DRILLING DOWN DISTRICT DATA: ANALYZING REACH AND FIDELITY OF PBIS IMPLEMENTATION



October 2021

PURPOSE

Using data to monitor, evaluate, and guide decision-making is an essential characteristic of PBIS implementation. Data-based decision making facilitates a cycle of quality improvement and helps the district build capacity for sustainable, culturally and contextually relevant, and high-fidelity implementation of PBIS. At the district level this involves collecting data across schools with the goal of gathering information to evaluate implementation progress, assess student outcomes, and inform decisions about the supports necessary to achieve valued outcomes and goals for each school.

The purpose of this practice brief is to suggest the initial data and structure to support data-based decision making at the district level. This practice brief was developed for district leadership teams supporting PBIS implementation. The information presented is aligned to the guidance provided in the PBIS Evaluation Blueprint (Center on Positive Behavioral Interventions and Supports, 2020).

PLANNING AND PREPARATION

The process of data-based decision making can be used for a range of purposes and can vary in complexity. Effective data-based decision making is represented by an ongoing cycle of gathering, organizing, and using data for information and guidance (Center on Positive Behavioral Interventions and Supports, 2020). This practice brief offers a format for assessing the **reach** (Who is participating in PBIS?), **process** (What is happening with the PBIS initiative?), and **fidelity** (Are the core features of PBIS being implemented?) of a district's efforts in implementing PBIS (see Table 1). Whether for summative or formative (i.e., progress monitoring) purposes, the information gained can guide action planning and help a district leadership team determine next steps to differentiate training and coaching to match each school's current level of implementation and move them toward full implementation.

Category	Value	Sample Questions	Sample Measures
Reach Who is participating in PBIS?	 Identifies schools participating in PBIS and students involved Indicates scale and potential benefit of PBIS implementation Highlights areas for expansion and/or sustained implementation 	 What number and/or percentage of our schools are implementing at each tier? What types of schools are participating (e.g., elementary schools, middle schools, high schools, alternative schools)? To what extent has PBIS implementation scaled across the district? To what extent has PBIS implementation sustained over time? 	Counts of Schools Counts of Students

Table 1. Sample Questions and Measures by Category



Table 1, continued

Category Value		Sample Questions	Sample Measures	
Process Where are we in our PBIS implementation efforts	- Documents installation and ongoing implementation activities	 What PBIS professional development (e.g., training, coaching) has been provided? Who has provided the professional development? To what extent was the professional development delivered with fidelity? Have participants perceived professional development events as useful and effective? Are schools receiving sufficient technical assistance to reach fidelity and demonstrate student impact? 	PD Calendar PD Event Evaluations TA Logs	
Fidelity Are the core features of PBIS being implemented with integrity?	 Shows the extent PBIS is being implemented per current research within each school across tiers Provides model schools within the district to serve as exemplars for other schools 	 What percentage of schools are implementing PBIS with fidelity across each tier? Which schools could serve as model schools for implementation demonstrations (across tiers and level)? 	Tiered Fidelity Inventory (TFI)	
Outcomes Are we achieving valued outcomes?	- Provides data showing the impact on students	 What percentage of all and key sub-groups of students are showing improvement within: Implementing schools? Schools implementing with fidelity within each tier? 	Student Outcome Data (e.g., academic performance, attendance, behavioral infractions, climate)	

(Center on Positive Behavioral Interventions and Supports, 2020)

ASSESSING STUDENT OUTCOMES

In addition to the assessment categories in Table 1, districts should also review outcome data to evaluate if PBIS implementation is achieving intended benefits, goals, and outcomes (e.g., office discipline referrals, disproportionality, exclusionary discipline, academic achievement). A guiding principle of data analysis is to

J	N	7	ľ
	-	F	1
	-	-	5

examine outcomes and effectiveness prior to and once individual schools have implemented with fidelity to note trends and overall impact. If PBIS is not being implemented with fidelity, changes in outcomes are less likely (Center on Positive Behavioral Interventions and Supports, 2020).

EFFICIENT FIDELITY AND STAFF PERCEPTION MEASURES

A primary goal of analyzing district-level PBIS data is to assess if the inputs and investment of the district have enabled schools to implement with fidelity. School-level PBIS teams can use the PBIS Tiered Fidelity Inventory (TFI) to assess the extent that the core features of Tiers 1, 2, and 3 are being implemented as intended. The TFI is a validated measure of implementation fidelity which can be used annually or more frequently depending on the team's implementation status. In addition to the TFI, the Self-Assessment Survey (SAS) can be used at the school level to identify faculty and staff perceptions of implementation across all tiers (1, 2, and 3). SAS data can assist school-level teams in understanding (a) how faculty and staff perceive PBIS being implemented in their school and (b) the staff priorities for promoting sustainability and improving implementation across tiers, and (c) possible disconnects between school teams reported fidelity and staff perceptions (i.e., comparisons between TFI and SAS). Because the TFI represents implementation from the perspective of the school's PBIS team in corroboration with an external technical assistance provider, it is helpful to include the SAS to check for inconsistencies between team and overall faculty/staff perceptions on the degree of implementation.

COLLECTING DATA WITH PBIS ASSESSMENT

Both the TFI and SAS are available through both the Center on PBIS (<u>www.pbis.org</u>) and <u>PBIS</u> <u>Assessment</u>. PBIS Assessment is an online application designed to help teams implement and sustain PBIS with fidelity through regular progress monitoring of implementation. With PBIS Assessment, school teams can access and download the TFI, enter their scores online, and immediately generate four different, downloadable reports:

- 1. Total Score total percent of items fully implemented across Tiers 1, 2, and 3
- 2. Scale percent of items fully implemented within each individual tier
- 3. Subscale percent of items fully implemented within each subscale of each tier
- 4. Items scores for each individual TFI item assessed (PBISApps, 2019).

Each time a team takes the TFI, their scores are saved which allows for progress monitoring implementation over time.

PBIS Assessment also allows school teams to open the SAS for online completion by as many staff and faculty at the school as possible. When completing the SAS, respondents score items based on their perception of current implementation status and whether they perceive the item to be a priority (PBISApps, 2019). Once the survey window closes, teams can access reports summarizing the responses across all participants. SAS data will show the percent of staff/faculty who perceive an individual item and/or larger system (e.g., school-wide) to be in place, partially in place, or not in place. Additionally, data



Center for Schoolwide Positive Behavior Support University of Missouri on improvement priority will show staff/faculty beliefs regarding items with a high, medium, or low priority for improvement (PBISApps, 2019).

COORDINATING ASSESSMENTS

Districts can enhance the efficiency of their data collection by identifying personnel to function as PBIS Assessment Coordinators. Assessment coordinators make it possible for schools to use PBIS Assessment, or developing within district e-versions of the tools, and complete measures like the TFI and SAS. As well, coordinators:

- develop and oversee the district evaluation plan,
- organize a district assessment calendar,
- provide technical assistance on using PBIS Assessment and collection of other district-wide data (e.g., universal screeners, climate surveys),
- train and coach school teams on using their individual school data for decision making and action planning.

With these activities, assessment coordinators play an integral role in a district's processes for data analysis. By facilitating consistent and efficient data collection at the school-level, they assist the district in organizing a district-level view of PBIS implementation.

Key to sustainability is the efficient use of personnel within the district who have expertise specific to the PBIS process. Districts are encouraged to consider expertise, role, and function over specific positions and/or titles (Center on Positive Behavioral Interventions and Supports, 2020). The role and function of a district PBIS coach overlaps well with the responsibilities of an assessment coordinator. Because they are already providing technical assistance to school teams and assisting with the overall district PBIS process, district PBIS coaches often have PBIS Assessment responsibilities, too.

USING SCHOOL DATA FOR DISTRIC IMPROVEMENT

Data collection systems should support regular data-based decision-making processes at the school level and provide summary data for district-level decision making (Irvin et al., 2006). Having clear systems and processes to support the assessment and evaluation of PBIS implementation helps districts achieve implementation goals.

PBIS Assessment offers assessment coordinators the option to download all survey data entered for a school. By downloading TFI and SAS data for each school and compiling them in a spreadsheet, district leadership teams can construct a district-level view showing the extent PBIS was implemented as intended for each school at each tier. As well, organizing school-level data for a district-level view helps answer many of the questions posed in Table 1.

Figure 1 illustrates how a district might approach organizing TFI and SAS data across schools to provide a broad view of current implementation



In this sample district, six schools (shaded in red) have PBIS teams all reporting implementation with fidelity at Tier 1 on the TFI, but the less than expected 80% "in place" as reported on the SAS indicate core Tier 1 interventions most likely not being implemented with fidelity across all staff. This data indicates a disconnect between the school PBIS team and the school's staff/faculty.

Four schools (shaded in green) all report fidelity at Tier 1. Several of these schools also have data indicating fidelity at Tiers 2 and 3. SAS data for these schools indicate that staff agree that implementation is in place across multiple systems. These four schools could serve as model demonstration sites.

Organizing TFI and SAS data in this manner can help district leadership teams better use their data for decision making. This data could be used to tailor professional development (i.e.,

	Tiered Fidelity Inventory (TFI)			Self-Assessment Survey (SAS)				
School	TFI Total Score	Tier 1 Subscale	Tier 2 Subscale	Tier 3 Subscale	School- wide Systems	Non- Classroom Systems	Classroom Systems	Individual Systems
А	70%	93%	65%	53%	89%	90%	85%	77%
В	66%	80%	69%	50%	55%	51%	61%	46%
С	79%	73%	85%	79%	38%	32%	40%	31%
D	74%	73%	73%	76%	58%	46%	60%	53%
E	66%	97%	69%	35%	73%	75%	71%	65%
F	72%	83%	62%	71%	62%	62%	61%	61%
G	60%	87%	42%	50%	55%	63%	58%	37%
Н	47%	57%	38%	44%	63%	47%	58%	48%
1	29%	40%	38%	12%	65%	57%	78%	60%
J	51%	60%	58%	38%	56%	47%	60%	78%
К	99%	97%	100%	100%	86%	87%	85%	72%
L	79%	97%	69%	71%	78%	87%	70%	75%
М	70%	93%	69%	50%	64%	69%	52%	49%
N	46%	60%	35%	41%	61%	64%	57%	45%
0	80%	100%	69%	71%	86%	89%	89%	78%
Р	67%	67%	65%	68%	84%	80%	90%	84%
Q	43%	50%	46%	35%	54%	57%	58%	55%
R	57%	67%	50%	53%	59%	58%	58%	44%
S	74%	100%	58%	65%	86%	80%	66%	81%
Т	69%	90%	69%	50%	73%	61%	72%	65%
U	59%	70%	46%	59%	60%	57%	61%	56%
V	48%	57%	54%	35%	66%	75%	73%	51%
W	77%	97%	73%	62%	89%	95%	88%	87%
Х	57%	53%	54%	62%	59%	59%	54%	55%
Y	97%	97%	96%	97%	96%	93%	97%	97%
Z	58%	47%	58%	68%	68%	63%	62%	50%

Figure 1. Sample District View of TFI & SAS

training, coaching) and/or re-allocate resources. One consideration for district leadership teams is grouping schools for professional development based on current implementation level versus the common approach of grouping by building type (elementary, middle school, high school).

Formative assessment of **reach** (Who is participating in PBIS?), **process** (What is happening with the PBIS initiative?), and **fidelity** (Are the core features of PBIS being implemented?) data helps the district create a cycle of continuous quality improvement where data is used to evaluate implementation, plan for new/enhanced supports, and assess implementation. This cycle provides the district leadership team, trainers and coaches, and school teams with regular feedback that allows for midyear (rather than next year) adjustments to implementation activities and prevents potential problems early.

RESOURCES

PBIS Evaluation Blueprint

PBIS Tiered Fidelity Inventory (TFI)

Self-Assessment Survey (SAS)

PBIS Assessment



REFERENCES

- Center on Positive Behavioral Interventions and Supports (2020). Positive behavioral interventions and supports (PBIS) evaluation blueprint. University of Oregon. <u>www.pbis.org</u>.
- Irvin, L. K., Horner, R. H., Ingram, K., Todd, A. W., Sugai, G., Sampson, N. K., & Boland, J. B. (2006). Using office discipline referral data for decision making about student behavior in elementary and middle schools: An empirical evaluation of validity. *Journal of Positive Behavior Interventions*, 8(1), 10–23. https://doi.org/10.1177/10983007060080010301

PBISApps. (January 2019). PBIS assessment coordinator's guide. <u>https://www.pbisapps.org/resource/pbis-assessment-coordinators-guide</u>

Suggested Citation for this Publication

Morris, K. & Lewis, T. (2021). Drilling down district data: Analyzing reach and fidelity of PBIS implementation. Columbia, MO: MU Center for School-wide PBS, University of Missouri.



Center for Schoolwide Positive Behavior Support University of Missouri