CRPBIS
Culturally Responsive Positive Behavioral Interventions and Supports

Practitioner Brief

Using Data Maps to Examine Racialization of Behavioral Problems and Transform Schools from the Ground-up

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Content

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"Data-based decision making" dominates the conversations in education today. Federal and local legislations and programs such as Response to Intervention (RtI) and Positive Behavior Interventions and Supports (PBIS) demand educators to collect and use meaningful and practical data in schoolwide decision-making and problem solving activities. Meanwhile, deepening educational outcome disparities plague schools. A major contributor to this problem is that culturally and linguistically diverse (CLD) students receive disproportionally higher rates of special education referrals for emotional or behavioral disorders (EBD) and exclusionary and punitive school disciplinary actions (detention, suspension, and expulsion). Disproportionality is an enduring and extremely consequential educational equity issue. Historically, behavioral outcomes have a particularly racialized presence in United States schools (Children's Defense Fund, 1975). This is called this racialization of behavioral problems.

Nationally, the risk ratio of EBD identification is 1.63 and 2.28 times higher for African American and Native American students respectively (National Research Council, 2002). As for exclusionary school discipline, African American, Native American, and Latino students receive exclusionary discipline with African American boys and girls receive the highest risk ratios starting from preschool: One out of every 6 African American students, 1 in 12 Native American students, 1 in 14 Latino students were suspended at least once, while 1 in 20 White students and 1 in 50 Asian American students were suspended (Losen & Gillespie, 2012).

It is important to note that geographical location plays en important role in the disproportionality risk that varies considerably between and within states. It is crucial for educators, educational leaders, and policy makers to understand the local patterns and predictors

of behavioral outcome disproportionality to develop more targeted and locally meaningful prevention and intervention models in local schools and educational systems (Bal, Sullivan, & Harper, 2014).

In Wisconsin, racialization of behavioral problems has been an enduring and significant educational and social equity issue that contributes to several unacceptable individual and social effects in the lives of CLD youth, their families and local communities from Madison to Superior, Milwaukee to La Crosse. Bal and colleagues (2013) found that in Wisconsin African American students and Native American students were 2 and 3 times more likely to be identified with EBD than White students. African American students were 7 times, Native American students 3 times, and Latino students 2 times more likely to be removed from school than their White counterparts (Bal, Betters-Bubon, & Fish, 2013).

The problem of disproportionality extends beyond the individuals. It is a systemic issue that requires systemic solutions that are locally meaningful and sustainable. Disproportionality is a "runaway object" that is partially determined by multiple interacting social systems: school, families, district, and the state educational agencies (Bal, Sullivan & Harper, 2014). Disproportionality cannot be addressed through Band-Aid solutions, external experts, or disjointed professional development seminars. It requires active and meaningful participation of all local stakeholders (educators, educational leaders, students, families, and community representatives). Local schools need to build internal capacity for problem solving and coalition building in which all stakeholders engage in praxis, a continuous cycle of reflection and action informed by multiple forms of data (Freire, 2000).

This brief presents the development and use of the interactive data maps from the Culturally Responsive Positive Behavior Interventions and Supports (CRPBIS) Project. In close collaboration with the Wisconsin Department of Public Instruction, the CRPBIS Data Maps

were developed as a tool for understanding and addressing behavioral outcome disparities by improving behavioral support systems in Wisconsin schools. The CRPBIS project emphasizes the use of data maps to not only provide a complex understanding of behavioral outcome disparities, but also to shine a light on opportunities and resources that exist within local communities to support schools' internal efforts to transforms their behavioral support systems.

This brief has three main sections. The first section briefly describes the development and use of CRPBIS data maps in Learning Labs, a new, innovative methodology of systemic transformation (Bal, 2011). Secondly, we discuss the current uses of data in education, the challenges of these methods to change practices, and how data maps are constructed to bridge the gap between practice and data. Finally, the brief ends with how these maps may encourage educators, parents, and local school communities to engage in critical dialogue and re-mediate their marginalizing practices.

Key Terms

CRPBIS

Culturally Responsive Positive Behavior Interventions and Supports (CRPBIS) framework was developed by Aydin Bal (Bal, 2011). As a process-oriented framework, CRPBIS aims at re-mediating school systems with local stakeholders to examine and address behavioral outcome disparities and marginalization of CLD students and families (Bal, 2011). The CRPBIS project is a collaborative project funded by Wisconsin Department of Public Education (DPI).

Learning Labs

CRPBIS uses a systemic change methodology, called *Learning Lab*. Informed by Activity Theory (Engeström, 1987), Aydin Bal (2011) developed Learning Labs methodology as an innovative approach of collective problem solving in schools. Learning Labs bring together school

professionals, families, and community members and students who are historically marginalized from school activities to develop solution of systemic problems (see *CRPBIS.org* for more information about the project and practitioner briefs on School-Family-Community Partnership and CRPBIS Framework and Learning Lab Methodology).

Data Maps

The CRPBIS interactive data maps are visual-geographic representation of behavioral outcome and social service data that inform educators, families, communities as well as public. There are:

- **Map of Risk** is a visual display of district-level disproportionality disaggregated by race/ethnicity in the state of Wisconsin.

- **Map of Opportunities** provides information about individual schools (student population, EBD identification, suspension and expulsion ratios disaggregated by race) in the cities of Madison and Sun Prairie in Wisconsin. The map also portrays geographical location of the community-based organizations in relation to the individual schools.

Participatory Social Justice & Coalition Building

CRPBIS is informed by principles of participatory social justice (Bal, 2012) and coalition building (Soja, 2010). Participatory social justice requires two simultaneous actions: Critically exploring outcomes and opportunity disparities as well as exploring and working against the processes producing and maintaining those long-lasting outcomes and opportunity disparities (Bal, 2012). Coalition building refers to empowering and utilizing resources at district and state level to support students' academic development and achievement (Soja, 2010).

CRPBIS Project: Using Data to Renovate the System

The CRPBIS Data Maps can be found at the CRPBIS website using the following link:

http://crpbis.apl.wisc.edu/. These interactive data maps, as living, breathing information

sources, are to help local stakeholders to make meaning of opportunities and concerns in schools,

neighborhoods and district. CRPBIS employs two types of datasets—*Map of Opportunities* and *Map

of Risk*—to make visible proximity and other spatial factors related to EBD identification,

suspension and expulsion data disaggregated by race (Bal, 2011; Bal et al., 2014).

CRPBIS vision is to give support to culturally responsive school-wide systemic

transformation from the ground up to re-mediate practices that contribute to disproportionality

(Bal, 2011; Bal, Kozleski, Schrader, Rodriguez, & Pelton, 2014). Local practitioners form

Learning Labs in their schools to examine and address behavioral outcome disparities. This

process requires committed involvement of educators, families, and community members as

equal partners to create a critical consciousness of marginalizing institutional practices and to

develop and test ecologically valid solutions via continuous use of data (Bal, 2011, see the Figure

1 for the cycle of systemic change followed by the CRPBIS Learning Labs). Learning Labs uses

the data maps as visual-geographic tools, tell meaningful stories of the relationship between

individuals and infrastructures in order to better understand patterns of culture and social

engagement of school practices and processes. With students, family members, community

representatives, and educators as equals on the table, data maps can be used as stimulant to

reflect on why disproportionality is occurring within their micro, meso, and macro educational

contexts (i.e., school, school district, and the whole state) to geographically situate the issue of

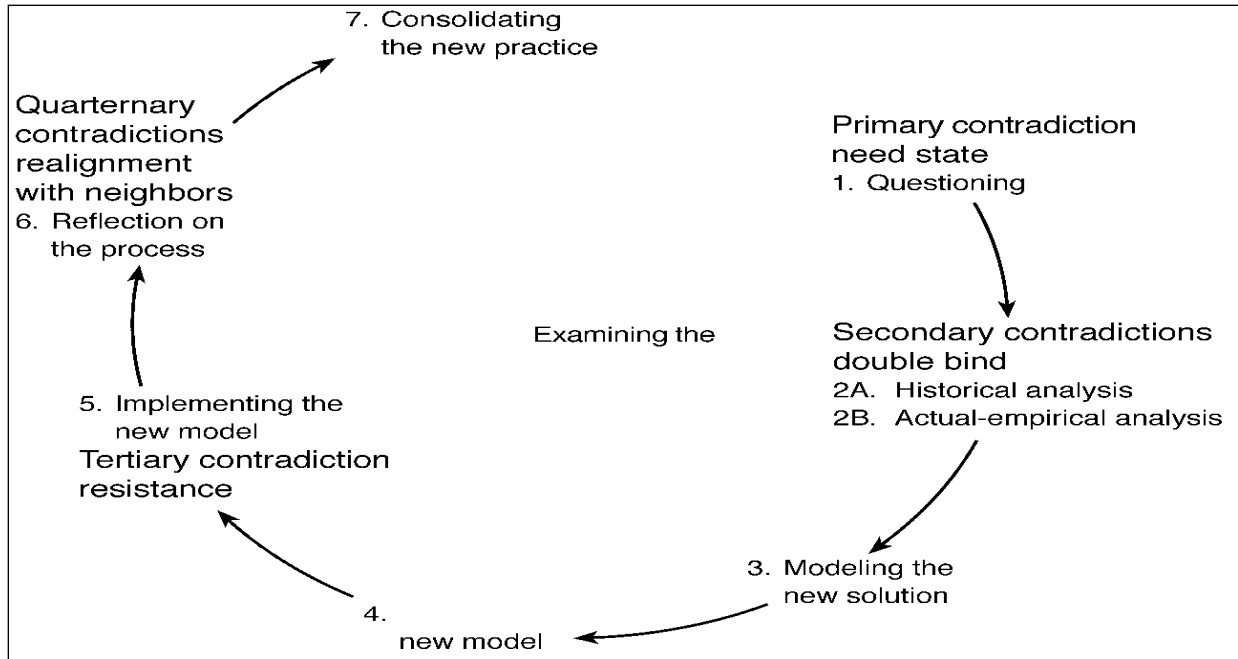disproportionality in behavioral outcomes (Bal et al., 2013).

Figure 1: *Cycle of Systemic Change (Reprinted from Engeström, 2008)*

Trends in School Data Collection

The collection and analyses of data are vital to addressing disproportionality. Alfredo Artiles (2009) problematizes the current data collection models used by educators to address disproportionality. Artiles notes that the macro analyses, from which we draw our large scale data, has been informing policy, while our micro analyses, such as lived experiences of students, have been used to inform practice. He suggests that neither analysis provides a clear enough picture; macro analyses are too general and ignore individualized areas, often explaining failures by a single often overgeneralized variable such as race, poverty while micro analyses ignore the larger problems such as histories and systems within schools, districts, and states that hinder efforts to impact disproportionality in a meaningful way. New analytical efforts should focus on providing a situated context for local school and classroom data.

PBIS provides structure for teaching behavior in which consistent positive reinforcement and behavior expectations are modeled and practiced by all school staff such that each child has

ample opportunity to learn and practice expected school behaviors. Vincent and Tobin (2010) evaluated trends in data collection within PBIS that aims to reduce office discipline referrals by using proactive approaches. Though data collection is an essential component to PBIS implementation, Vincent and Tobin suggested that the current tools and practices for data collection and analysis not ensure cultural responsiveness and recommend the collection of data situated within local, culturally meaningful contexts. In sum, current data models have been found insufficient, at best, in addressing disproportionality in behavioral outcomes in schools.

Deficit-oriented perspectives, most common in educational practice and research, view differences as problems to be fixed and can lead to assumptions about the nature of student behavior without understanding the underlying systems and cultural contexts. By contrast, strength-based practices view potential cultural differences of the individual, neighborhood, and school as assets, or strengths, upon which to build teaching practices, leading to a more complex consideration of "appropriate" behavior. The recommendations from the research literature include utilizing data models that mediate multiple contexts, allow for cultural responsive analysis, and provide a contextually situated strength-based perspective, rather than the deficit model. Sugai and colleagues (2000) suggested:

> [PBIS] emphasizes the importance of procedures that are socially and culturally appropriate. The contextual fit between intervention strategies and the values of families, teachers, schools, support personnel, and community agency personnel may affect the quality and durability of support efforts. (p. 136)

How Are Data Maps Constructed?

The community's health and culture are a bridge into understanding how the community context affects the school context. Understanding the strengths and needs in local communities is

an important civic function and present invaluable opportunities for practitioners to examine the outcome disparities they face in their schools and neighborhoods (Miller, 2012; Tate, 2008). Data maps help us to visualize, what is occurring in the community from the past to the present as well as to think about those often-invisible effects of the community's development over generations and the changes in demographics and culture of the community over time. Data maps can use the geography of the area to help plan the use of space and resources in the community. When making decisions, school practitioners/educators need to consider the size of the neighborhood and whether it is a rural or urban community. Small towns function much differently than large cities or urban areas (Tate, 2008). Understanding the larger context of the impacts of children living in impoverished urban communities is relevant to understanding student outcomes in schools. The awareness of school and district geographical areas is important not only at micro level (e.g., school practitioners) but also at meso level (e.g., city planners) decision making. An example of neighborhood and district indicator map that can inform decision-making could be obtained from http://madison.apl.wisc.edu/mapping.php.
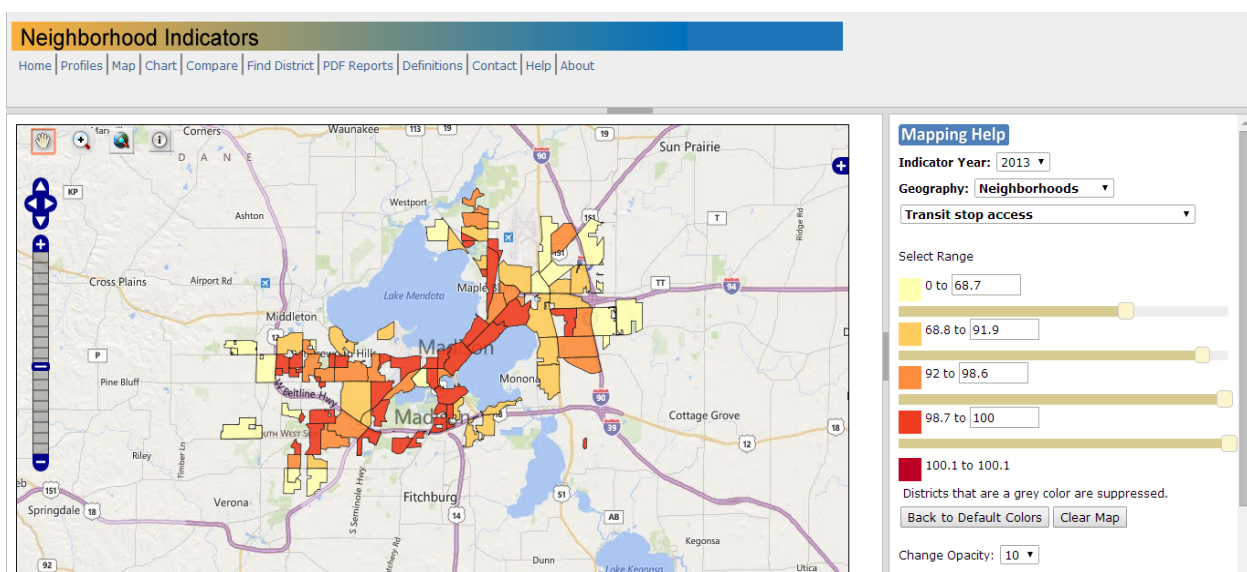
Picture 1: Madison Neighborhood Indicators

Map of Risk

Different types of data maps help teachers, administrators, and parents reflect on both the strengths of school practices and the areas for growth. Unlike charts and graphs, maps represent actual physical spaces. Given these natural properties of maps and the added properties of digital maps (zooming in and out), data maps provide a natural way to navigate between micro (school-level) and macro (state-level) contexts (Bal, 2011). This is accomplished by obtaining state and school level data and plotting them on the same digital map according to specific location. For example, a statewide map can highlight districts in which students of color are disproportionately represented in special education, and one can zoom in to find which schools in the district see the most disproportionate outcomes for these students.
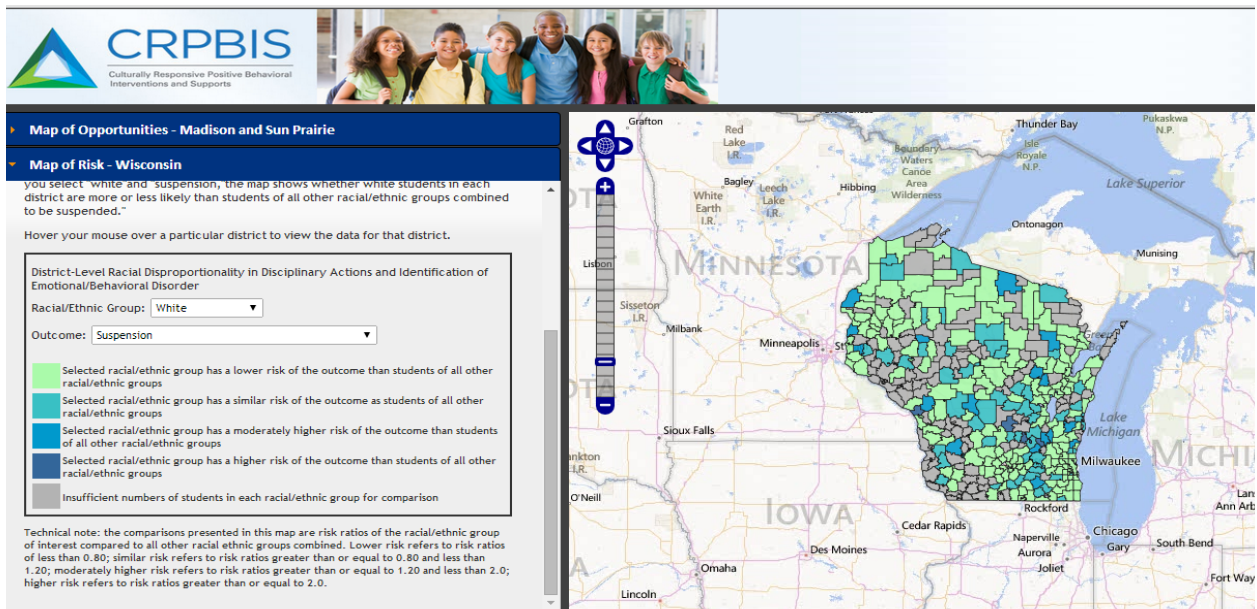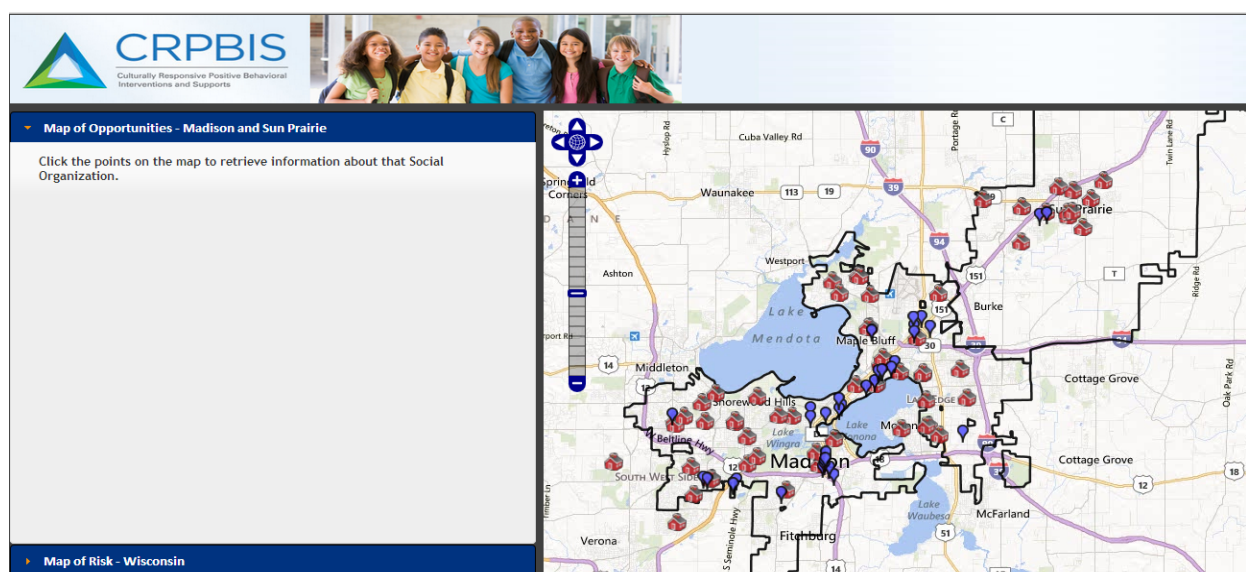

Picture 2: CRPBIS Map of Risk

The Map of Risk in the CRPBIS website allows you to view the extent of disproportionality in disciplinary actions (i.e., suspensions and expulsions) and identification with EBD across the state of Wisconsin. Using the drop-down menus to select a racial/ethnic group of interest and an outcome of interest, you can see - at the school district level - whether that group

is more likely to have that outcome than peers of other racial/ethnic groups. For example, if you select "Black" and "suspension, "the Map of Risk shows whether Black students in each district are more or less likely than students of all other racial/ethnic groups combined to be suspended. You can hover your mouse over a particular district to view the data for that district.

Map of Opportunities

CRPBIS is grounded in a critical social-spatial justice perspective, *Local to Global Justice*, that endorses "more progressive and participatory forms of democratic politics and social activism, and provides new ideas about how to mobilize and maintain cohesive coalitions and regional confederations of grassroots and justice-oriented social movements" (Soja, 2010, p. 6). Having been presented with large datasets of disproportionality at micro and macro levels, the Map of Opportunities provides information about coalition building resources (Bal, 2011). This map depicts what is happening at the two local school districts; the same structure could be expanded to state and nation wide level or scaled down to a local school neighborhood. Our district-level map was developed by plotting all district level data related to community resources on the same digital map, providing a picture of locations for all resources in the districts. In addition, Map of Opportunities provides individual school data disaggregated by race/ethnicity, including population, EBD identification, suspensions, and expulsions, as well as percentages of students who received free and reduced lunch (FRL) and were identified as English language learner (ELL). This bird's eye view provides a clear picture of the geographical structure and distribution of the resources (e.g., after school programs and homeless shelters) as related to local schools. Schools, families, and students might utilize this data for coalition building and finding resources to support their inside-out transformation by bringing community resources from outside-in.

School administrators could explore available resources in the districts and find potential community partners within the local communities. During the Learning Lab processes in CRPBIS schools, we observed that school practitioners developed new ways to identify and engage local resources as part of schools' problem solving efforts. For example, when discussing social support organizations, one school administrator mentioned two or three organizations in the area and was surprised to learn from our Map of Opportunities that 30 other centers are widely available in the district. Another school administrator made specific requests for information about external resources to increase the connectedness of the school to the community.

Picture 3: CRPBIS Map of Opportunities

With opportunity-focused data maps, school administrators and teachers can become aware of and build coalitions with community centers, and or other social service organizations that support CLD students and ELLs behaviorally in school settings. As not every individual problem can be addressed in school setting, these networks provide important resources for schools and the families they serve. They can provide key insight to problems at the school.

How Could Data Maps Build School-Community Coalitions?

Because data maps are designed to situate data across multiple contexts, they allow for visual analyses of systemic problems or tensions—such as portions of school data that stand out from their contexts—that can be easily accessible to researchers, school personnel, and families alike. Secondly, rather than including race as an isolated variable, data maps situate race/language/income variables within natural contexts, such as neighborhoods and schools. This model brings data to life and can prompt dynamic discussions between stakeholders throughout the community. The intentional inclusion of neighborhoods and community centers on the map invites them to join the dialogue with staff regarding real and lived issue of disproportionality. Our expectation is that local solutions for supporting all students and providing appropriate services for students experiencing behavioral difficulties could be approached in multiple ways. For example, if a school site is struggling with serving Latino students, there is an opportunity that they could reach out and collaborate with local universities, YMCA, Transition Education Program or Centro Hispano.

In an effort made by a CRPBIS Learning Lab at the high school site, the school hired a new PBIS support staff to work on establishing school-community coalition around the issues of school discipline and racialization of behavioral problems. In this school site, the PBIS team consisted of all White school staff. Toward the end of the high school Learning Lab, administrators decided to expand the structure of the PBIS personnel by involving community representatives, parents, and students from CLD backgrounds. There is such a light from our side that the expansion of PBIS structure would open more room to bring more minoritized voices and expanding their influence in schools' decision making activities and to work hand in hand to provide more inclusive and culturally responsive behavioral support (Bal, 2011).

School, family and community are like three-legged chair. Taking one of them would dysfunction the chair. In the CRPBIS project, as we collected data on the ample opportunities that the Learning Lab participants explored and formed, it became clear that schools that are more isolated from children; family and community voices are less equipped to address complex, adaptive issues such as disproportionality. Schools must and can become the pillars interconnected in providing equal and high-quality behavioral opportunities for all children. Local stakeholders must find ways to work together as partners. Any systematic transformation effort must focus on building capacity in inquiry-based problem solving teams.

Concluding Thoughts: Solving Real Life Problems and Transforming Schools

The CRPBIS Learning Labs aim to use data maps to collectively analyze opportunities and risks in multiple contexts and give participants meaningful and actionable data for praxis (Bal, 2011). Data maps can help us to identify potential aids to solve systemic issues that contribute to behavioral outcome disparities that CLD students face. Data maps give us insight into the systems as well as a key into examining to reflect as school and community upon our own practices that might marginalize certain students. Data maps may help practitioners to look at not just one reef in the ocean, but the entire ocean itself. Data maps were being used to help light fire for conversations about how to problem solve systemic practices that might exclude and marginalize certain cultural groups. Of course, our perceptions and practices are situated in our local cultural contexts and contribute to how we view behavioral competence and deviance. Data maps allow us to examine those practices within the school and community that might have remained invisible, bringing them into our awareness (Bal et al., 2014).

Local stakeholders can work together and use data maps to engage in critical dialogue and cooperatively use comprehensive data collection to solve real world problems that will improve school systems and the lives of students across the country. We hope that practitioners and educational leaders generate new ideas of how to engage data and use multiple external opportunities in examining and engaging in collective problem solving around the issues of disproportionality. We end with some reflective questions:

- What kinds of data are available about my school, district, and neighborhood?

- How is the data collected, analyzed, shared and used in practice?

- Who could access the data? School staffs only? Parents? Students? Public?

- How does my school examine micro and macro scale data to address disproportionality?

- How is the data used to inform problems solving and decision-making?

- To what extent has my school opened up room for school-family-community coalition?

- What could my school do to provide enough room for multiple voices?

- How can my school bring in diverse perspectives, experiences, and ideas regarding the interactions that are taking place?

- What is needed to build coalition between my school and local community organizations and universities?

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About the CRPBIS Project

Culturally Responsive Positive Behavior Interventions and Supports (CRPBIS) is an educational initiative grounded in participatory social justice with the ultimate goal of culturally responsive and sustainable systemic transformation in local schools (Bal, 2011). Using Activity Theory and various types of data collection, local schools are working with members of their communities to identify systemic tensions within the schools, pose new solutions, and test effectiveness of the systemic solutions.