

# **Culturally Responsive Problem-Solving Guide**

## An Evidence-Based Guide for Team Practice



Wisconsin Department of Public Instruction  
Carolyn Stanford Taylor, State Superintendent

# **Culturally Responsive Problem-Solving**

## An Evidence-Based Guide for Team Practice

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Dear Stakeholder,

One of Wisconsin's greatest strengths is the growing diversity of communities, schools, and workplaces. For Wisconsin to be innovative in the 21st century, and for communities to remain strong, all students must graduate college and career ready. As Wisconsin's student population becomes increasingly diverse, the persistence of racial disparities in the educational system poses real challenges to opportunity and economic progress. Raising the achievement of our students of color requires swift, targeted, and deliberate attention.

The Culturally Responsive Problem-Solving Guide helps educators in honoring cultural backgrounds and remaining committed to supporting students through anti-bias frameworks. The Culturally Responsive Problem-Solving Guide provides strategies that support more culturally relevant decision-making processes in order to help close the gap between students of color and their peers.

We thank Dr. Markeda Newell and the Wisconsin Rtl Center for their commitment to supporting all of Wisconsin's learners.

Sincerely,

Carolyn Stanford Taylor  
State Superintendent

# Acknowledgments

Vaunce Ashby, Educational Consultant, Special Education Team,  
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Michelle Belnavis, Culturally Responsive Practices Technical Assistance Coordinator,  
Wisconsin Rtl Center

Laurie Burgos, Director, Bilingual Programs & Instructional Equity, Verona Area School District

Kathryn Bush, Education Consultant, Student Services, Prevention and Wellness Team,  
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Andreal Davis, Culturally Responsive Practices Coordinator, Wisconsin Rtl Center

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Audrey Lesondak, Education Consultant, Content and Learning Team,  
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Dana McConnell, Students with Disabilities Coordinator, Wisconsin Rtl Center

Amy Melik, Teacher, English Language Learning, Nicolet High School

Ananda Mirilli, Education Consultant, Special Education Team,  
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Jessica Moe, School Administration Consultant, Special Education Team,  
Wisconsin Department of Public Instruction

Alexis Nass, Elementary ELL Coordinator and SIOP Coach, Verona Area School District

Justyn Poulos, Assistant Director – PBIS, Wisconsin Rtl Center

Deb Ptak, Principal, Whitehorse Middle School, Madison Metropolitan School District

Kathy Ryder, Director, Wisconsin Rtl Center

Kent Smith, Regional Technical Assistance Coordinator, Wisconsin Rtl Center

Heidi Thuli, Assistant Director – Academic, Wisconsin Rtl Center

Paula Volpiansky, Education Consultant, Special Education Team,  
Wisconsin Department of Public Instruction

Lynn Winn, Assistant Director, Special Education Team,  
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## Background

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Across Wisconsin, teams of educators (e.g., child-study teams, building support teams, problem-solving teams, Individualized Education Program (IEP) teams) collaborate to maximize the educational success of every student. To that end, educators who serve on teams are prepared to address the academic, behavioral, social-emotional, and mental health needs of students. Further, they aim to do so in a manner that does not marginalize students from their educational environment, especially those students who are members of historically underserved groups (e.g., students of color, students who live in poverty, students with IEPs, English language learners, students who are lesbian, gay, bisexual, queer, transgender).

In 2007, to support teams in this effort, the Wisconsin Department of Public Instruction awarded a grant to the University of Wisconsin-Oshkosh and the Madison Metropolitan School District to develop and test *Culturally Responsive Practices in Schools: The Checklist to Address Disproportionality*. IEP teams used this checklist to consider relevant internal and external factors during eligibility determinations.

Educators who used the checklist observed that these questions would be more meaningful and impactful earlier in the process of supporting students. Educators recognized that these “courageous conversations” about race, culture, and difference are sometimes difficult, and they asked for a tool to guide team conversations. The Culturally Responsive Problem-Solving Guide evolved from this work.

## Evidence-Based Problem-Solving Model

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Teams are most effective for every student when they adhere to a clear team process and use an evidence-based problem-solving model (Gravois & Rosenfield, 2006; Newton, Horner, Algozzine, Todd, & Algozzine, 2012). Team process refers to teams having an agenda and procedure for all meetings as well as having clearly defined roles and functions for all team members. By adhering to an established team process, teams are more likely to work efficiently and productively.

In addition to establishing a team process, teams should also use an evidence-based problem-solving model. Effective problem-solving models engage teams in four core stages:

1. Problem identification: Operationalize the target problem and develop a hypothesis for why the problem is occurring
2. Problem analysis: Confirm the hypothesis and collect baseline data
3. Plan implementation: Establish a clear plan for implementation and monitoring progress
4. Plan evaluation: Review the data to gauge the effectiveness of the plan and adjust accordingly

The following resources can be used to support the development of the team process and evidence-based problem-solving model:

- Wisconsin DPI webinar: [Culturally Responsive Problem-Solving](#)
- Wisconsin RtI Center: [Framework for Equitable Multi-Level Systems of Support](#)



# What Is Culturally Responsive Problem-Solving?

In order for problem-solving teams to ensure that they are maximizing learning opportunities for every student, they should understand how to problem-solve within the diverse cultural context of schools. Educators are realizing that cultural differences are a factor in how we perceive and understand human behavior and functioning. Cultural differences are generally viewed as group-level differences that are borne out of a group's traditions, beliefs, and norms. Cultural beliefs can influence educators' perspectives on behavior, academic performance, mental health, or other concerns (Murrell, 2007).



It is important to note that cultural differences not only occur between educators and students and families, but also can manifest among educators or between educators and administrators. To explain, each person in the school (e.g., student, teacher, administrator) has a unique cultural identity that influences how they think, feel, behave, and interpret the world. Moreover, the school and the larger community also have a culture. Problem-solving team members should examine how their beliefs and values impact their views of students, families, and of each other. Differences in cultural beliefs can make it difficult for problem-solving teams to agree on the student area of need as well as how to best intervene to remedy the problem.

The primary concern is the development of shared stereotypes, biases, and prejudices that can cause team members to develop deficit-based views of students (Knotek, 2003). Deficit-based thinking can make typical behavior appear as atypical, and individual and cultural expressions appear as *disorder* rather than *difference* (Newell & Chavez-Korell, 2017). When we have deficit-based views of students and families, we immediately diminish opportunities for effective problem-solving and increase the likelihood that we will further marginalize students and families from the educational process. For these reasons, educators cannot ignore their own cultural beliefs, values, and experiences in the problem-solving process; instead, educators should identify them and examine how they influence the identification of problems and the design of solutions.

Implicit bias refers to unconscious attitudes or stereotypes held about people based on identity characteristics (race, gender, sexual orientation, income, religion) (Greenwald & Banaji, 1995). Rudman (2004) explained that implicit biases could emerge from past experiences such as rearing by families, affective experiences such as having interracial friendships, or cultural biases such as stereotypes learned from media. Therefore, all team members are susceptible to holding implicit biases that can influence decision-making (Staats, 2014).

Increasing cultural competence allows teams to identify and examine the influence of their own cultural identities. Becoming culturally competent is an aspirational goal, which means there is no endpoint. Therefore, team members should commit to continually learning about themselves and others to expand and deepen their cultural competence (Sue, Arredondo, & McDavis, 1992). The development of cultural competence begins with work on *self*. Each team member should identify their own biases and reflect on the experiences, values, attitudes, and beliefs that shape who they are.

## TEACHING TOLERANCE: 13 COMMON BELIEFS

Implicit biases can be difficult to identify because not only are they unconscious, but oftentimes those who hold the biases are well-intentioned. To explain, Teaching Tolerance delineated [13 Common Beliefs](#) educators hold about students who have been historically underserved in education. The unconscious, yet well-intentioned nature of implicit biases among educators is what makes them so harmful to the problem-solving process as they underlie the decisions made by team members.

## TAKE THE IAT

Culturally competent team members take time to identify their biases. One way to do this is to complete the [Implicit Association Test \(IAT\)](#). The IAT is an online test that identifies biases based on race, gender, religion, etc. The test is free and confidential, and it provides immediate results.

Culturally competent team members examine the influence of bias on how they interpret information about students, discuss students and families, and make decisions. For this reason, the *Culturally Responsive Problem-Solving Guide* (the Guide) will focus on questions team members can ask themselves about their own biases as they progress through the team problem-solving process. The Guide includes strategies team members can use to reduce the influence of biases that can inhibit the team's ability to accurately problem-solve. By using this Guide, teams can move closer to accurately identifying target problems and developing solutions that will improve outcomes for every student served.

The purpose of culturally responsive problem-solving is to embed strategies into the problem-solving process that bring team members' cultural attitudes and beliefs into the discussion. This reduces the likelihood that teams will identify a problem within the student that does not exist or identify the wrong problem (e.g., target individual student vs. classroom management). Such work has the power and potential to (1) reduce discrepancy in equitable opportunities for historically underserved populations (e.g., students of color, students with IEPs, students who live in poverty, and English learners [ELs]) and (2) reduce the disproportionality of students of color in special education.

### ***The Culturally Responsive Problem-Solving Guide is intended to be used in the following ways:***

Teams responsible for problem-solving within general education may use this Guide in order to (1) reflect and remedy possible cultural mismatches at the universal level and (2) plan for culturally responsive interventions.

Teams responsible for evaluating students as part of the IEP process may use this Guide (or review data collected on a previously administered Guide) as they carefully consider information about the child's social and cultural background and determine whether lack of appropriate instruction in math or reading is the determinant factor for the student's disability. IEP teams document these discussions and decisions on the evaluation report and appropriate eligibility criteria worksheet.



While the *Culturally Responsive Problem-Solving Guide* is designed to guide discussions regarding individual students, teams may find it useful in occasional reviews of aggregated data. For example, teams may identify a need for a system-wide review of interventions if they find educators consistently struggle when selecting evidence-based interventions. Or, teams may notice that specific student groups (i.e., students of color) consistently respond less well to specific interventions as compared to their peers. Or, teams may recognize their staff could mentor or serve as role models to other educators because they consistently excel at conveying messages of high expectations through actions, interactions, and words.

### It is important to explain how the *Guide* should *not* be used:

Teams should **not** use this *Guide* only for students of color. The *Culturally Responsive Problem-Solving Guide* should be used with every student.

The *Culturally Responsive Problem-Solving Guide* should **not** be used for teacher or program evaluation.

The *Guide* is **not** a replacement for IEP team decision-making processes as stated under the Individuals with Disabilities Education Act (IDEA).

## How Should Teams Use the *Guide*?

During the problem-solving process, teams make decisions that ultimately result in a plan to improve a student's performance. A range of factors can influence these decisions, but one of the most important, yet under-examined, factors considered is the implicit bias of team members. Although these biases can manifest at any time, there are *vulnerable decision points* where implicit biases are more likely to manifest and adversely impact the problem-solving process.

According to Smolkowski, Girvan, McIntosh, Nese, and Horner (2016), *vulnerable decision points* (VDPs) are contextual events or elements that increase the likelihood of implicit bias affecting decision-making in schools. There are certain contexts (e.g., classrooms with less engaging instruction), factors (e.g., student behavior that is judged subjectively, such as disrespect), and internal states of educators (e.g., hunger, fatigue) that increase the likelihood of educators making decisions based on implicit bias. By identifying these vulnerable decision points, educators can take steps to interrupt the process and make decisions based on objective information, resulting in equitable and appropriate solutions.



While the term VDP was borne out of research on disproportionate discipline practices, the concept of vulnerable decision points can also be applied to the problem-solving team process.

In applying the VDP framework to the problem-solving team process, this *Guide* identifies critical moments, or vulnerable decision points, when team members are more likely to make decisions based on implicit bias rather than objective information. With knowledge of these VDPs, team members can intentionally interrupt the influence of bias and take steps to use a more culturally responsive approach to problem-solving.

The *Culturally Responsive Problem-Solving Guide* that follows includes VDPs in the problem-solving process, a set of questions problem-solving teams can ask to interrupt the influence of bias, and strategies teams can use to replace biased thinking with evidence-based, culturally responsive practices.



# CULTURALLY RESPONSIVE PROBLEM-SOLVING

## AN EVIDENCE-BASED GUIDE FOR TEAM PRACTICE

### Establish Communication Norms

To begin the culturally responsive team process, teams establish norms and expectations for how team members will communicate with each other. Establishing communication norms is especially important in culturally responsive problem-solving because difficult topics such as ability, race, socio-economic status, sexual orientation, or religion are central to many discussions.

In the context of these discussions, team members may unintentionally make statements offensive to another team member. These offensive statements are usually in the form of microaggressions. Microaggressions are unintended slights or insults that degrade the identity or heritage of others. Oftentimes, these degradations are targeted towards the identities of historically underserved groups (e.g., students of color, LGBTQ, transgender students, students living in poverty, English language learners) (Sue et al., 2007). For example, a team member may state that people who live in poverty “do not value education,” and another team member

may have either grown up in poverty or is currently living in poverty. Thus, this statement is an insult (i.e., microaggression) to that team member, who may be saddened or angered by that statement and disengage from the problem-solving process.



#### RESOURCES

The Wisconsin DPI has several resources on culturally responsive practices. Please visit the [Culturally Responsive Practices](#) page and [Equity: Wisconsin's Model to Inform Culturally Responsive Practices](#).

# Acknowledge Vulnerable Decision Points and Use Strategies to Reduce Bias

There are seven vulnerable decision points (VDPs) that culturally responsive teams acknowledge during the problem-solving process. Each of these VDPs is explained along with strategies teams can use to reduce the influence of bias on the problem-solving process.

## VULNERABLE DECISION POINT 1 Presenting Initial Concern

**Guiding Question: Did the team consider perspectives other than the initial presentation of the student concern?**

### HOW BIAS SHOWS UP

During the team process, team members tend to agree with the initial presentation of the problem, which is typically focused on the student (Knotek, 2003). As a result, teams often adopt the initial view that the student is the problem. To explain, if team members hold an implicit bias that African-American boys are violent, then a concern about an African-American student being disruptive is more likely to be accepted as the problem without question from team members. In this example, the team may disregard that the problem potentially lies with instruction, management, and/or curriculum, rather than within the student.

When teams adopt the initial perspective presented, it is referred to as confirmatory bias. Confirmatory bias is “the tendency of an evaluator to agree with the preliminary hypothesis... despite the lack of substantial evidence to support these findings” (O’Reilly, Northcraft, & Sabers, 1989, p. 71). Students who are members of historically underrepresented groups are especially impacted by confirmatory bias because teams often do not recognize the nature of the biases that brought the concern to the problem-solving team (Knotek, 2003). As a result, the team reifies this bias in the problem-solving process. When team members engage in confirmatory bias, they do not consider a variety of perspectives on the problem.



### STRATEGIES TO INTERRUPT BIAS

To consider other perspectives, culturally responsive teams seek out comprehensive information about the learning environment instead of only considering information about the student’s skills and/or behavior. To obtain a comprehensive view of the problem, teams obtain information about instruction, classroom management, curriculum/tasks, and the performance of other students in the class. This data can be used to identify whether the student is significantly different from peers or if there are other students who are exhibiting the same difficulties. If other students are experiencing the same difficulties, then the problem is less likely to lie with the student. Instead, the problem more likely lies with the overall instruction, curriculum, and/or management and thus would warrant a group or classwide intervention approach. Use the following strategies to discern where the problem lies:

## Strategy 1: Interview teacher about classroom management and/or instruction

### Sample Interview Questions on Classroom Management:

- Describe the classroom management plan.
- How do the students in your class respond to the management plan?
- How does this student's behavior compare to other students in the class? *Note: It is important to make appropriate peer comparisons. Try to identify peers who are similar to the target student (e.g., race, ethnicity, gender, language proficiency, academic skills).*
- How does the target student respond to the management plan?
- How might the management plan contribute to the problem?
- How can the management plan be modified to better meet the needs of the student?

### Sample Interview Questions on Instruction/Curriculum:

- What instructional strategies are used to teach [Insert Subject Area]?
- How do the students in your class respond to these instructional strategies?
- How does the target student respond to the instruction?
- How does this student's academic performance compare to other students in the class? *Note: It is important to make appropriate peer comparisons. Try to identify peers who are similar to the target student (e.g., race, ethnicity, gender, language proficiency, academic skills).*
- How might the instruction or curriculum contribute to the problem?
- How can the instruction or curriculum be modified to better meet the needs of the student?

## Strategy 2: Obtain data on management and instruction

- Review office-managed disciplinary referrals from the classroom.
- Review classroom-managed discipline data from the classroom (e.g., detentions).
- Review academic data from the classroom (e.g., Measures of Academic Progress (MAPs), Dynamic Indicators of Basic Early Literacy Skills (DIBELS), Fountas and Pinnell (FP) reading level, classroom common assessments).

## Strategy 3: Obtain data on student's performance in other settings

- Ask teacher about the performance of the student in other settings outside of the classroom (e.g., recess, cafeteria, other classes).

By using these strategies, teams can discern whether the problem lies with the student or in the larger learning ecology (i.e., instruction, curriculum, management).

## INDICATOR(S) OF SUCCESS

Teams can document that multiple perspectives on the problem were discussed and ruled in/out as the focus of the problem-solving process. Keep in mind that if instruction, curriculum, or management were identified as contributors to the problem, these factors take precedence over individual student difficulties. Teams address these ecological factors *before* trying to address individual student difficulties.



## VULNERABLE DECISION POINT 2

### Identifying the Area of Need

**Guiding Question: Did the team operationalize an area of need that is focused on instruction, classroom management, student skills, and/or teacher skills?**

#### HOW BIAS SHOWS UP

A problem is defined as a discrepancy between current performance/behavior and desired performance/behavior (Christ & Aranas, 2014). Identifying the target problem is a vulnerable decision point because the discrepancy between current and desired performance is often subjective, especially for behavior. As Smolkowski et al. (2016) explained, when behavior is subjective, educators are more likely to make decisions based on implicit biases rather than based on objective information. For example, an educator may present a concern to that team about a Hispanic male student who is “lazy and not completing his work.” Acting on confirmatory bias, the team does not ask questions to understand what the teacher means when she says the student is “lazy” and “not completing his work.” Instead, the team accepts the target problem and moves to develop an intervention.

In this scenario, the teacher and team are operating on a shared bias about the student being lazy, and as a result, the validity or accuracy of this description is not questioned. Moreover, the team has not defined what is meant by “lazy” and whether it is related to the student’s performance. In these cases, teams are less likely to collect appropriate data (i.e., how does one collect data on “being lazy”?) and are less likely to develop an appropriate intervention. Teams actively take steps to ensure that they are identifying a problem that is relevant to student performance. For this reason, teams ask, “Did we operationalize a target problem that is focused on instruction, curriculum, classroom management, student skills, and/or teacher skills?”

#### STRATEGIES TO INTERRUPT BIAS

To identify an accurate target problem, culturally responsive teams first identify a problem that is focused on instruction, classroom management, student skills, and/or teacher skills because these are elements of the learning ecology that contribute most to student learning outcomes (Rosenfield, 2008). By focusing on the learning ecology, teams are more likely to identify a problem relevant to student success.

#### Strategy 1: Identify a problem that is focused on instruction, classroom management, student skills, and/or teacher skills

**Example of problem with *instruction*:** The student is not responding to whole-group instruction and would benefit from a different instructional approach.

**Example of problem with *classroom management*:** The teacher is inconsistent in adhering to the management plan; therefore, the students are unsure how the teacher will respond to misbehavior.

**Example of problem with *student skills*:** The student lacks the phonemic awareness to accurately decode.

#### **Example of problem with *teacher skills*:**

The teacher does not know strategies to teach reading to English learners; therefore, ELs are performing below grade level in reading.

Next, teams operationalize the target problem by identifying behaviors and skills that are observable and measurable. Descriptors such as *defiant*, *disruptive*, *low-performing*, or *off-task*, are not operationalized because they are subject to a range of personal interpretations by team members. By operationalizing the problem, team members are required to describe these behaviors in objective and observable terms, so they can more easily identify when bias is influencing the identification of the target problem.



## Strategy 2: Operationalize target behavior

### Examples of operationalized target problems focused on the learning ecology:

- Jasmine is able to accurately read 85 wpm, which is below the 3rd grade norm. She has difficulty decoding unknown words and often skips words.
- Robert does not follow teacher directives within 1 minute of being given the directive. When given a directive, he will express reasons why he should not have to comply with the directive.
- Ms. Jones is inconsistent in how she delivers consequences to students who do not comply with her directives within 1-minute of the directive being given. She will sometimes ignore non-compliance, sometimes verbally respond to students, or sometimes send students to the office.

### INDICATOR(S) OF SUCCESS

To know whether a target problem is focused on the learning ecology, review the target problem and identify whether the problem lies with instruction, behavior management, student skills, and/or teacher skills. If yes, the problem is focused on the learning ecology. If the problem lies elsewhere (e.g., home environment), then the team revises the target problem because it is outside educators' control.

To know whether the target problem has been operationalized, review the problem and determine whether it includes observable behaviors or skills that are measurable. A good test is to ask, "If a stranger had to go into the classroom to conduct an observation or review the student's academic work, could the stranger identify examples of the target problem based only on the operationalization of the problem and no other information?" If yes, the target problem has been clearly operationalized. If no, revise the target problem to better operationalize it.



### RESOURCE

For examples of options that can benefit all students, see [Wisconsin DPI's Universal Design for Learning](#) page.

## VULNERABLE DECISION POINT 3

### Identifying a Hypothesis for Area of Need

**Guiding Question: Did the team identify a low-inference, alterable, and measurable hypothesis that explains why the problem is occurring?**

#### HOW BIAS SHOWS UP

A hypothesis is a reason why the problem is occurring (Christ & Aranas, 2014). Identifying the reason why the problem is occurring is central to the problem-solving process because the intervention will target the hypothesis. Identifying a hypothesis is a vulnerable decision point because teams are susceptible to selecting hypotheses based on biases (Knotek, 2003). For example, teams may identify hypotheses that reflect biased views of the student and family, such as “the family lives in poverty,” “the parent dropped out of school,” “the home environment is chaotic because too many people live in the home” “no one cares about the student,” “the student is lazy.” In addition, teams may identify hypotheses that are not alterable, such as “the student lives in poverty,” “the student has a disability,” “the student has an incarcerated parent.” These hypotheses deflect the team from identifying root causes within the school’s control and places the problem within the student and/or the family. Given this vulnerability, teams actively take steps to identify a hypothesis that is low-inference, alterable, and measurable.



A *low-inference* hypothesis is a cause that is directly linked to the problem; minimal interpretation is needed for the team to understand how cause and effect are connected (Christ & Aranas, 2014). For example, one team problem-solving about a student exhibiting reading difficulties may hypothesize that the root cause is the student’s low IQ. Another team may hypothesize that the student’s reading difficulties stem from the amount and type of reading instruction received. In the first scenario, it is very difficult for the team to explain how low IQ leads to the specific reading difficulties the student is exhibiting. With the second example, reading instruction is directly linked to the student’s reading skills and therefore represents a more proximal factor contributing the problem. Thus, *reading instruction* is a low-inference hypothesis, whereas *low IQ* is not.

In another example, a team may hypothesize that poverty is causing a student to yell at the teacher. The teacher’s management skills or student’s anger management skills, however, are more proximal factors that could be contributing to this problem. Thus, classroom management skills or anger management skills are low-inference hypotheses. Poverty, or another aspect of the student’s identity, is not. Teams can collect data on the hypothesis to determine if it is linked to the problem, and they can observe instruction, management, and tasks to determine if they are contributing to the problem. Teams can also measure student and teacher skills to determine if they are contributing to the problem.

#### **Examples of *low-inference, alterable, and measurable* hypotheses:**

- Approximately 50% of Ms. Billings’s class is failing math because they are using a reading-based math curriculum, and 40% of the students are receiving Tier 2 supports to improve their reading comprehension.
- Juan is completing 25% of his homework in reading because most of the assignments require access to a computer, and Juan does not have access to a computer at home.
- Vanessa is completing her social studies assignments with 40% accuracy because she is an English learner who does not have the academic vocabulary to understand the content.



The hypotheses in these examples (i.e., student having difficulty with reading comprehension, student not having access to a computer, and student not having academic vocabulary) are proximal, measurable hypotheses that educators can change.

## STRATEGIES TO INTERRUPT BIAS

Given the team's vulnerability to identifying hypotheses based on biased or unalterable factors, culturally responsive teams ask themselves, "Did we identify a low-inference, alterable hypothesis that explains why the problem is occurring?"

### Strategy 1: Ensure the hypothesis is *low-inference*

#### Sample questions:

- Is the hypothesis a factor directly linked to the problem?
- Is the hypothesis based on the learning ecology (i.e., problem with instruction, classroom/behavior management, tasks/assignments, student skills, and/or teacher skills)?
- Is the hypothesis based on a student and/or family deficit?

The team continues to revise the hypothesis until it is *low-inference*, based on the learning ecology (i.e., instruction, classroom/behavior management, tasks/assignments, student skills, and/or teacher skills), and not based on student/family deficit.

### Strategy 2: Ensure the hypothesis is *alterable*

#### Sample questions:

- Is the hypothesis a factor we can change? The team revises the hypothesis to focus on factors within control of educators.
- Is the hypothesis an important and relevant data point - *but unalterable* (e.g., poverty, grief, trauma, etc.)? Students may be affected by grief, divorce, violence, trauma, etc., which are factors that the team cannot change. In these scenarios, teams recommend interventions that can help the student cope with these circumstances (e.g., group and/or individual counseling).

### Strategy 3: Ensure the hypothesis is *measurable*

#### Sample question:

- Is the hypothesis observable? The team revises the hypothesis until it identifies factors that are measurable (i.e., teacher/student skills) and/or observable (i.e., instruction, management, curriculum).

## INDICATOR(S) OF SUCCESS

To know whether the team has identified a low-inference, alterable hypothesis focused on the learning ecology, teams review the hypothesis and ask, "Does the cause lie in the learning ecology, can we change it, and can we measure it?" If you answer "yes" to all of these questions, then the hypothesis is appropriate.



## VULNERABLE DECISION POINT 4

### Collecting Data

**Guiding Question: Did the team use strategies to reduce the impact of our implicit biases on the collection of data?**

#### HOW BIAS SHOWS UP

Implicit bias can manifest during data collection when team members seek out data that aligns with their bias. For example, a team may have a case where a 14-year-old, Hispanic female student is completing 50% of her work in math class. The team decides to collect data on the student's English language proficiency and the percent of work the student has completed in the last 2 weeks. By collecting this data, the team is communicating a bias that because the student is Hispanic, the problem has to be the student's English language proficiency. As a result, the team doesn't consider a range of other important factors that could help explain the student's performance (e.g., instruction, classroom management, mastery of math skills). In another example, a team has a case in which a 12-year-old, male student who is transgender is talking back to his science teacher and not complying with the teacher's directives. The team decides to collect data on how often he is talking back and not being compliant in all of the student's classes. A team member suggests that the student may be misbehaving because he is transgender, so the team member suggests the school counselor meet with the student to discuss how being transgender is impacting his behavior. Based on this data collection, the team is assuming that the student's identity is causing the behavioral difficulties. However, the team ignores a range of other potential factors (e.g., classroom management, academic frustration, bullying, etc.) that could be contributing to the behavior.



Given the potential for team members to seek out data based on biases, team members have to take steps to reduce the influence of their biases guiding the data they collect. For this reason, teams ask themselves, "Did we use strategies to reduce the impact of our implicit biases on the collection of data?"

## STRATEGIES TO INTERRUPT BIAS

To reduce the impact of biases on the data collection process, culturally responsive teams collect multidimensional data (Newell & Newell, 2011).

### Strategy 1: Collect multiple types of data

Multidimensional data is collecting multiple types of data (e.g., interviews, observations, tests) from multiple sources (e.g., general education teacher, parent, physical education teacher) and settings (e.g., different classrooms, home, cafeteria, gym) (Christ & Aranas, 2014). It is ideal to collect data from the parent and student about the performance of the student at school and at home. The purpose of collecting multidimensional data is to ensure a broad range of factors potentially impacting student performance are considered. Relying on too few data sources can bias the problem-solving process (Wright, 2011).

To collect multidimensional data, the team uses a systematic process for collecting data. The RIOT/ICEL matrix is a tool that teams can use to ensure that they are collecting multiple types of data from multiple sources and settings (Christ & Aranas, 2014). The RIOT component of the tool refers to sources or types of data that the team can collect. Those sources include:

- Review (any type of existing data, such as work products, cumulative file, test data)
- Interview (refers to people the team can interview, such as parents, teachers, students)
- Observation (refers to observing different environments that the student is in, such as classroom, cafeteria, recess, etc.)
- Test (refers to administering tests, such as curriculum-based measures)

Ideally, teams gather data from more than one of these sources. In addition to multiple types of data, the team gathers data from multiple domains that can impact student performance. ICEL refers to these learning domains:

- Instruction (refers to how the teacher teaches the content)
- Curriculum (refers to the curriculum and tasks students complete)
- Environment (refers to the settings that can impact the student's learning)
- Learner (refers to characteristics and traits of the student)

Teams will not collect data from all sources and types, but the team takes steps to collect data from more than one source, setting, and domain to ensure that they are obtaining a comprehensive view of the student as well as of the learning ecology.

## INDICATOR(S) OF SUCCESS

The team can identify data that was collected from more than one source, from more than one setting, and from more than one domain. All of the data is relevant to understand the target problem (e.g., severity of the problem) and the hypothesis (e.g., cause linked to the target problem).



## RESOURCE

To help facilitate the use of this RIOT/ICEL matrix, please go to the [RIOT/ICEL matrix](#) for instructions and a sample template.





## VULNERABLE DECISION POINT 5

### Interpreting Data

**Guiding Question: Did the team consider all the data and identify common themes to verify the problem and confirm the hypothesis?**

#### HOW BIAS SHOWS UP

After teams gather multidimensional data, they have to interpret the data to verify the problem, confirm a hypothesis as to why the problem is occurring, and design an intervention that will improve the student's performance. Herein lies a vulnerable decision point because implicit biases can influence how teams interpret data, even when it is multidimensional (Newell & Newell, 2011).

The first common manifestation of bias during the interpretation of data is *ignoring the data and instead relying on stereotypes, prejudice, and/or bias to guide decision-making*. For example, the multidimensional data could indicate that a student who lives in poverty has not received appropriate instruction in reading, which has led to reading comprehension difficulties. However, the team may ignore that data and instead identify the fact that the student lives in poverty as the reason the student comprehends below grade level. With that interpretation, the team is likely to select an intervention that is not targeting the correct hypothesis (i.e., lack of instruction).

The second common manifestation of bias during this phase is *weighting some types of data more heavily than other types of data*. When collecting multidimensional data, teams will collect multiple types of data from multiple sources; however the team may weigh some types and sources more heavily than others due to bias. For example, a team may weigh standardized test data more heavily than classroom work products. Or, teams may weigh teacher reports more heavily than parent or student reports. Unless there is a valid reason to dismiss a type or source of data, all data should be considered equally.

Third, teams may sometimes review data and only see what the student cannot do, what the student does not know, or what is wrong with the student/family. When this occurs, bias is *leading to a deficit view of the student*. Student difficulties are then viewed as being within-person, pathological, and unalterable. As a result, teams conclude that there is nothing they can do to improve the student's performance. Instead, teams should take a strengths-based approach to data interpretation, identifying what students can do, what students do know, and the assets and strengths the student/family brings to the classroom.

The fourth and final common manifestation of bias during the interpretation of data is *relying on one type of data instead of seeking common themes across multiple types and sources of data*. When analyzing multidimensional data, teams should not rely on one source or type of data (e.g., teacher interview). Instead, teams should look across all data to identify points of convergence, which occurs when multiple pieces of data are pointing to the same problem and hypothesis. If the data do not converge, then the team re-evaluates the problem, re-evaluates the hypothesis, reflects on different data (i.e., do the divergent data match our beliefs or come from an "outside" source?), or collects additional data.

## STRATEGIES TO INTERRUPT BIAS

Given these vulnerabilities, culturally responsive teams ask themselves, “Did we consider all the data and identify common themes to verify the problem and confirm the hypothesis?”

### Strategy 1: Reflect on the team’s interpretation of data

#### Sample questions:

- Did we weigh all the data equally? If not, what data did we not fully consider and why?
- Did the data tell us what the student can do? Did it include student strengths?
- Did the data converge to confirm the problem? If not, why not? Do we need to gather more data? Revise our hypothesis?
- Did the data converge to confirm why the problem is occurring?
- Did the data identify the discrepancy between observed and desired performance (i.e., problem) and a reason why the problem is occurring (i.e., low-inference, alterable, and measurable hypothesis)?



#### INDICATOR(S) OF SUCCESS

The team collects multidimensional data about the target problem and hypothesis. When interpreting that data, the team equally considers all data and identified strengths as well as common themes. Based on that convergence, the team is able to verify the problem (i.e., there is a discrepancy between current and desired performance) and confirm the hypothesis (e.g., teacher’s inconsistent discipline increased student non-compliance; student is able to decode initial and end sounds, but not medial sounds, and this interferes with the student’s reading fluency).

## VULNERABLE DECISION POINT 6

### Selecting Evidence-Based Interventions

**Guiding Question: Did the team select an evidence-based intervention based on data?**

#### HOW BIAS SHOWS UP

After teams have verified the problem and confirmed the hypothesis, teams use the data to select an intervention. The reason selecting an intervention is a vulnerable decision point for teams is because often teams do not select interventions based on data, especially for historically underrepresented students (Crone, Carlson, Haack, Kennedy, Baker, & Fien, 2016). As a result, the team is more likely to identify a narrower range of interventions and identify interventions that do not specifically address the target problem or hypothesis (Knotek, 2003).

Teams will sometimes develop an intervention based on the target problem. For example, the target problem may be a student being out of their seat. The team then designs an intervention to get the student to stay in their seat (e.g., reward for staying in seat). The problem with this approach is that there can be a number of reasons why the student is out of their seat - so designing an intervention that simply gets the student in their seat may be successful in the short term, but it may be ineffective in the long term because the underlying cause of the behavior was not addressed. Given this vulnerability, teams ask themselves, “Did we select an evidence-based intervention based specifically on the hypothesis data?”

## STRATEGIES TO INTERRUPT BIAS

As explained earlier, data converge so that culturally responsive teams identify the correct problem as well as the reason why the problem is occurring. When data have common themes regarding why a problem is occurring, culturally responsive teams design an intervention that will address the reason why the behavior is occurring. Interventions address the reason why the behavior is occurring in order to effectively remediate the problem and improve the student's performance. For example, if the data converge to say that a student's lack of reading fluency is causing the student to comprehend below grade level, then the intervention should target reading fluency. If the data converge to say that a student is out-of-seat because he or she has not developed self-regulation skills, then the intervention should target the development of self-regulation skills. Therefore, teams use the data gathered to confirm the hypothesis to drive the selection of the intervention.

**Strategy 1: Ensure that the intervention targets the hypothesis (i.e., reason why the problem is occurring)**

**Strategy 2: Select an intervention that has empirical support to indicate the intervention can effectively address the hypothesis (i.e., cause of the problem)**

## INDICATOR(S) OF SUCCESS

The team is able to explain how the intervention will address the cause of the problem. The intervention has some empirical evidence that indicates the intervention is capable of addressing the cause for this particular student.

## VULNERABLE DECISION POINT 7

### Improving Cultural Responsiveness of Intervention

**Guiding Question: Did the team use strategies to improve the cultural responsiveness of the intervention during selection and progress monitoring?**

## HOW BIAS SHOWS UP

Teams not only select an intervention based on data, but they also select interventions that are culturally responsive. The attitudes/beliefs of students are considered when selecting an intervention that will best meet their needs. This consideration is given throughout progress monitoring.

## STRATEGIES TO INTERRUPT BIAS

There are three interchangeable and research-based strategies to increase the cultural responsiveness of interventions as part of progress monitoring.

**Strategy 1: Select a culturally-specific or adapted intervention (Bernal, Chafey, Rodriguez, Roberts, & Gallardo, 2009)**

Teams can review research to identify interventions that have been specifically designed for specific populations of students for specific problems.

**Strategy 2: Select an intervention that has been implemented with groups that are similar to your population (Vasquez et al., 2011; Villareal, 2014)**

Although selecting an intervention that is specifically designed for the student's cultural group is ideal, this is not always possible. In situations where there is not an identified culturally responsive, evidence-based intervention available, teams should try to find interventions that have been effective with students of similar demographics (e.g., race, language, gender, socio-economic status). To find these interventions, teams use intervention research and look at the sample demographics to determine if the intervention has been implemented with similar populations.



### Strategy 3: Implement an evidence-based intervention and measure treatment acceptability (Nastasi, Truscott, & Gutkin, 2000).

When teams cannot find interventions that are culturally specific or interventions implemented with similar populations, teams can use an intervention that is evidence-based and collect data on the student's acceptability of the intervention. Intervention acceptability is the extent to which the student likes/dislikes elements of the intervention and believes that the intervention was helpful



in addressing the problem. To measure acceptability, a teacher can ask the student the extent to which he or she liked/disliked the different components of the intervention and whether he or she thinks the intervention was helpful. If the student liked most of the intervention, then it can be deemed acceptable. If not, then the intervention has low acceptability. If the intervention has low acceptability and data also shows it has been ineffective, then the low acceptability may be the reason why the intervention was not effective, and the team selects a new intervention that is more acceptable to the student in order to improve outcomes. Teams also assess the extent to which the teacher accepts the intervention.

### INDICATOR(S) OF SUCCESS

The team can explain how the hypothesis data guided the selection of the intervention. The team can explain the strategy used to select an intervention that aligns with the attitudes/beliefs/experiences of the student. As appropriate, treatment acceptability was measured for interventions to ensure that the intervention was responsive to the student.

### RESOURCES

The [PBIS Cultural Responsiveness Field Guide](#) offers resources for making systems more responsive to the needs of the students and communities they serve.

All interventions are progress monitored in order to determine the level of effectiveness. For guidance on best practices for progress monitoring, please watch the National Center on Response-to-Intervention webinar on [Using Progress Monitoring Data for Decision-Making References](#)

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March 2020

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