a SW-PBS program. Input is a basis for planning and re-planning efforts, allocating resources and assessing fidelity and outcomes (Algozzine et al., 2010, p. 8).

MO SW-PBS has answered the following questions to evaluate professional development efforts.

**Question 4: What professional development was part of SW-PBS implementation support?**

To provide quality technical assistance to schools, professional development to consultants has been a priority. The state coordinator provided training and support to the regional and Tier Two/Three consultants through formal two-day monthly meetings. These meetings included review and analysis of current research and policy, presentation and training content/skill development, practice and assessment of training curriculum, and decision making related to establishing priorities for future MO SW-PBS projects. The state coordinator also conducted monthly half-day training sessions with new consultants to familiarize them with research, state/national policy and curriculum content, and to informally share questions and concerns unique to their initial experiences.

The MO SW-PBS team continued to improve and refine professional development activities during 2010-11, ensuring a logical and meaningful progression of knowledge and skill acquisition across all three tiers. Training and technical assistance were provided regionally by consultants for school teams in the Exploration Phase, the two phases of Tier One (Preparation and Emerging), and the three levels of Tier Two, as well as continued planning and preparation for training at Tier Three. The progression of professional development phases and levels and their related outcomes is shown on page 7.
EXPLORATION AND ADOPTION PHASE

Professional Development
Activities for schools and districts in the Exploration and Adoption Phase were conducted in all 10 regions. Beginning in January, superintendents and principals were invited to hear an overview of SW-PBS. Once the administrator agreement was secured and school or district staff was surveyed, consultants provided individual school staff overviews to obtain 80 percent buy-in. The process for this phase is depicted in the timeline below. These activities provided a clear and consistent process for schools throughout Missouri to successfully initiate their professional development experience and to support staff in making informed decisions regarding their readiness to begin SW-PBS. After completing this phase, schools began participation in Tier One Preparation Phase professional development.

EXPLORATION AND ADOPTION TIMELINE
TIER ONE PROFESSIONAL DEVELOPMENT
During the 2009-10 year, MO SW-PBS developed a Tier One scope and sequence to guarantee the training content of the Preparation and Emerging Phases followed a logical progression for novice teams. In 2010-11, a standard training curriculum was aligned with that scope and sequence and was piloted in all of the regions. To address the growing number of schools involved in the initiative, summer training sessions were provided to new schools (Preparation Phase) and schools beginning implementation with students (Emerging Phase) in more accessible regional locations. These regional training sessions not only provided greater accessibility to teams but also promoted opportunities for networking.

A total of 120 regional training sessions were conducted throughout the school year for teams in the Preparation and Emerging Phases. Some regions customized training sessions further by breaking regions into multiple sites and cadres to address their unique geographic or demographic characteristics (rural, urban, suburban). In addition, extended training opportunities included topics such as the Schoolwide Evaluation Tool (SET), data tools, and administrator, high school, early childhood and coaches networking. Individualized technical assistance continued throughout the year to further develop depth of knowledge and fluency.

TIER TWO PROFESSIONAL DEVELOPMENT
A major focus of the MO SW-PBS statewide team was the creation of a Tier Two curriculum. Like the Tier One curriculum, the Tier Two curriculum identified schools’ learning at three levels (preparation, initial installation and full implementation) that led them through the process of developing and implementing small group interventions. The initial Tier Two curriculum was developed during the 2009-10 year, in which extensive training materials and supporting resources were piloted in seven regions of the state. Revisions were then made to that curriculum, and as the number of Tier Two schools increased, the number of training sessions also increased. In 2010-11, 123 schools participated in Tier Two training sessions held in the regional centers across the state. The comprehensive Tier Two curriculum addressed all phases of implementation to meet the needs of school teams beginning Tier Two implementation and more experienced teams that were adding research-based Tier Two interventions to their school’s “bank” of interventions.

TIER THREE PROFESSIONAL DEVELOPMENT
As teams across the state progressed through Tiers One and Two, the MO SW-PBS statewide team intensified work to investigate and outline a Tier Three scope and sequence. Training content was developed and pilot schools were identified for the training to begin in the 2011-12 year. The process of identifying pilot sites helped to guide the creation of the Tier Three readiness criteria, training content and the projected intensity of technical assistance.

SUMMER INSTITUTE
In addition to the regional trainings at Tiers One and Two, the MO SW-PBS Fifth Annual Summer Institute provided extended learning, sharing and networking opportunities for MO SW-PBS schools. The summer institute was open to all educators, from schools beginning implementation to those fully implementing. It provided structured team time with the regional consultants, state and national perspectives from keynote speakers, topics of interest to school personnel and strands based on the three tiers. A color-coded system assisted teams in selecting sessions aligned with their school’s level of implementation. Topics included family involvement, collaboration within schools, functional behavioral assessment (FBA), classroom strategies, interagency and cross-initiative collaboration, and implementation specific to early childhood, elementary schools, middle schools, high schools and alternative schools.

(MO SW-PBS Goals 1, 3, 9, 11; Department Goals 2, 3; SPP Indicators 5, 9, 10)
Question 5: Who participated in the professional development?

More than 2,200 participants attended summer professional development events (summer institute and summer training for preparation and first-year emerging teams) and over 3,700 participants attended four days of regional training sessions throughout the year for each phase and/or level.

MO SW-PBS professional development participants included but were not limited to school-level coaches, classroom teachers, special education teachers, school counselors, administrators, school board members, parents, Department personnel, SW-PBS personnel from other states, RPDC directors and personnel from other initiatives, such as special education and Professional Learning Communities.

(MO SW-PBS Goals 1, 3, 9, 10; Department Goal 3; SPP Indicators 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.

Feedback from participants who attended the summer institute shared the value as well as insights on their related SW-PBS work:

- “We learned what we are doing right and where we need to go next.”
- “Content was excellent. Team time was great.”
- “I see how MO SW-PBS relates to our Comprehensive School Improvement Plan (CSIP) goals to create an environment conducive to learning.”
- “SW-PBS supports an increase in academic success.”
- “I will work to get more families involved in SW-PBS which will help us reduce the achievement gap.”
- “I need to be more consistent in using the behavior management techniques that I already know.”
- “Teaching social skills consistently and not just on days with extra time.”
- “We need to train all teachers to do simple functional behavioral assessments (FBAs).”
- “Consistency across all high school classrooms will be critical.”
Fidelity details how faithfully the program was implemented based on its original design and the resources that were directed to it (Algozzine et al., 2010, p. 12).

The answers to the following questions show evidence that the MO SW-PBS essential components are 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 being implemented. School outcomes for all phases of the MO SW-PBS training sequence were identified and became the basis for regional- and state-level training sessions. These outcomes were based on items from the School-wide Positive Behavior Support Implementers’ Blueprint and Self-Assessment (Sugai et al., 2005) and assessment tools such as the Effective Behavior Support Self-Assessment Survey (EBS/SAS) (Sugai, Horner, and Todd, 2003), School-wide Evaluation Tool (SET) (Sugai, Lewis-Palmer, Todd, and Horner, 2005) and the Team Implementation Checklist (TIC) (Sugai, Horner, and Lewis-Palmer, 2009). Schools used these measures for internal and external monitoring and evaluation.

The knowledge of the essential components deepened as teams progressed through the phases of training and implementation. For example, the content of the component, Ongoing Monitoring and Evaluation, guided teams to increasingly sophisticated data analysis. Fluency in collecting and developing the Big Five graphs of office discipline referrals in the Preparation Phase led to systematic analysis of the Big Five in the Emerging Phase. The Missouri Big Five Data Review Guide provided a standardized format for schools to move from analysis of data to data-based decision making. The MO SW-PBS website reinforced the importance of implementing all essential components by providing related information, exemplars and training materials.
Essential components of the SW-PBS advanced tiers were clearly articulated through a formalized scope and sequence based on the Benchmarks for Advanced Tiers (BAT) (Anderson, Childs, Kincaid, Horner, George, Todd, Sampson, and Spaulding, 2010). This scope and sequence guided the content, structure and scaffolding of Tiers Two and Three.

Pilot sites for Tier Three schools were identified and these pilot sites informed the development of the Tier Three scope and sequence content and readiness criteria guides as well as the projected need for technical assistance per site.

(MO SW-PBS Goals 1, 3, 4, 8, 9; Department Goals 1, 2, 3, 4; SPP Indicators 1, 2, 4, 5, 6, 7, 9, 10)

**Question 8: To what extent was SW-PBS implemented with fidelity?**

This question references what elements (or essential components) schools are merely attempting to implement and which of those elements are being done with fidelity (personal correspondence with Rob Horner, August 24, 2010). The evaluation of fidelity of implementation at the Tier One level was completed by external personnel using the SET (Sugai, Lewis-Palmer, Todd, and Horner, 2005). Ongoing progress monitoring of fidelity was done through schools regularly taking the EBS/SAS (Sugai, Horner, and Todd, 2003) and the TIC (Version 3.0) (Sugai, Horner, and Lewis-Palmer, 2009).

**TIER ONE**

One of the MO SW-PBS essential components is ongoing monitoring and evaluation. Schools that implemented SW-PBS with fidelity were fluent with data collection and analysis. The standardized Preparation Phase training curriculum emphasized establishing data collection techniques and initial data analysis. Thereafter, schools were expected to initiate consistent data collection and analysis and report data quarterly to regional consultants. Severe weather occurred in Missouri during the second half of the 2010-11 school year, which impacted school functioning for periods of time from several days to the cancellation of the remaining school calendar days. In numerous cases, the reporting of data collection was affected.

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**MO SW-PBS EMERGING AND ABOVE SCHOOLS DATA COLLECTION PARTICIPATION 2010-11 (439 SCHOOLS)**

* 80% is considered an accepted benchmark of implementation fidelity
Missouri schools in the first year of implementation with students (Emerging) could request a SET (Sugai, Lewis-Palmer, Todd, and Horner, 2001). It is a research-validated instrument that is designed to assess and evaluate the critical features of SW-PBS. The SET was designed to determine:

- The extent to which schools are already using SW-PBS.
- If training and technical assistance efforts result in change when using SW-PBS.
- If use of SW-PBS procedures is 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. A common metric for reporting SET results is 80/80. The first 80 represents schools scoring 80 percent on the general index, and the second 80 is a score of 80 percent on the specific index for teaching behavioral expectations. Schools scoring 80/80 or above are implementing SW-PBS at a universal or Tier One level with fidelity (Todd, Lewis-Palmer, Horner, Sugai, Sampson, and Phillips, 2003).

In an attempt to build a sustainable statewide model, MO SW-PBS established new assessment procedures during the 2010-11 year. Schools that had demonstrated Tier One fidelity of implementation by scoring 80/80 on the SET for two consecutive years had the option to instead utilize the Benchmarks of Quality (BoQ) (Kincaid, Childs, and George, 2005). The OSEP Technical Assistance Center on PBIS recognizes the BoQ as a valid and reliable progress monitoring self-assessment for Tier One implementation and has included the BoQ as an online tool in PBIS assessments (Algozzine et al., 2010; Loika, Hoang, Carvalho, Eramudugoda, Dickey, Conley, Boland, Todd, Horner, and Sugai, 2011).

The reduction in SET observations during 2010-11 reflected the large number of schools that had maintained fidelity for over two years and had opted to use the BoQ. As a result, the schools that participated in the SET were less experienced. This may account for the slight decrease in the overall percentage of schools reaching criteria for fidelity of implementation at Tier One.
The SET also provides a score to indicate the level of implementation for each of the seven feature areas of SW-PBS. The SET by individual feature score provided a cause to celebrate the fidelity of implementation of the essential features of SW-PBS in Missouri. These data also provided MO SW-PBS with information indicating areas to improve the MO SW-PBS training curriculum.

SET by feature scores for schools that demonstrated fidelity of implementation showed improvements across all features during the 2010-11 school year. In five of seven features, schools that did not attain fidelity criteria of 80/80 demonstrated improvement. Feature areas scored below 80 percent were considered by the statewide team as areas for improvement.

During this pilot year of the widespread use of the BoQ, data reporting procedures varied across schools and regions. A total of 114 participated in the use of the BoQ.

**TIER TWO**

Tier Two implementation and training content is less defined nationally. This is also reflected in the limited number of fidelity measurement tools for Tiers Two and Three. As a result, MO SW-PBS has followed the guidance from the OSEP Technical Assistance Center on PBIS and piloted the BAT for schools actively implementing Tier Two. The BAT is a self-assessment tool that has verified value in guiding reflection and ongoing progress monitoring of Tier Two/Three teams (Anderson, Childs, Kincaid, Horner, George, Todd, Sampson, and Spaulding, 2010). During the 2010-11 school year, MO SW-PBS personnel created and piloted a standardized electronic interface for school teams to collect and graph results. Of the 123 schools participating in Tier Two training, 93 schools reported they used the BAT, but few submitted results. While the schools that used the BAT indicated it yielded valuable information for school-level decision making, the limited sample of BAT results submitted minimized the usability of the data for statewide decision making.
SCHOOL RECOGNITION
Fidelity was also demonstrated by the movement through the phases of implementation by mastery of specified outcomes. As schools mastered these outcomes, they were eligible to receive recognition awards. Since MO SW-PBS began formal recognition of school progress, more have obtained bronze, silver and gold status.

SCHOOLS BY RECOGNITION

Impact indicators detail intended and unintended outcomes and provide a basis for continuations, revisions and improvements. As Fixsen, Naoom, Blasé, Friedman and Wallace (2005) point out, “[a] test of evidence-based practice or program effectiveness at implementation sites should occur only after they are fully operational, that is, at the point where the interventions and the systems supporting those interventions within an agency are well integrated and have a chance to be fully implemented (p. 18).” 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 five years. The MO SW-PBS leadership team identified fields of data (factors), which were included in the profile, based on a review and alignment with two OSEP Technical Assistance Center on PBIS guiding documents: 1) the Implementers’ Blueprint, and 2) the Evaluation Blueprint. These factors can be categorized as inputs and outcomes. These factors, which were collectively dubbed the MO SW-PBS School Data Profile (SDP), can be valuable for all SW-PBS stakeholders when viewed in tandem. Schools already routinely reported all but five of the SDP factors to the Department. The five additional factors are now also reported annually. The Department’s Missouri State Performance Plan, Part B, also identified the SDP as a vehicle to address progress on Missouri Part B goals.

During the 2010-11 school year, collaborative discussions across multi-tiered systems of support (e.g., Professional Learning Communities, Missouri Integrated Model, Special Education, and Transition) identified the MO SW-PBS SDP as a model for data collection, aggregation and reporting. Work continues toward integration of SDP factors schools enter within Department data sources. The integration will allow all stakeholders to access their data from one location.

The Department encouraged school participation in Leadership and Learning Center training on Decision Making for Results and Data Teams. Most regional consultants attended the training, and many achieved certification. This training aligned with the monitoring and evaluation training already provided by MO SW-PBS.

### MO SW-PBS SCHOOL DATA PROFILE

#### INPUTS

**Student Demographics**
- Student Race
- Student Ethnicity
- Student Gender
- Free and Reduced Lunch Status
- IEP, Non-IEP or All Students

**SW-PBS Implementation**
- School Safety Survey (SSS)
- Team Implementation Checklist (TIC)
- Self-Assessment Survey (SAS)
- School-wide Evaluation Tool (SET)
- Benchmarks of Quality (BoQ)
- Benchmarks of Advanced Tiers (BAT)

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

**Staff Head Count**

#### OUTCOMES

**Attendance**

**Graduation/Dropout Rates**

**Office Discipline Referrals**
- By Grade Level (IEP and Non-IEP)
- By Student
- ISS
- OSS

**Assistance Referrals**

**Special Education Identification/Eligibility**

**Missouri School Improvement Program Advanced Questionnaire**

**Missouri Assessment Program (MAP)**
- Communication Arts
- Math
Question 9: To what extent is SW-PBS associated with changes in student (behavioral) outcomes?

**ATTENDANCE**

Attendance data reported by Department data sources indicated that as school implementation fidelity was achieved across tiers, attendance for all students in the SW-PBS buildings also increased.

Additionally, attendance by students with IEPs also increased as implementation fidelity was achieved across tiers.
**OFFICE DISCIPLINE REFERRALS (ODRs)**

School-wide Information System (SWIS) is an online resource available to schools implementing SW-PBS from the OSEP Technical Assistance Center on PBIS. During the 2010-11 school year, 178 (29.8 percent) of MO SW-PBS schools utilized SWIS for data entry and report generation. ODR data for the year indicated MO SW-PBS schools are close to or at national averages for SWIS ODR rates.

Since the 2006-07 school year, the number of schools and the percentage of students achieving 0-1 referral have increased.

<table>
<thead>
<tr>
<th>GRADES</th>
<th>MO SW-PBS SCHOOLS 2006-07</th>
<th>MO SW-PBS SCHOOLS 2010-11</th>
<th>IMPROVEMENT/COMPARISON TO NATIONAL AVERAGE</th>
<th>SWIS SCHOOLS 2009-10 (SWIS reporting runs one year behind)</th>
</tr>
</thead>
<tbody>
<tr>
<td>K-6</td>
<td>84% 0-1 referral 30 schools</td>
<td>89% 0-1 referral 124 schools</td>
<td>5% increase in number of students in 0-1 referral/slightly below national average</td>
<td>90.8% 0-1 referral 2,565 schools</td>
</tr>
<tr>
<td>6-9</td>
<td>74% 0-1 referral 7 schools</td>
<td>82% 0-1 referral 21 schools</td>
<td>8% increase in number of students in 0-1 referral/slightly above national average</td>
<td>81.4% 0-1 referral 713 schools</td>
</tr>
<tr>
<td>9-12</td>
<td>2 schools (*sample too small for reporting purposes)</td>
<td>81% 0-1 referral 9 schools</td>
<td>No comparison data for number of students with 0-1 referral/above national average</td>
<td>76.2% 0-1 referral 266 schools</td>
</tr>
<tr>
<td>K-8/K12</td>
<td>0 schools</td>
<td>82% 0-1 referral 24 schools</td>
<td>No comparison data for number of students with 0-1 referral/above national average</td>
<td>82.5% 0-1 referral 474 schools</td>
</tr>
</tbody>
</table>

*No reporting of groups with less than five schools is done to protect anonymity.

*(MO SW-PBS Goals 1, 3, 4; Department Goals 1, 3, 4; SPP Indicators 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?

Positive academic outcomes were realized for all students in MO SW-PBS schools and for students with IEPs. MO SW-PBS schools saw consistent improvement in academic outcomes, based on Missouri Assessment Program (MAP) communication arts and math scores, as schools moved through the MO SW-PBS implementation phases.
Another outcome experienced by students with disabilities who attend MO SW-PBS schools is increased time in regular education classes. MO SW-PBS schools had a greater proportion of students with special needs receiving instruction in general education settings compared to Missouri schools preparing to implement SW-PBS and those electing not to participate in MO SW-PBS.

Following are data from three schools that have implemented SW-PBS with fidelity for at least four years and have shown academic and/or behavioral improvement. The school profiles begin with student demographic data for each school. Behavioral data is shared through these graphs: 1) by student referrals, 2) per day per month ODRs, 3) average attendance rate per year, and 4) instructional time lost. To calculate the decrease in time lost as administrators handled ODRs, a 15-minute per incident metric was used. Twenty minutes was used to calculate the instructional time students lost as a result of ODRs (Barrett and Scott, 2006).

CA Percentage Proficient/Advanced graphs indicate the percentage of students who scored proficient or advanced in Communication Arts on the MAP. Math Percentage Proficient/Advanced illustrate the percentage of students who scored proficient or advanced in Math on the MAP.
MAPLECREST ELEMENTARY SCHOOL
Lebanon School District

2010-11 Student Demographics
652 students
94 percent Caucasian
2.5 percent African American
0.5 percent Asian
2.3 percent Hispanic
0.8 percent Indian
63.7 percent Free/Reduced Lunch

Maplecrest Elementary School has implemented SW-PBS for five years. During the 2010-11 school year, they progressed to Tier Two, Level Three training. Average referrals for an elementary school of equivalent size would be 1.43 per day based on SWIS national statistics. The focus on classrooms has helped to make their fidelity of implementation so successful. Preliminary results indicate that Maplecrest met AYP goals for 2011.
EXCELSIOR SPRINGS MIDDLE SCHOOL
Excelsior Springs School District

2010-11 Student Demographics
657 students
89.3 percent Caucasian
4.4 percent African American
1.1 percent Asian
4 percent Hispanic
0.5 percent Indian
38.3 percent Free/Reduced Lunch

Excelsior Springs Middle School has participated in MO SW-PBS for four years, and during the 2010-11 school year progressed to Tier Two, Level Two training. Average referrals per day per month for a middle school of equivalent size would be 3.285, based on SWIS statistics.
REEDS SPRING HIGH SCHOOL
Reeds Spring School District

2010-11 Student Demographics
674 students
95.5 percent Caucasian
0.7 percent African American
0.4 percent Asian
2.1 percent Hispanic
1.2 percent Indian
51.9 percent Free/Reduced Lunch

Reeds Spring High School has participated in MO SW-PBS for four years, and in 2010-11 they progressed to Tier Two, Level Two training. Average referrals for a high school of equivalent size would be 4.59 per day based on SWIS national statistics. In 2008-09, the Board of Education mandated a cell phone policy; in 2009-10, the school improved consistency of response to problem behaviors; and in 2010-11, the school enacted a tardy sweep, professional development for all staff on classroom management and de-escalation techniques.
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).

MO 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 Department has continually committed a strong level of support for implementation of evidence-based practices. The Department supports MO SW-PBS in many ways. Some of these are: 1) financing 32 regional and state positions, 2) relying on the initiative as an SPP improvement activity for numerous SPP Indicators, 3) committing human and financial resources to support the MO SW-PBS SDP online data collection system, 4) promoting the initiative since 2005 through the participation of assistant commissioners (letters to superintendents, presentations to stakeholders and collaboration with Missouri Department of Mental Health to promote three-tiered models across agencies), and 5) recognizing schools reaching exemplary implementation.

The Department’s support also allowed for the improvement of training in needed areas. Research has demonstrated that students from diverse backgrounds are at greater risk for lower levels of achievement as well as higher levels of discipline referrals and dropout rates. Therefore, MO SW-PBS formed committees to educate the consultants to provide more specific training regarding issues of culturally responsive practices and family engagement.

Replication of MO SW-PBS also is evident in the number of participating schools. Shaded counties on the maps on page 25 indicate a minimum of one school per county involved in the MO SW-PBS initiative. The growth in personnel has facilitated increased opportunities for schools to receive training and technical assistance.
During five years of MO SW-PBS implementation, 162 of the 724 schools initially committing to the initiative chose at some time to discontinue. Regional consultants were surveyed regarding reasons for schools not re-committing. Administrative issues were the primary reason, followed by budget/fiscal and other (which included situations such as schools in a district hit by a tornado, district mandated withdrawal or limited resources for numerous initiatives). Initial data for 2011-12 indicate 33 schools that had previously discontinued have re-committed to implementing SW-PBS. Retention of MO SW-PBS schools across five years stands at 83 percent.

Sustainability of SW-PBS is demonstrated by continued high scores on the SET. On average, Missouri schools stayed above the 80 percent benchmark, which increased the number of schools that met one of the criteria for participation in Tier Two training.
A centerpiece for improving capacity is the MO SW-PBS website (pbismissouri.org). Google analytic data for the 2010-11 school year indicated:

- More than 30,000 visits
- More than 16,000 unique visitors
- More than 112,000 page views

The pages most visited included the home page, training, coaches and resources. Sixty-two percent of visits were from Missouri, representing 324 cities across the state. The average visitor from Missouri visited 3.85 pages per visit and stayed on the site an average of 3.44 minutes.

To support improved capacity, changes were made to the website. These included designation of training levels of participating schools, development of an online MO SW-PBS workbook (focused on Tier One implementation with fidelity), development of an online Tier Two tool kit and increased online resources from the 2011 summer institute.

Recent research and publications have indicated that SW-PBS is a promising practice that meets multiple criteria related to being classified as evidence-based (Epstein, Atkins, Cullinan, Kutash, and Weaver, 2008; Horner, Sugai, and Anderson, 2010; McIntosh et al., 2010). These criteria have provided information to assess impact and sustainability and to guide the MO SW-PBS staff and leadership team in monitoring the state action plan. MO SW-PBS data available to date indicate a relationship between implementation of SW-PBS and improvement in social and academic outcomes for students (see Question 9 on page 17 and Question 10 on page 19). However, multi-year data analysis will be necessary to support the extent and strength of the relationship.

(MO SW-PBS Goals 3, 5, 6, 7, 8; Department Goals 3, 4; SPP Indicators 5, 8, 9, 10)
Question 12: To what extent did SW-PBS implementation change educational/behavioral policy?

MSIP and SPP Indicators help to shape the content of school district policy through their Comprehensive School Improvement Plans (CSIPs). 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. Approximately 39 percent have district-level teams that address CSIP indicators through SW-PBS. Some examples of CSIP indicators aligned with SW-PBS are:

- 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 have been actively involved in the state-level alignment group with representatives of academic Response to Intervention, Professional Learning Communities, Missouri Integrated Model, Special Education and Transition. The purpose of this group is to enhance the collaboration among multi-tiered systems of support. One of the outcomes of this group is to consolidate systems of data collection and analysis. The MO SW-PBS SDP has served as a model and is being adopted by other initiatives for their use.

MO SW-PBS staff also have been actively involved with the interagency work group, comprised of education and mental health professionals from various state and other agencies. The group is focused on development of tertiary level SW-PBS curriculum, evaluation, and expansion of state service systems to provide activities, training and other projects across the life span.

(MO SW-PBS Goals 3, 4, 5, 6, 11; Department Goals 1, 2, 3, 4; SPP Indicators 1, 2, 4, 5, 6, 7, 8, 9, 10, 13, 14)

Question 13: To what extent did SW-PBS implementation effect systemic educational practice?

A growing number of Missouri districts now include SW-PBS in new teacher and administrator orientation, support staff training, substitute teacher training, websites, parent supports, school handbooks and community communications. CSIP plans as described in Question 12 are another indicator of systemic impact. Further examples are:

- Presentations to a variety of stakeholders (e.g., Missouri School Boards Association, Missouri Association of Elementary School Principals, Missouri School Counselor Association, Missouri Parents Act, National and Missouri Staff Development Councils).
- Participation in the Department Seclusion and Restraint Work Group.
- Training to administrators and staff of Missouri Schools for the Severely Disabled resulting in full participation in MO SW-PBS.
- School-based research supported by the MU Center for SW-PBS.
- Presentations and training for pre-service teachers.
- Development of a multi-tiered MO SW-PBS curriculum.
- Consultant participation in Department-sponsored Decision Making for Results (DMR) and Data Team (DT) two-day awareness training.
- 62 percent of regional consultants achieving certification as trainers of DMR and DT training (minimum of one per region certified).
- Collaborative planning and training with RPDC consultant colleagues from other initiatives and departments, such as Professional Learning Communities, Special Education and Missouri Integrated Model.
- Forming of MO SW-PBS staff committees to extend and deepen the curriculum. Identifying culturally responsive practices and family engagement as topics in need of specific emphasis.

(MO SW-PBS Goals 1, 3, 4, 5, 6, 9, 10, 11; Department Goals 3, 4; SPP Indicators 5, 8, 9, 10)
SUMMARY

Systems change research indicates it takes a community (i.e., school, district) a minimum of two to four years to implement a new, evidence-based initiative with fidelity (Fixsen, Naoom, Blasé, Friedman, and Wallace, 2005). From a statewide perspective, the SW-PBS implementation in Missouri is a relatively young initiative, having begun in 2005. As such, the evaluation data to date reflect process evaluation. From this initial process evaluation data, the question, “Can and have schools in Missouri implemented the core features of SW-PBS and sustained that implementation over time?” can be answered with an unequivocal “Yes.”

The data and reporting systems that are being used and refined will allow MO SW-PBS to more fully reflect upon the impact of SW-PBS implementation. Currently available impact data indicate when SW-PBS is implemented with fidelity in Missouri schools, students experience increased attendance, improved academic achievement and increased placement in least restrictive environments (LRE).

MO SW-PBS acknowledges that evaluation of this initiative is a process, not a single event. The ultimate goal of MO SW-PBS is to help schools establish a process for continuous regeneration of what works, leading to all students graduating with college and/or career-ready skills. SW-PBS research continues to uphold its viability as an effective means to achieve these goals. In a letter to chief state school officers in July 2009, U.S. Secretary of Education Arne Duncan stated, “PBIS provides a framework for decision making that guides the implementation of evidence-based academic and behavioral practices throughout the entire school, frequently resulting in significant reductions in office disciplinary referrals, suspensions and expulsions.”
Introduction

- Top 10 By 20: Missouri Proud – desemo.gov/top10by20/
- Missouri State Performance Plan (SPP) Part B Indicators – desemo.gov/divspeced/SPPpage.html

Context

1. What are/were the goals and objectives for MO SW-PBS implementation?
   - MO SW-PBS Action Plan Goals – pbismissouri.org/leadership.html

2. Who provided support for MO SW-PBS implementation?
   - MO SW-PBS personnel listed online – pbismissouri.org/staff/consultant-list.html
   - Missouri Department of Elementary and Secondary Education – desemo.gov

3. Who received support during SW-PBS implementation?
   - MO SW-PBS Schools – pbismissouri.org/schools.html

Input

4. What professional development was part of SW-PBS implementation support?
   - Summer Institute 2010 – pbismissouri.org/si2010/si2010.html
   - Training Materials – pbismissouri.org/train.html
   - MO SW-PBS Tiers, Levels and Phases – pbismissouri.org/train.html
   - MO SW-PBS Workbook – pbismissouri.org/tier_1/WB_T1.html
   - Tier Two Tool Kit – pbismissouri.org/tier_2/t2tk.html

5. Who participated in the professional development?
   - MO SW-PBS Schools – pbismissouri.org/schools.html

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

Fidelity

7. To what extent was SW-PBS implemented as designed?
   - Training Materials – pbismissouri.org/train.html
   - MO SW-PBS Workbook – pbismissouri.org/tier_1/WB_T1.html
   - Tier Two Tool Kit – pbismissouri.org/tier_2/t2tk.html

8. To what extent was SW-PBS implemented with fidelity?
   - MO SW-PBS Recognitions Criteria – pbismissouri.org/criteria.html
   - MO SW-PBS Exemplar Schools for 2010-11 – pbismissouri.org/exemplar.html
   - PBIS Assessments – pbisassessment.org/

Impact

9. To what extent is SW-PBS associated with changes in student (behavioral) outcomes?
   - Missouri Assessment Program – desemo.gov/divimprove/assess/

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 – pbismissouri.org/starting.html
   - Lewis Elementary Resources (links for Parents, SW-PBS Resources, CSIP, etc.) – le.essd40.com/cms/one.aspx?objectld=4995425
   - Missouri School Improvement Program – dese.mo.gov/divimprove/sia/msip/
   - Missouri State Performance Plan Indicators – dese.mo.gov/divspeced/SPPpage.html
   - Missouri Department of Elementary and Secondary Education Implementation Audit Report – dese.mo.gov/Appendix6.pdf

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

REFERENCES


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CENTERS MAP AND CONTACT INFORMATION

MISSOURI RPDCs

REGION 1: SOUTHEAST RPDC
800-401-6680 or 573-651-5161
www4.semo.edu/rpdc

REGION 2: HEART OF MISSOURI RPDC
800-214-2753 or 573-882-6924
heartofmissourirpdc.org

REGION 3: KANSAS CITY RPDC
816-235-5652
education.umkc.edu/kcrpdc

REGION 4: NORTHEAST RPDC
888-878-7732 or 660-785-4310
rpdc.truman.edu

REGION 5: NORTHWEST RPDC
800-663-3348 or 660-562-1995
nwmissouri.edu/rpdc

REGION 6: SOUTH CENTRAL RPDC
800-667-0665 or 573-341-6473
rpdc.mst.edu

REGION 7: SOUTHWEST RPDC
800-735-3702 or 417-836-4090
education.missouristate.edu/rpdc

REGION 8: ST. LOUIS RPDC
314-692-1256
csd.org/administrative/pdprograms

REGION 9: CENTRAL RPDC
800-762-4146 or 660-543-8240
ucmo.edu/rpdc

REGION 10: MISSOURI WESTERN RPDC
816-271-4534
missouriwestern.edu/rpdc
The mission of Missouri Schoolwide Positive Behavior Support (MO SW-PBS) is to assist schools and districts in establishing and maintaining school environments where the social culture and behavioral supports needed to be an effective learning environment are in place for all students.