



Using Discipline Data within SWPBIS to Identify and Address Disproportionality: A Guide for School Teams

This practice guide is one of a series of guides for enhancing equity in school discipline. The guides are based on a 5-point multicomponent intervention described by McIntosh, Girvan, Horner, Smolkowski, and Sugai (2014). The 5 points include effective instruction, School-wide PBIS as a foundation for culturally-responsive behavior support, use of disaggregated discipline data, effective policies, and reducing bias in discipline decisions. This guide addresses use of data.

The recommendations and guides are available at:

<http://www.pbis.org/school/equity-pbis>

Introduction

The purpose of this guide is to provide a reference for SWPBIS school teams in the use of discipline data (e.g., office discipline referrals, suspensions) in the area of racial and ethnic disproportionality in school discipline. The guide will describe a framework and steps for identifying levels of disproportionality, analyzing data to determine solutions, and monitoring the effectiveness of action plans in addressing disproportionality. Specific practices to address disproportionality are described in other guides in this series.

Audience

This guide is designed primarily for use by school or district teams seeking to reduce racial and ethnic disproportionality in school discipline, regardless of whether they are implementing SWPBIS.

Background

The problem of racial and ethnic discipline disproportionality is both long-standing and widespread. In 1973, African American students were almost twice as likely to be suspended as white students. In 2006, African American students were more than three times likely to be suspended than their white peers (Losen & Skiba, 2010). African American students continue to face increased risk for suspension for minor misbehavior and increased risk of school suspension and expulsion for the same behavior as students from other racial/ethnic groups (Skiba et al., 2011). These differences have been found consistently across geographical regions of the United States and cannot be adequately explained by the correlation between race and poverty (Noltemeyer & Mcloughlin, 2010). In other words, race continues to play a role in the likelihood a student will be suspended or expelled, regardless of socioeconomic status. Given the well-documented negative effects of exclusionary discipline on a range of student outcomes (American Academy of Pediatrics Council on School Health, 2013), educators must address this issue by identifying rates of discipline disproportionality, taking steps to reduce it, and monitoring the effects of intervention on disproportionality. Disproportionality in exclusionary discipline blocks us from the overall objective of promoting positive outcomes for all students.

Using data for decision making is a powerful approach for improving both educational systems and student outcomes (McIntosh et al., 2013; Stecker, Fuchs, & Fuchs, 2005). As such, it is also promising for reducing discipline disproportionality and is strongly recommended by the U.S. Departments of Education and Justice as an important step (2014). Rigorous collection and analysis of data serves to understand the need, identify areas for improvement, and determine appropriate action to ensure that efforts to reduce disproportionality are effective and provide guidance for adjustments that may be required. However, educators

currently need specific guidance for using discipline data to assess and monitor disproportionality in a method that is both effective and efficient (Boneshefski & Runge, 2014).

Data Sources Needed

Assessing disproportionality requires a discipline data system with more features than is needed for decision making without considering ethnicity.

Required Features

- Consistent entry of ODR data and student race/ethnicity
- School enrollment by race/ethnicity
- Instantaneous access for school teams (not just district teams)
- Capability to disaggregate ODRs and patterns by race/ethnicity
- Capability to calculate risk indices and risk ratios by race/ethnicity

Recommended Features

- Standardized ODR forms and data entry
- ODR forms with a range of fields (e.g., location, time of day, consequence)
- Clear operational definitions of problem behaviors
- Clear guidance in discipline procedures (e.g., office vs. classroom managed)
- Instantaneous graphing capability
- Capability to disaggregate graphs by race/ethnicity
- Automatic calculation of disproportionality graphs, risk indices, and risk ratios

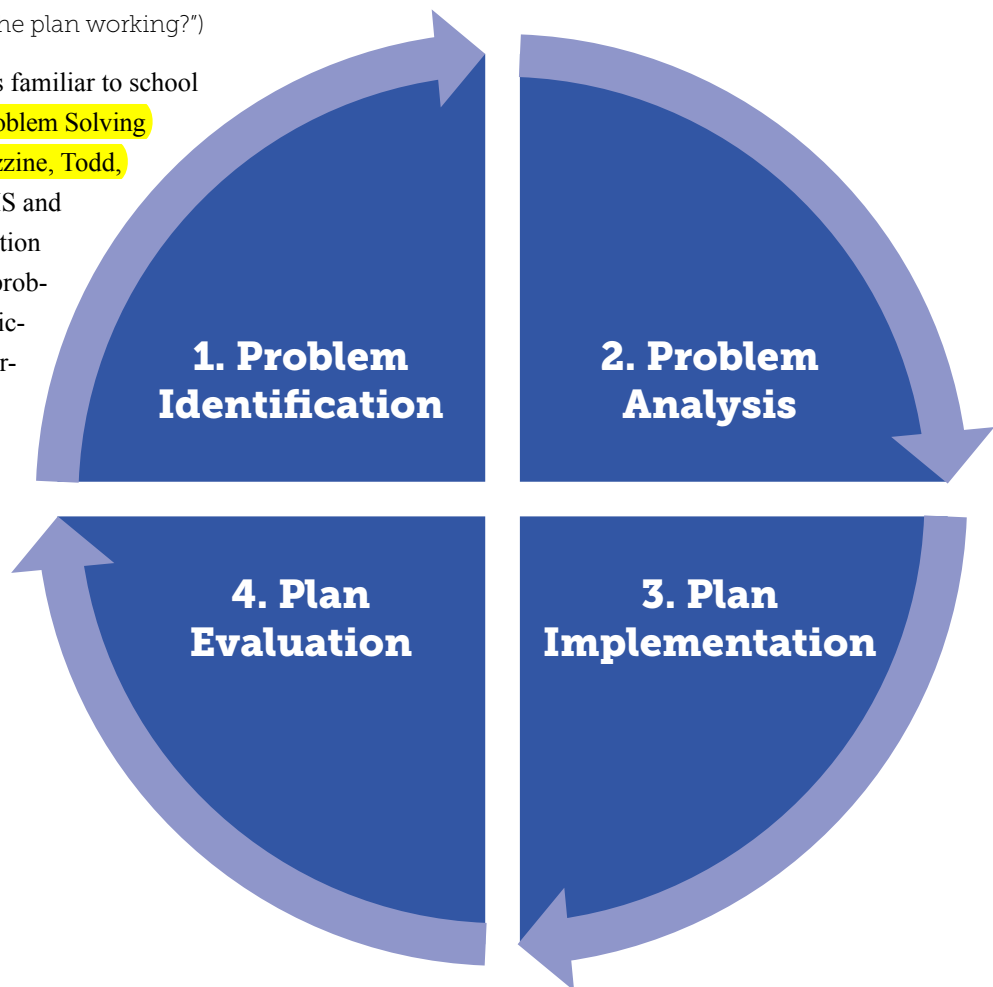
This guide will use the School Wide Information System (SWIS; May et al., 2013) for examples, although any data system with the features described above can be used with this guide.

Framework for this Guide

The organization of this guide is based on a four-part problem-solving model commonly used in educational settings (as described by Tilly, 2008). This model provides an effective set of steps to use in using data for discipline decision making. These steps include:

1. **Problem Identification** (i.e., "Is there a problem?")
2. **Problem Analysis** (i.e., "Why is it happening?")
3. **Plan Implementation** (i.e., "What should be done?")
4. **Plan Evaluation** (i.e., "Is the plan working?")

This problem-solving model is familiar to school teams using **Team-Initiated Problem Solving** (TIPS; Newton, Horner, Algozzine, Todd, & Algozzine, 2012) in SWPBIS and academic response to intervention (RTI) systems. The four-step problem-solving model works particularly well for use in disproportionality decision making.



STEP 1: Problem Identification “Is There a Problem?”

The first step of the problem-solving model is Problem Identification. In Problem Identification, teams seek to identify whether a problem exists. Such problems are often described as differences between what is currently observed (performance) and what is expected or desired (goals). If a problem is identified, data are used to quantify the severity of the problem. For example, if 62% of students have 0 to 1 Office Discipline Referrals (ODRs), but the goal was 80%, the team has identified a problem, with a difference of 18% between what is observed and what is expected. Defining problems with objective measures makes the process more effective and allows accountability for improvement.

The Problem Identification process can occur either whenever a problem is suspected or as part of a planned, recurring evaluation period (e.g., beginning of the year screening, summative end-of-year reporting). If a problem is identified, the team follows the next steps of the problem-solving

model to address it and then cycles back to Problem Identification to see whether to continue, modify, or fade the plan.

Use for Disproportionality

Problem Identification for disproportionality is not as straightforward as problem solving with ODRs only. Disproportionality may be hidden if only one metric (i.e., a way of counting data) is used. For example, different groups of students may have the same overall risk of receiving ODRs (risk index), but a specific group who receives ODRs may receive many more than others (composition). As a result, it is important to examine multiple metrics instead of just one (IDEA Data Center, 2014). Problem Identification for disproportionality involves comparing rates of discipline across racial/ethnic groups.

The following forms of data are most commonly used in Problem Identification for disproportionality:

Risk Index

A risk index is the percent of a group that receives a particular outcome (most commonly an ODR or suspension), which is equivalent to the likelihood of someone from that group receiving that outcome. For meaningful assessment of disproportionality (Boneshefski & Runge, 2014), it is necessary to calculate and compare risk indices for each racial/ethnic group in a school.

Example and Calculation

	# of Enrolled Students	# of Students with Referrals	# of Students within Ethnicity with Referrals	Risk Index
Native	5	2	40.00%	0.40
Asian	21	10	47.62%	0.48
Black	70	41	58.57%	0.59
Latino	123	101	82.11%	0.82
Pacific	5	3	60.00%	0.60
White	255	165	64.71%	0.65
Unknown	0	0	0.00%	0.00
Not Listed	0	0	0.00%	0.00
Multi-racial	21	14	66.67%	0.67
Totals:	500	336		

$$\frac{\text{Number of Students with 1 or more ODRs}}{\text{Total Number of Students in the Group}} = \text{Risk Index}$$

$$\frac{\text{Number of Latino Students with 1 or more ODR}}{\text{Number of Latino Students enrolled}} = \frac{101}{123} = .82$$

$$\frac{\text{Number of White Students with 1 or more ODR}}{\text{Number of White Students enrolled}} = \frac{165}{255} = .65$$

Risk Ratio

Risk ratios represent the likelihood of the outcome (e.g., ODRs) for one group in relation to a comparison group. Risk ratios are calculated by dividing the risk index of the group of interest by the risk index of a comparison group. The comparison group most commonly used is White students, but others, such as the risk index for all other groups is sometimes used.¹ A risk ratio of 1.0 shows that the risk for the two groups is equal, whereas a risk ratio greater than 1.0 is indicative of overrepresentation, and a risk ratio less than 1.0 is indicative of underrepresentation (Boneshefski & Runge, 2014).


Example and Calculation

$$\frac{\text{Risk Index of Target Group}}{\text{Risk Index of Comparison Group}} = \text{Risk Ratio}$$

Continuing with the above example, the risk ratio of Latino/a students for receiving an ODR, compared to White students would be calculated as follows:

$$\frac{\text{Risk Index of Latino Students}}{\text{Risk Index of White Students}} = \frac{.82}{.65} = 1.27$$

It is also possible to use excel spreadsheets to quickly calculate risk ratios like this example from the Wisconsin PBIS Network²:

Instructions for use: Enter data for cells highlighted in blue							
Total School Enrollment		Black	Native	Latino	Asian	Pacific Isle	Multi-racial
Student Enrollment by Race		70	5	123	21	5	21
Office Discipline Referral		Black	Native	Latino	Asian	Pacific Isle	Multi-racial
Office Discipline Referral by Race (# of students with ODR)		41	2	101	10	3	14
%age of enrolled students with ODRs by race		0.59	0.40	0.82	0.48	0.60	0.67
Risk Ratio for ODR		0.91	0.62	1.27	0.74	0.93	1.03

1. In most situations, White students are the comparison group because they are the majority group and dominant culture. If a group other than White students composes a larger percentage of the student body, teams may use all other groups (excluding the target group) as the comparison group. Some experts recommend calculating risk ratios both ways (IDEA Data Center, 2014), but in most cases, White is the most common comparison group.

2. Available for free at <http://goo.gl/mNcgVS>

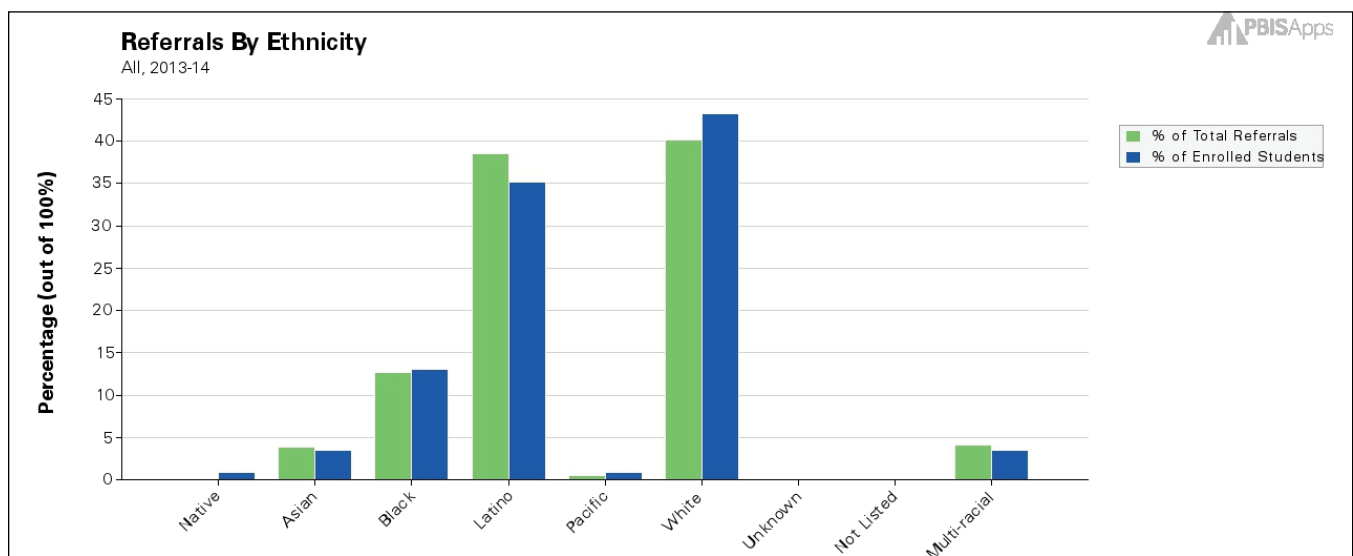
Composition

Composition metrics provide another measure of disproportionality. One common metric is the comparison of the proportion of students within a racial/ethnic group to the proportion of ODRs from the same group. Referred to as *Referrals by Ethnicity*³, this metric allows educators to evaluate whether the number of ODRs from one group is proportionate to the group's size. It is a useful addition because in some cases, risk indices and ratios may show that a similar percent of each group has received an ODR, but students from a specific group with ODRs may receive many more than students from other groups.

Steps

Regardless of the specific discipline data system, the following general steps are used in Problem Identification for disproportionality:

1. **Select metrics to use.** As described above, it is helpful to use a few different measures, because relying on only one can hide or exaggerate disproportionality (IDEA Data Center, 2014). We recommend calculating these two metrics for each group of concern because they are the most commonly used:
 - Risk Ratios
 - Composition Reports
2. **Calculate metrics.** Using the formulas provided earlier, calculate these metrics for each outcome (e.g., ODRs and suspensions) for your selected period of time (often the last full school year or the year to date).
3. **Compare to goals.** Once metrics are calculated, the next step is to compare these numbers to a criterion. This step can be challenging because there is no federal definition of what constitutes disproportionality, so each state sets its own criteria. There are a number of options, each with advantages and disadvantages, so we recommend using more than one:
 - **Previous Years for Same School.** A common approach for Problem Identification is to compare to the same calculations from previous years. This approach is helpful because it allows school teams to track whether the problem is increasing or decreasing over time (and based on their efforts). However, by itself, it does not tell teams how their results compare to an external standard for disproportionality. As a result, we recommend using this comparison and one or more of the following additional goals.
 - **Local or National Norms.** Comparing to information from other schools (e.g., district,



3. This report is one of the SWIS Ethnicity Report graphs.

state, national averages) can help provide an external standard. School teams with extreme disproportionality may want to set an initial goal of the median disproportionality (50th percentile), whereas those with better numbers may aim for the 25th percentile or a logical criterion (described next). Regarding national norms, for U.S. public schools using SWIS and with at least 10 African American and 10 White students in 2011-12, the median risk ratio for African American students (with White as the comparison group) was 1.84. The 25th percentile was 1.38.

- **Logical Criteria.** Another approach is to set a reasonable goal for disproportionality that is not related to school or national norms, which may or may not be an ambitious goal. One logical goal would be the standard for disparate impact

(i.e., disproportionality regardless of intent) from the U.S. Equal Employment Opportunity Commission (EEOC). Their disparate impact criterion (known as the "4/5ths rule") indicates a goal risk ratio range between .80 and 1.25.

One important caution when considering comparisons is the number of students in each group. When there are fewer than 10 students in a particular group, smaller changes on ODRs or suspensions may inflate the disproportionality metrics (U.S. Government Accountability Office, 2013). In these situations, it may be more accurate to measure disproportionality at the district or regional level. These results still indicate disproportionality that should be addressed, however, and efforts to address this at either the systems or individual level may be warranted.

School Example: Rainie Middle School

To help clarify the approach used in this guide, each step will include the steps taken by a fictitious school, but this example is based on common data patterns. It is important to note that this example illustrates the process based on this fictitious school's needs, and their decisions may not fit the context of another school and are not necessarily recommended for all schools.

Rainie Middle School (RMS) is located in a small city and has an enrollment of 2000 students, 72% of whom receive free and or reduced price meals. The student population is 48% white non-Hispanic, 31% African American, 20% Latino/a, and 1% Asian. The school has been implementing SWPBIS for 2 years and uses the School Wide Information System (SWIS) to enter and analyze ODR data. They are examining their school discipline data for racial/ethnic disproportionality.

The RMS leadership team, along with their PBIS coach, decides to use risk ratios as their primary

disproportionality metric. Before they can calculate risk ratios, they need to calculate risk indices for each group and identify the most appropriate comparison group (e.g., White students, all other students). They decide to use White students as the comparison group. Although that group is less than 50% of the overall population, it is still the majority group and represents the dominant culture of the region. Calculating the risk ratios for ODRs, the team determines that, compared to White students, African American students have a risk ratio of 3.2, and Latino/a students have a risk ratio of 1.1. These metrics indicate significant disproportionality for African American students because the risk ratio is above the federal disparate impact criterion of 1.25. The team decides to set a year-end goal of reducing the ODR risk ratio for African American students to below 1.25. Next, the team will use their data to examine why the problem is happening and create an action plan to reduce disproportionate rates of ODRs for African American students.

STEP 2: Problem Analysis “Why is it Happening?”

Once a problem is identified in Step 1, Problem Analysis is used to understand why the problem is occurring. The central goal of Problem Analysis is to identify potential solutions to the problem. By finding the specific cause of the problem, teams can identify more effective solutions (e.g., strategies, interventions, systems-level initiatives). Problem Analysis involves gathering information that links observed problems to their presumed causes and ultimately to potential solutions. For example, when a team identifies a problem in which too many students have multiple ODRs, the team may assess fidelity of PBIS implementation to identify areas where practices might be improved. It is important that Problem Analysis focus on identifying variables that can be changed, as opposed to individual traits or variables beyond the control of the system.

Use for Disproportionality

The key outcome in Problem Analysis for disproportionality is to identify whether the disproportionality identified in Problem Identification is consistent across all situations or more pronounced in some situations (McIntosh et al., 2014). A pattern where disproportionality is consistently high across all situations indicates the effects of explicit bias, or systematic discrimination (see next step for indicated solutions). A pattern where disproportionality is higher in some situations and not as high in others may indicate the effects of implicit bias, the unconscious and unintended use of stereotypes in decision making (Lai, Hoffman, Nosek, & Greenwald, 2013)⁴. We refer to situations that are more likely to lead to disproportionality as vulnerable decision points because it is at these times where bias is more likely to affect decisions to refer a student to the office or suspend the student (McIntosh et al., 2014). For example, disproportionality may be more likely for disrespect in non-classroom areas. Identifying these specific points is

crucial for successful intervention to reduce disproportionality. For those who are familiar with Team Initiated Problem Solving (TIPS; Newton et al., 2012), this process is the same one used to develop a precise problem statement, but specifically for disproportionality.

The following list provides questions to help identify vulnerable decision points. These situations can be found on many ODR forms and analyzed from disaggregated ODR data.

- WHAT problem behaviors are associated with disproportionate ODRs and suspensions?
- WHERE are there disproportionate ODRs and suspensions (i.e., for what locations)?
- WHEN are there disproportionate ODRs and suspensions (i.e., for what times of day/days of the week/months of the school year)?
- WHAT MOTIVATIONS are associated with disproportionate ODRs and suspensions (e.g., for what perceived functions of problem behavior)?
- WHO is issuing disproportionate ODRs and suspensions (e.g., for what staff)? Note: for this situation, disparities do not necessarily indicate racism, but rather situations or contexts where additional support may be needed. Data should not be used to punish individuals, but rather to improve the understanding of the context in which incidents take place.

In addition, it is also worthwhile to examine the achievement gap to assess whether lower academic skills are related to problem behavior for certain groups (i.e., the achievement gap may be exacerbating the discipline gap; Gregory, Skiba, & Noguera, 2010). This pattern indicates the need for additional academic support.

4. For more information about implicit and explicit bias, see the Equity page of www.pbis.org and Staats, (2014).

Steps

The following steps can be used for Problem Analysis:

1. **Assess PBIS Fidelity.** Before examining specific ODR situations, it is beneficial to assess whether PBIS is fully in place as a foundation for effective behavior support. Certain aspects of PBIS (e.g., clarity in discipline procedures, training in alternatives to ODRs and suspensions), have promise in reducing the effects of implicit bias on discipline decisions (McIntosh et al., 2014). The SWPBIS Tiered Fidelity Inventory (Algozzine et al., 2014) includes items assessing cultural responsiveness and community engagement, which may also be helpful in reducing disproportionality.
2. **Identify Vulnerable Decision Points.** Specific situations that are more susceptible to disproportionality can be identified by examining the metrics used in Problem Identification (e.g., risk ratios) across different situations. Teams can either generate separate metrics for each situation (e.g., classroom, hallways) or use the following process⁵:
 - a. Create a dataset that includes ODRs only for the subgroup identified with disproportionality in Step 1 (e.g., African American students).
 - b. Filter the dataset to identify situations with more disproportionality:
 - **Location:** Examine ODRs by location to assess where this group is receiving more referrals (e.g., hallways). Then, use the specific location as a filter to include ODRs only from that location.
 - **Time of Day:** Use the refined dataset to identify the primary time of day when the subgroup is receiving the most ODRs in that location (e.g., hallways, after 2:30 p.m.). Add the specific time range as another filter.
 - **Problem Behavior:** Use the refined dataset to identify the primary problem behavior for these ODRs. Add the specific problem behavior as a filter to include only data matching location, time, and behavior (e.g., hallways, after 2:30 p.m., for disrespect).
 - **Motivation:** Use the refined dataset to identify the perceived motivation for problem behaviors (e.g., hallways, after 2:30 p.m., for disrespect, to obtain peer attention).
 - **Precise Problem Statement:** This process results in a precise problem statement. For example: African American students are receiving ODRs in the hallways after 2:30 p.m. Referrals are for disrespect and are maintained by peer attention.
 - **Compare Statement:** Remove all filters and include all subgroups to confirm whether this statement is unique to this subgroup.
3. **Assess Achievement Gap.** By examining academic achievement by subgroups, the school team can assess whether academic intervention is needed for addressing differences in student outcomes.

5. In SWIS, both of these approaches are performed using the Drill Down tool. Visit www.pbisapps.org for more detailed guidance.

School Example

In moving through the above process, the RMS team uses the SWPBIS Tiered Fidelity Inventory and identifies that SWPBIS is partially in place. They identify some areas for improvement for their discipline procedures: (a) clarifying what behaviors should be classroom vs. office managed, and (b) using consequences other than sending students to the office. The team decides to improve implementation in these areas to enhance their SWPBIS systems, with potential positive effects for disproportionality.

The team also uses the SWIS Drill Down tool (see p. 13) to identify a precise problem statement: African American students are more likely to receive ODRs in the classroom for inappropriate language and dress code violations. These ODRs are most likely to occur shortly before lunch, and are related to students

receiving peer attention. This pattern is most likely in the 6th grade. Because this pattern is not seen for other subgroups, this pattern of data indicates the need to address implicit bias in these specific ODR decisions. The RMS team decides to work with staff to help all gain a better understanding of implicit bias and to focus everyone's attention on how it may play a role in the situations described in the precise problem statement.

Upon further analysis, the team identifies that 44% of African American students and 52% of Latino students are meeting or exceeding standards on the state reading achievement test, compared to 71% for White students. They decide to set a goal to improve these numbers and create an action plan for adding additional reading interventions during the 6th grade.

STEP 3: Plan Implementation “What Should Be Done?”

Based on the information gathered in Step 2: Problem Analysis, Step 3: Plan Implementation includes (a) selecting and then (b) implementing strategies that are most likely to be effective in solving the problem. Plan Implementation includes designing an action plan to ensure that the specific strategies are carried out as intended. Identifying each task, who will be responsible, and when it is to be completed helps improve the likelihood the task will be accomplished on time.

Use for Disproportionality

For Plan Implementation, use the data collected in Step 2: Problem Analysis to create an intervention plan that is most likely to improve outcomes. One or more of the following problems (and recommended strategies) may be targeted:

- **Inadequate PBIS implementation.** Implement core features of PBIS to establish a foundation of support and instructional approach to discipline.
- **Misunderstanding of school-wide expectations.** Implement culturally-responsive PBIS with input from students, families, and community members.
- **Academic achievement gap.** Implement effective academic instruction.
- **Disproportionality across all settings (indicating explicit bias).** Enact strong anti-discrimination policies that include accountability for actions and regular monitoring of outcomes to enhance equity (Pettigrew & Tropp, 2006). Continue to share disproportionality data from Step 1 on a regular basis with administrators and build equity into evaluations.
- **Disproportionality in specific settings (implicit bias).** Use the Vulnerable Decision Points identified in Step 2 to develop trainings to reduce effects of bias in decision making for these situations. For example, greater disproportionality in common areas indicates the need for specific teaching and staff guidance in this area. Greater disproportionality in the perceived motivation of Avoid Work indicates the need for improving academic skills for the group of interest.
- **Lack of student engagement.** Increase relevance of the curriculum by using culturally-responsive pedagogy.

Steps

See the Center’s recommendations for reducing disproportionality and other practice guides in this series for steps to reduce disproportionality at www.pbis.org.

School Example

In Step 2: Problem Analysis, the team identified the need for training in alternatives to ODRs, clarity in the ODR process, and staff training to reduce implicit bias in ODRs for inappropriate language and dress code violations, particularly before lunch. The team creates the following action plan to clarify and review ODR procedures with staff at the next staff meeting. Members of the team lead staff through activities targeting classroom vs. office managed behaviors and clarifying the expectations and procedures for responding to

inappropriate language and dress code violations. All staff are advised to be particularly attentive to equity before lunch period, when disproportionality seems to be strongest. In an effort to improve cultural responsiveness and consistency, the team also holds meetings to review their behavior expectations matrix with students and families. Last, the team builds a structure for regular monitoring and evaluation of the 6th grade reading intervention.

Activity	Activity Task Analysis	Who	When
3. Plan Implementation <ul style="list-style-type: none"> • Match Plan to Assessment Data • All Parties Informed • Plan Matched to Resources 	a. Plan staff activity/discussion to clarify (a) classroom vs. office managed behaviors, (b) dress code policy, and (c) instructional responses to inappropriate language	Diana and Thomas	One week prior to next staff meeting
	b. Review ODR procedures with all staff and complete staff activity/discussion	Leadership Team	Next staff meeting
	c. Provide all staff with reminder to consider instructional alternatives to ODRs "just before lunch" at morning staff announcement	Dr. Stoll	Daily for 2 weeks
	d. Evening meeting to review expectations with students and families	Erika and Lisa	Three days after staff meeting
	e. Regular monitoring and evaluation of 6th grade reading implementation and outcomes, with report to Leadership Team	Jonas	1st and 3rd Friday of each month

STEP 4: Plan Evaluation “Is the Plan Working?”

Step 4: Plan Evaluation involves collecting short-term (i.e., progress monitoring) data to determine whether strategies selected in Step 3 are being implemented and are effective in solving the identified problem. Evaluation occurs through periodic data collection and meetings (e.g., monthly or quarterly), so that the plan can be changed based on results. Progress monitoring, or formative assessment, takes place more frequently than summative evaluation, which happens again when teams return to Step 1: Problem Identification. The summative step will then be used to inform the next cycle of the four-part problem-solving model. As the cycle is completed, it is important to report progress to the staff, families, community, and district.

Use for Disproportionality

Evaluation for disproportionality includes calculating the metric(s) chosen in Problem Identification (e.g., risk ratios, composition reports) on a regular basis and reviewing them for progress. However, the time interval for monitoring progress in disproportionality may be longer than for other discipline data decisions. For example, teams often examine their general discipline data at least monthly. Yet, for disproportionality data, monthly may be too frequent to see stable change. Currently, we recommend examining disproportionality data quarterly, but teams may wish to look more frequently (e.g., monthly). For assessing status of action plan implementation, monthly checks are recommended.

One important note about monitoring disproportionality data is that risk indices are not recommended for plan evaluation because risk indices will continue to rise throughout the year. Instead, we recommend using risk ratios, because they should remain more consistent throughout the year, especially after the first month or two of the school year.

Steps

Regardless of the specific discipline data system or the selected period of time, the following general steps are used in Problem Evaluation for disproportionality:

1. Identify the Time Periods For Evaluating Disproportionality Data. We recommend that teams assess plan implementation monthly and disproportionality outcomes quarterly or monthly.
2. Assess Progress and Fidelity Plan Implementation from Step 3: Plan Implementation. Review the progress made in the action plan since the previous period. Assess steps completed to date (progress) and how well the strategies are being used (fidelity of implementation). If progress is slow or implementation is poor, assess barriers and make a plan to address them.
3. Calculate Metrics From Step 1: Problem Identification. For each evaluation meeting, calculate and share the disproportionality data for the most recent time period. For example, if evaluating monthly, calculate the metrics for the last month, and compare these results to previous months⁶. As noted above, risk ratios may provide better data for plan evaluation than risk indices.
4. Compare to the Goal Determined in Step 1: Problem Identification. The team can evaluate progress toward the final goal and determine whether and what changes are needed to meet that goal.
5. Share Results with Relevant Stakeholders. The team can share results with important groups, such as the whole school staff, families, community groups, and district administrators.

6. The SWIS Drill Down filters and ethnicity graphs can be used to calculate risk indices and ratios by any designated time period (e.g., monthly).

School Example

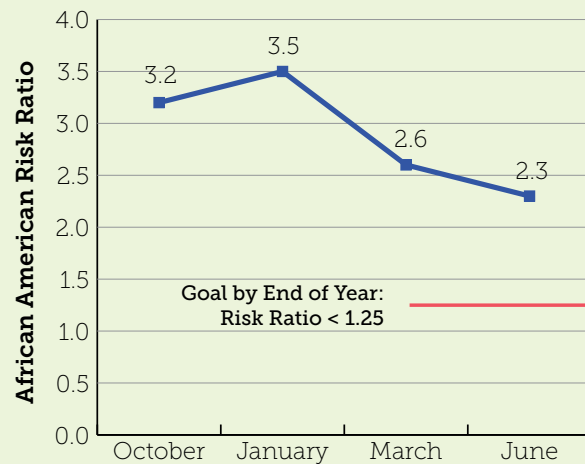
The RMS team reviews and examines their action plan on a monthly basis. They pay particular attention to completing implementation tasks and assessing fidelity of implementation. After the first month, they discuss the possibility that the Grade 6 team may need another refresher on classroom vs. office managed behaviors and assign a member of the team to meet with Grade 6 staff to facilitate the review.

At the start of each quarter, the team uses SWIS to examine their ODR risk ratios as they did in Step 1 and assess their progress toward their goal of reducing the risk ratio for African American students to be at or below the federal disparate impact criterion of 1.25. They use Microsoft Excel to chart their risk ratios.

At the end of the first year, the team notes that the risk ratio has decreased from 3.2 to 2.3. They are making some progress, but more improvement is needed to reach their goal. Examining all of their monthly and quarterly data, they revise the action plan for the coming year to include additional professional development

and review sessions for all staff. At their year-end meeting, the team discusses their meeting schedule and procedures for monitoring their progress. The team agrees that their monthly, quarterly, and yearly monitoring has worked reasonably well, and they plan to continue this evaluation in the coming year to meet their goal.

Rainie Middle School ODR Risk Ratio for African American Students



Conclusion

There may be no easy solutions for disproportionality in school discipline, but it is absolutely important for school teams to assess disproportionality and take action if it is evident. In this guide, we have shared how to use a four-step problem-solving model to identify problems with disciplinary disproportionality, further analyze the related discipline data, implement an action plan to address the identified problem, and use formative and summative evaluation to

determine if the plan is working. Although we referred to the use of the Wisconsin PBIS Network Risk Ratio Calculator and SWIS data as examples, we encourage school teams to use any available disaggregated discipline data to monitor disproportionality. It is only through the use of such data that a school can accurately observe and analyze discipline disproportionality and create specific and effective action plans to achieve positive outcomes for all students.

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Action Planning for Identifying and Monitoring Disproportionality

Activity	Activity Task Analysis	Who	When
1. Problem Identification <ul style="list-style-type: none"> Select Metrics Calculate Metrics Compare to a Goal 			
2. Problem Analysis <ul style="list-style-type: none"> Assess PBIS Fidelity Identify Vulnerable Decision Points Assess Achievement Gap 			
3. Plan Implementation <ul style="list-style-type: none"> Match Plan to Assessment Data All Parties Informed Plan Matched to Resources 			
4. Plan Evaluation <ul style="list-style-type: none"> Identify Time Periods Assess Fidelity of Plan (from Step 3) Calculate Metrics (From Step 1) Compare to Goal (From Step 1) Share Results With Relevant Stakeholders 			

References

- Algozzine, R. F., Barrett, S., Eber, L., George, H., Horner, R. H., Lewis, T. J., Sugai, G. (2014). *PBIS Tiered Fidelity Inventory*. Eugene, OR: OSEP Technical Assistance Center on Positive Behavioral Interventions and Supports. Available at <http://www.pbis.org>.
- American Academy of Pediatrics Council on School Health. (2013). Policy statement: Out-of-school suspension and expulsion. *Pediatrics*, 131, e1000-e1007. doi: 10.1542/peds.2012-3932
- Boneshefski, M. J., & Runge, T. J. (2014). Addressing disproportionate discipline practices within a School-Wide Positive Behavioral Interventions and Supports framework: A practical guide for calculating and using disproportionality rates. *Journal of Positive Behavior Interventions*, 16, 149-158.
- Gregory, A., Skiba, R. J., & Noguera, P. A. (2010). The achievement gap and the discipline gap: Two sides of the same coin? *Educational Researcher*, 39, 59-68. doi: 10.3102/0013189x09357621
- IDEA Data Center. (2014). *Methods for assessing racial/ethnic disproportionality in special education: A technical assistance guide*. (Revised). Rockville, MD: Westat, Julie Bollmer, Jim Bethel, Tom Munk, & Amy Bitterman.
- Lai, C. K., Hoffman, K. M., Nosek, B. A., & Greenwald, A. G. (2013). Reducing implicit prejudice. *Social and Personality Psychology Compass*, 7, 315-330.
- Losen, D. J., & Skiba, R. J. (2010). *Suspended education: Urban middle schools in crisis*. Montgomery, AL: Southern Poverty Law Center.
- May, S. L., Ard, W. I., Todd, A. W., Horner, R. H., Glasgow, A., Sugai, G., & Sprague, J. R. (2013). *School-Wide Information System. Educational and Community Supports*, University of Oregon, Eugene, OR. Retrieved from <http://www.pbisapps.org>
- McIntosh, K., Girvan, E. J., Horner, R. H., Smolkowski, K., & Sugai, G. (2014). *Recommendations for addressing discipline disproportionality in education*. OSEP Technical Assistance Center on Positive Behavioral Interventions and Supports.
- McIntosh, K., Mercer, S. H., Hume, A. E., Frank, J. L., Turri, M. G., & Mathews, S. (2013). Factors related to sustained implementation of schoolwide positive behavior support. *Exceptional Children*, 79, 293-311.
- Newton, J. S., Horner, R. H., Algozzine, B., Todd, A. W., & Algozzine, K. (2012). A randomized wait-list controlled analysis of the implementation integrity of team-initiated problem solving processes. *Journal of School Psychology*, 50, 421-441.
- Noltmeyer, A., & Mcloughlin, C. S. (2010). Patterns of exclusionary discipline by school typology, ethnicity, and their interaction. *Perspectives on Urban Education*, 7(1), 27-40.
- Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology*, 90, 751-783.
- Skiba, R. J., Horner, R. H., Chung, C., Rausch, M. K., May, S. L., & Tobin, T. (2011). Race is not neutral: A national investigation of African American and Latino disproportionality in school discipline. *School Psychology Review*, 40, 85-107.
- Staats, C. (2014). *State of the science: Implicit bias review 2014*. Columbus, OH: Kirwan Institute.
- Stecker, P. M., Fuchs, L. S., & Fuchs, D. (2005). Using curriculum-based measurement to improve student achievement: Review of research. *Psychology in the Schools*, 42, 795-819.
- Tilly, W. D. (2008). The evolution of school psychology to science-based practice: Problem-solving and the three-tiered model. In A. Thomas & J. P. Grimes (Eds.), *Best practices in school psychology V* (pp. 17-36). Bethesda, MD: National Association of School Psychologists.
- U.S. Departments of Education and Justice. (2014). *Dear Colleague Letter: Nondiscriminatory Administration of School Discipline*. Retrieved from <http://www2.ed.gov/about/offices/list/ocr/letters/colleague-201401-title-vi.html>.
- U.S. Government Accountability Office. (2013). *Standards needed to improve identification of racial and ethnic overrepresentation in special education*. Report to the chairman, committee on health, education, labor, and pensions, U.S. Senate (Report GAO-13-137). Washington, DC: Author.