

From Intervention to Innovation: A Cultural-Historical Approach to the Racialization of School Discipline

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Abstract Youth from nondominant racial communities have been disproportionately subjected to exclusionary disciplinary actions for less serious and more subjective incidents in the United States. This racial disproportionality in school discipline is associated with negative academic and social outcomes, further exacerbating the historical marginalization of nondominant communities. Grounded in cultural-historical activity theory and informed by an interdisciplinary literature, this article presents a formative intervention methodology, Learning Lab, as means of designing culturally responsive behavioral support systems from the ground-up with—not for—local stakeholders. Implications for practice and research are discussed.

Keywords School discipline · Racial disproportionality · Culturally responsive positive behavioral interventions and supports · Cultural-historical activity theory · Formative intervention · Learning lab · Expansive learning · Systemic transformation · Collaborative research

Introduction

Race and education outcomes have been interlocked in complex and dynamic ways in the United States. Today, racial disparities in educational outcomes are at their largest levels (Darling-Hammond 2010). A major contributor to this problem is the racialization of school discipline. Youth from nondominant communities are disproportionately subjected to exclusionary discipline (detention, suspension, and expulsion; Skiba et al. 2014). Exclusionary discipline is ineffective and associated with negative consequences such as racial segregation, stigma, limited access to

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general education curriculum, and involvement in prison system that exacerbate the historical marginalization of nondominant communities (American Psychological Association (APA) 2008; Losen and Martinez 2013; Orfield et al. 2014).

Generally, the research on school discipline has taken the individuals as the unit of analysis: Identifying an individual's behavioral difficulties and modifying their behaviors and thoughts (e.g., beliefs, values, biases) to change outcomes such as office discipline referral (Bal 2011). As a result, racial disproportionality has been overwhelmingly conceptualized from an individualistic, outcome-oriented perspective that locates the problem within the minds of individuals such as teachers, families, or students—at the expense of targeting systems. Though it is vital to understand outcomes, robust and critical analyses and interventions are needed to focus on systems and processes that produce maintain the racial disparities in educational outcomes. Utilizing a Marxist historical-materialist lens and informed by an interdisciplinary literature from cultural psychology, critical pedagogy, information studies, and critical geography (e.g., Bowker and Star 2000; Cole 1996; Freire 2000; Soja 2010), this article first provides a process-oriented cultural-historical analysis of the racialization of school discipline. Then it presents a systemic intervention methodology called Learning Lab for local stakeholders to collectively examine racial disproportionality at their schools and design culturally responsive behavioral support systems.

Racial Disproportionality in School Discipline in the United States

In the United States, behavioral problems and school discipline have had a racialized presence (Children's Defense Fund 1975). These disparities hold today. Nationally, African American, Latino, and Native American students receive office discipline referrals (ODRs) more frequently for more subjective reasons such as disrespect, insubordination, or excessive noise compared to White students who receive ODRs for more easily classified actions such as smoking and vandalism (APA 2008). One out of every 6 African American students, 1 in 12 Native American students, 1 in 14 Latino students, 1 in 20 White students and 1 in 50 Asian students were suspended at least once (Orfield et al. 2014). The suspension rate for African American students increased 12.5 % points between 1975 and 2010 (Losen and Martinez 2013). In the 2009–2010 academic year, African American students are suspended three times more likely than White students (U.S. Department of Education Office for Civil Rights 2014).

Exclusionary discipline is ineffective for improving functional behaviors and safety at school (APA 2008; Losen and Martinez 2013). Exclusionary discipline is found to result in academic failure, high-school dropout, and placement in special education (Gregory et al. 2010; Orfield et al. 2014). Additionally, it has an impact on the likelihood of involvement in the juvenile justice system known as school-to-prison pipeline (Krezmien et al. 2015). There have been numerous policy initiatives, national reports, and programs that to create positive and inclusive school discipline systems and in turn, to address the outcome disparities. Despite the efforts, disproportionality remains problematic across the United States (U.S. Department of Education 2014; Skiba et al. 2014).

Positive behavioral interventions and supports (PBIS) has become a primary means of providing behavioral support and creating an effective school discipline system in U.S. Schools. PBIS is the only systemwide approach related to behavioral issues mentioned in the special education law, the Individuals with Disabilities Education Act (IDEA 2004). Today, more than 20,000 preK-12 schools in the U.S. are implementing PBIS (Horner 2015). PBIS promises to eliminate cultural and contextual factors and identify the “true” cases of students with behavioral problems and thus eliminating disproportionality (Sugai et al. 2012). Multiple empirical studies found that PBIS implementation was linked to reduction in ODRs, reduction in discipline recidivism, and increased perception of school safety (Bradshaw et al. 2010). Nevertheless, White students benefited from these positive changes. African American and Native American remain overrepresented as recipients of exclusionary discipline practices (McIntosh et al. 2015).

Much of the original research and development of PBIS was done in suburban, dominant-culture schools where assumptions about how and who should be involved in the development of schoolwide discipline systems were closely tied to cultural views of behavior and development that most often coincided with the dominant cultural norms (Utley et al. 2002). As PBIS is becoming increasingly popular nationally and internationally, PBIS scholars have not been able to resolve the pressing issue of meaningfully and productively partnering with parents, students, and community members to collectively design culturally responsive school discipline systems (Sugai et al. 2012). As a requirement of PBIS implementation, schools must form a multidisciplinary team that determines the school-wide behavioral expectations (e.g., be safe, be responsible, and be respectful) and discipline procedures. Ideally, PBIS teams should represent the whole school community including school staff (e.g., teachers, psychologists) as well as students, parents, and community members to determine schoolwide behavioral expectations and create a behavioral management plan that is responsive to the whole school community (Sugai and Horner 2002). However, in reality students, families, and community representatives, specifically those who are from nondominant racial, linguistic, and economic communities, are excluded from decision-making processes regarding school discipline (Vincent et al. 2011).

Racial disproportionality is a symptom of larger social and structural problems that goes beyond single individuals: It results from multiple individual, interpersonal, and institutional factors (e.g., institutionalized racism) within interacting activity systems such as schools, families, school districts, states’ education agencies, and academia (e.g., universities) along the lines of power distribution. Therefore, racial disproportionality demands a systemic and multilevel examination of systems in order to disrupt the unjust and marginalizing practices and procedures and, in turn, address outcome disparities within local school communities. The education research literature lacks studies on how to conduct systemic examinations and interventions of school systems with local stakeholders (Sugai et al. 2012). The present article addresses this gap.

Cultural-Historical Construction of Behavioral Problems

In the United States, how behavioral deviance is determined in schools has striking similarity to the ways in which adult behaviors are disciplined and punished: “[T]hose most frequently targeted for punishment in school often look—in terms of race, gender, and socioeconomic status—a lot like smaller versions of the adults who are most likely to be targeted for incarceration in society” (Noguera 2003, pp. 342–343).

The function of schools is not to challenge but to reproduce existing social hierarchies based on race, class, gender, sexual orientation, and ability differences (Apple 2013). As state apparatuses, schools are the primary sites of classification within which children are clustered and distributed across spaces (e.g., special education, detention room, advanced placement, or gifted education) based on valued qualities. Schools govern diverse bodies by categorizing them (e.g., behaviorally disabled). Schoolwide behavioral expectations, discipline rules and practices, and assessment tools for behavioral problems have been developed by the norms based on practices and goals firmly embedded in specific social, economic, and legal circumstances of the dominant group (White-male-monolingual-heterosexual-able bodies). These norms are applied to nondominant children inappropriately to assess their learning and development and their diverse cultural practices have been constructed as abnormal (Cole 2013).

Unearthing this process of systemic marginalization makes the taken for granted racist, ableist, and classist norms and artifacts visible; thus, transferable (Bowker and Star 2000). Cavendish et al. (2015) made urgent the call for a new generation of intervention research that “helps us understand the complex technical, cultural, historical, and political processes that mediate practitioners’ efforts to remedy disproportionality” (p. 9). In what follows, I demonstrate how a process-oriented formative intervention methodology called Learning Lab can guide to simultaneously examine and transform schools from the ground-up with—not for—local school communities.

Formative Intervention for Systemic Transformation

Formative intervention is grounded in cultural-historical activity theory (CHAT; Engeström 2011). CHAT is the third generation of sociocultural theory built on Vygotsky’s (1978) notion of cultural mediation. Informed by Marxism, Vygotsky’s experimental studies showed that culture mediates all human actions and that individuals make and use artifacts to break away from constrains of their immediate environments. CHAT takes collective activity systems as the unit of analysis rather than the traditional unit in the Western social sciences—autonomous individuals and their functional or dysfunctional actions (Cole 1996). People learn and develop “through their changing participation in the socio-cultural activities of their communities” (Rogoff 2003, p. 11). Collective activities are dynamic entities that are dialectically evolving in their components: object, subject, mediating artifacts, rules, community, and division of labor (Engeström 2008). Put together by a shared object, activity systems serve as contexts for collective learning and change

(Cole 1996; see Fig. 1). CHAT provides a robust framework to analyze and remediate how individuals participate in school activities.

CHAT offers a new approach to social interventions called *formative intervention*. Yrjö Engeström and his colleagues refined this methodology over the past two decades in organizational learning experiments in various organizations such as hospitals and factories (Engeström 2008). Formative interventions seek to facilitate expansive learning and collective agency among practitioners in activity systems. Local practitioners partner with researchers to solve their real-world challenges within various organizations (e.g., hospitals and factories; Sannino et al. 2009). There are four epistemic treads of formative interventions: (1) activity system as the unit of analysis, (2) systemic transformation as an expansive object formation (3) contradictions as a source of change, and (4) agency as a layer of causality (Engeström 2008). Adaptations of formative intervention methodology are new in schools (Sannino et al. 2009). Engeström et al. (2014) made a call for formative

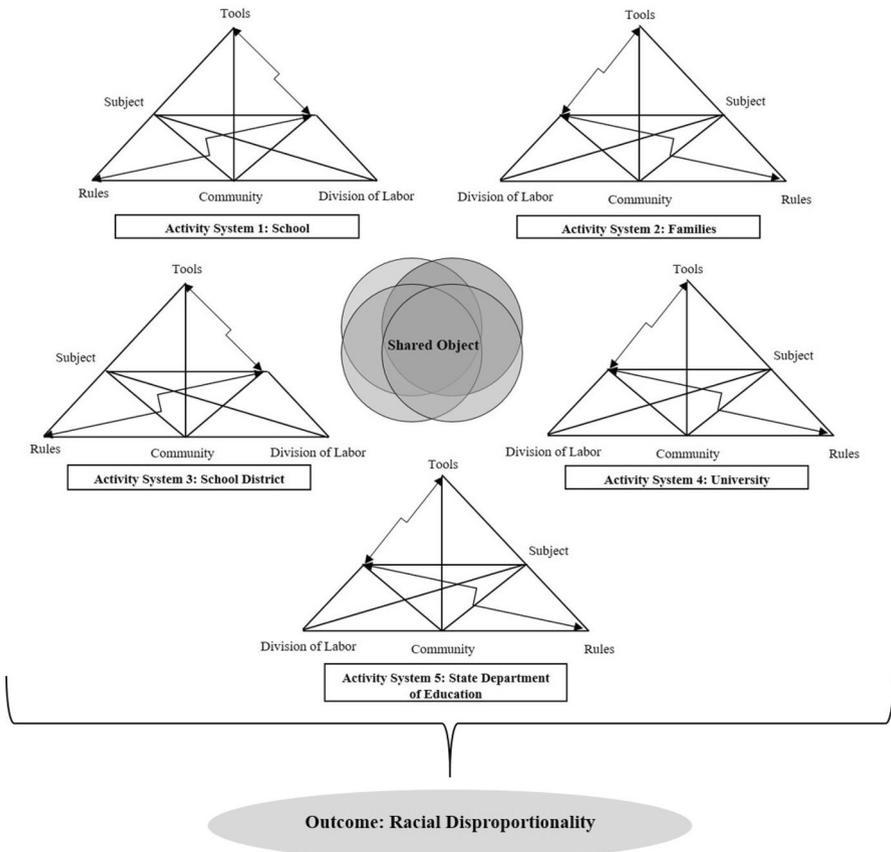


Fig. 1 Constellation of activity systems with a partially shared object (Bal 2011)

intervention studies conducted in multi-activity constellations and adapted to diverse organizational contexts.

Culturally Responsive Positive Behavioral Interventions and Supports (CRPBIS) Project

To my knowledge, the CRPBIS Project is the first multisite formative intervention study in the field of education in the United States (Bal 2011; Bal et al. 2014a). CRPBIS, started in 2011, is a multiphase mixed methods research. CRPBIS aims to develop locally meaningful and inclusive school discipline systems, to build schools' capacities for equity-oriented problem solving and systemic transformation, and to inform statewide practices and policies in the state of Wisconsin.

Wisconsin is an important context for studying racial disparities as the state was identified as one of the worst states for African American students in the United States in terms of education outcomes (The Annie E. Casey Foundation 2014). Since the early 2000s, the state's education agency, the Wisconsin Department of Public Instruction (DPI), has promoted PBIS. Today, more than 40 % of all Wisconsin schools are implementing PBIS (Horner 2015). However, PBIS has not addressed the racial disparities in Wisconsin (Bal et al. 2013, 2014b). Moreover, local schools are struggling to maintain the inclusivity and are not effectively collaborating with nondominant communities in PBIS implementations (Bal et al. 2014a).

Acknowledging the necessity of implementing PBIS with a specific focus on increasing inclusivity and cultural responsiveness, I received a grant from Wisconsin DPI to design a framework and design a multisite intervention study. I developed the CRPBIS framework, in which cultural responsiveness was operationalized as an inclusive problem-solving process, called "Learning Lab" (Bal 2011). The CRPBIS framework provides a research-based inclusive problem-solving process through which educators co-design culturally responsive school discipline systems with local stakeholders who have been historically excluded from schools' decision-making activities. Throughout the project, CRPBIS research team from a local university worked in a reciprocal and sustained partnership with the state's educational agency, two school districts, education centers (e.g., Wisconsin PBIS Network and Partner School Network), and civic organizations (e.g., the Urban League, Centro Hispano, the Boys and Girls Club, and YMCA).

In the first phase of the CRPBIS study, the research team conducted descriptive and multilevel logistic regression analyses to identify the extent of racial disproportionality in Wisconsin between the academic years 2006–2007 and 2011–2012. The analyses included all students ($n = 429,725$) in all 2116 public schools and examined the student level variables (e.g., race, reading and math scores, and family income) and the school level variables (e.g., racial composition of schools and teachers' race, language status, and education; see Bal et al. 2013, for detailed analyses). We found African American students were seven times and Native American and Latino students two times more likely to be removed from the learning environment due to disciplinary actions compared to White students in Wisconsin

schools (Bal et al. 2013). Students' race and academic achievement were significant determinants of exclusionary school discipline, which were more robust to income level, English proficiency, and gender effects and school level factors such as racial composition of students and teachers or academic proficiency (Bal et al. 2013). It means that school contexts (e.g., higher numbers of nondominant students or reading and math scores at schools) did not provide a protection to racial minority students in Wisconsin. Regardless of the schools they attended, nondominant youth were disproportionality removed from classrooms due to behavioral incidents.

In the second phase, we moved into local schools that had reproduced those racial disparities. Learning Labs were implemented at three public schools (elementary, middle, and high schools) with two specific goals: (1) unite and empower local stakeholders who are historically excluded from schools' problem solving processes and (2) provide a structure in which school practices and systems are examined and renovated (Bal et al. 2014a, 2016). One elementary school served as a comparison site in which the research team studied PBIS committee's work without the Learning Lab intervention. There were 98 participants in the second phase. At the intervention schools, the research team conducted participant observations in PBIS committee meetings, facilitated 8–12 Learning Lab sessions and agenda meetings at each school, conducted entry and exit interviews.

Learning Labs included educators (e.g., principals, special and general education teachers, paraprofessionals, librarians, playground attendants, and social workers), community-representatives working with the participating schools (e.g., an after

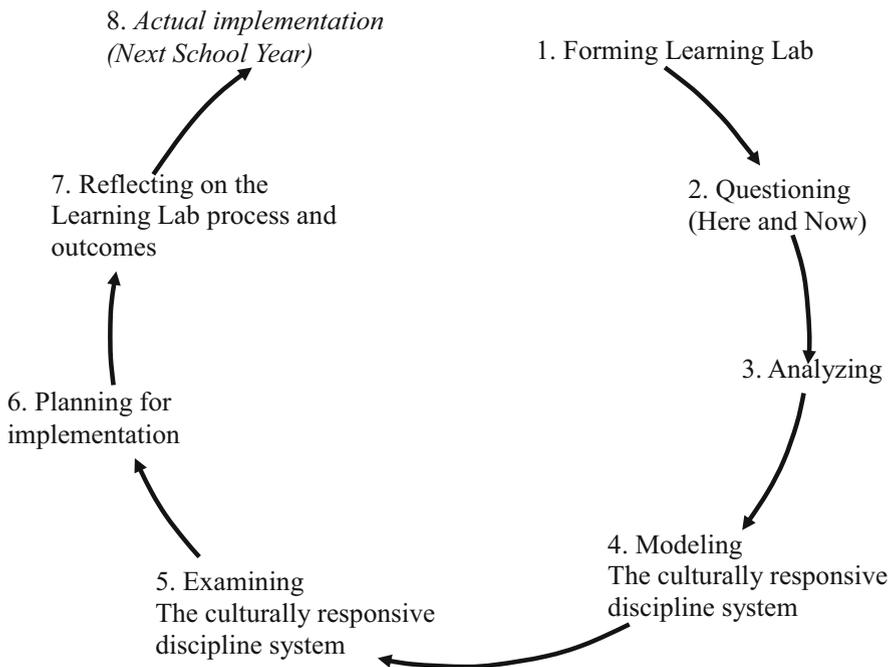


Fig. 2 Cycle of systemic transformation in the Ponderosa Learning Lab (Bal et al. 2015)

school program coordinator) and nondominant students and family members such as African American, Latino, Hmong refugee, and the families experiencing homelessness. The CRPBIS study employed a “culturally responsive intervention research design” (Bal and Trainor 2015), in which the school leadership and internal PBIS coaches have actively collaborated with the research team from inception to dissemination of the study findings and joined professional presentations and publications as co-authors.

Learning Lab Process for Collective Innovation

Sustainable and locally meaningful systemic transformations require time, strategic planning, continuous involvement, and a robust theory of change (Frattura and Capper 2007; Fullan 2003). CRPBIS Learning Labs followed the cycle of change actions adapted from Engeström (2011). The cycle of change included six expansive learning actions over eight to ten monthly Learning Lab sessions: (1) questioning; (2) analysis of the discipline system in place—historical-genetic analysis and empirical analysis; (3) modeling a culturally responsive (CR) discipline system; (4) examining the CR system; (5) planning for implementation; and (6) reflecting on the Learning Lab process and the new system (Bal et al. 2015; see Fig. 2).

The middle school and high school sites completed the whole change cycle. At those schools, the Learning Labs formed and sustained inclusive problem solving teams, mapped out existing discipline systems, and redesigned new discipline systems that were culturally responsive to diverse experiences, the goals of the whole school community, and to the existing resources and initiatives. Although providing the full analyses of Learning Lab implementations is beyond the scope of this article, I present the Learning Lab implementation at Ponderosa High School as an illustrative case (see Bal et al. 2015, for the complete analysis of expansive learning actions in the Ponderosa Learning Lab).

Ponderosa High School is located in a large city. In the 2013–2014 academic year, there were 216 educators worked at the school, comprised of %89 White, % 6 African American, % 3 Hispanic, and % 2 Asian. There was an enduring racial disproportionality that had significantly impacted the achievement of nondominant students at the school. In the 2013–2014 academic year, the student body was comprised of 55 % White, 14 % African American, 14 % Hispanic, 10 % Asian, 6 % two or more races, and 1 % Native American. African American students received 60 % of all documented ODRs and nearly 80 % of detention room visits that resulted in missing instructional time (Bal et al. 2015). The school leadership was concerned about the effectiveness of their discipline system and PBIS implementation. They decided to participate in the CRPBIS study.

The school’s PBIS team had 15 members. All of the PBIS team members were White school staff. In contrast, the Learning Lab had 13 members: Six school staff (1 African American, and 1 Hmong, 4 White), three parents (1 African American, 1 Hmong, 1 Latina), three community members (1 African American, 1 Latino, 1 White) and one former student who graduated from Ponderosa in the spring 2013 (Latino). While it is important to diversify a decision-making team, simply bringing

Table 1 Summary of the CRPBIS Learning Lab sessions at Ponderosa High School (Bal et al. 2015)

Meeting	Date	Purpose of the sessions	I	Te	Pa	Sp	St	T
LL#1	09/30	Introduction the project and data sharing	1	3	4	4		12
LL#2	10/23	Description of LL and determining expectation and goals	2	1	3	4		10
LL#3	11/25	Reviewing disproportionality data	2	3	3	3		11
LL#4	01/13	Reviewing disciplinary data and disproportionality discussion	2	1	4	4	1	12
LL#5	02/04	Mapping out behavior support system in place	2	2	2	4	1	12
LL#6	02/25	Mapping out behavior support system in place	2	2	3	4	1	12
LL#7	03/25	Creating and developing new behavior support model	2	2	3	3	1	11
SubCom#1	04/01	Developing new behavior support model based on small group works in LL7	2	1	2	1		6
LL#8	04/29	Finalizing new behavior support model	2	2	4	3		11
SubCom#2	05/14	Finalizing behavior support model based on small group works in LL8	2	1	2	1	1	7
LL#9	05/20	Reviewing and reflecting on new model and LL process	2	2	1	3	1	9

LL learning lab sessions, *I* interventionist, *Te* teacher, *Pa* parent, *Sp* school personnel, *St* student, *T* total participants

together individuals from dominant and nondominant communities in the same room was not enough to run a truly inclusive problem solving process. In Learning Labs, critical dialogues were needed so all members were empowered to contribute as they determined and worked toward a common goal and produced a concrete product—the CR discipline system through six expansive actions in eleven sessions (see Table 1 for the summary of the Ponderosa Learning Lab sessions).

Questioning

In questioning, members examined the existing discipline system and its outcomes and school climate. Members examined the immediate situation by reviewing their own school level data. Dean of students and assistant principal presented their school data regarding racial disproportionality. This was the first time that the staff shared data about disproportionality with parents, students, and community representatives. The data review prompted questions for further investigations about the effectiveness of the current system:

Gisella (Parent): If they're going to detention, that there is no behavioral referral, and they keep doing that period after period, day after day, how many of those kids may not end up being suspended, but just end up being in the school and earning no credit. And I feel like that's probable. (Learning Lab session #1)

Members discussed the breakdowns in the system. They realized that there was little communication among teachers, behavioral support team, and the administrators.

Each member came with different knowledge and experiences and helped de/constructed the system from multiple perspectives. Members shared a variety of concerns, anger towards one another, guilt, worry, and a myriad of past racialized or classed experiences. Gisella, a parent and the afterschool program coordinator, shared her experience as an alumna:

I have incredible heartbreak as a parent with my kids at Ponderosa, and it's been ironic, because I'm a grad of Ponderosa High School. And had very fond memories and a love for Ponderosa. And so to see my sons who are black go through the school and not ever, in my opinion, claim their true potential to achievement and excellence, was heartbreaking. (Learning Lab session #1)

Gisella's own experience at Ponderosa as a student stood in sharp contrast to the experiences of her sons, who were neither adequately challenged nor supported by the school. As questioning unfolded, interventionists brought racial, organizational, and personal tensions to light and purposefully avoided participants to have catharsis without a tangible solution (Brecht 1964). To facilitate this delicate process, interventionists shared a review of literature on disproportionality showing disproportionality as a systemic problem that resulted from multiple individual and institutional forces and histories. As members learned about one another's experiences and the extent of disproportionality in their school and district, they decided to include students and more African American parents. As a result, an African American parent and a Latino student joined as Learning Lab moved into the next expansive action, analyzing.

Analyzing

Analyzing involved articulating needs, challenges, ideas and solutions to disproportionality including its historical/genetic analysis. Members moved from concrete here and now to abstract by creating a physical representation of the current system. The purpose of this expansive learning activity was to create a mediating artifact to represent both the intention of the current or the ideal discipline system in the mind of school leaders as well as the actual application of the system in real life with its working elements and breakdowns. Going through the map, the members identified inaccuracies in the real life application of the discipline system and breakdowns such as lack of consistent information sharing:

PBIS coach: The student leaves class, they're either in detention, principal's office, or maybe they've just left and we don't know where they are and we're trying to locate them. After the principal has addressed them it might just end.

Interventionist: ...do you inform teachers about those actions?

Assistant principal: There is a breakdown in the system right there. A lot of times they don't know. (Learning Lab session #5)

In the sixth session, interventionists formed small groups to brainstorm improvements to the existing system. Each group presented their ideas on the system map (Fig. 3).

By making the system visible, members began to realize how the system might have caused disproportionality and the consequences of this exclusionary and punitive system. The existing system was not helping teachers to keep students in the classroom and providing timely and adequate support for teachers to manage behavioral problems.

Group # 1 (PBIS coach, health teacher, and parent): “the system did not require any follow-up actions to restore teacher-student relationships or to address the needs of student and teachers to prevent future instances” (Learning Lab session #7).

Moreover, there was a no “reverse button” in the system. Once the ODR was initiated, the only possible product of the school discipline machinery would be the student with problem behaviors (the object of the school dicipline) with a possibility of a student with special education placement for emotional disturbance. The system was incapable of creating contextually situated object such as a student in a dysfunctional classroom context, a student in conflict with a teacher, a student who did not received high quality academic instruction in class, teachers without adequate time, support, and professional learning opportunities whose only tool was ODR to manage classroom, or a school with a culture of referral or an unsafe,



Fig. 3 Modeling and examining actions and a mediating artifact for designing the culturally responsive discipline system at Ponderosa High School

unwelcoming school climate for nondominant students (Harry and Klingner 2014; Orfield et al. 2014). Generating solutions to these issues more systematically was the focus of the next action.

Modeling

Modeling focused on creating an ideal discipline system based on the prior two actions in the cycle of change. Members worked in dyads to fully utilize all voices. Members served as boundary crossing agents and utilized other initiatives in the district while exploring the feasibility of their ideal systems (Engeström 2011). For example, in the same school year, the school district was offering a mindfulness training designed to help teachers in reducing stress and stress related symptoms and improving mental and physical health as well as teaching practices (Document Analysis). Gloria and Harriet (Latino parent–Hmong teacher) explained a component of their ideal system that informed by mindfulness and allocated a space, mindfulness zone. Harriet attended the district's mindfulness training and incorporated her knowledge into their ideal system:

Students that are sent out of class they will go to the mindfulness zone and ideally yes this will be staffed with an adult but we were also thinking it would be great to have adult university student volunteers, site volunteers, counseling volunteers, or even retired teachers to be in there and have the students go through this process of reflecting. (Learning Lab session #7)

The name, mindfulness zone, was not ultimately used but the essence of what this teacher-parent dyad suggested was used in the final CR system that included mindfulness practices for teachers and students. The members combined those ideal system maps into a single map as the first version of the new system at Ponderosa High School. Then, members worked together to operationalize components of the CR system (Fig. 3).

Examining

Examining involved running and experimenting with the newly designed CR discipline system in order to fully grasp its dynamics, potentials, and limitations. At first, interventionists provided imaginary situations wherein members would assume another role and check the improved system step by step. Members brought their real life experiences to the imaginary scenarios, adding vital complexity and depth to the picture as they revised the system. They engaged in a critical dialogue that integrated their diverse perspectives.

As members moved closer to a finalized the CR model, they began to consider at a conceptual level how this model could actually come to life within the school and community reality and context: *What was real and practical and what was missing?* They discussed necessary resources as well as rules, roles, and division of labor in the new model:

Emily (Dean of Students): Right. Not every, teachers don't have phones. They have telephones. They don't have radios, walkie-talkies in the room. And so the easiest way is for them to just call down to secretary, who's at the visitors' window...to alert them that the student was sent out to whatever place. (Subcommittee session #2)

The challenges of getting the necessary supports were not all resolved in this moment but they were made visible, discussed and would be addressed again in the next expansive action, planning for implementation.

Planning for implementation

This action involved planning for the actual implementation of the final CR system in the next school year. The members discussed in more depth who would be responsible for different components of the CR system:

Rosa (Assistant principal): There has to be a bringing back of the student and the teacher before they come back into classroom, that has to happen because if kids go back, the teacher doesn't know what happened to the kid...that's where I can see the dean or the PBS coach really helping to facilitate that. (Learning Lab session #9)

Members began to plan for securing the necessary resources and buy-in for the new CR system. They agreed that the school leadership and the whole PBIS team should be immersed in the new, CR system. In addition, they planned to introduce the system to all teachers and get their feedback.

Reflecting

During the last session, interventionists presented a summary of the entire Learning Lab process and displayed initial drafts and the final model of the CR discipline system. Gloria, a Latina parent, highlighted the promises of Learning Lab:

It was a fascinating experience to see, having the point of view of teachers, community and administrators. I think we looked at the system from a different perspective. I was looking at how destructive, chaotic and crazy the system can be if you don't find the mistakes that you are making and the things that you can change and you can apply. (Learning Lab session #9)

It was important for the group to comment on the entire Learning Lab process and results because the intention was to create an institutional memory and a structured process for an inclusive and productive problem solving team (Bal 2011).

In May, the Learning Lab intervention concluded with detailed plans for the actual implementation in the next year. At Ponderosa High School, the actual implementation of the new system is the next step of the CRPBIS project.

Limitations

This manuscript presents the theoretical underpinning of the Learning Lab methodology and an illustrative case from the CRPBIS Project. The use of the new systems and their impacts on the everyday practice of the schools are not available at this time. The CRPBIS research team plans to conduct a study to examine the implementation and sustainability of the CR discipline systems. Race impacts every aspect of schooling in the United States (Ladson-Billings and Tate 2006). Because the focus of the Learning Lab was on disproportionality, race played an important role in the intra-group dynamics. A comprehensive analysis of the racial tensions in the systemic change process is beyond the scope of this article.

Another limitation is that the present article does not report the impact of the Learning Lab on racial disproportionality. The CRPBIS Project did not assume the CR discipline systems would affect outcomes immediately. Organizational change is a multifaceted process and takes time for an organizational redesign to result in sustained changes in school cultures and outcomes. Even with ideal factors such as stability in school leadership and continuous financial and administrative support from the district, an effective and sustained transformation at a school may take a decade (Frattura and Capper 2007; Fullan 2003). The CRPBIS research team continues to partner with local education agencies and school communities. The research team will analyze the data on school climate and ODRs to examine the changes in behavioral outcomes at the Learning Lab schools.

Implications for Practice and Research

Today educators find themselves between a rock and a hard place juggling multiple demands while facing lessening resources to collaboratively reflect, innovate, and experiment. Learning Lab provided a research-based structure for building productive family-school-community coalitions for restoring unjust spaces of opportunity, recognition, and participation to build democratic schools with local stakeholders who reproduced and suffered from those unjust spaces. Learning Lab was an effective formative intervention wherein diverse local stakeholders created a CR school discipline system and researchers engaged in a locally situated change process within their own community (Bal et al. 2015).

In the larger CRPBIS study, Learning Labs have functioned as research and innovation sites for schools, district, state's education agency, and research team to test and improve practices and artifacts for facilitating ecologically valid systemic transformations. Based on the quantitative analyses of the statewide data in first phase of the study, the research team created interactive data maps on school and district level disproportionality as mediating artifacts. The data maps include the community resources available for students, families, and educators (e.g., homeless shelters, tutoring programs, or tenant resource centers; <http://crpbis.apl.wisc.edu/>). One of the school districts that participated in the project is now working with the

research team and the Learning Lab members to scale up Learning Labs in its all schools.

This work has potential contributions to the newly emerging research literature on formative intervention. Prior formative intervention studies in education have been generally implemented in single classrooms, schools, or afterschool programs (Engeström et al. 2014; Sannino et al. 2009). Consequently, the impact of the prior formative interventions was compact. Anchoring PBIS, a federally sanctioned education program, generalizability and potential impact of Learning Lab goes beyond the participating schools. Furthermore, this article brings the intersection of race and disability to the center. The intersection of race and disability has not been adequately addressed in the formative intervention literature. The CRPBIS study and Learning Lab may break ground for further studies and change the way we understand and address racialization of behavioral problems as a fluid, adaptive systemic problem as reproduced in local schools.

In special education research, there is an urgent need for a paradigm shift to capture the human-context dialectic. This is akin to the paradigm shift took place in physics in the beginning of the 20th century moving from Newtonian physics to the general theory of relativity (Kuhn 2012). Before the general theory of relativity, space and time were formulated as separate and static arenas in which events happen. In the general theory of relativity, space and time were seen as dynamic and interwoven quantities combined into a continuum, called space-time (Hawking and Mlodinow 2005). Space-time is not flat but curved in the presence of a mass and energy. It affects and in turn is affected by the forces or events (Hawking and Mlodinow 2005).

In the special education literature, individual and context have been overwhelmingly formulated as separate and static entities. The mainstream theories in special education (e.g., applied behaviorism or cognitive-behaviorism) as well as the alternative postmodern or liberal formulations in disability studies have not been able to go beyond this binary. Therefore, the enduring, fluid, and adaptive systemic problems such as racial disproportionality have not been adequately conceptualized and effectively addressed (Artiles 2011). As a paradigm shift, I argue that human and context are not discrete entities but they are interwoven on a continuum—human-context—in which activities as forces affect human-context and in turn are affected by it. Power is a property of human-context geometry. Out of the activities comes power. The structure of human-context is curved by the distribution of power not unlike gravity in space-time. As a result, human-context warps and expands incessantly. Power does not exist in concentrated form but it “exists only when it is put into action” (Foucault 1982, p. 788). For example, discipline emerged in military, hospital, and school is a machinery of power. In/through a set of activities systems (e.g., objects, artifacts, rules, and division of labor), discipline explores body, breaks it down, and rearranges it as an object (Foucault 1995). However, this is not a unidirectional relationship in which dominant classes and institutions govern nondominant bodies (children, sick, poor, or racial minorities). Power “is a total structure of actions brought to bear upon possible actions; it incites, it induces, it seduces, it makes easier or more difficult; in the extreme it constrains or forbids absolutely; it is nevertheless always a way of acting upon an acting subject or acting

subjects by virtue of their acting or being capable of action. A set of actions upon other actions” (Foucault 1982, p. 789).

Following the human-context formulation that I put forward here, overly deterministic, static, and linear formulations of individual and context cannot capture the outcomes of this ever evolving, dynamic, and generative notion of human-context topology such as racial disproportionality. At this point, the lineage of Vygotskian cultural-historical activity theory employing Marxist dialectic materialism has offered a more apt unit of analysis for social scientists, culturally mediated, goal-oriented activity (Cole 1996; Vygotsky 1978). Learning Lab and other cultural-historical activity theory-based intervention methodologies can serve for the paradigm shift in special education to re-mediate education systems and racial disparities in outcomes and opportunities.

Conclusion

Karl Marx (1998) wrote, “All social life is essentially *practical*. All mysteries which lead theory to mysticism find their rational solution in human practice and in the comprehension of this practice” (p. 571). Racial disproportionality in behavioral outcomes is a cyclical systemic crisis, which demands complex and dynamic conceptualizations and continuous interventions in practice. Forming democratic and inclusive public schools demands bold and persistent experiments. The default mode of U.S. schools marginalizes nondominant communities and maintains racial power. If the local education systems are not intervened continuously, systematically, and in locally meaningful ways, the education systems are most likely to reproduce the same unjust outcomes nondominant communities have experienced for centuries (Apple 2013).

Schools as social spaces are dynamically renovated to maintain inequality (Anyon 2005). However, social spaces are also made for the *possibility for emancipation* as seen in the civil rights movements in the 1960s: “All who are oppressed, subjugated, or economically exploited are to some degree suffering from the effects of unjust geographies, and this struggle over geography can be used to build greater crosscutting unity and solidarity” (Soja 2010, p. 24). The enduring existence of the racialization of school discipline forms a systemic crisis challenges for practitioners. However disproportionality also offers a significant opportunity to examine and transform school systems. If researchers do not engage in a critical and theoretically robust examination of the education systems, PBIS and other top to bottom education reform efforts will “simply be like old wine in a new bottle, in other words, just another deficit-based approach to sorting children” (Klingner and Edwards 2006, p. 115).

CRPBIS strategically united Vygotskian cultural-historical theory (Cole 1996; Engeström 2008; Vygotsky 1978) and critical theory and pedagogy (Freire 2000; Ladson-Billings and Tate 2006) in special education intervention research. CRPBIS positioned nondominant students, families, and communities as social agents that create change—not passive objects of reform efforts (Freire 2000). In so doing, Learning Labs utilized the diverse experiences, practices, and goals all stakeholders

bring to school thereby actively re-conceptualizing diversity in school communities as an asset rather than as an obstacle to overcome (Bal 2011). The Learning Lab methodology has a potential to nurture schools as democratic institutions that foster emancipatory possibilities for local school communities (Bal et al. 2014a). The CRPBIS Learning Labs and future multisite formative intervention studies will enable researchers and practitioners to make comparisons between formative interventions in different education systems possible and thus facilitate collective problem solving and innovations among diverse school communities for forming inclusive and supportive schools for all.

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