Development of a Mixed Methods Approach to Describe and Measure Culturally Responsive School Practices

Lauren Shure, Ph.D.[1], Shana Ritter[2], Renae Azziz, Ed.S., NCSP[3], Russell Skiba, Ph.D.[4],

Cassandra Cole, Ed.D.[5], Laura V. Middelberg, Ph.D.[6], Adam Sheya, Ph.D.[7]

[1]Barry University, 11300 NE 2nd Avenue, Miami Shores, FL 33161
lshure@mail.barry.edu
[2]6700 S. Church Rd. , Bloomington, IN 47401
shana747@gmail.com
[3]Virtuoso Education Consulting, 9450 East Raymond Street, Indianapolis, IN 46239
razziz@virtuosoed.com
[4]Center for Evaluation and Education Policy, Indiana University, 1900 East Tenth Street,
Bloomington, IN 47406
skiba@indiana.edu
[5]Center on Education and Lifelong Learning, Indiana Institute, Indiana University, 1905 North Range Rd,
Bloomington, IN. 47408
cmcole@indiana.edu
[6]902 East 54th St, Austin, TX 78751
Lvmiddel@indiana.edu
[7]406 Babbidge Road, Storrs, CT 06269-1020
adam.sheya@uconn.edu

Abstract: Racial and ethnic disparities, including disparities in discipline, are pervasive and long standing (Ladson-Billings, 2006; National Research Council, 2002; Skiba & Rausch, 2006; Wald & Losen, 2007). Research has shown culturally responsive (CR) practice to be an important strategy in addressing the disproportionate representation of culturally and linguistically diverse students in achievement and discipline (Klingner, Artiles, Kozleski, Harry, Zion, Tate, Durán & Riley, 2005; Vincent, Randall, Cartledge, Tobin & Swain-Bradway, 2011; Voltz, Brazil & Scott, 2003). CR practice emphasizes the importance of understanding the impact culture has on both academics and social behaviors at school. This paper reports upon a mixed methods approach used to develop two paired tools designed to describe and assess the implementation of CR practice at four public K-12 schools, the Cultural Responsiveness Assessment (CRA) and the CR Walkthrough. Results of this study indicate that when used together, these tools provide information useful to assist school leadership teams in reflecting upon CR practices being implemented at their schools and developing action plan goals and strategies to improve CR practice.

Racial and ethnic disparities, including disparities in discipline, are pervasive and long standing (Ladson-Billings, 2006; National Research Council, 2002; Skiba & Rausch, 2006; Wald & Losen, 2007). In order to address these disparities, many education researchers and scholars regard the consideration of race and culture, and the development and implementation of culturally responsive (CR) practices, integral to increasing the efficacy of educational practices for all students (Gay, 2000; Gregory & Mosely, 2004; Ladson-Billings, 2001; Nieto, 1999; Sleeter & McLaren, 1995). One issue that emerges, however, is how to identify CR practices and measure the impact those practices have on changing the school environment to benefit all groups of students (Banks, Cookson, Gay, Hawley, Irvine, Nieto, Schofield & Stephan, 2001).

The purpose of this study is to explore the extent to which a mixed methods approach, utilizing both survey methodology and qualitative observation, can provide a comprehensive approach to assessing culturally responsive practice in school settings.

Theoretical Framework

Research has shown culturally responsive practice to be an important strategy in addressing the disproportionate representation of culturally and linguistically diverse students in achievement and discipline (Klingner, Artiles, Kozleski, Harry, Zion, Tate, Durán & Riley, 2005; Vincent, Randall, Cartledge, Tobin & Swain-Bradway, 2011; Voltz, Brazil & Scott, 2003). Culturally responsive practice emphasizes the importance of understanding the impact culture has on both academics and social behaviors at school. Education research shows that children learn best when their culture and language are reflected in the school's curriculum (Gay, 2000; Ladson-Billings, 1995; Nieto, 1999; Tatum, 2003). Becoming adept in implementing culturally responsive pedagogy is a developmental process which includes: awareness of one's own culture and the culture of others, knowledge of cultural norms and values, skill in applying that knowledge to instructional practices and classroom management, and effective communication with families and communities (Ladson-Billings, 1995; Villegas & Lucas, 2002; Weinstein, Tomlinson-Clarke & Curran, 2004).

The complexity of culturally responsive practice includes the interaction of culture, climate, teaching and learning, data based decision making, and community and family relations. The multidimensional aspect of culturally responsive practice necessitates assessing CR across educational domains. Therefore, to best measure the multi-dimensionality of culturally responsive practice assessment tools that encompass multiple educational domains and utilize a variety of methods including surveys and observations are necessary to capture the complexity of CR practices. The need for tools to better assess culturally responsive practices are an important aspect of furthering schools' abilities to meet the needs of all students (Klingner et al., 2005).

Methods

The first step of the study was to develop tools to assess culturally responsive practices across five educational domains (1) Curriculum and Instruction, (2) Assessment and Accountability, (3) Family and Community Engagement, (4) Professional Development, and (5) Environment.

The Cultural Responsiveness Assessment (CRA)

The CRA is a survey administered to professional school staff to measure their perceptions of what culturally responsive practices are currently in place at their school. An overview of the content addressed across each educational domain, as well as empirical evidence and scholarly support for this content is summarized below.

Curriculum, instruction, and classroom management. Implementation of culturally responsive instruction requires educators to build upon the cultural knowledge, background experiences, and learning preferences of culturally diverse students in order to make instruction relevant (Gay, 2000; Ladson-Billings, 1995). Culturally responsive instruction relies upon the teacher's ability to reshape traditional curricula in order to infuse aspects of diverse perspectives through the curriculum. Morey and Kilano (1997) suggest that educators move from relying on curriculum that is exclusive and represents mainstream perspectives, to transformative curriculum, which challenges traditional views and encourages higher order thinking and self-reflection.

Assessment and accountability. In an effort to increase the level of accountability of schools in ensuring that the needs of all students are met, the use of data to guide decision making and action planning has become a consistent practice in the school improvement process. Purposeful analysis of data allows schools to identify strengths and areas of need regarding student skills and allows educators to refine their practices to be responsive to those areas of need. Much has been written to highlight the benefits of using data to address disparities in both academic and disciplinary practices (Skiba, 2008; Gibb, 2008; Johnson, 2002). Using data to promote equity

requires schools to disaggregate data across relevant subgroups and consider the relevancy of culture on observed data trends. Analysis of data at this level allows schools to develop hypotheses about the disparities that may be indicated across subgroups and develop action plans to specifically address the identified areas of challenge.

Family and community engagement. The impact that successful partnerships between schools and families have on student outcomes is well documented (Epstein, 2001; Christenson, 2001). When families and schools find meaningful ways to collaborate, student outcomes in both academics and discipline improve (Henderson & Mapp, 2002). Best practices in establishing successful partnerships focus on the implementation of ongoing two way communication with families, establishing opportunities for parent support of student learning at school and at home, and developing collaborations with communities that support families.

Professional development. In recent years, providing ongoing professional development opportunities for educators has become a common approach for ensuring that teachers remain abreast of the most recent research around best practices in teaching and learning. There is a substantial amount of literature about the characteristics of effective professional development opportunities (Guskey, 2009). Professional development that leads to sustainable practices is characterized by: (1) information dissemination through discussions, readings, and lectures, (2) explicit demonstration or modeling of a set of skills, strategies, and opportunities for teachers to practice, and (3) opportunities for teachers to receive feedback and coaching regarding implementation of the skills taught (Bean, 2004).

However, professional development must not focus solely on current strategies related to instruction and classroom management. It must also provide opportunities for teachers to reflect on the role that culture has on learning and behavior (Van Broekhuizen & Dougherty, 1999). Professional development focused on the development of teachers' awareness, knowledge, and skills in the area of culturally responsive practice begins with activities that support them in developing self-awareness about their own cultures, values, and beliefs. Subsequently, culturally responsive practice can be enhanced through professional development that deepens the understanding of the dimensions of culture that impact perceptions of behavior in the school environment (i.e. differing communication styles, response styles, social interaction preferences, and ways of handling conflict (Ladson-Billings, 1995, 2001; Weinstein, Tomlinson-Clarke & Curran, 2004; Villegas & Lucas, 2002).

Environment and school climate. Positive school environments/climates have been correlated with several student outcome indicators of success. Research indicates that schools with more positive school climates have lower dropout rates, fewer disciplinary concerns and incidences of violence, and higher rates of student achievement (Ruus, Veisson, Leino, Ots, Pallas, Sarv & Veisson, 2007). The National School Climate Council identifies four major areas that schools should focus on in their efforts to evaluate the effectiveness of their climates. Those four areas include: (1) safety, (2) relationships, (3) teaching and learning, and (4) the external environment. In addition to assessing the level of effectiveness across those four domains, schools should evaluate their school climates with purposeful considerations regarding the ways in which the environment/climate specifically impacts culturally and linguistically diverse students. Schools should reflect on the degree to which relevant languages are used in signage and written communication and representations of the cultures of the school community are visible throughout the school environment.

In order to capture the essential elements in each domain of the CRA, as suggested by the research base, participants responded to a variety of questions as summarized in the Table 1.

Table1: Sampling of Question Content Across CRA Domain Areas

Domain	Content of Questions
Curriculum, Instruction, & Classroom Management	• Includes items focused on adapting practices to address student's needs, abilities, interests, and learning styles.
Assessment & Accountability	• Includes items addressing the use of student data disaggregated by race/ethnicity to consider issues of disproportionality.
Family & Community Engagement	• Includes items which assess the various ways schools communicate with families and involve them in school events, decision-making, and student learning.
Professional Development	• Includes items assessing the consistency and methods by which educators develop awareness, knowledge, and skills in the areas of culturally responsive practices.
Environment & School Climate	• Includes items assessing the school climate, including use of relevant languages and visible representation of the cultures of the school community.

The Cultural Responsiveness (CR) Walkthrough

The Cultural Responsiveness (CR) Walkthrough is an ethnographic field observation tool to assess culturally responsive practice across the same five domains as the CRA. While the CRA assesses practitioner perceptions of which CR practices are in place, the CR Walkthrough assesses which, and to what degree, the same CR practices are actually being implemented. The CR Walkthrough is conducted by researchers with an extensive knowledge base of CR theory and practice in the five domains. The CR Walkthrough was developed with key observable indicators of CR practice in each area. Researchers observed classrooms and common areas such as hallways and cafeteria, interviewed administrators, students, teachers and family liaisons and reviewed relevant documentation. Below is a sample of the key observable indicators in each of the five areas.

Table 2: Sampling of Indicators Across the Five Domains

Domain	Observable Indicators of CR Practice	Observation Source
Curriculum, Instruction, & Classroom Management	• Instructional strategies and teaching styles are frequently varied to meet the needs of all learners. • The students' culture is incorporated into instructional materials.	• Classroom observation, • School improvement plan, Lesson plans
Assessment & Accountability	• Assessment data is disaggregated by race/ethnicity, language, and IEP status. • Assessment data is consistently used to inform instructional practice.	• Data wall, Focus groups, Interviews
Family & Community Engagement	• A system is in place to determine family preferences for ongoing communication. • Some family events are held off site in the community.	• School improvement plan, Focus groups, Family survey
Professional Development	• Professional development activities are culturally relevant to the lives of students at the school. • Professional Development enhances teacher skill in integrating culturally relevant materials into the content areas.	• School improvement plan, Documentation of PD, Focus groups, Interviews
Environment & School Climate	• Information, students work, and other materials displayed around the building represent the cultures of the school community. • Signs and labels around the school are in relevant languages.	• Observation in hallway, classroom, entryways, office, and library

Phase One

Initial validity and reliability testing was conducted from the piloting of the CRA across seven sites with 720 professional school staff. This included a principal components factor analysis. Secondly, Cronbach's Alpha was computed for the CRA overall and for each subscale of the CRA found through factor analysis.

Phase Two

In order to gain a deeper understanding of the assessment of culturally responsive practice, the second phase of the study uses a mixed-methods case study approach (Creswell & Plano Clark, 2007) to describe and measure culturally responsive practice at four schools. The four schools in this phase of the study participated in both the CRA and the CR Walkthrough.

The CR Walkthrough was conducted by outside researchers at each school site. The ethnographic field observation tool includes classroom observations, interviews, descriptors of school climate and environment, and review of documents across the five educational domains.

Peer examination and member checking was utilized to begin establishing credibility of the CR Walkthrough. At least two researchers assessed each school using the CR Walkthrough. Member checking consisted of a discussion of the results with a school leadership team of 8 – 12 school staff at each site. Qualitative descriptive data gathered from the CR Walkthrough by members of the research team will be used to further describe and explain the culturally-responsive practices at each school.

Differences in mean subscale scores of the CRA across schools will be examined through one-way ANOVA analysis with posthoc follow-up testing, as needed. Qualitative data from the observations, interviews, and documents collected through the CR Walkthrough administration will be used to complete the mixed methods description of culturally responsive practices at each school and any significant differences in culturally responsive practices found across schools.

Data Sources

Phase one participants included 720 educators including; teachers, building and central office administrators, and related professional services personnel from seven school districts in different geographical areas in a Midwestern state.

In phase two, staff at four public schools comprised the case study participants. Demographic information for the certified staff and students during the 2010-2011 school year at these schools can be found in the table below. The data was collected during the 2010-2011 school year.

Table 3: Demographic Information for Case Study Schools (2010-11)

	CRA respondents	# of certified school staff	Racial/ethnic breakdown of school staff	Setting of school	Grade levels	Student population	Racial/ethnic breakdown of students
School one	n=31	31	White=94% African American=6%	Urban	K-5	457	White=48% African American=25% Multiracial= 24% Latino=3%
School two	n=15	32	White=100%	Rural	K-6	634	White=63% Latino=32% Multiracial= 3% African American=1% Native American=<1%
School three	n=29	32	White=94% African American=6%	Urban	K-4	429	African American=62% White=13% Latino=13% Multiracial= 11% Asian=1% Native American=<1%
School four	n=36	40	White=100%	Rural	6-8	561	White=86% Latino=7% Multiracial= 4% African American=2% Native American=<1%

Results

Factor Analysis

A principal components analysis was conducted to establish validity of the CRA. On the basis of a scree test, an approximate solution of five factors was indicated. Principal components solutions of four and five factors were considered. The five-factor solution accounting for 61.65% of the total variance was judged to yield the most

interpretable solution. A principal components factor analysis identified the following five factors, used as subscales: (1) Student-centered learning, (2) Examination of disaggregated data, (3) Family and community engagement, (4) Professional development, and (5) Additional culturally-responsive factors. (1) *Student-centered learning* includes items focused on adapting practices to address student's needs, abilities, interests, and learning styles (Ladson-Billings, 1995). (2) *Examination of disaggregated data* includes items addressing the use of student data disaggregated by race/ethnicity to consider issues of disproportionality. (3) *Family and Community Engagement* includes items which assess the various ways schools communicate with families and communities and involve them in school events, decision-making, and student learning. (4) *Professional development* includes items assessing the consistency and methods by which educators develop awareness, knowledge, and skills in the areas of culturally responsive practices. (5) *Additional culturally responsive factors* include items assessing the school climate, including use of relevant languages and visible representation of the cultures of the school community.

Reliability of CRA

Internal consistency, as calculated by Cronbach's Alpha was .936 for the CRA overall. Cronbach's Alpha for the five subscale factors as dictated by the factor analysis are as follows: Student-Centered Learning Practices: .860, Examination of Disaggregated Data: .758, Family and Community Engagement: .837, Professional Development: .916, and Additional Culturally-Responsive Factors: .711.

CRA ANOVA Results

Using a one-way analysis of variance (ANOVA), significant differences across schools on the CRA were found on the following domains: Curriculum, Instruction and Classroom Management (F=5.563, p=.001), Family and Community Engagement (F=3.017, p=.033), Professional Development (F=3.238, p=.025), and Environment and School Climate (F=9.638, p=.000). No significant differences were found on the Assessment and Accountability (F=1.204, p=.312) domain. Post-hoc testing using a Bonferroni correction found no significant differences across schools on the Professional Development domain and the following significant differences across schools:

- Curriculum, Instruction, and Classroom Management:
  - Staff at School One and School Two rated CR practices within the Curriculum, Instruction, and Classroom Management domain to be implemented at a higher level than staff at School Four rated these practices at their school (p=.033 and p=.003, respectively).
- Family and Community Engagement:
  - Staff at School One rated CR practices within the Family and Community Engagement domain to be implemented at a higher level than staff at School Four rated these practices at their school (p=0.026).
- Environment and School Climate:
  - Staff at School Two rated CR practices within the Environment and School Climate domain to be implemented at a higher level than staff at School One and School Four rated these practices at their school (p=.003 and p=.000, respectively).
  - Staff at School Three rated CR practices within the Environment and School Climate domain to be implemented at a higher level than staff at School Four rated these practices at their school (p=0.006).

CR Walkthrough and Case Study Results

School one. *Curriculum, instruction, and classroom management.* The results of the CRA show that staff at School One rated their level of CR practices in curriculum, instruction, and classroom management to be at a significantly higher level than at School Four (M=3.55; SD=0.65 and M=3.07; SD=0.66, respectively). This is not directly supported by the results of the CR Walkthrough. Like all of the schools in this study, the level of CR practices varied greatly across classrooms. For example, one classroom at School One was observed instructing a lesson using teacher lecturing in front of the classroom with students seated individually in rows taking notes directly from an overhead projector. This was a U.S. history lesson in which students copied dates of wars and other events related to the independence of the United States from Great Britain. A number of times students began talking and were asked to be quiet and continue copying notes from the overhead.

In another classroom, students seated at desks set into one large rectangle were engaged in creating their own "designer" dinosaurs. The teacher circulated among the students and made individual comments on each drawing. The comments indicated high expectations for student work, encouragement, and higher order thinking skills. For example, the teacher asked the difference between the dinosaurs drawn from their imagination and the depictions of dinosaurs studied with scientific background. This lesson illustrated a classroom that was student centered, developmentally appropriate, and strength based-elements of culturally responsive practice. All students appeared to be engaged in the lesson.

Interviews with the principal indicate that refinement of an academic assessment process is currently underway.

Assessment and accountability. State-mandated test score results (ISTEP) from the 2010-11 school year disaggregated by race/ethnicity show the following groups of students passing both the English Language Arts (ELA) and mathematics portions of the test: White=73.7%, Multiracial=54.8%, and Black=29.3%. The principal reports that benchmarking and formative achievement tests are used for academic assessment along with state-mandated testing. The proportion of gifted/talented placement by race/ethnicity is not known because this program is housed in another school within the district.

Family and community engagement. The results of the CRA show that staff at School One rated their level of CR practices in family and community engagement to be at a significantly higher level than at School Four (M=2.90; SD=0.77 and M=2.33; SD=0.82, respectively). This is supported by the results of the CR Walkthrough and viewed as a strength at this school. Staff at School one conduct home visits with each student's family that is interested at the beginning of the school year. In addition, neighborhood visits are done, in which staff come to the students' neighborhoods to talk with students and families and answer questions and provide information about the school. Other family events occur throughout the year. Some of these events are held off campus in the community. This includes a Skate Night at a local roller skating rink and an evening at a minor league baseball game in which low cost or no cost tickets are made available to students and their families. One area for improvement in CR practices in this area would be to create a system to determine family preferences for communication with the school, as one does not currently exist.

Professional development. The Positive Behavioral Interventions and Supports (PBIS) team is engaged in professional development focused on increasing cultural awareness, knowledge, and skills. This includes a book study using Gloria Ladson-Billing's book, *Dreamkeepers*. The staff has also participated in a number of professional development sessions on topics such as: CR classroom management, CR practices in curriculum and

instruction, and family engagement. The PBIS team has shown a willingness to discuss issues of race, culture, and equity. However, in their attempts to share this information with the rest of the school staff, resistance was met. The principal bought a copy of *Dreamkeepers* for each staff member. The PBIS team initiated a book study in their grade level teams. This initiative was stalled because many staff were not reading the book and the principal notes conflict amongst staff members that she attributed to the resistance around reading and discussing the book.

Environment and school climate. The results of the CRA show that staff at School One rated their level of CR practices in environment and school climate to be at a significantly lower level than at School Two (M=3.10; SD=0.78 and M=3.92; SD=0.64, respectively). This was not directly supported by the CR Walkthrough. Posters and other information posted on the building walls depict students who appear to be from a diversity of backgrounds. However, there were no depictions of diverse leaders or other figures and no depictions of actual students or families or other representations from the community. The mascot for School One is a stereotypic Native American representation of a red-skinned person wearing a headdress with feathers and a painted face. When this was brought to the attention of the principal and PBIS team, these stereotypical depictions were removed from the building and the reward system was changed from using "feathers" to using "tickets." The school website still includes stereotypical images.

English Language Learner (ELL) students are offered services in another school within the district. There is no evidence for the use of bilingual staff or materials at School One.

Planning periods are utilized for grade level team collaboration. However, like all of the schools in the study, the principal does not direct the meetings or know what occurs during them. She does not collect notes from these meetings either. Therefore, it is unclear if this collaboration time is used to implement best practices for teaching culturally and linguistically diverse students.

Action planning. Areas of focus for discussion with the PBIS team for use in action planning were curriculum, instruction, and classroom management and environment and school climate. The results of this discussion were the decision to use *Dreamkeepers* in a book study with the entire staff at the grade level meetings and other professional development sessions focused on CR classroom practices. Actions were taken to eliminate the stereotypical depictions of Native Americans from school practices. Additionally, goals were set for the school to establish and maintain consistent reporting of disaggregated discipline data.

School two. *Curriculum, instruction, and classroom management.* The results of the CRA show that staff at School two rated their level of CR practices in curriculum, instruction, and classroom management to be at a significantly higher level than at School Four (M=3.84; SD=xx and M=3.07;SD=xx, respectively). Classroom observations were not possible at School Two because of a mandate by the teacher's union that permission for any classroom observations be cleared ahead of time through the union. Therefore, it is unknown whether this perception of higher levels of CR practice in the classroom would be supported by direct observation.

Interviews with the principal and other school staff support the presence of a well-defined academic assessment process which attends to individual student strengths but not to cultural or family strengths.

Assessment and accountability. There were data walls present in the literacy coach's classroom and in the staff meeting room. State-mandated test score results (ISTEP) from the 2010-11 school year disaggregated by race/ethnicity show the following groups of students passing both the English Language Arts (ELA) and mathematics portions of the test: White=65% and Latino=44.4%. The principal reports that benchmark testing is

conducted three times per year and formative academic assessments are also used in addition to the state-mandated tests. The proportion of gifted/talented placement by race/ethnicity is not known because this program is housed in another school within the district.

Family and community engagement. Almost one third of the students at School Two are native Spanish-speaking ELLs. A bilingual parent liaison is on staff full time. This person translates materials for families and interprets when families come to school for meetings. There is no system in place to determine family preference for communication with the school and no family events are held off campus. A family member of a student and a community member participate regularly on the school improvement committee. A family member also participates regularly on the PBIS team.

Professional development. Based on a review of disaggregated discipline data, professional development sessions geared toward improving this data were planned. These included sessions on the successful educational engagement of boys and working from a strength-based perspective with students in poverty. Believing there was a disconnect between the school and many of the ELL students' families, a workshop was also conducted in developing awareness and understanding of the culture and experiences of Latino students and families.

Environment and school climate. The results of the CRA show that staff at School Two rated their level of CR practices in environment and school climate to be at a significantly higher level than at School One and School Four (M=3.92; SD=0.64, M=3.10; SD=0.78, and M=2.79; SD=0.76, respectively). This was not directly supported by the CR Walkthrough. The building walls display a lot of student work and appear to be student-centered. Signs for the schoolwide expectations and location specific rules are displayed in English and in Spanish. Several inspirational signs and banners are also displayed around the school. However, none of these inspirational signs are in Spanish. Only the rules are translated into Spanish. Bilingual staff or interpreters are utilized during assessments, interventions, and family events.

Grade level teams meet at least one time per week and some meet once per day. The principal does not direct the meetings or know what occurs during them. She does not collect notes from these meetings either. Therefore, it is unclear if this collaboration time is used to implement best practices for teaching culturally and linguistically diverse students.

Action planning. Areas of focus for discussion with the PBIS team for use in action planning were family and community engagement and environment and school climate. The discussion focused on how Latino families and other families not often present at the school could be better engaged and made aware of PBIS and other school activities. An action plan item of "expanding parent awareness and increasing communication through PBIS" was established. As a result, a bilingual information sheet on PBIS that could be used as a refrigerator magnet in students' homes was designed by staff and distributed to families. The school hosted a family carnival in the fall, and there are funds set aside to plan other family celebrations and events.

The rest of this discussion focused on how Spanish-speaking students and families may interpret the fact that only the signs with school rules were translated into Spanish. The discussion included the idea that Spanish-speaking students and families could be engaged in creating inspirational signs that represent their cultural norms and use sayings and messages that are meaningful for them. To date, this has not occurred.

School three. *Curriculum, instruction, and classroom management.* The level of CR practices varied greatly across classrooms. One classroom allowed students to choose what activity they would like to engage in from a variety of hands-on activities in "rotating stations." Another class involved didactic teaching followed by

student participation to teach students synonyms and antonyms. It was clear that some students understood while some students did not, as evidenced by student responses to teacher questions. The instruction style did not seem to be modified to engage learners who were not engaged and those students who were not able to produce correct answers and did not seem to understand the concept.

Interviews with the principal and other school staff support the presence of a well-defined academic assessment process which attends to individual student strengths but not to cultural or family strengths.

Assessment and accountability. There was a data wall present in the literacy coach's classroom. State-mandated test score results (ISTEP) from the 2010-11 school year disaggregated by race/ethnicity show the following groups of students passing both the English Language Arts (ELA) and mathematics portions of the test: White=81.3%, African American/Black=59.8%, Latino=59.1%, and Multiracial=57.1%. The proportion of gifted/talented placement by race/ethnicity is not known because this program is housed in another school within the district.

The principal produced an academic data report with several benchmark and other academic assessment data used by the Response to Intervention (RtI) team. The RtI team reportedly meets one time per month to monitor and develop interventions. This data along with discipline data is reviewed once per week at schoolwide staff meetings. It is unclear whether RtI team discussions and interventions incorporate students' individual, family, and cultural strengths.

Family and community engagement. There is no system in place to determine family preferences for communication with the school and no family events are held off campus. Title I family events are held each semester on campus, as are other school events, such as movie nights and grandparent breakfasts. The school does have multiple methods of communicating with families in a unidirectional way, including: phone messages, newsletters, and a website.

Professional development. The PBIS team is engaged in book discussion with excerpts from the book, *Everyday Anti-racism*. The principal has purchased several other books focused on culturally responsive school practices and made them available to all staff. The school staff has participated in some professional development focused on improving family engagement and increasing cultural awareness.

Environment and school climate. The results of the CRA show that staff at School Three rated their level of CR practices in environment and school climate to be at a significantly higher level than at School Four (M=3.40; SD=0.66 and M=2.79; SD=0.76, respectively). This is supported by the CR Walkthrough and viewed as a strength at this school. Posters and other images on the building walls depict a diversity of leaders, community members, and student work.

English Language Learners (ELLs) are offered services in another school within the district. There is one secretary who is bilingual in English and Spanish. No other evidence for the use of bilingual staff or materials at School One exists.

The principal reports that grade level teams have various ways of collaborating. Some teams meet weekly to plan lessons together and put out a grade level newsletter to families, while some teams meet less formally and one grade level team is currently in process of developing a system for collaboration.

Action planning. Areas of focus for discussion with the PBIS team for use in action planning were curriculum, instruction, and classroom management and family and community engagement. Action plan goals to "improve staff understanding of cultural responsiveness and improve family-school connections" were

established. This discussion mainly focused on how the incorporation of multiple perspectives and cultures are currently being utilized in teaching and learning. Several team members reported that they have incorporated new materials, particularly in reading and language arts, in order to include multiple perspectives and experiences in the curriculum. All staff will be invited to participate in an after school book club with two books focused on culturally responsive school practices. Staff will be compensated financially for their time. The books used in this activity will be provided for all staff. Family and community engagement was not discussed as in depth nor were any action strategies or steps created.

School four. *Curriculum, instruction, and classroom management.* The level of CR practices varied greatly across classrooms. One classroom included student choice in the curriculum. Students were allowed to choose which computer program to use to create a presentation for the class on "waves." In a math class, students brought in suggestions for websites with math games to be used in class. One history classroom has posters of Sitting Bull, Gandhi, and Dr. Martin Luther King, Jr. posted on the walls. The teacher stated that he teaches history from multiple perspectives. In another history class, a teacher is observed telling a student, who asked her why all of the people they were learning about were white, that "it doesn't matter" what race the historical figures she teachers him about are and asked him why he cares.

Assessment and accountability. A well-defined academic assessment process is in place. Academic data is used to identify students needing extra support for targeted interventions. The referral form for this process includes documentation of student strengths, as well as home and community interventions that have been used. State-mandated test score results (ISTEP) from the 2010-11 school year disaggregated by race/ethnicity show the following groups of students passing both the English Language Arts (ELA) and mathematics portions of the test: White=65.2%, Latino=55.3%, and Multiracial=50%. Academic data is not disaggregated at the school level, and it is unknown what the racial/ethnic proportions of gifted and talented programs are at the school.

Family and community engagement. There is no evidence that a system for determining family preferences for ongoing communication is in place. Likewise, there was no evidence that specific efforts to involve families who generally have low participation rates are currently were occurring. No family events have been held off campus. A district initiative aligns with local businesses to provide each student at the school with a laptop computer. Besides the Parent Teacher Organization (PTO), there is no evidence of any programs or opportunities for community or family involvement in educational decision-making through the school.

Professional development. Professional development focusing on issues of culture has not occurred for school staff. There has been some discussion about this in PBIS team meetings.

Environment and school climate. Student work is displayed around the building. Some classroom walls depict leaders and heroes from a diversity of cultures and countries. However, this varied from classroom to classroom.

Teachers meet regularly, but there is no direct evidence that this time is used to collaborate to implement best practices for teaching culturally and linguistically diverse students.

English Language Learners (ELLs) are offered services in another school within the district. There is no evidence for the use of bilingual staff or materials, except for two posters in Spanish posted in the building. One designates the school as a safe place and the other asks "Do we have homework?"

Action planning. Areas of focus for discussion with the PBIS team for use in action planning were curriculum, instruction, and classroom management and family and community engagement. The discussion

mainly focused on how the incorporation of multiple perspectives and cultures are currently being utilized in teaching and learning and if curriculum and instruction in the building is benefitting all students equally. The team acknowledged that staff needs more professional development focused on culturally responsive classroom practices. The questions of how two-way communication with families could be developed and how teachers can more effectively learn about and connect with families were also discussed.

Action plan items to: "improve parent-teacher communication through a variety of direct contact strategies," "develop a program to increase positive teacher communications with parents and students," "develop means to determine parent preference of communication, "develop and implement specific strategies to gain cultural knowledge from multiple groups of students and families," "develop means for multiple groups to have regular input to PBIS team," "increase staff awareness of culturally responsive practice through professional development and/or book study," and "increase communication with staff about culturally diverse students" were established. It is unclear how these goals are currently being addressed.

Table 4: Summary of Case Study School Areas of Strength and Areas for Improvement

	Area/s of Strength	Area/s for Improvement
School one	• Curriculum, Instruction, and Classroom Management (CRA) • **Family and Community Engagement (CRA & CR Walkthrough)**	• Curriculum, Instruction, and Classroom Management (CR Walkthrough) • **Environment and School Climate (CRA & CR Walkthrough)**
School two	• Curriculum, Instruction, and Classroom Management (CRA) • Professional Development (CR Walkthrough) • Environment and School Climate (CRA)	• Family and Community Engagement (CR Walkthrough) • Environment and School Climate (CR Walkthrough)
School three	• **Environment and School Climate (CRA & CR Walkthrough)**	• Curriculum, Instruction, and Classroom Management (CR Walkthrough) • Family and Community Engagement (CR Walkthrough)
School four	• Assessment and Accountability (CR Walkthrough)	• Curriculum, Instruction, and Classroom Management (CRA) • **Family and Community Engagement (CRA & CR Walkthrough)** • **Environment and School Climate (CRA & CR Walkthrough)**

Table 5: Summary of Trends Across Schools

Curriculum, Instruction, & Classroom Management	• Inconsistent implementation of CR practices in curriculum, instruction, and classroom management
Assessment & Accountability	• Inconsistent implementation of CR practices in assessment processes • Most schools would benefit from assistance in making meaning of disaggregated data
Family & Community Engagement	**School 1 area of strength**
Professional Development	• Most schools would benefit from PD in family engagement and CR curriculum, instruction, classroom management, and assessment
Environment & School Climate	**School 3 area of strength**

Discussion

Significance

The true merit of a tool to measure culturally responsive practices is found in an ability to guide the implementation of practices that will benefit all groups of students. Developing a rich picture of the relationship between how educators perceive culturally responsive practices at their schools and an external qualitative description of CR practices has the potential to advance current knowledge of how using tools to measure CR practices can guide action planning, professional development, and other school practices.

Initial validity and reliability testing of the CRA suggest it is a useful tool to assess culturally responsive practices in school settings. The mixed methods approach combining the self-report survey methodology of the CRA with the ethnographic field observation methodology of the CR Walkthrough allows for the comparison of perceptions of what CR practices school staff believe to be in place and an external observation of what practices are in place. While more data is needed, this may provide us with a means for deepening an understanding of the relationship between self-assessment of CR practices and what CR practices are being implemented.

Implications for Practice

The results of the CRA and CR Walkthrough provide information useful to assist school leadership teams, such as PBIS teams, in reflecting upon CR practices being implemented at their school and developing action plan goals and strategies to improve CR practices. The CRA provides information regarding staff perceptions of what CR practices are in place as well as what CR practices they rate as high priorities for improvement. The CR Walkthrough provides information regarding what CR practices are in place at each school.

Based upon data from the CR Walkthrough and what practices school staff rated as a high priority for improvement on the CRA, a report can be developed and discussed with leadership teams within a school. In the presented case studies, researchers discussed this report with the PBIS team and helped them develop action plan items to improve CR practice. The case studies described above explain how the results of these measures were used to guide action planning among school leadership teams to improve CR practices, impact student outcomes, and increase educational equity.

Future Research

It is unclear to what extent action plan items and strategies developed at each school will permanently change school practices. Thus, a future administration of the CRA and the CR Walkthrough will be useful to evaluate how perceptions of what CR practices are in place and what CR practices are actually in place at each school has changed. Additionally, examining the relationship between CRA and CR Walkthrough data with disaggregated academic and discipline data will provide us with information regarding the influence of CR practices on student outcomes.

Preliminary data suggests there is not a linear relationship between perceptions of what CR practices are in place and what CR practices are actually being implemented at the school level. This relationship may be curvilinear and explained by the relationship between participants' level of cultural awareness, knowledge, and skills. At schools where more CR practices are in place and, presumably, staff have higher levels of cultural awareness and knowledge, CRA scores may be skewed lower than at schools implementing fewer CR practices because lower levels of cultural awareness and knowledge may prohibit staff from fully understanding the complexities and breadth of CR practice implementation. More data is needed to explore this hypothesis and further validate the CRA and CR Walkthrough, both as separate tools as well as related assessments.

Lastly, further exploration on ways to more directly involve school staff teams and family and community in the CR Walkthrough is necessary. The possibility of stakeholders engaging in participatory action research (Brydon-Miller & Maguire, 2009) may offer a way to both increase buy-in and build capacity at the local level to augment CR practice and thereby address issues of equity in the schools.

References

Banks, J. A., Cookson, P., Gay, G., Hawley, W. D., Irvine, J. J., Nieto, S., Schofield, J. W., & Stephan, W. G. (2002). Diversity within unity: Essential principles for teaching and learning in a multicultural society. Seattle, Washington: Center for Multicultural Education, College of Education, University of Washington.

Bean, R. M. (2004). Professional development: Key to effective reading instruction. New *England Reading Association Journal, 40*, 12-16.

Brydon-Miller, M., & Maguire, P. (2009). Participatory action research: Contribution to the development of practitioner inquiry in education. *Educational Action Research, 17,* 79-93.

Christenson, S. L., & Sheridan, S. M. (2001). School and families: Creating essential connections for learning. NY: Guilford Press.

Creswell, J. W., & Plano Clark, V. L. (2007). *Designing and conducting mixed methods research*. Thousand Oaks, CA: Sage.

Epstein, J. L. (2001). School, family, and community partnerships: Preparing educators and improving schools. Westview Press. Cumnor Hill, Oxford.

Gay, G. (2000). *Culturally responsive teaching: Theory, research, and practice*. New York: Teachers College Press.

Gibb, A.C., & Skiba, R.J. (2008). Using data to address equity issues in special education. Bloomington, IN: Center for Evaluation & Education Policy.

Gregory, A., & Mosely, P. M. (2004). The discipline gap: Teachers' views on the over-representation of African American students in the discipline system. *Equity & Excellence in Education, 37,* 18-30.

Guskey, T. R. (2009). Closing the knowledge gap on effective professional development. *Educational Horizons, 87*, 224-233.

Harry, B., & Klingner, J. (2006). *Why are so many minority students in special education?* New York: Teacher College Press.

Henderson, A. T., & Mapp, K. L. (2002). *A new wave of evidence: The impact of school, family, and community connections on student achievement.* Austin, TX: Southwest Educational Development Laboratory.

Johnson, R.S. (2002). Using data to close the achievement gap: How to measure equity in our schools. Thousand Oaks, CA: Corwin Press.

Klingner, J. K., Artiles, A. J., Kozleski, E., Harry, B., Zion, S., Tate, W., Durán, G. Z., & Riley, D. (2005). Addressing the disproportionate representation of culturally and linguistically diverse students in special education through culturally responsive educational systems. *Education Policy Analysis Archives, 13*(38). Retrieved [date] from http://epaa.asu.edu/epaa/v13n38/.

Ladson-Billings, G. (1995). *The dreamkeepers: Successful teachers of African American children.* San Francisco: Jossey-Bass.

Ladson-Billings, G. (2001). *Crossing over to Canaan: the journey of new teachers in diverse classrooms*. San Francisco: Jossey-Bass.

Ladson-Billings, G. (2006). From the achievement gap to the education debt: Understanding achievement in U.S. schools. *Educational Researcher*, *35,* 3–12.

Losen, D., & Orfield, G. (Eds.). (2002). Minority issues in special education. Cambridge, MA: The Civil Rights Project, Harvard University & The Harvard Education Publishing Group.

Morey, A., & Kilano, M. (1997). Multicultural course transformation in higher education: A broader truth. Needham Heights, MA: Allyn and Bacon.

National Research Council. (2002). Minority students in special and gifted education. Committee on minority representation in special education, Division of Behavioral and Social Sciences and Education. Washington, DC: National Academy Press.

Nieto, S. (1999). *The light in their eyes: Creating multicultural learning communities.* New York: Teachers College Press.

Ruus, V., Veisson, M., Leino, M., Ots, L., Pallas, L., Sarv, E., & Veisson, A. (2007). Students' well-being, coping, academic success, and school climate. *Social Behavior and Personality, 35*, 919–936.

Shade, B.J., Kelly, C., & Oberg, M. (1997). Creating Culturally Responsive Classrooms. Washington, D.C.: American Psychological Association.

Skiba, R. J., Simmons, A. B., Ritter, S. Gibb, A. C., Rausch, M.K., Cuadrado, J. & Chung, C. (2008). Achieving equity in special education: History, status, and current challenges. *Exceptional Children, 74*, 264-288.

Skiba, R. J., & Rausch, M. K. (2006). Zero tolerance, suspension, and expulsion: Questions of equity and effectiveness. In C.M. Evertson & C.S. Weinstein (Eds.), *Handbook of classroom management: Research, practice, and contemporary issues* (pp. 1063-1089). Mahwah, NJ: Lawrence Erlbaum Associates.

Sleeter, C., & McLaren, P. (Eds.). (1995). *Multicultural education, critical pedagogy, and the politics of difference.* Albany: State University of New York Press.

Tatum, B. (2003). *Why are all the Black kids sitting together in the cafeteria? A psychologist explains the development of racial identity*. New York: Basic Books.

Van Broekhuizen, D. L., & Dougherty, B. (1999). *Teacher diversity: Implications for professional development*. Honolulu, U. S. Department of Education.

Vincent, C., Randall, C., Cartledge, G., Tobin, T, & Swain-Bradway, J. (2011). Toward a conceptual integration of cultural responsiveness and schoolwide positive behavior support. *Journal of Positive Behavior Interventions, 13,* 219-229.

Villegas, A. M., & Lucas, T. (2002). Preparing culturally responsive teachers: rethinking the curriculum. *Journal of Teacher Education, 53*, 20-32.

Voltz, D., Brazil, N, & Scott, R. (2003). Professional development for culturally responsive instruction: A promising practice for addressing the disproportionate representation if students of color in special education. *Teacher Education and Special Education, 26*, 63-73.

Wald, J., & Losen, D. J. (2007). Out of sight: The journey through the school-to-prison pipeline. In S. Books (Ed.) *Invisible children in the society and its schools (3rd ed.).* (pp. 23-27). Mahwah, NJ: Lawrence Erlbaum Associates.

Weinstein C., Tomlinson-Clarke S., & Curran M. (2004). Toward a conception of culturally responsive classroom management. *Journal of Teacher Education*, 55, 25-38.