Culturally Responsive Positive Behavioral Interventions and Supports

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Aydin Bal

This article presents the underlying theory and methodology of the first framework to operationalize culture and culturally responsiveness in the context of Positive Behavioral Interventions and Supports (PBIS; Bal, 2011). Created following a systematic review of literature, this framework was created as a cultural artifact to expand the conceptualization of the role of culture in the implementation of PBIS and other education programs. I hope the framework will start a movement to address the systemic contradictions that researchers and practitioners in the field experience regarding racial disparities in behavioral and academic opportunities and outcomes and the locally meaningful implementation of PBIS and other top-to-bottom initiatives and programs (e.g., Response to Intervention [RTI]).

In the United States, nondominant youth from historically marginalized communities face enormous disparities in educational outcomes and opportunities (Anyon, 2005; Darling-Hammond, 2010; Gamoran, 2010; U.S. Department of Education, 2014). A major contributor to this problem is that these students—especially African American, Native American, and Latino—are disproportionately placed in special education programs for those identified as having emotional or behavioral disorders (EBD) and receive exclusionary school discipline more severely and frequently for less objective reasons such as insubordination, disrespect, and excessive noise (Children's Defense Fund, 1975; Skiba et al., 2008; the Office for Civil Rights, 2014). The racial disproportionality in behavioral outcomes, which maintains the historical marginalization of nondominant communities in educational systems, is a cyclical, adaptive, and multifaceted issue determined by interacting social systems (e.g., schools, families, school districts, and state educational agencies).

Concern about racial disproportionality has spurred policy change. The 1997 and 2004 reauthorizations of the special education law—the Individuals with Disabilities Education Act (IDEA)—mandated that states and school districts assess disproportionality, implement systemic efforts to eliminate disparities, and, where significant disproportionality was found, allocate 15% of federal special education funds for coordinated early intervention. Among the programmatic responses, PBIS—a three-tiered prevention model of behavioral support—is one of the most important innovations in the field of special education for addressing discipline issues and behavioral problems to have emerged in the past 20 years. Fast becoming a primary means of providing behavioral support in U.S. schools, PBIS is the only schoolwide behavioral identification and intervention approach specifically mentioned in IDEA (2004). PBIS has been implemented in more than 20,000 schools in the United States (Horner, 2015).

The goal of PBIS is to more precisely classify needs and deliver services for students with behavioral difficulties (Sugai & Horner, 2002; Sugai, 2011). Grounded in applied behaviorism and relying on increased standardization and accountability measures, PBIS aims to take into account the whole school context and its social and academic quality. It strives to create a cohesive, supportive, and positive social climate for all children by providing early identification and intervention and unifying general and special education resources. Across the United States, local educational agencies (LEAs) and state education departments encourage local schools to

implement PBIS. While PBIS enjoys increasing policy-level support and popularity nationally and internationally, PBIS scholars have not been able to resolve three critical issues regarding its effective and sustainable implementation: (1) making PBIS culturally responsive to vastly diverse social contexts of local schools, (2) facilitating authentic student/family/community involvement, and (3) addressing racial disproportionality (Vincent, Randall, Cartledge, Tobin, & Swain-Bradway, 2011). Below I present those issues briefly and discuss them in detail later.

The first unresolved issue is cultural responsiveness. Developers of PBIS stress that it is not intended as a prepackaged program and that its implementation strategies need to be modified for contextual fitness:

> PBS 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. (Sugai et al., 2000, p. 136)

However, to date, the literature lacks robust theoretical approaches to systematically define contextual fitness or cultural responsiveness in PBIS (Jones, Caravaca, Cizek, Horner, & Vincent, 2006; Sugai, O'Keeffe, & Fallon, 2012). As Vincent and Tobin (2011) summed up, "[T]he mechanisms and strategies necessary for culturally responsive implementation … remain unclear" (p. 2).

The second unresolved issue regarding implementation of PBIS is increasing family and community involvement. Cohesion and collaboration among educators, families, and community members is assumed to produce and maintain safer, more effective school contexts (Sugai & Horner, 2006). Schoolwide behavioral expectations and reinforcements for students are ideally generated by all stakeholders, thus motivating them toward the same goal (Chen, Downing, & Peckman-Hardin, 2002; Sugai et al., 2010). However, in reality, students and family and community members—specifically those from nondominant cultural and linguistic backgrounds—do not have opportunities to participate in PBIS processes (Vincent & Tobin, 2011).

The third issue is racial disproportionality. Multiple studies found that PBIS implementation was linked to a reduction in office discipline referrals (ODRs), reduction in discipline recidivism, and increased perception of school safety (Bradshaw Mitchell, O'Brennan, & Leaf, 2010; Vincent & Tobin, 2011). However, even after PBIS implementation, nondominant students remain overrepresented as recipients of exclusionary disciplinary practices and EBD identification (Sugai, 2011; Vincent & Tobin, 2011).

Currently, local educators and education leaders find themselves in *a double bind*. On the one hand, they must address immediate issues in their local contexts related to racial disproportionality and authentic partnership with students, families, and community members. On the other hand, they are expected to implement PBIS with high fidelity while maintaining cultural responsiveness without systematic and locally meaningful guidance on cultural

responsiveness from PBIS scholars and technical assistance centers that have lack information about needs, strengths, and interests of local school communities. To date, the literature has not offered a methodological solution to this double bind beyond conceptual arguments highlighting the need for cultural responsiveness (Sugai et al., 2012; Vincent et al., 2010).

The present paper addresses this critical gap in the literature and presents *culturally responsive* PBIS (CRPBIS), the first framework to operationally define cultural responsiveness in the context of PBIS (Bal, 2011). Going beyond simply suggesting that "culture matters," the CRPBIS framework lays out *how* culture matters. CRPBIS aims to offer a praxis-oriented cultural theory, as well as a systemic change methodology to guide practitioners in local implementations of PBIS and researchers in linking individuals and social/organizational structures in diverse local educational contexts to remediate school systems and cultures. The CRPBIS framework presented here is a systemic transformation model meant to expand localization of PBIS in order to facilitate cultural responsiveness and increase collaboration and dialogue among local stakeholders for the purpose of addressing outcome disparities in local schools. CRPBIS embraces a process-oriented conceptualization of cultural mediation drawn from multidisciplinary scholarship to understand and support behavior and socialization in schools as educators, students, and families embrace the waves of diversity that surge through their schools. In CRPBIS, diversity is conceptualized as the main source *for*—not obstacle *to*—facilitating a culturally responsive systemic transformation in schools. The framework is geared toward schools facing racialized outcome disparities. CRPBIS offers a multifaceted approach that intervenes in the school culture to open up decision-making and problem-solving processes to family and community members who have been historically excluded from those processes.

To develop the CRPBIS framework, I conducted a literature review to identify guidelines, conceptual and empirical articles, and research syntheses on cultural responsiveness in PBIS. The following section presents the methodology of a review of the literature.

Methods

I reviewed education and social science literatures to identify prior guidelines, rubrics, conceptual and empirical articles, and research syntheses on cultural responsiveness or cultural relevancy in the context of PBIS. I searched four electronic databases: Academic Search Premier, the U.S. Department of Education's Education Resources Information Center, Education Full Text, and PsycInfo between 1975 and 2011. I used the following combinations of keywords: SWPBIS OR schoolwide positive behavior* intervention* support* OR PBIS OR positive behavior* intervention* support* OR PBS OR positive behavior* support* AND Intervention* OR treatment* OR program* OR model* OR therap* research AND culturally responsive or culturally competent or culturally adequate or cultural competency or cultural adequacy or cultural responsiveness. I also manually searched reference lists of the selected publications. Next, I synthesized the resulting relevant conceptual papers, guidelines, and empirical studies that detailed the related tenets of cultural responsiveness in PBIS.

In the following sections, I first present the findings of my literature review on behavioral health and school discipline issues faced by the nation's schools and discuss how PBIS models historically evolved from radical behaviorism to a "contextually fitted" school-based prevention model in response to social, cultural, and political demands and changes in U.S. society and education systems. I then discuss the current efforts to include cultural and contextual factors within PBIS literature; overall, those efforts can be read as a movement from a culture-blind view to a cultural-difference perspective. Lastly, I present the CRPBIS framework that expands the so-called culture-free PBIS tenants to be culturally responsive in order to build safe, inclusive, and supportive school climates in diverse local school contexts.

The Racialization of School Discipline: Challenges and Possibilities

All children have a right to have free public education in a safe, academically rich, and inclusive school context where the individual and social diversity that students bring to schools is valued as educational resource that promotes expansive learning opportunities in a democratic society (Dewey, 1916 [1997]). The importance of understanding the cultural nature of learning, development, and formal schooling has gained great attention in education research, especially after immense demographic changes in the United States, where historically cultural, linguistic, and ability differences create invisible but consequential borders, leading to different opportunities, privileges, status, and outcomes (Banks & Banks, 2007). In school, students become socialized to the ways in which knowledge and skills are pursued, understood, and accomplished. "In a sense, everything in education relates to culture—to its acquisition, its transmission, and its inventions" (Erickson, 2009, p. 35). Students and families bring complex experiences, skills, and goals to this task that may or may not fit the expectations, dispositions, and disciplined knowledge schemas they encounter in schools.

As noted, deep educational inequalities persist for students from low-income families and nondominant racial backgrounds. The outcome disparities that result are examples of the cultural reproduction of structural inequalities and opportunity gaps found in a racially and economically stratified society (Darling-Hammond, 2010; Ladson-Billings, 2006). Outcome disparities, such as high school dropout rates or low college attendance, should be understood as resulting not from individual student and family characteristics but from the way cultural and linguistic minority students are educated. In short, the U.S. education system offers unequal learning opportunities, substandard physical and academic resources, and hostile climates to nondominant students and communities (Anyon, 2005, Darling-Hammond, 2010; Harry & Klingner, 2014; Kozol, 2006; Orozco-Suarez & Orozco-Suarez, 2001).

Behavioral difficulties and violence in schools can be very consequential and costly for students, educators, families, and the entire society. Schools often use already scarce recourses on punitive and exclusionary discipline (e.g., ODRs, suspension, or expulsion) that have been found to be not only ineffective and costly but also associated with academic failure, high-school dropout, and involvement in the juvenile delinquency system (Leone et al., 2003). Reactive behavioral management, as exemplified by "zero tolerance policies," is ineffective and even

harmful to students experiencing behavioral difficulties, as well as their schoolmates and teachers (American Psychological Association, 2008).

Another common reaction of schools to discipline and behavioral problems is special education referral. While, under IDEA, a student should be identified with a disability in order to receive free, public, and appropriate academic and behavioral supports, it has been widely reported that special education placement does not produce intended outcomes such as secondary school graduation, access to higher education, life satisfaction, and income (Klingner et al., 2005; Wagner et al., 2006). Students who are identified as having EBD have some of the most negative educational outcomes (Wagner et al., 2006). Special education may stigmatize students, segregate them from their peers, expose them to low expectations, and limit their access to the general education curriculum (Donovan & Cross, 2002). For example, 25% of students identified with EBD spend the majority of their instructional time in general education classrooms. Approximately 70% of out-of-school students who were identified with EBD are unemployed (Bradley, Doolittle, & Bartolotta, 2008).

Historically, behavioral problems have had a particularly racialized presence in the United States (Children's Defense Fund, 1975). African American and Native American students consistently, and Latino students less consistently, are subjected to harsher disciplinary practices, suspensions, and local applications of national policies (e.g., zero tolerance) for school discipline and safety (APA Zero Tolerance Task Force, 2008). One out of every six African American students, one in twelve Native American students, one in fourteen Latino students, one in twenty White students and one in fifty Asian students received suspension at least once (Losen & Gillespie, 2012).

Schoolwide PBIS: A Historical Overview

In the last two decades, PBIS emerged as a new way of thinking about behavioral difficulties and discipline and offered a promising approach to improving the quality of school climate and behavioral support. PBIS is grounded in behaviorism, the most influential theory in the field of special education (Kauffman & Landrum, 2005). A genealogical understanding of behaviorism is vital to understand its expansion from individual students to the whole school context. In the late 19th century, when large bureaucratic structures started to handle education (through compulsory schooling) and industrial productivity (through factories and large industrial complexes), preparing the nation's children to be capable future workers of highly compartmentalized massive industrial production and office work was the main purpose of formal schooling. Frederick Winslow Taylor's scientific management theory was the major influence in curriculum and instruction and behavioral management in mass schooling. Taylor's theory highlighting the role of standardization and accountability in productivity and effectiveness was adopted by educators. The theory includes top-to-bottom management, strict compartmentalization in division of labor, efficient use of resources, and standardization of best practices; this leaves no room for individual interpretations and innovations that deviate from the standardized practices and disturb the quality of products.

U.S. public schools have been organized by the theory of scientific management. In the cultural-historical constellation for formal schooling of the early 20th century, the social, political, financial, and even architectural organizations of schools were systematized around the idea of cultivating the future workforce to support industrial mass production as efficiently as possible. At the same time, the idea of self-governing, morally directed, autonomous selfhood and mainstream psychological theories of individual and cultural development emerged (Popkewitz, 1997). This cultural-historical milieu affected school curricula, instruction, behavioral management techniques, and classification of students based on norm-based aptitude and achievement batteries (e.g., IQ tests), as well as the architectural design of the school buildings. Applications of behaviorism for students with psychological disorders evolved from radical behaviorism and behavioral therapy, to applied behavioral analysis, and, finally, to schoolwide preventative support models such as PBIS.

Behavior modification (such as punishment) gained an immense popularity in the second half of the 20th century and was used mostly for individuals with severe behavioral problems and developmental disabilities who were institutionalized for aggression or sexually deviant behaviors (Dunlap, Sailor, Sugai, & Horner, 2009). In the 1970s and 1980s, disability rights movements and deinstitutionalization of people with psychiatric problems and cognitive impairments gave rise to moral opposition to the systemic use of aversive behavioral modification methods, including electric shock or corporal punishment. Through applied behavioral analysis and functional behavioral assessment, special education scholars started to systematically apply nonaversive behavioral interventions to analyze the function of an aberrant behavior and physical and interactional circumstances maintaining the behavior. This gave a rise to the earliest model of PBIS, which was introduced as behavioral support for individuals with severe disabilities who often were placed in mental health institutions (Dunlap et al., 2009). Since the 1990s, prominent PBIS scholars have expanded the historical unit of analysis in applied behavioral analysis and functional behavioral assessment by considering the whole school context and focusing on explicitly teaching behavioral expectations, which are observed and reinforced consistently across classrooms and all school spaces, including the cafeteria, playground, and school bus (Sugai et al., 2000). As seen, the ideal system of educational production is located in theoretical space where each autonomous individual works with high external control and low social agency. This is the historically ontological realm of behavioral therapy and its unit of analysis. PBIS expanded the traditional unit of analysis in behaviorism from an individual to collective, the larger sociohistorical contexts of the whole school (Singer & Wang, 2009).

Guiding Principles of PBIS

Grounded in applied behavioral analysis and functional behavioral assessment and multi-tiered prevention models from the field of public health, PBIS has gained more attention among educational leaders and policy makers that hope to facilitate a positive, predictable, and supportive schoolwide social and academic environment (Sugai et al., 2000). The *positive* in PBIS refers to the reliance on proactive discipline practices. To sustain positive student and adult

behaviors, PBIS emphasizes early intervention and prevention, continuous progress monitoring, data-based decision making, evidence-based practices, interventions, and the coordination of school activities and systems (Sugai & Horner, 2002). It is a team-based process that includes special and general education teachers, administrators, guidance staff and paraprofessionals (playground attendants). The PBIS team determines schoolwide rules and expectations and creates a behavioral support plan to show how minor and major behavioral issues should be handled. The team meets regularly to review behavioral data, make modifications in the behavioral plan, and report outcomes to school staff (Lewis & Sugai, 1999).

PBIS is often implemented in three tiers (Sugai et al., 2000). The primary tier supports are universally provided for all students and within which educators (1) directly teach social skills and expected school behaviors, (2) create opportunities for students to practice those behaviors, and (3) reinforce compliance (Sugai & Horner, 2002). It involves preparing schoolwide behavior support and proactive classroom management plans (Sugai & Horner, 2006). Ideally, measurable behavioral expectations and desired outcomes and corresponding incentives and reinforcements for demonstrating these outcomes should be cogenerated and thus valued by students, families, educators, and other stakeholders (George, Kincaid, & Pollard-Sage, 2009).

In the secondary tier, functional behavioral assessment and empirically supported interventions are applied for students who are not responsive to universal supports. The secondary tier emphasizes addressing individual students' "risk factors," such as low achievement, truancy, and history of suspensions and expulsions. In the tertiary tier, students who are unresponsive to primary and secondary tiers of support are exposed to highly specialized and individualized functional behavioral assessment-informed interventions by teams of special educators, behavioral interventionists, school psychologists, and counselors. Determinations about which students require more intensive behavior interventions and supports are made by PBIS teams and are based on monitoring a number of data sources in a given time period and location: attendance, tardiness, suspension, and academic and behavioral outcomes. By these means, PBIS focuses on the social organization and climate of entire school (e.g., collective behaviors, working structures, and routines of educators), as well as individual student and teacher behaviors.

With current conceptualizations of culture and cultural responsiveness, the PBIS literature are moving from a culture-blind approach to cultural deterministic approach (Artiles, Kozleski, Trent, Osher, & Ortiz, 2010). The cultural deterministic approach recommends that PBIS teams pay attention to diverse cultural and linguistic practices, such as greetings in another language, and the local context in which student behaviors take place (e.g., Sugai et al., 2012; Vincent et al., 2010). This approach essentializes culture, assuming that everyone in a given cultural group category (e.g., Hispanic, Hmong, or Muslim, etc.) shares the similar beliefs, norms, and traditions that determine how they act and think (Erickson, 2009). The concept of culture in the existing PBIS models is generally defined in relation to racial/ethnic or religious group and social class—all or none—membership, as implied in the following definition: "the language, beliefs, values, norms, behaviors, and material objects that are passed from one generation to

another" (Hoffarth, as cited in Ritter, 2011). As such, one's culture determines and thus explains, in part, why Hispanic students or White teachers act and think in certain ways (see for example Utley, Kozleski, Smith, & Draper, 2002; Wang, McCart, & Turnbull, 2007 for the deterministic view of culture).

Current PBIS literature suggests that cultural characteristics associated with minority groups' assumed explicit behaviors (e.g., greetings), values (e.g., collectivist or individualistic cultures), or cognitive processes (e.g., learning styles) are different from the dominant culture characteristics of the majority White middle class teachers and may result in cultural mismatch, misunderstandings and erroneous special education and discipline referrals (Fallon, O'Keeffe, & Sugai, 2012). It is further suggested that "[t]o facilitate all students' social success in schools, then, behavior support delivery needs to bridge various degrees of divergence between students' cultural identities and the school environment" (Vincent et al., 2011). These differences are considered relevant to improving implementation fidelity of PBIS models in local educational contexts (Eber, Upreti, & Rose, 2010; Utley et al., 2002).

The main promise of the existing theoretical discussions about cultural responsiveness is that through cultural consideration and schoolwide scientifically proven "culture-free" academic and behavioral instructions, practitioners can prevent and more aptly identify "true cases" of behavioral problems regardless of the race or culture of students and thereby address racial disproportionality. Recommendations in the existing literature focus on three key areas of practice:

1. Professional development on cross-cultural communication aimed at increasing educators' awareness of differences between their own and non-dominant students' cultural patterns of communication styles, roles of authority, and preferences that will allow educators to better interpret and intervene in the "topography" of student behaviors;

2. Understanding and addressing racial disparities in ODRs and other outcomes through analysis of trends in data disaggregated across student demographic characteristics (i.e., race/ethnicity), and;

3. Input from nondominant communities in determining schoolwide behavioral expectations.

As stated above, these recommendations represent a movement from a culture-free approach to cultural-deterministic approach. I argue PBIS should be expanded from essentialist views of culture to cultural instrumentalist approach to implement PBIS in diverse and dynamic contexts of local schools and reverse the pernicious effects of disproportionality (Artiles et al., 2010). To expand current efforts, the CRPBIS framework discussed below offers a cultural-instrumentalist view relying on a more robust and contemporary conceptualization of culture (Artiles et al., 2010; Engeström, 2008; Erickson, 2009; Rogoff, 2003). CRPBIS strives to increase equity within PBIS by educating practitioners and opening up decision-making and problem-solving processes to previously excluded families. Designed to increase collaboration and

communication between families and staff, CRPBIS offers the possibility of implementing culturally responsive interventions to prevent disproportionality and improve schools' discipline/behavioral support systems and outcomes for all students.

CRPBIS: A Process-oriented Cultural-Historical Theory for Systemic Transformation

CRPBIS is informed by Cultural-Historical Activity Theory (CHAT) and built on guiding principles of PBIS (Engeström, 1987; 2008; Sugai et al., 2000; 2010). CHAT is the third-generation theory of Marxist cultural-historical psychology. CHAT is increasingly used in education research to study how individuals learn and develop as active social agents in specific sociocultural contexts (Engeström & Sannino, 2010). It is built on the idea of multiple interacting systems connected with a shared object to capture complexities of human learning and developments in today's society (Engeström, 2008; Kaptelinin, 2005).

Moving from the cultural determinist view to a cultural-instrumentalist approach, CRPBIS calls for a paradigm shift in PBIS literature to produce the next generation of system-wide PBIS that accounts for the cultural nature of learning and development. The critical focus is on dynamic interactions of cultural processes in local educational contexts to improve school climate and learning opportunities for all students via ecologically valid, socially just, and sustainable systemic transformation. Thus, what is needed is an instrumental and critical process-oriented cultural theory of practice—rather than a value-based one. The guiding principles of CRPBIS are that humankind is biologically cultural. People learn and develop via "their changing participation in the socio-cultural activities of their communities, which also change" (Rogoff, 2003, p. 11).

For the purpose of the CRPBIS framework, I define culture as a historically unique configuration of the residue of collective problem-solving activities among a social group in its efforts to survive and thrive within its ever-changing environments (Gallego et al., 2001). This social inheritance is embedded in ideals (e.g., beliefs and cultural models) and material artifacts (e.g., behavioral questionnaires or IQ tests; Cole, 1996). Culture "is experienced in local, face-to-face interactions that are locally constrained and heterogeneous with respect to both 'culture as a whole' and the parts of the entire toolkit experienced by any given individual" (Cole & Engeström, 1993, p. 15). Further, I define context as culturally mediated collective activities, not as the immediate visible physical and social environment. As participants in multiple cultural communities and activity systems (e.g., family, school district, PBIS team, language arts class, video games, basketball team, hip hop communities, and church youth groups), students appropriate multiple cultural practices and tools that mediate their learning and development in and outside of the school setting (Nasir, Rosabery, Warren, & Lee, 2006). Culture provides a toolbox of artifacts that both enable and constrain human actions. At the same time, culture is not our destiny (Nieto, 2002). As active social agents, people do not solely resist or passively internalize the culture. People do use and make cultures by participating goal-oriented collective activity systems (Varenne & McDermott, 1998).

There are regularities in cultural group members' participation in everyday activities that have relatively stable characteristics. However, there are also constant tensions between those relatively stable characteristics and the emergent multiple goals and actions of group members situated in contexts (Gutierrez & Rogoff, 2003). These tensions are sources of individual and social changes and variations in cultural cultures (Engeström, 2008). The CRPBIS framework conceptualizes culture as dynamic, multifaceted, and filled with conflicts, negotiations, power/privilege differentiations, resistance, and compliance. Culture also includes orchestrated solutions and innovations as local accomplishments that should be understood and changed at a local level with local stakeholders. The CRPBIS framework theorizes four interacting layers of school cultures: *individual factors* (the cultural and linguistic practices and experiences that students and teachers bring to schools), *institutional factors* (the structural context of the school that already exists, such as rules, privileged behavioral practices, and narrative styles), *interpersonal/interactional factors* (the different yet overlapping social environments that emerge in schools when people work together, such as the ecology of interactions), and *systemic infrastructure* (more durable network relations and collective material and conceptual structures that function as a glue to make communities more than the sum of autonomous individuals; Bowker & Star, 2000; Engeström, 2008; Rogoff, 2003; see Figure 1).

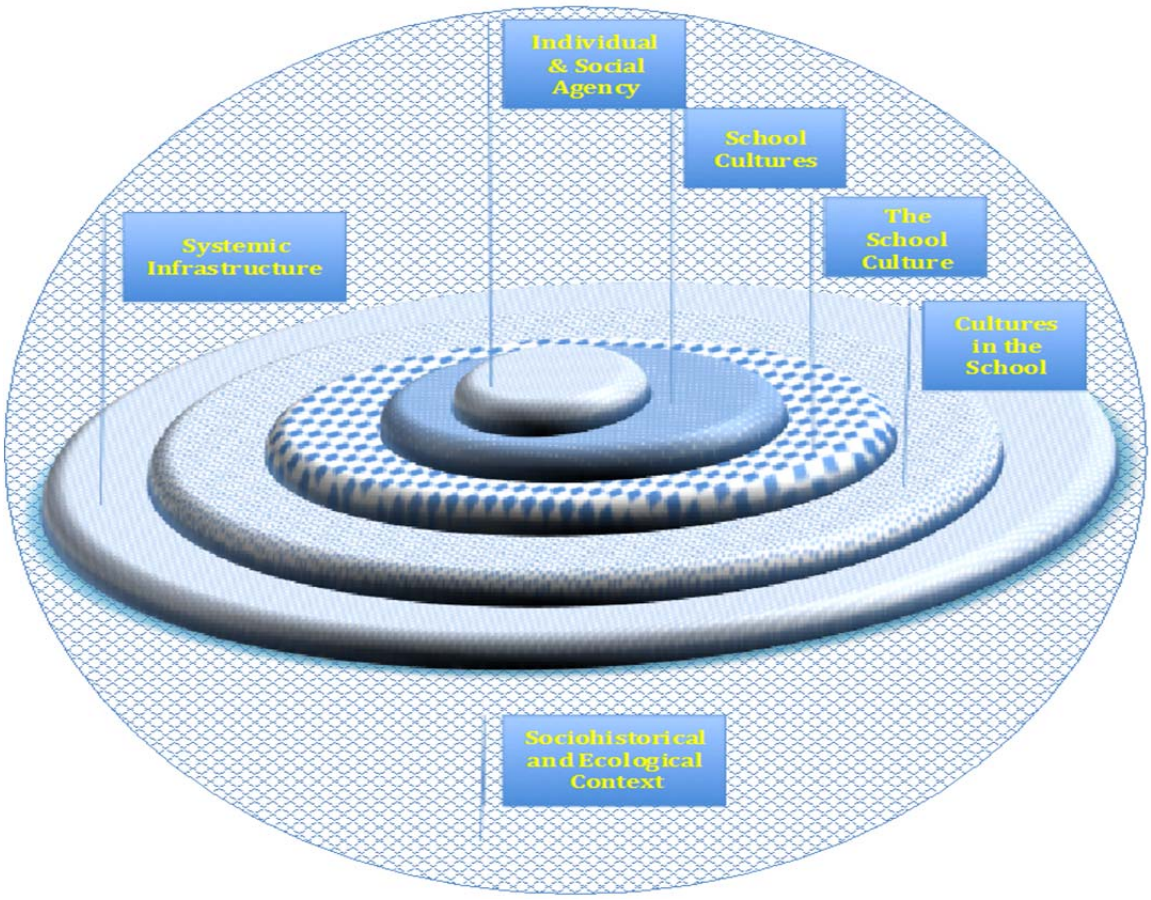

***Figure 1*. Cultures in School and School Cultures**

Culture as Praxis

Cole aptly stated (1996) “culture is very difficult for humans to think about. Like fish in water, we fail to ‘see’ culture because it is the medium within which we exist” (p. 8). Because the study of culture is interdisciplinary, in this review, I focus on recent and comprehensive scholarship relevant to learning, development, and knowledge production activities, drawing from work in education, psychology, cultural studies, and sociology of science (e.g., APA, 1990, 2003; Banks et al., 2007; Bonilla-Silva & Zuberi, 2008; Cole, 1996; Rogoff, 2003; Tillman, 2002). Cultural histories, institutional traditions, and their reconstitution in action are critical factors in shaping, naming, and marginalizing certain types of behaviors while reifying others.

The CRPBIS framework starts with examination of the cultural *practice*s of schools rather than mainstream normative definitions of culture that seek to understand individual factors (e.g., student culture) as a static property (e.g., a proxy indicator for race, nationality, language). The normalized cultural assumptions and practices are entrenched institutional processes that generate long-lasting education and social opportunity gaps and may be connected to structural systems of oppression in local neighborhood communities and larger society (Anyon, 2005; Artiles, 2009; Artiles, Bal, & King-Thorius, 2010; Ladson-Billings, 2006). A local school’s practice of exclusionary and punitive discipline cannot be solely understood and transformed by looking at school’s behavioral outcome data and changing local practitioners’ perceptions or subconscious biases. For example, disproportionately high and unjust use of exclusionary discipline practices may cause students of color to miss a critical amount of instructional time. Nonetheless, an exclusively outcome-oriented educational equity approach relying solely on desegregated data and white educators’ perceptions may blackbox the structural and historical forces and social and cultural processes that produce and maintain long-lasting academic and social inequities that minority students experience in schools and the larger U.S. society (Soja, 2010). Hence, I argue for a locally situated, ground-up systemic transformation model led and owned by—not for—local stakeholders.

In agreement with Moje and Hinchman (as cited in Klingner, Sorrells, & Barrera, 2006, p. 225) that “[a]ll [educational] practice needs to be culturally responsive in order to be best practice,” CRPBIS proposes a paradigm shift in the PBIS service delivery model from a normative and deterministic concept of culture to an instrumental conceptualization, which includes moving away from surface outcome disparities to actual social and institutional processes of injustice that maintain and reproduce the outcome disparities in U.S. schools. With this paradigm shift, educational researchers and practitioners may more comprehensively understand and address complex and adaptive enduring academic and behavioral equity issues that are reproduced in/through individuals in the specific context of local schools.

Epistemologically, CHAT suggests that a culturally mediated object-oriented activity system (e.g., classroom, school, neighborhood, and PBIS leadership team) should be taken *as the unit of analysis*. Minimum elements of an activity system constitute the object, subject, mediating cultural tools, rules, community, and division of labor (Engeström & Miettinen, 1999). The notion of *object-oriented and culturally mediated activity* from this theoretical perspective is

potentially useful for building upon the existing knowledge base of PBIS. The object of an activity system (e.g., a minority student with a behavioral problem) is socially, historically and spatially co-constructed. The object balances the various motives of the participants and maintains coordination among multiple activity systems (e.g., schools, LEAs, and families). The activity systems can be understood as historically evolving. The differences in a learning history of individuals or their cognition, perceptions, and practices should be understood by analyzing social, political, and economical factors that contribute to differences observed in local educational contexts.

An activity system is full of multiple voices, conflicts, negotiations, and power/privilege differentiations, as well as collective innovations and solutions. Systemic tensions, multi-vocality, and differing interpretations are generally seen as obstacles in PBIS implementations that must be solved via a streamlined and highly controlled system implemented with high fidelity (Sugai, 2011). Conversely, in the CRPBIS framework, those systemic disruptions and diverse views, goals, and histories are the driving forces of expansive learning for an activity system and its participants (Engeström & Sannino, 2010). Therefore, systemic change in CRPBIS implementation can be studied by tracing these historical and present disruptions and innovations.

From Intervention to Innovation: Implementing CRPBIS

CRPBIS follows five interceptive actions: (1) forming a Learning Lab; (2) determining desired outcomes; (3) empirically and culturally validating research-based practices; (4) using data for continuous improvement and innovation; and (5) systemic change. Together, these actions aim for restructuring of the social organization of schools. The goal of CRPBIS is to promote positive social behaviors and use diverse cultural resources and practices to support students' learning, development, academic engagement, and need for safety, belonging, and affirmative identification.

CRPBIS is grounded in the basic tenets PBIS for assisting local schools in the early stages of PBIS implementation. It is designed to remediate social and academic activities within schools that place specific groups of students and families at the margins and to reconstitute the practices, norms, rituals, rules, and division of labor within the school culture and activity contexts. Remediation of the school systems requires committed involvement of teachers, families, and students to open dialogue (not top-down prescriptions of linear interventions) to create awareness of the oppressive and marginalizing institutional practices and jointly develop and implement ecologically fit solutions (Freire, 2000; Gutiérrez, 2008). For this reason, implementation of CRPBIS starts with the formation of a structured learning activity called Learning Lab (Bal, 2011).

Learning Labs

CRPBIS Learning Lab is a research and innovation site for organic, equity-oriented systemic transformation. It aims to lead a cycle of systemic transformation (see Figure 2). The Learning Lab methodology seeks to rouse and sustain an expansive transformation process that should be

led and owned by the practitioners and other stakeholders, specifically those from historically excluded from school activities. Activities focus on developing and facilitating social agency, in particular the agency of participants who are more often exposed to aversive, punitive, exclusionary, and reactive discipline. Objectives of the locally formed solutions are continuously revised by the Learning Lab members, who are active co-innovators. Engeström (2008) called this movement "collaborative interdependence." Organized "around the development of an equity-oriented, humanist research agenda" (Gutiérrez & Vossoughi, 2010, p. 102), local communities of practice are perceived as expansive learning and innovation sites, and formative interventions are powerful specifically in serving students from nondominant racial, linguistics, and economic backgrounds facing outcome disparities.

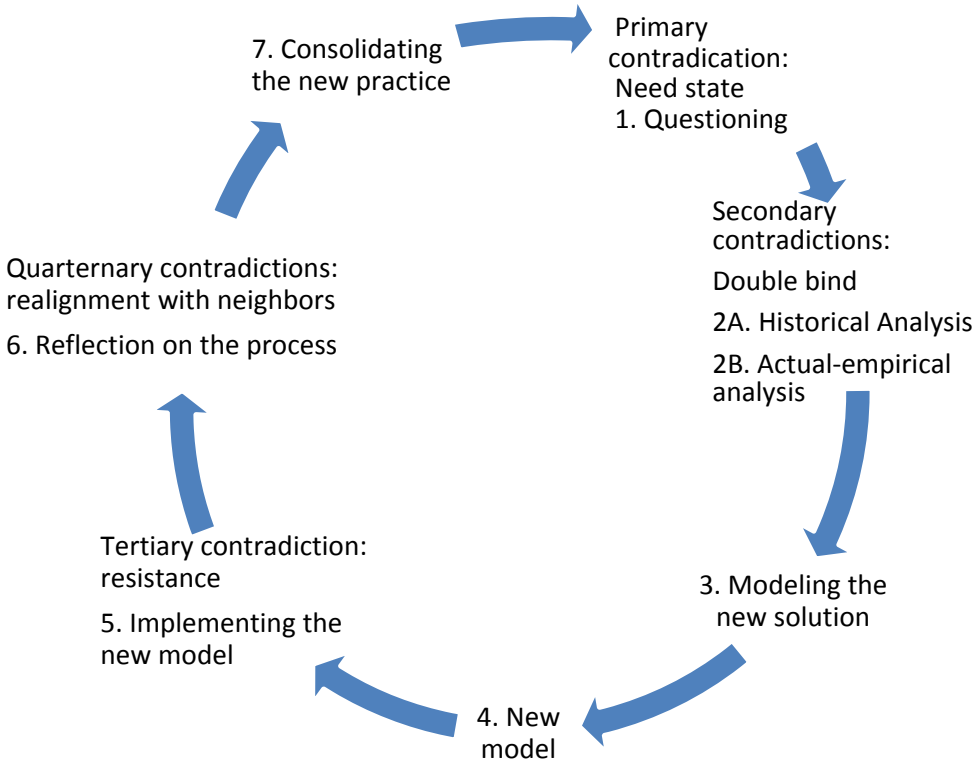

***Figure 2*. Systemic Transformation and Expansive Learning Cycle (Reprinted from Engeström, 2010)**

Learning Labs are for schools facing a major transformation such as PBIS implementation. Learning Labs may comprise families, skilled behavior interventionists, teachers, and school leaders. They may also include district or state representatives (e.g., external PBIS coaches), local community members from business, non-government organizations (e.g., the Urban League and the Boys and Girls Club), and community activists. A Learning Lab is formed as a separate entity, yet it includes members from existing schoolwide structures, such as improvement teams, PBIS teams, or teams designed to provide leadership for school change. Gradually, as a Learning

Lab team develops, it coordinates the efforts of the other schoolwide improvement teams. The main concern in CRPBIS is nondominant students experiencing behavioral and academic difficulties in schools. However, the unit of intervention is the schoolwide PBIS team and its historically evolving culturally mediated joint activities. Developing goals and new or edited instructional and assessment tools is open for negotiation, appropriation, and resistance. The goal is interventions "that may be used in other settings as frames for the design of locally appropriate new solutions" (Engeström & Sannino, 2010, p. 15). This conceptual examination is critical (but not enough by itself) for stakeholders to grasp the power and meaning of critical cultural-historical perspectives to school and systemwide applications of multi-tiered academic and behavioral interventions.

Learning Labs employs Vygotsky's (1978) experimental method of double stimulation. In double stimulation experiments, "the subject is put in a structured situation where a problem exists … and the subject is provided with active guidance towards the construction of a new means to the end of a solution to the problem" (van der Veer and Valsiner, 1991, p. 169). Learning Labs meet for 8–10 consecutive sessions. The starting point of Learning Lab meetings is the here and now, daily and developmental tensions, as defined, experienced, analyzed, and expanded upon by the members, who are asked to record critical incidents of daily problems that the participants face and bring these into Learning Lab (Freire, 1993). These ethnographic data are *primary stimuli*. Then, researchers introduce conceptual models such as research literature on racial disproportionality, the triangle model of CHAT along with new data collection and analysis tools such as data maps and school climate surveys (e.g., Horner et al., 2006). These conceptual and material tools serve as *secondary stimuli.* Sessions may be videoed as additional secondary stimuli for participants' reflection.

Members analyze the components of the four interacting activity systems—school, families, school districts, and LEAs—and trace the historical disruptions and tensions within these interacting activity systems. All four systems are held together by a shared object: Nondominant students experiencing behavioral difficulties and receiving disproportionally higher ODRs (see Figure 3). Members are encouraged to move on multiple time scales among the past, the present, and the future, and on multiple spatial systems levels (from neighborhood to city to state), to analyze their system and its tensions. Members also create and test new solutions via the mediation of the secondary stimuli. Interventionists support this examination through accessible representations of quantitative and qualitative analyses such as pie charts or data maps.

Implementers of CRPBIS should be mindful of and seek to overcome legacies of the uses of reactive or aversive discipline as ways to control students who belong to underrepresented racial, ethnic, linguistic, and ability groups by those in dominant groups, deeply structured horizontal power relationships, and historical segregation of educators from families and community members in U.S. schools (Skiba, Michael, Nardo, & Peterson, 2002; Harry & Klingner, 2006). In other words, critical consideration of the use of discipline with minority populations provides the impetus for ongoing reflection on the meaning of what is offered as intervention, even in the case

of a robust research base that shows a particular intervention is positively linked to teaching prosocial replacement behaviors or the extinction of problem behaviors.

From a Marxist historical materialist perspective, systemic contradictions experienced in a school are not seen as problems but opportunities and motives for change. “Contradictions are historically accumulating structural tensions within and between activity systems” (Engeström, 2000, p. 137). Through adopting a critical social, temporal (individual biography and group history), and spatial perspective, practitioners may develop new solutions locally to transform their actions and school systems such as school’s discipline system (e.g., rules, roles, and division of labor). The newly emerged solutions are discussed, implemented and rigorously tested. As connected to the Learning Lab, the goal of the other four CRPBIS implementation processes—outcomes, empirically validated practices, data-based decision making, and systemic change—is to make the supposedly “cultural neutral” tenets of PBIS (Sugai et al., 2000) culturally responsive in order to understand and address the diverse strengths, needs, and interests of minority students and families. In what follows, I present how Learning Lab members critically conceptualize the tenets of PBIS as they implement it in their local contexts.

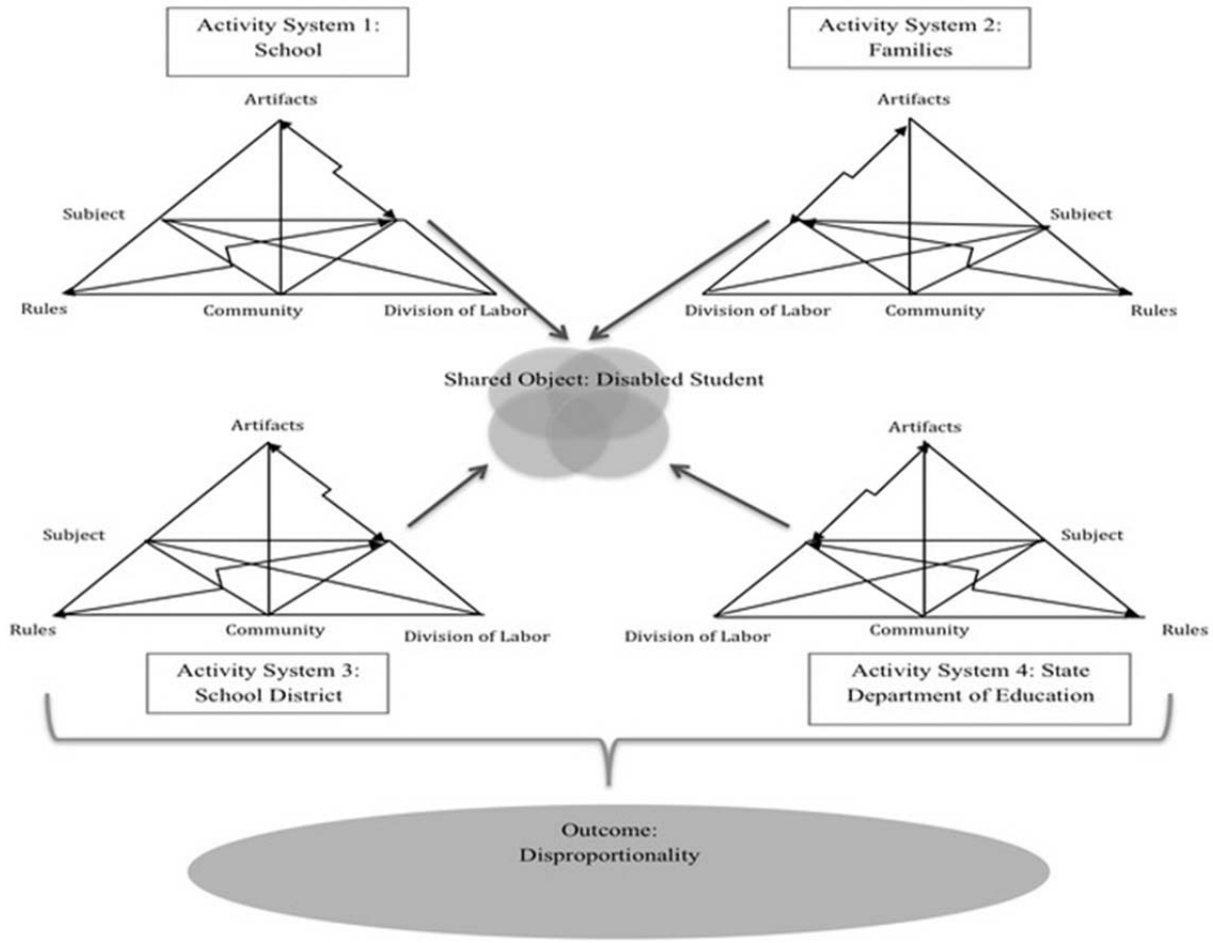

Figure 3. **Constellation of activity systems with a partially shared object**

Outcomes: Toward Agency and Innovation in the Determination of Behavioral Expectations and Interventions

A key feature of PBIS is to make the determination and reinforcement of behavioral expectations, consequences, and behavioral support procedures socially relevant and ecologically valid for local stakeholders (Dunlap et al., 2009; George et al., 2009; Sailor, Dunlap, Horner, & Sugai, 2009; Sugai & Horner, 2002). The goal of the CRPBIS is that all students, particularly nondominant students, who have experienced systemic marginalization, engage in empowering emancipatory participation in socially positive, academically rich, and inclusive educational activities. Diversity in culture, language, and ability is not only valued but used for facilitating a systemic change that allows all students to be empowered in determining the content and direction of their learning and learning interactions, leading to learner-driven positive personal and social change.

Learning Lab members critically examine whether desired and locally meaningful social outcomes are determined in an open process that includes all stakeholders. In defining the outcomes, the team can employ a distributive social justice perspective (Rawl, 2005) to ensure the inclusion of stakeholders representing racial, linguistic, and economic diversity in Learning Lab. Members can use school demographics on race, language, and class to attempt to bring representatives from those groups. However, representation of diverse groups in Learning Lab's problem solving activities is necessary but not enough. A participatory social justice approach is also required to facilitate an inclusive problem solving process (Bal, 2012). Participatory social justice is about equal access and influence on decision-making activities. It asks who makes the decisions in our schools? Who determines what insubordination means and how to respond to school discipline issues? Learning Lab members should make sure to establish a process in which all stakeholders have power over the determination of outcomes – not just voice their concerns. Thus, Learning Lab facilitators must be cognizant of the culture, learning, development, change, and discipline/control underlying school discipline and special education practices. Illegitimate classification and punishment of minority students in disciplinary contexts is often characterized by student deficits or a result of unequal power relations along the lines of race, ethnicity, language, class, and sexual identity (Varenne & McDermott, 1998; Nasir et al., 2006).

Scholars in the field of learning sciences suggested that one of the most crucial considerations in exploring student learning is the *discontinuities* between informal learning and the explicitly didactic teaching/learning practices (Bransford et al., 2006). For example, while African American students' narratives have not been the privileged way of demonstrating competency in school-based literacy activities, rhetorically powerful narratives of many African-American youth are found to share similar characteristics with the literary texts of celebrated American writers (Nasir et al., 2006). Yet, students using such narrative styles are generally devalued and labeled incompetent learners. Accumulated experiences of devaluation, negative identification, and social stereotypes influence minority students' future participation and performance on academic tasks (Steele, 1997). Learning Lab should facilitate educational

activities' use of non-dominant students' informal learning activities. The cognitive and social organization of the school should tap into the cultural worlds of nondominant families. Moll and colleagues (1992) showed that teachers who develop an understanding of Latino families' *funds of knowledge*—cultural-historical practices, experiences, and skills—could appreciate and use what non-dominant students bring from their socially and cognitively rich cultural worlds. Those teachers also reflexively analyzed their own instructional practices, developed higher expectations from minority students, and tied the academic activities to families' funds of knowledge without stereotyping or overgeneralizing those non-dominant communities (Moll et al., 1992). In addition, educators need to be cognizant about naturalized classroom activities and interactions that do not fully use nondominant students' cultural resources (Hatt, 2007).

Learners are not passive receptors but active social agents in their lifelong learning and development (Bransford et al., 2006; Engeström, 2008). Students' active engagement assists their cultural communities in adapting to a constantly changing world. Studies of informal learning provide a rationale for the incorporation of multicultural perspectives into the classroom and curriculum. Learning Lab members can examine the ways in which students develop different, even contradictory, pathways of competence in academic and non-academic settings, as well as how students' academic and behavioral performances are assessed in daily activities and through research. For example, it would be important to study if/how teachers build on students' existing cultural-historical styles to facilitate developing new networks and different ways of showing knowledge. In this respect, CRPBIS definition of educational equity is not conceptualized as offering the same academic and behavioral programs across all students or producing sameness but "enabling youth to appropriate the repertories they need in order to live the richest life possible and reach their full academic potential" (Nasir et al., 2006, p. 499). The cultural nature of learning embraces adaptive expertise, the development of flexible knowledge that facilitates effective navigation across varied settings and tasks. Even though learning is situated in collective activity systems, not every activity in schools results in "a deep understanding of complex concepts, and the ability to work with them creatively to generate new ideas, new theories, new products, and new knowledge" (Sawyer 2006, p. 2). Therefore, to understand and impact student learning, we need to develop a critical focus on social and cognitive organization of learning activities in formal and informal settings.

The CRPBIS framework pays an attention to unequal behavioral and academic opportunities and outcome disparities in the local schools and LEAs. However, it gives more critical attention to sociocultural constructions of success/failure, in/competence, and deviance through the institutionalized processes of power and privilege that maintain the inequalities. This process-oriented understanding repositions the focus from *what* outcomes are determined to *how* a representative group of stakeholders determines desired outcomes. For example, the concept of respect, a commonly agreed upon desired behavior in PBIS implementations, is grounded not only in the cultural understandings that individuals bring to school settings in relation to membership in cultural groups and individual experiences, but also within the institutional cultures of schools and day-to-day interactions in classrooms *and* historical configurations of daily tensions around how respect is defined, performed, and monitored within and outside

school walls. Engaging stakeholders as social agents in an ongoing process of exploring behavioral and academic outcomes, why they are relevant, and what these look like to members of the leadership team, encourages stakeholders to examine their own values, beliefs, and knowledge about the purpose of schooling and the goals of supporting certain ways of interacting within that setting. Using agency does not imply that an individual is a free, willing agent. Rather it is a socially distributed process. CRPBIS conceptualizes that an individual as a social agent will form/transform herself by orchestrating the individual and structural/systemic factors in social activities that are situated "historically contingent, socially enacted, and culturally constructed 'worlds'" (Holland, Lachicotte, Skinner, & Cain, 1998, p. 7). The notion of social agency also has application to the second tenet of PBIS (Sugai et al., 2000), which is discussed next. The use of empirically validated practices with students who are determined by educators to be struggling with behavior.

Empirically Validated Practices: Which Intervention Works with Whom, by Whom, and under What Circumstances

As Sugai and Horner (2006) summarized, "The SWPBS approach is about redesigning learning and teaching environments so that the best and most appropriate evidence-based practices can be adopted and implemented at the classroom and schoolwide levels" (p. 256). Behavioral support and interventions in the mainstream PBIS literature relies on what Danforth, Taff, and Ferguson (2006) called "curative geographies," a historical form of defining special and remedial education spaces and programs—that is, manipulation of consequence events or changes in the school, causes changes in children's cognition and behavior so that the behavior complies with predetermined schoolwide expectations for how students are to act. Within these curative geographies, both schoolwide and individualized *interventions* are determined from an existing "evidence-base" or "best practices." Historically, evidence-based interventions were seen as culture-free or context neutral, following an approach that likens behavioral interventions to medical treatments through the use of terms like "dosage," "side effects," and "placebo" used to describe the nature and intensity of interventions. That is, they were considered to be universally appropriate for "treating" or "fixing" student behaviors if they were used as prescribed. The promise of PBIS for students struggling behaviorally is to provide an evidence-base for high-quality instructions and interventions that match each child's needs; further, ongoing assessments determine the extent to which students respond to these evidence-based instructions and interventions (Klingner & Solano-Flores, 2007).

Those at the forefront of cultural responsiveness in PBIS took issue with this culture- and context-free notion of intervention (Vincent et al., 2011). A similar critique has been applied to the ways interventions were conceptualized for students struggling academically by noting the lack of inclusion of culturally and linguistically diverse students in the evidence-base; thus, they recommend a focus on understanding *which intervention works with whom, by whom and under what circumstances* (García & Ortiz, 2008; Klingner & Edwards, 2006). In special education and the larger mental health literature, most studies do not include minority students, report participants' racial, ethnic, and linguistic backgrounds, or discuss the findings disaggregated by

students' demographic characteristics (Graham, 1992; Trent, Artiles, & Englert, 1998). Therefore, we do not know if evidence-based interventions work with all students. Historically, the findings from experimental studies "tend to be overgeneralized, particularly by educational leaders and policy makers, without a close enough look at variance and possible treatment X attribute interactions or school or teacher effects" (Klingner et al., 2007, p. 227).

The existing models of cultural responsiveness in PBIS place attention on the design and study of interventions with particular groups of students and the geographical designation (i.e., urban, suburban, rural) of the schools within which they are implemented (see for example, Lassen, Steele, & Sailor, 2006). However, because of the deterministic use of the term "culture" as a proxy for people's membership in a shared sociodemographic group, attention to the practices has focused on designing and testing interventions for specific racial/ethnic groups because of conceptualizations of shared behaviors and likely beliefs of students belonging to one group or another. The same pattern holds for location of the school: students and conditions in urban schools demonstrate a set of shared practices and beliefs in relation to their "urban-ness."

In the CRPBIS framework, the focus is on how culture both enables and constrains student learning and behavior. Systematizing expansive learning activities and settings via scaffolding encompasses:

> [1] organizing participation in activities in ways that address basic human needs for a sense of safety as well as belonging; [2] making the structure of the domain visible and socializing participants for dispositions and habits of mind necessary for expert-like practice; [3] helping novices understand possible trajectories for competence as well as the relevance of the domain to the learners; and [4] providing timely and flexible feedback. (Nasir et al., 2006, p. 491)

Bransford and colleagues (2006) suggested that restructuring an expansive learning environment to allow all students to (1) appropriate the school-based knowledge and thinking, various cultural resources and practices, collaboration, and previous experience to reason unique configurations of real-world problems; (2) construct their own knowledge in meaningful and valued activities; (3) reflect critically on their own process of learning and actions; (4) experience flexible and just-in-time feedback; (5) feel safe and a sense of belonging; and (6) be adaptive expert learners who maximize future learning opportunities and engage in innovation and expansion.

CRPBIS follows general principles of culturally responsive education: democratic, reciprocal, and inclusive school climate, communities of learners, and conceptions of knowledge and curriculum content. Culturally relevant pedagogy and culturally responsive educational programs aim to organize academically rich, inclusive, and safe learning activities for expansive learning and students' adaptive expertise (such as Gay, 2002; Klingner et al., 2007; Lee, Spencer, & Harpalani, 2003). Ladson-Billings (1995) stated effective culturally relevant pedagogy addresses nondominant students' academic achievement, understand and affirm

cultural practices, and assist students to develop critical perspectives that understand and challenge what is reproduced in schools and other sociopolitical institutions. In her recent critical work revisiting and extending the third space concept, Gutierrez (2008) draws on her research in Los Angeles with students from migrant farmworker families to describe a "curriculum and its pedagogy [that] are grounded in the historical and current particulars of students' everyday lives, while at the same time oriented toward an imagined possible future" (p. 154).

Programs solely meant to increase nondominant students' academic achievement and social compliance with schoolwide behavioral expectations without raising a critical awareness among those involved can be very costly to the social and psychological wellbeing of nondominant students and may further marginalize them. Birman, Trickett, and Bacchus (2001) and Fordham (1996) found that African-American and African immigrant students who perform privileged (White-middle class) style of acting and talking are identified with racialized social positions—"acting White" or "Oreo"—by their peers. Yet, culturally relevant programs are reported to generate sustained positive academic outcomes (e.g., college attendance, lower dropout rates) for minority students who were at risk of failing academically and being placed in special education (Gutierrez, 2008; Lee et al., 2003). Such culturally relevant programs allowed educators to use nondominant students' informal learning experiences and their cultural and linguistic resources and the funds of knowledge of their communities.

Moreover, CRPBIS pays critical attention to the interactional context of school activities. Equitable and reciprocal adult-student interactions—rather than highly individualistic and competitive social interactions—are important. Teachers using culturally relevant pedagogies consciously enable social interactions to "maintain fluid student-teacher relationships, demonstrate a connectedness with all of the students, develop a community of learners, encourage students to learn collaboratively and be responsible for another" (Ladson-Billings, 1995, p. 480). In CRPBIS, educators are encouraged to capitalize on students' protective factors, such as high degrees of collaboration between educators and families, as well as opportunities for extracurricular activities (George, Kincaid, & Pollard-Sage, 2009). Some widely used second-tier interventions include Check and Connect, Check-In/Check-Out, First Step to Success, social skills trainings, and mentoring programs such as Big Brothers and Sisters or Boys or Girls Club (Hawken et al., 2009). First Step to Success and mentoring programs were found to be effective for culturally and linguistically diverse students at risk of special education referral (Diken, 2004).

Several scholars explored the ways in which the varied cultural practices and expertise of nondominant students are connected to academic practices such as mathematics, science education, and literacy (Lee et al., 2003). It is recommended that educators innovatively expand the-taken-for-granted ways of teaching in academic domains, look for the continuities of multiple practices and making connections by blurring the borders between in- and out-of-school learning, and develop a deep understanding of cognitive and social strengths that all students bring as participants of multiple cultural communities (Nasir et al., 2006). In CRPBIS, Learning Lab members select and appropriate the guiding principles and key practices of those studies and

programs on expansive learning, adaptive expertise, and informal learning as situated in their local social, cultural, and spatial contexts. By examining the motives for and understandings of expected behaviors that make them relevant to all members of the leadership team, CRPBIS shifts its major goal from eliminating aberrant behaviors or maintaining replacement behaviors to supporting the development of students' and teachers' social agency and power to act in innovative ways that shape their school and classroom communities.

Data-Based Decision Making: Complex Analyses for Complex Issues

Data-based decision making is the third tenet of PBIS. Data-based decision making is of central importance both in terms of the types of data collected to determine which students are in need of interventions and supports and how existing interventions and supports can be modified to better meet students' needs. Data also measure the impact of PBIS on improving school climate and student behavior. Yet, data collection tools may lack construct validity for nondominant students and across all situations (Solano-Flores, 2008). As Vincent and colleagues (2011) emphasized, little is known about the ecological validity of tools used to collect behavioral outcome data and of the operational definitions of inappropriate behaviors in the widely used data systems.

In a PBIS implementation, behavioral data (e.g., ODRs, suspension) are collected to expose the interwoven aspects of formal learning and academic competence, and behavioral deviance. Data collection focuses on the distributed and negotiated nature of function and meaning of behaviors from multiple perspectives that are constructed through a triple dialectic of social, temporal and spatial contexts relationally formed through the regimes of power/privilege and institutionalized acts of inclusion/exclusion (Artiles, 2009). These three contexts can be and have been haphazardly taken as background and foreground for each other for the purpose of analyses. CRPBIS interventionists should not lose sight of their relational and simultaneous existence.

Traditional individualistic yardsticks of impact in PBIS are used to measure progress (e.g., fewer ODRs). The existing conceptualization of cultural responsiveness in PBIS models suggests that professional development workshops that inform educators about racial disproportionality via disaggregating school data on ODRs across racial group and about cultural mismatch and racial prejudice will decrease racial disproportionality in ODRs (Eber et al., 2010). However, there is no empirical causal link was established between educators' awareness about racial disproportionality and implicit/explicit biases and ODRs. Racial disproportionality in school exclusionary and punitive disciplinary actions or racialization of school discipline is a systemic, structural problem that goes beyond individual teacher's perceptions. The perceptions are not observable and measurable and not adequate for addressing systemic, structural problems. For example, if you ask educators in the United States about their perception toward racial segregation, a majority of educators would disagree with racial segregation in schools. Yet, five decades after the Brown vs. Board of Education of Topeka, Kansas decision in 1954, U.S. schools are more segregated (Darling-Hammond, 2010; Orfield, 2009).

The CRPBIS framework uses these resources to identify historical and spatial patterns of outcome disparities but also generates data from multiple sources and methods. Multiple data sources facilitate practitioners' reflexivity and record historical and contemporary processes of individual and systemic development and change. For example, a logical direction in PBIS scholarship is to develop theories and methodologies to understand micro, meso, and macro level structural, political, policy, and social factors (e.g., neighborhood ecology, availability of social support programs such as Head Start, and state and federal educational policy initiatives such as English-only laws) surrounding the local school contexts and influencing the effectiveness and sustainability of PBIS implementation (Dunlap et al., 2009). Data from multiple sources should be represented via new technologies of map-rich data analysis tools to raise stakeholder awareness about the geographies of opportunities and risk in local social-spatial contexts (see for example, http://crpbis.apl.wisc.edu/).

Working with complex education systems and achieving sustainable, locally meaningful, and effective systemic change requires comprehensive systems of data collection and analyses that should provide understanding of complexity within and between activity systems (Bal, Sullivan, & Harper, 2014). To achieve this goal, state-level organizations and resources must be coordinated. From a process-oriented perspective, data may be collected through observations and assessment of the interactions that occur within schools and are used for purposes other than measuring student progress or improvements in school climate. Useful data sources may be accessed through both locally developed and relevant norm-based valid and reliable instruments that allow stakeholders to understand the dynamic interactions of individuals and group—demographic, such as race and gender, and organizational, such as classrooms within a grade level. CRPBIS uses multiple data collections tools, including mainstream PBIS data collections tools (available at www.pbis.org), and learning and school climate tools, as well as the assessment tools such as the learning in and out of school in diverse environments' checklist developed by the Learning in Informal and Formal Environments Center (Banks et al., 2007).

Data collection and analysis also focus on the dynamic interactions of individuals, cultural groups, institutions, and policy contexts that exist in relational and reciprocal ways, not singular and autonomous ways. Thus, the interactions between individuals and institutional structure, not individual student behaviors, become the focus of analysis. Emphasizing interactions focuses attention on the nature of communications within the school—that is, the work educators and students do together. Members of a CRPBIS Learning Lab should understand the opportunities of learning and privilege and social identity positions available for all students. To support students' engagement in the learning process, observation guides and questions that allow for the assessment of the forms of participation set up by educators and made available to students in classrooms could be both a data collection tool and a source used to reflect upon and critique dominant cultural practices in the school. Critical Race Theorists suggested that a system of oppression could only be understood from perspectives and experiences of the oppressed people (Crenshaw, 1989; Ladson-Billings, 1995). Thus, in CRPBIS, it is crucial to get nondominant students' and families' perspectives via multiple mediums such as group and individual video interviews or photo diaries. Most importantly, however, these analyses should be informed by an

equity-oriented systemic change framework to address the micro, meso, and macro level factors as enacted and interacted in local school contexts to produce and maintain socially unjust educational opportunities and outcomes for students from nondominant communities.

Systemic Change

The last tenet of PBIS is systemic change. PBIS scholars suggested that "From a systems perspective, the school is treated as the unit of analysis, and the collective actions of individuals within the school contribute to how the school, as a whole, is characterized" (Sugai & Horner, 2006, p. 248). School personnel need sustained systems-level support if they are to achieve organizational, goal-related school behaviors. "The emphasis on person-centered planning and team-based decision making extends behavior support beyond manipulation of events in the immediate life space of the individual to recognition that schedules, staffing patterns, cultural expectations, physical conditions, budgeting, and organizational policy are also likely to affect the success of support" (Dunlap et al., 2009, p. 5). PBIS literature is yet to use the findings of relevant literatures, such as organizational psychology, industrial engineering, and social psychology.

It appears as though the PBIS literature has not fully integrated the complexities of collective human activities and organizational learning and change. Sugai and Horner (2006) stated, "[T]o work effectively with the school as a whole, one must remember that organizations do not 'behave.' Instead, individuals within the organization engage in behaviors" (p. 248). Decades of research in organizational psychology and school reform showed that organizations have histories and cultures that cannot be understood solely by focusing on discrete actions of individuals within those organizations (Bowker & Star, 2000; Engeström, 2008; Fullan, 2003).

Moreover, PBIS demands seamless and coordinated systems toward a common goal. PBIS implementations should include representatives from local communities, social services, business, and political offices. However, these diverse people and institutions often have contradicting goals and agendas, and no clear guidelines exist to help them work together to create safer schools with rich, high-quality learning opportunities for all students. Without a robust theory of systems change and careful attention to power/privilege and individual and institutional histories, recommendations targeted at autonomous individuals render unlikely integrated and authentic implementation of district/statewide PBIS models.

The new unit of analysis of PBIS (the whole school context) has yet to generate intended outcomes for all students in various local educational systems (Vincent et al., 2011). The main reason for this shortcoming is an ontological one: While PBIS has moved from individual student to the collective activities in the whole school context, it maintains the use of high external control, bureaucratization of all school places, and standardization of procedures for a Taylorist lean production of quality educated people with desired behavioral and academic competencies (see Figure 4). Increasing the number of culturally and linguistically diverse students nationally, coupled with the expansion of global capitalism internationally, demand educated people with hybrid cultural identities and innovative teams in highly connected and

fluid cultural groups and systems (Darling-Hammond, 2010). Moreover, the landscape of U.S. educational systems has changed considerably, blurring the conventional boundaries of schools. "The walls of the school have become more permeable and transparent. Teachers and principals now operate under a microscope in a way that they have never had to do before. This new environment is complex, turbulent, contradictory, relentless, uncertain, and unpredictable" (Fullan, 2003, p. 3). Conflicts, systemic tensions and uncertainty are not temporal but permanent characteristics of the schools. Therefore, the proposed process-oriented activity-based theory of CRPBIS moves PBIS to a new space through a zone of proximal development (Vygotsky, 1978). In this new space PBIS is implemented with low external control to facilitate higher social agency, communication, and efficiency among stakeholders and their innovations (Figure 4).

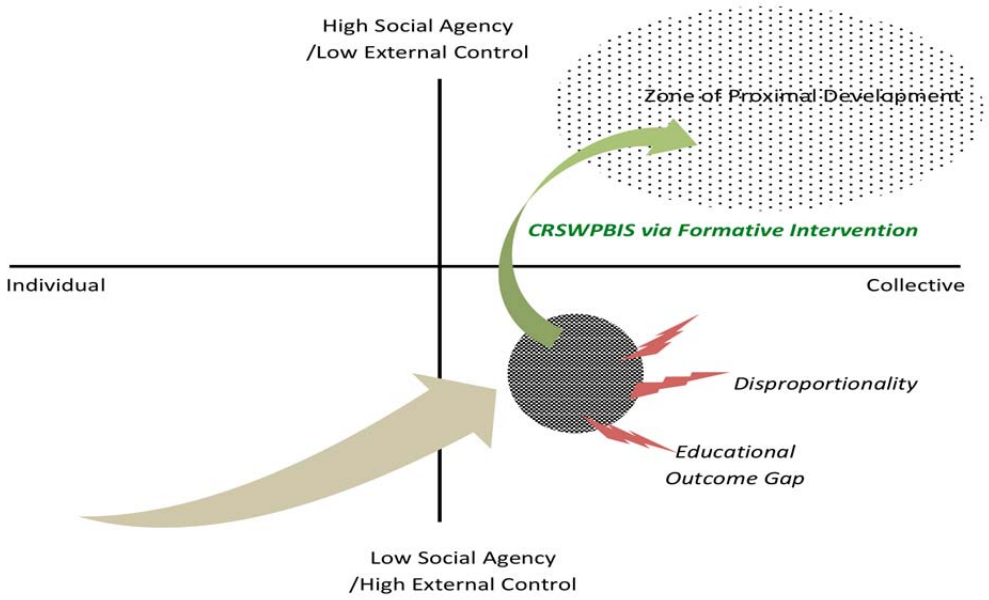

***Figure 4*. Historical Evaluation of PBIS**

To achieve this, CRPBIS coordinates inside-out efforts to make the four tenants of PBIS (Sugai et al., 2000; Sugai & Horner, 2006) culturally responsive. Outside-in efforts then support the social agency of collaborative Learning Lab teams so as to transfer their innovations to the larger systemic level (i.e., from school to district to state). This requires reconfiguration of the infrastructure surrounding the schools and district- and state-level educational agencies via expansive learning, which implies a critical examination and transformation of daily contradictions and systemic tensions, along with capacity and coalition building. Studies on informational systems support Baker's point that "[a]ny information system that neglects use and user semantics is bound for trouble down the line—it will become either oppressive or irrelevant" (Bowker & Star, 2000, p. 7). To facilitate culturally responsiveness and an expansion of PBIS, CRPBIS Learning Lab teams form open discussion groups to determine the best practices and appropriate interventions for their local context. The CRPBIS activities support and institutionalize the shift in the central focus of PBIS: improvements in student behavior and increased commitment to the work of learning. This occurs as teachers and students alike

negotiate, identify, and become fluent in new sets of cultural practices that will define interaction in classrooms, cafeterias, playgrounds, and athletic fields.

A systemic transformation strategy that the practitioners can use is coalition building, which is recommended by critical geographers (Harvey, 2008; Soja, 2010) and critical special educators (Artiles et al., 2011). Coalition building 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). Sugai & Horner (2002) stated, "Clearly, schools will need to work collaboratively with families, business, local and state agencies, and researchers, but much can be done in and by schools to improve school climate, maximize academic and social outcomes, and create safer school environments" (p. 45). Such acknowledgements, while an improvement over the ways that communities and families have traditionally been engaged by school personnel, portrays schools as surrounded by other individual systems (e.g., other schools or districts) in the form of concentric circles that are assumed to interact but remain autonomous. Usually, Bronfenbrenner's (1979) ecological systems theory is cited without critical attention to its complexity or a clear connection to how ecological systems theory is used to design the study and interpret its findings.

Enduring educational disparities have dramatically widened since the mid-1980s (Darling-Hammond, 2010). These disparities cannot be addressed by the acts of single activity systems or the top-to-bottom policies and programs. We need new theories and methodologies about how to form strategic, critical, interconnected, and sustainable alliances to address these educational inequalities. Thus, the central issue underlying the design and implementation of PBIS is to foreground not students' behavior problems but the cultural processes of social, historical, and spatial inequalities inside/outside of schools. Socially healthy open systems and infrastructure that support the sustainability of CRPBIS should center on coordinating the social agency of the stakeholders involved—civil, local, and grassroots organizations and justice-oriented movements in government, neighborhoods, and local universities.

Conclusion

PBIS is gaining an increased attention nationally and globally among practitioners and policy makers as a means of providing positive proactive and ecologically valid behavioral support for addressing behavioral problems in schools. PBIS offers an extended unit of analysis: social and organizational context of schools where the support is systematically provided. PBIS implementation should consider the role of culture. The extended unit of analysis in PBIS and a critical attention to the role of culture represent important progress. However, the PBIS field has not developed theoretically robust culturally responsive models of systemic change to comprehensively study this new unit of analysis and instrumentally conceptualize the role of culture. The current literature on PBIS focuses on collecting disaggregated data to capture referral and outcome disparities and reduce misunderstanding or miscommunication between the faculty and families from nondominant racial, linguistic and economic backgrounds by employing a deterministic view of culture (e.g., customs or beliefs).

The CRPBIS framework presented here aims for facilitating socially just systemic transformation. It proposes to help PBIS implementation expand the "culturally-neutral" tenants of PBIS to be culturally responsive and reach its full potential. Adapted for local educational systems, it is multidisciplinary and appropriates current knowledge in psychology, learning sciences, critical geography, educational reform, and multicultural education, as well as special education scholarship. The CRPBIS framework emphasizes data based decision making in formative implementation, which traces systemic tensions within and between activity systems that are the unit of analysis. CRPBIS implementation aims to facilitate the collective agency and critical dialogue among local stakeholders. *Outside-in* activities within CRPBIS introduce research-based culturally relevant educational and behavioral practices and tools (e.g., informal learning and data maps) that can make the tenets of PBIS culturally responsive to the diverse strengths, needs, and interests of the whole school community. *Inside-out* activities comprise the formation of an expansive learning laboratory to enhance collective problem-solving and decision-making processes in CRPBIS Learning Lab teams and to re-mediate critical dialogue and coalition building among team members. The principals of the CRPBIS framework and the Learning Lab methodology may be used in the culturally responsive implementation of education programs and schoolwide prevention and intervention models such as RTI and the comprehensive, integrated, three-tiered (CI3T; Lane, Menzies, Ennis, & Oakes, 2015). Moreover, Learning Lab can be used in special education to unite educators and families in decision-making for the education of students with severe disabilities (e.g., collective curricular mapping) and in the Individualized Education Program (IEP) process (Bal, 2011).

In CRPBIS Learning Labs, local stakeholders use multiple data resources and methodologies and historical analyses to foster social agency among participants in local contexts. Learning Lab members examine their institutional data as well as student data to understand the structural and institutional processes that maintain current inequities in learning and behavior. Understanding and responding to historical barriers may change how schools welcome and embrace their learners. Learning Lab addresses the contexts and interaction patterns that undergird early intervening, intensive instruction, specialized student and teacher supports, and individualized supports. Data foreground the cultural patterns in order to support transformation in how teachers, students, and the whole local school system understand their own identities, practices, and assumptions about how learning and socialization occur and are maintained over time. Use of CRPBIS Learning Lab holds promise as a way to nurture schools as democratic institutions and facilitate local stakeholders' authentic and sustained participation in designing the kinds of school systems that they wish to be a part of and that were culturally responsive to diverse experiences and goals of the whole school community (Bal, Kozleski, Schrader, Rodriguez, & Pelton, 2014). The default mode of U.S. education system is maintaining power and privilege of dominant racial, linguistic, and economic communities. If the schools systems are not intervened continually and strategically, they are most likely to reproduce the similar outcome and opportunity disparities that have been produced for decades (Bal, 2015). Building democratic, supportive, inclusive, and just schools requires bold and persistent experiments by local stakeholders in practice that inform and are informed by research.

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