Supporting Behavior and Improving School Climate through the Elementary to Middle School Transition: Whole School Restorative Practices in Austin Independent School District (AISD)

Education Innovation and Research Program - Early Phase Application

<u>Absolute Priority 1:</u> Supporting High-Need Students <u>Absolute Priority 2</u>: Improving School Climate

# **Table of Contents**

| Significance   | . 1 |
|--|-----|
| National Significance  | . 1 |
| Demonstration of Promising New Strategies, Building Upon Existing Strategies | . 4 |
| Exceptional Approach to EIR Priorities                                       | . 5 |
| Project Design   | . 9 |
| Goal, Objectives and Outcomes  | . 9 |
| Management Plan  | 14  |
| Feedback and Continuous Improvement  | 16  |
| Broad Dissemination for Further Development and Replication                  | 17  |
| Project Evaluation   | 18  |

Appendix A: N/A

| Appendix B: Evidence Standards       |
|--------------------------------------|
| Appendix C: Resumes of Key Personnel |
| Appendix D: Letters of Support       |
| Appendix E: N/A                      |
| Appendix F: N/A                      |
| Appendix G: Other                    |
| - AIR Evaluation Plan                |
|                                      |

- AISD Restorative Practices Model
- Demographics of RP Middle Schools and their Feeder Elementary Schools
- Proposal Figures & Tables
  - Figures:
    - Logic Model
    - Figure 1: AISD MTSS and Tiers of School-Based RP
    - Figure 2: AISD Project Design and Implementation Plan
  - o Tables:
    - Table 1: Project Goals and Objectives
    - Table 2: Milestones, Major Activities, Key Responsibilities
    - Table 3: Project Strategies and Responsibilities
- References for Entire Proposal

### Significance

Austin Independent School District's (AISD) proposed project will evaluate the impact of implementing restorative practices (RP), a proactive and inclusionary school-wide approach to climate and discipline, within a feeder pattern of elementary (ES) and middle schools (MS) populated by the district's neediest students. This application, submitted under EIR's Absolute **Priority 1** and **2**, represents the next generation in improving school climate, behavioral supports and correctional education, with a unique focus on transition points between high-need ES and MS. A rigorous evaluation, incorporating a four-year quasi-experimental design utilizing propensity score matching and an implementation study, will generate evidence of effectiveness by demonstrating the impact on a cohort of students transitioning from ES to MS in which schools at both levels utilize a consistent approach to school climate. Student and teacher-level impacts will be reported, identifying key program components and contextual factors to the program's success. Findings will contribute to the development of theory and practices to be replicated in the field by rigorously testing an approach that can be used to better coordinate student transitions between school levels, examine the impact of school-wide RP at the campus level on both students and teachers, and foster positive school climates and address the root causes of the uses of and disparities in exclusionary discipline.

### **National Significance**

Impact of Exclusionary Disciplinary Policies: Suspensions and expulsions are derailing young peoples' lives across the nation's schools. Longitudinal and multivariate studies demonstrate that exclusionary discipline is related to various short- and long-term negative consequences, including academic disengagement, lower academic achievement, school dropout, and increased involvement in the juvenile justice system (Skiba, Arredondo & Williams, 2014). Findings like these have led the U.S. Departments of Education and Justice (2014) and the Council of State Governments Justice Center (Morgan et al., 2014) to recommend reducing reliance on suspensions in favor of alternative practices. Now more than ever, policymakers and educators need alternative tools to prevent disciplinary problems and provide fair interventions when they do occur.

Impact of Disproportionate Discipline: Students with disabilities and students of color are disproportionately impacted by punitive disciplinary practices, with the highest rates of suspensions, expulsions and subsequent delinquent pathways via the school-to-prison pipeline.

Research exposed the meteoric rise of suspensions and expulsions in Texas for low-level disciplinary infractions, particularly among students of color and special education students (Fabelo et al., 2011). The study found that a much larger percentage of African American (26%) and Hispanic students (18%) were placed in out-of-school suspensions for their first violation than were whites (10%) (Ibid). Although this report focuses on Texas, it has national significance, in that Texas has the second largest public school system, with a student population whose diversity increasingly typifies many school systems.

Austin, recently deemed the most economically segregated city in America (Florida & Mellander, 2015), faces unique challenges in equitably serving its students, who are two-thirds Hispanic and/or low-income. Recent disciplinary referral rates further highlight the need in Austin schools. Among ES in AISD, the average disciplinary referral rate for African-American students was five times greater than the referral rate for White students. The average MS referred African-American students four times more often than White students, and Hispanic students were referred two times as often than White students. One MS referred African-American American students at a rate 34 times that of White students.

2

<u>School-Level Transitions:</u> Young adolescents are experiencing rapid changes in their physical, emotional and interpersonal development when they move from elementary to middle schools (Crockett et al., 1989; Hirsch & Rapkin, 1987). These experiences have been linked to difficulties in behavioral and emotional adjustment (Eccles, et al., 1993). Research also shows an increase in student discipline problems when students transition from ES to MS (Theriot & Dupper, 2009).

AISD discipline data substantiates that disciplinary referrals increase at points of transition. In Fall 2015, only 5 percent of fifth graders received disciplinary referrals. However, approximately 26 percent of sixth grade students faced disciplinary referrals.

Filling a Research Gap: Research evaluating the impact of the RP whole-school change approach is in its nascent stages, with few studies using empirical evidence to support their claims. Most of the existing case studies and emerging comparison studies in Minnesota, California, Colorado and Florida have focused on RP models used as an alternative to selected types of exclusionary disciplinary practices at the secondary level (McCluskey et al., 2008). The proposed study will be novel in that it will *rigorously* assess RP as a whole-school approach, impacting *all* students. Additionally, this study will provide empirical evidence of the impact of an on-campus RP coordinator. Findings from existing evaluations suggest RP models lead to reduced use of out-of-school suspension (Karp & Breslin, 2001 and Armour, 2013). In addition to reductions in disciplinary infractions and dropout rates, McMorris and colleagues (2013) found that secondary students participating in RP reported greater connection to school. However, few studies have examined the link between quality of RP implementation in classrooms and student outcomes (McCluskey et al., 2008).

A review of the literature suggests a gap in the research on implementation of RP at the elementary level. Furthermore, no studies have examined the effect of continuous exposure to RP in ES and MS in terms of short- and long-term academic and non-academic outcomes of students (including the closing of gaps between student groups). Such longitudinal studies are needed to assess the longer-term developmental impact of an intervention because research has shown that disciplinary suspensions at ages 6-11 are strong predictors of serious or violent offending during ages 15-25 (Wilson, Lipsey & Soydan, 2003).

### **Demonstration of Promising New Strategies, Building Upon Existing Strategies**

<u>Current Efforts to Address School Climate:</u> The proposed approach will be supported and complemented by AISD's existing framework around social and emotional learning (SEL) and multi-tiered systems of support (MTSS). Researchers have established that effective school-based SEL interventions positively impact students' academic, social and behavioral outcomes (Zins, et al., 2004, Wilson, et al., 2001, Purkey & Smith, 1983).

In late 2010, AISD was selected by the nation's leading SEL organization, the Collaborative for Academic, Social and Emotional Learning (CASEL) to become a member of the Collaborating Districts Initiative (CDI). As part of the CDI and thanks to strong public-private partnerships, AISD has planned, implemented, and monitored systemic SEL, resulting in district-wide implementation of direct SEL instruction, integration of SEL into core content, and in and out-of-school climate. Complementing each other, RP supports SEL by providing a tangible vehicle for teaching and practicing SEL and for addressing anti-social behavior (Vaandering, 2013). How RP and SEL interact and collectively work to minimize disciplinary problems and racial disparities remains an area of needed research.

<u>RP, SEL & MTSS</u>: AISD's whole-school RP model will be embedded within the district's multi-tiered systems of support to build community (Tier 1), rebuild relationships (Tier 2), and reintegrate students (Tier 3). (See Figure 1.)

Building upon existing Tier 1 supports, including SEL, the AISD RP model will seek to influence positive behavioral change among staff, students and parents, and



build school community and a positive school climate. The approach will include immersing the whole school community in activities that focus on relationships and creating shared values, through inclusive decision-making, affective statements, respect agreements, impromptu restorative chats and community-building circles, which are carefully planned, healing discussions inspired by Native American cultures. At Tier 2, RP processes, such as harm circles, mediation or family-group conferencing, will be used to repair individual and relational harms resulting from fights, disruptions and other hurtful exchanges. Beginning in 2016-17, the district piloted a restorative reintegration of students transitioning from the disciplinary Alternative Learning Center to their home campuses. Specifically, a point person at the students' home campuses (i.e. Transition Facilitator) has been trained in basic RP supports, connects with support staff for Tier 3, s/he initiates and maintains contact with students during their alternate placement, and supports their successful reintegration through 1:1 conversations and reentry/welcome circles.

### **Exceptional Approach to EIR Priorities**

<u>Target Population</u>: The project addresses Absolute Priority 1 in that we will reach all students and staff at 10 high-need schools in Austin, including approximately 6,200 students who are

predominantly economically disadvantaged (94%) and Hispanic (81%), and more than 600 staff.

(See Appendix G for a complete Table of Demographics for Participating Schools.) We

anticipate approximately 100 additional students per year for a total of 6,500 over the four years

of implementation. Academic performance at these schools trails that of other schools in the district. In fact, the four targeted middle schools received the lowest state accountability rating, with less than half scoring proficient in English Language Arts (ELA) and math standardized assessments.

| Target Schools' Student Demographic Information |     |  |
|---|-----|--|
| Hispanic  | 81% |  |
| Black   | 13% |  |
| White   | 3%  |  |
| Asian   | 1%  |  |
|   |     |  |
| Economically disadvantaged (qualify for         |     |  |
| free/reduced lunch)                             | 94% |  |
| At-risk for dropping out                        | 78% |  |
| English Language Learner (ELL)                  | 63% |  |
|   |     |  |

|                                 |         | All     |
|---------------------------------|---------|---------|
|                                 | Target  | AISD    |
|                                 | Schools | Schools |
| ELA Proficiency Rates           | 62%     | 74%     |
| Target Middle Schools           | 49%     |         |
| All Feeder Elementary Schools   | 65%     |         |
| Math Proficiency Rates          | 67%     | 77%     |
| Target Middle Schools           | 47%     |         |
| All Feeder Elementary Schools   | 73%     |         |
| # Improvement Required Schools* | 5       | 8       |

\*Texas Education Agency Accountability Rating, Improvement Required is the lowest of three academic ratings based on a framework of four indices.

<u>Restorative Practices</u>: RP, differing from traditional approaches to school climate and discipline, support the safety, well-being and success of students by developing positive relationships, fostering school connectedness, and building social and emotional competencies. Specifically, RP not only

provides effective responses when incidents of disruption and harm have occurred (i.e., viable alternatives to removing students from classroom activities), but also offers methods and a framework for teachers and administrators to work *with* young people to build respectful relationships (Sumner, Silverman, & Frampton, 2010). (Appendix G: AISD's Draft RP Model.)

While developing interpersonal and intrapersonal skills, students improve persistence at academic tasks and engage in more positive social behaviors, leading to fewer problems with misconduct, less emotional distress, and ultimately, higher academic achievement (Durlack, et

al., 2011). This tendency is particularly true for high-need students that the proposed project targets (Heckman & Kautz, 2013). Schools that emphasize the establishment of caring relationships of students with peers and adults within their schools have shown to improve achievement, behavior, and attachment to schools, teachers and peers (Gregory, Skiba & Noguera, 2010). Researchers have suggested that positive student-teacher relationships benefit students of color even more so than white students (Gay, 2000). Therefore, this project will not only examine the impact of RP on student outcomes but also on teacher attitudes and behaviors.

Because the focus is on inclusion and community-based problem solving, RP simultaneously addresses harm and creates a climate that promotes healthy relationships, builds community in and out of school, develops social-emotional understanding and skills, increases social and human capital, and enhances teaching and learning (Armour, 2013). Based on **strong theory**, RP is a whole-school relational approach that fosters belonging over exclusion, social engagement over control, and meaningful accountability over punishment (Armour, 2014).

<u>Root Causes</u>: The proposed model will address root causes of exclusionary disciplinary practices and disproportionate use of these practices in AISD, while also promoting alternative practices that address the disparities and their uses.

*Causes of Exclusionary Discipline:* Students and adults often lack the social and emotional skills such as active listening and empathy that could prevent misunderstandings and deescalate conflicts that sometimes lead to disciplinary actions (Durlack, Domitrovich, Weissberg, & Gullotta, 2015 and Brackett et al., 2009). In fact, teachers with greater emotional intelligence tend to skillfully engage students and prevent discipline problems from arising (Jennings & Greenberg, 2009; Nizielski, Hallum, Lopes & Schutz, 2012).

A school climate characterized by distrust and alienation can lead both students and adults to feel a lack of connection and belonging (Thapa, 2012). In contrast, when young people feel they are part of a caring community, they feel accountable to that community and discipline incidents decline (Cornell, 2015).

*Causes of Disproportionate Use of Exclusionary Discipline:* Multiple factors influence the occurrence of disproportionality, making it complicated and at times sensitive work. The causes of disparities may be due to disciplinary policies, regulations, and procedures; the school culture; or the actions of a few staff. For example, some teachers may hold implicit, preconceived notions about particular races and ethnicities and may subconsciously apply biases to students (Zucker & Prieto, 1977), or teachers may lack the skills to use positive de-escalation techniques.

Schools often fail to provide contexts in which adults can forge deeper connections with students that can reduce district, implicit bias, and cultural misunderstanding (Gregory et al, 2016). This "culture of chronic disconnection" in schools contributes to punitive school discipline and disproportionality because people fail each other empathetically (Jordan, 2001). With its focus on addressing harm through repairing relationships, engaging community and tending to the needs of all, RP offers a process to transform the root cause of the culture of chronic disconnection.

The proposed project will build upon district leaders' commitment to address the root causes of exclusionary and disproportionate discipline. In February 2017, the Superintendent proposed and the Board of Trustees approved a ban on suspensions in PK-2<sup>nd</sup> grade, aimed not only at ensuring students who would have been removed from classrooms receive academic instruction and counseling but also to address the district's disparities in suspensions.

As part of the proposed project, campus staff will engage in root cause analysis, during which they dig into their campus-specific data, get at the roots about why certain disparities persistently occur, and create an action plan to reduce – and eventually eliminate – disparities (Osher et al, 2015).

# **Project Design**

**Goal, Objectives and Outcomes:** The primary goal of the proposed project is to reduce disparities in exclusionary discipline by employing RP within an SEL framework. To reach this overarching goal, we must guide and support teachers as they adopt RP, create a sustainable school-wide RP culture and high likelihood of program continuation throughout the district, and ensure replicability for and applicability to ES and MS in various communities. As shown in the logic model in Appendix G and Table 1 below, we will assess our progress toward these larger goals through short and long-term objectives of student and campus-level academic and behavioral outcomes as well as changes in teacher practice.

The project will leverage existing annual AISD student, staff and parent surveys that measure perceptions of campus culture and acquisition of competencies related to RP. All surveys have high reliability estimates and are appropriate for students in ES and MS. The project will assess teacher change in practice (i.e., decreased use of exclusionary disciplinary practices) and utilize existing classroom observation tools, with a particular focus on classroom climate and procedure components of the observational protocols.

Table 1: Project Goals and Objectives

| Goals                     | Objectives   | Outcomes  |
|---------------------------|--|---|
| 1: Build the capacity of  | <b>1.1</b> : Each participating school's administrators, support | <b>1.A</b> Disciplinary removals or emergency placements will drop by |
| 10 high-need              | staff and educators will be trained in RP approaches             | 1/3 (Baseline = 240 in SY 2015-16)                                    |
| elementary and middle     | and philosophy and participate in ongoing coaching               | <b>1.B</b> Achieve average of 90% of students who report feeling safe |
| schools in Austin to      | throughout the grant period.                                     | in their school annually on the SCS in RP Schools.                    |
| implement RP. Build       | <b>1.2</b> : District-level staff and community service          |   |
| overall district capacity | providers will be trained in RP.                                 |   |
| and buy-in for RP.        | <b>1.3</b> : Track fidelity of implementation via an active      |   |
|                           | feedback loop to ensure teachers, administrators,                |   |

|   | community and students are engaged in and implementing RP at a high level.   |  |
|---|--|--|
| 2: Improve student<br>academic and climate<br>outcomes and gaps as a<br>result of RP<br>implementation.   | <ul> <li>2.1: Reduce achievement gaps in core content areas between groups of students in RP schools.</li> <li>2.2 Increase in students' ability to engage in respectful communication with adults and classmates.</li> <li>2.3 Increase in students' decision making skills.</li> </ul>                       | <ul> <li>2.A Reduce achievement gaps in reading and math between AA and white, HI and white, economically disadvantaged and non-economically disadvantaged, ELLs and non-ELLs, special education and non-special education by 2 points, mirroring district-wide goal as detailed in AISD Strategic Plan Scorecard.</li> <li>2.B Achieve average proportion of 90% for each of the following items on the SCS in RP Schools: <ul> <li>Ease of respecting classmate opinion during a disagreement.</li> <li>Ease of talking with an adult when having issues at school</li> <li>Ease of getting along with classmates</li> <li>Ease of thinking through decisions and consequences</li> </ul> </li> </ul>  |
| <b>3:</b> Improve campus-<br>level outcomes and<br>gaps as a result of RP<br>implementation.  | <ul> <li>3.1: Decrease in the number of disciplinary removals and/or emergency placements.</li> <li>3.2 Increase in students' perception of attending a safe, respectful, and supportive school.</li> <li>3.2 Increase parent's perception that their student attends a supportive and safe school.</li> </ul> | <ul> <li>3.A Decrease number of discretionary removals and/or emergency placements in RP schools by 1/3.</li> <li>3.B Achieve average proportion of 90% of students agreeing with each of the following items on the SCS in RP schools: <ul> <li>feeling safe in their school</li> <li>being easy to talk about their problems with adults in their school</li> <li>students at their school follow school rules</li> <li>students at their school treat teachers with respect</li> <li>their classmates behave the way their teachers want them to</li> <li>adults at their school listen to student ideas or opinions</li> </ul> </li> <li>3.C Achieve average proportion of 90% parents indicating agreement with each of the following items on the APS in RP schools: <ul> <li>attends school in a safe learning environment</li> <li>likes going to school</li> <li>is treated with respect by other students</li> </ul> </li> </ul> |
| <b>4:</b> Improve teacher<br>attitudes and<br>perceptions of student<br>misbehavior and<br>working conditions as a<br>result of RP<br>implementation. | <b>4.1</b> : Increase teachers' perception of their school as a supportive and positive environment for them, as well as their students.   | <ul> <li>3.A Achieve average proportion of 90% of teachers agreeing with the following items on the TELL:</li> <li>school staff clearly understand policies and procedures about student conduct</li> <li>the school's discipline practices promote SEL (e.g. developmentally appropriate consequences, restorative justice, etc.)</li> <li>overall, the school is a good place to work and learn</li> <li>all campus staff interactions with one another model social and emotional competence</li> <li>their principal models social and emotional competence in how s/he deals with student and faculty on an everyday basis</li> </ul>   |

APS = AISD Parent Survey.

Project Team: The project team involves RP experts, including Dr. Marilyn Armour, from

the University of Texas at Austin's Institute for Restorative Justice and Restorative Dialogue

(IRJRD), who have developed the school-based RP model. With Dr. David Osher as Senior

Technical Advisor, the American Institutes for Research (AIR) will conduct a Fidelity of

Implementation (FOI) evaluation and quasi-experimental design (QED) to test the effectiveness of the RP intervention. A part-time staff person from AISD's Department of Research and Evaluation (DRE) will support external evaluators with data collection requests, including student and teacher surveys and State of Texas Assessments of Academic Readiness (STAAR) results. AIR, in partnership with DRE will document and distribute interim and summative results to drive programmatic improvements.

<u>Components</u> – **UT IRJRD RP Model:** The central component of the IRJRD RP model is a campus-level RP Associate, who will contextualize the principles of RP at each campus. A district-level RP Coordinator and campus-level Associates (7) will collaborate with existing support teams, including SEL facilitators (campus) and specialists (district), Child Study Teams (CSTs)<sup>1</sup>, and long-term in-school suspension class teachers to form campus RP leadership response teams (LRTs). Along with campus administrators, these five to seven-member LRTs will adapt the RP model to the culture of the campus and guide RP implementation throughout the project. Each MS campus will have an RP Associate, and two ES will each share one.

**Training:** IRJRD provides didactic and experiential training for RP staff, administrators and LRTs. Trainings will vary depending on a person's role. District-level staff, including the RP Coordinator and SEL specialists and campus-level RP Associates will attend an initial five-day intensive training. Select administrators, counselors, and CST members will attend a two-day, grade-level-specific training that will provide the tools to implement RP at the Tier 2 and 3 levels. These district and campus teams will then collaborate to deliver Tier 1, campus-specific

<sup>&</sup>lt;sup>1</sup> A key component of AISD's multi-tiered system of support (CSS), CSTs serve as a campus-based problem-solving team that meets regularly to identify, intervene and monitor the progress of students with academic, behavioral, attendance or speech/language needs at Tiers 2 and 3. The CST is composed of educators and specialized instructional staff, including permanent staff members, with other staff or adults invited to participate as appropriate and based on the student's needs. Team members have defined roles and responsibilities, and the team is monitored for effectiveness by the school's administration or leadership team.

training over the project period (phased in by grade level) that includes identifying and addressing the root causes of disparities in exclusionary discipline at their campus, while also integrating and aligning RP within the district-wide SEL and MTSS framework. All training will include culturally-responsive pedagogy, acknowledging that teachers enter classrooms with a particular lens, viewing the world through personal background, biases, values and beliefs. Professional development (PD) follow-up surveys will provide feedback about the quality and relevance of training teachers receive.

Implementing RP may require a philosophical shift for some AISD educators. Therefore, intensive, initial training for administrators, support staff and then teachers will be reinforced through ongoing PD and coaching both individually and in groups (through campus-level professional learning communities, cross-participating campus events, etc.). AISD-specific Tier 1 trainings led by campus and district leadership will not only ensure longer-term sustainability of the project but will also mitigate the risk associated with inconsistent staff buy-in.

Trainings will also be made available at least once per semester for parents, in partnership with Campus Advisory Councils and/or Parent Teacher Associations, as well as for in- and outof-school time service providers, including the Austin Voices for Education and Youth, Boys and Girls Club of the Austin Area and Communities in Schools of Central Texas (Appendix D: letters of support from these organizations).

**Existing SEL/MTSS Supports:** *CST and eCST:* AISD was recently highlighted in the Council of State Government's *School Discipline Consensus Report* as an exemplar for clearly defining the roles and responsibilities of the CST as a whole and of individual members to help ensure that students' needs are fully identified and addressed appropriately, and that students and their families are engaged in the process (Morgan, et al, 2014). The same report highlighted

AISD's web-based electronic CST (eCST) as an exemplary strategy for coordinating data collection efforts, specifically the dashboard's ability to link micro and macro student data and to preserve detailed student-specific intervention information over time. Campus RP Associates will leverage the eCST to document their activities, the percentage of time per activity, etc. *SEL Specialists:* Sixteen district-level SEL specialists are assigned to a number of schools and provide classroom coaching, support and guidance as schools work to integrate SEL into their culture and daily practice. SEL specialists will attend the five-day intensive RP training with the RP staff and serve on campus-level LRTs as needed. Trained SEL specialists will help integrate proposed project and enable sustainability beyond the grant period.

School Selection: Four high-need MS, including Garcia Young Men's Leadership Academy (YMLA), Dobie, Mendez and Burnet Middle Schools, will participate in the RP intervention. The project team worked with district and campus administrators to select schools according to a variety of criteria: disproportionality in disciplinary referrals and removals, readiness for implementation as measured by principal buy-in and SEL implementation levels, poverty levels and percentages of students of color. Similar criteria will be utilized to select six of the feeder ES during the planning phase of the grant.

As part of the proposal development process, we sought input from the principals of the four MS. Kathy Ryan, Principal of Mendez MS shared her excitement for the project, particularly the opportunity for staff and students to collaborate across campuses. All four principals agreed that RP will be beneficial on their campuses, and their request to be part of the hiring process for the RP Associate has been reflected in the management plan below, ensuring this hire reflects the unique needs of each campus.

<u>Procedures</u>: As shown in Figure 2, administrators, staff and partners from the 10 participating campuses will be phased into the training and implementation of RP, beginning with third through fifth grade plus sixth grade staff in Y1. By the end of the grant period, more than 580 AISD ES and MS teachers, 30 administrators and 15 service providers will be trained in RP.

IRJRD, as the project's training experts, will conduct trainings in Y1-3. By Y4, RP Associates, RP champion teachers (i.e., teachers who implement RP in their classrooms

| lanning Phase<br>anuary 2018 - June 201   | 8   |  |   |  |   |
|---|---|--|---|--|---|
| <ul> <li>Finalize elementary<br/>schools for<br/>participation</li> <li>Provide training for<br/>district and campus<br/>restorative practice<br/>coordinators</li> <li>Collect baseline<br/>campus and student<br/>level outcome<br/>measures</li> </ul> | Implementation Year 1<br>3rd-5th and 6th<br>QED begins at 4 MS<br>and 6 ES<br>• Provide training for ES<br>administrators & LRTs<br>• Provide training for<br>3rd-5th and 6th grade<br>teachers<br>• Begin ongoing<br>monitoring of campus<br>and student level<br>outcomes | (SY 2018-19):<br>Implementation Year 2<br>Add 7th grade<br>QED continues<br>•Provide training for<br>7th grade teachers at<br>participating middle<br>schools, new<br>teachers, new LRTs<br>•Continue ongoing<br>monitoring of campus<br>and student level<br>outcomes | (SY 2019-20):<br>Implementation Year 3 (<br>Add 8th grade (full imple<br>QED continues<br>•Provide training for 8th<br>grade teachers at<br>participating middle<br>schools + new teachers<br>•Continue ongoing<br>monitoring of campus<br>and student level<br>outcomes<br>•Allow other schools to<br>opt in to the<br>restorative practice<br>program | SY 2020-21):<br>ementation)<br>Implementation Yea<br>Full implementation<br>•Analyze program<br>effects at grades 3-<br>8<br>•Analyze results for<br>QED<br>•Demonstration<br>classrooms | ar 4 (SY 2021-22):<br>Dissemination &<br>Sustainability Phase (July<br>2022- Dec 2022)<br>•Yearend review<br>•Documentation and<br>dissemination of<br>lessons learned<br>•Institutionalization<br>activities |

with high fidelity and become proponents of the approach), and students will facilitate trainings and other ongoing PD. Students will also be engaged in other ways, including near-peer modeling of RP with MS students planning and implementing circles at ES in Y3-5.

**Management Plan:** Utilizing existing organizational and operational structures, the goals and objectives established can be achieved in the five-year grant timeline with efficacy, efficiency and sustainability. AISD, serving as fiscal agent, will house the RP program in the Department of SEL and MTSS, with the district's Coordinator of Cultural Proficiency, Inclusiveness and Restorative Practices, Angela Ward, overseeing the Project Coordinator. With over 20 years of educational and management experience, Ward will dedicate 25% of her time in Y1, 15% in Y2, and 10% in Y3-5 as part of the district match. AISD commits facilities, personnel, resources and active participation to ensure the success of the intervention. Table 2 illustrates the management plan to achieve the objectives of the project and includes clearly-defined responsibilities, timelines and milestones. Each year, the EIR team will review and update tasks, timelines and milestones for the next year based on educator development, student progress and campus climate changes. AISD anticipates a start date of January 1, 2018, using the first several months to finalize evaluation instruments, hire key staff, begin

| Table 2: Milestones, Major Activities, Key Responsibilities                |           |             |             |             |             |                  |
|--|-----------|-------------|-------------|-------------|-------------|------------------|
|  |           |             |             |             |             | Dissemination    |
|  | Planning  |             |             |             |             | & Sustainability |
|  | Phase     | Impl Year 1 | Impl Year 2 | Impl Year 3 | Impl Year 4 | Phase            |
|  | Jan 2018- | SX 2018 10  | 53/2010 20  | 537 2020 21 | 532 2021 22 | July 2022 - Dec  |
| Project Management   | June 2018 | SY 2018-19  | SY 2019-20  | SY 2020-21  | SY 2021-22  | 2022             |
| Director of SEL/MTSS and Coordinator for Cultural Proficiency and          | Ian       | 1           |             |             |             |                  |
| Inclusiveness him district level PP Coordinator                            | Jan       |             |             |             |             |                  |
| District PP Coordinator finalizes partnership legal documentation          | Feb Apr   |             |             |             |             |                  |
| (MOUs DSA etc.) and gets Board approval where necessary                    | reo-Api   |             |             |             |             |                  |
| District Coordinator in partnership with SFI Director Coordinator for      | Feb-June  | 1           |             |             |             |                  |
| Cultural Proficiency and Inclusiveness and campus principals hire          | r co vune |             |             |             |             |                  |
| campus-level RP Associates   |           |             |             |             |             |                  |
| DRE AIR. Director of SEL and District RP Coordinator develop               | Mar-May   |             |             |             |             |                  |
| benchmarks and detailed indicators of success to ensure that all           |           |             |             |             |             |                  |
| components of the project are moving forward.                              |           |             |             |             |             |                  |
| Monthly project team meetings with RP Coordinators, DRE/AIR.               |           | Monthly     | Monthly     | Monthly     | Monthly     |                  |
| IRJRD (only in Y1-2)   |           |             |             |             |             |                  |
| Quarterly meetings with district and school leadership                     |           | Quarterly   | Quarterly   | Quarterly   | Quarterly   | Quarterly        |
| Coordinator submits year-end eval. report. Subsequent year                 |           | May         | May         | May         | May         |                  |
| modifications planned and timeline, benchmarks and indicators              |           |             | -           | -           | -           |                  |
| revised, in partnership with AIR, DRE, IRJRD (only in Y1-2)                |           |             |             |             |             |                  |
| Evaluation   |           |             |             |             |             |                  |
| AIR confirms evaluation design, develops FOI instruments in                | Jan-Aug   |             |             |             |             |                  |
| collaboration with IRJRD, and prepares for QED (inc. control schools)      |           |             |             |             |             |                  |
| AIR works with DRE to compile and analyze baseline data                    |           | July-Aug    | July-Aug    | July-Aug    | July-Aug    |                  |
| AIR conducts FOI and analyzes FOI measures, providing feedback to          |           | Ongoing     | Ongoing     | Ongoing     | Ongoing     |                  |
| project team re: levels of fidelity (annual reports). Revisions to project |           |             |             |             |             |                  |
| design made as necessary.  |           |             |             |             |             |                  |
| AIR conducts QED, analyzes results of matched comparison group             |           | Ongoing     | Ongoing     | Ongoing     | Ongoing     |                  |
| and participating students, providing feedback to project team and         |           |             |             |             |             |                  |
| making revisions to project design   |           |             |             |             |             |                  |
| Professional Development   | 1         | •           | 1           | -           | I.          | 1                |
| RP Coordinator, RP Associates and SEL specialists attend 5-day             | Aug       |             |             |             |             |                  |
| intensive RP training provided by IRJRD                                    |           |             |             |             |             |                  |
| Administrators from participating campuses attend IRJRD training           |           | Aug-Jan     |             |             |             |                  |
| Leadership Response Teams (LRTs) attend IRJRD training                     |           | Aug-Jan     | Aug-Jan     |             |             |                  |
| Staff and service providers attend training, phased in by grade level,     |           | Aug-Jan     | Aug-Jan     | Aug-Jan     | Aug-Jan     |                  |
| and conducted by IRJRD in Y1-3   |           |             |             |             |             |                  |
| Weekly consultation between IRJRD and District RP Coordinator              |           | Weekly      | Weekly      | Weekly      |             |                  |
| Monthly consultation with LRTs (by IRJRD in Y1-2)                          |           | Monthly     | Monthly     | Monthly     | Monthly     |                  |
| Replicability and Dissemination  |           |             |             | -           |             |                  |
| AIR publishes final, summative report that summarize lessons learned       |           |             |             |             |             | Aug-Dec          |
| from FOI and QED   |           |             |             |             |             |                  |
| RP Coordinator & Associates adapt IRJRD teachers' manual                   |           |             |             | July-Aug    | July-Aug    |                  |
| Project team publishes manual of operating procedures and posts on         |           |             |             |             |             | Aug-Dec          |
| respective websites, etc.  |           |             |             |             |             |                  |
| District Coordinator identifies 2 demonstration classrooms and/or          |           |             |             |             | Jan-July    | Aug-Dec          |
| schools. Video and site visits   |           | Tec 1- :    | Ter 1-      | Tec 1-      | Tag 1       |                  |
| KP Coordinator, Associates and SEL specialists create exemplar             |           | July        | July        | July        | July        |                  |
| ressons integrating KP into other content areas and/or explicit RP/SEL     |           | <u> </u>    |             |             |             |                  |
| Annual cross-campus summit to facilitate learning across campuses.         |           | August      | August      | August      | August      |                  |
| AIR and AISD share results of FOI and QED publicly and broadly via         |           |             |             |             |             | Aug-Dec          |
| conterence presentations, webinars, social media                           | 1         | 1           | 1           | 1           | 1           | 1                |

professional development, and plan for the start of project activities in SY 2018-19.

# Feedback and Continuous Improvement: The evaluation design will include

comprehensive FOI measures to understand variations in how RP works in practice, collect and evaluate data to assess progress against interim and longer-term goals, make mid-course corrections, interpret the efficacy of the intervention, and identify features and conditions necessary for sustainability and effective replication. Measures include focus groups, interviews, checklists, classroom observations and student perceptions of RP implementation. Table 3

outlines strategies to ensure active communication, accountability, and continuous improvement:

|                | Who  | Responsibilities  |
|----------------|--|---|
| Project Team   | Led by district-level RP Coordinator, and includes: (1)      | Articulate common vision for the project, define partners' roles and  |
| Meetings       | RP Associates; (2) Researchers – AIR (quarterly in Y3-       | responsibilities, monitor implementation, respond to challenges,      |
| (Monthly)      | 5) & DRE; IRJRD (in Y1 & 2); (3) Other district staff,       | manage financial and other resources, support data collection and     |
|                | as needed: Finance Department, Coordinator of Cultural       | analyses, and promote sustainability in each school and across the    |
|                | Proficiency and Inclusiveness, SEL/MTSS staff                | district. Review project progress toward milestones and goals at each |
|                |  | campus and identify and problem-solve challenges.                     |
| Campus-based   | Led by campus-level RP Associate and includes: (1)           | Manage project activities, provide all requested data, and serve as   |
| LRT Meetings   | LRT members – i.e. principal or assistant principal,         | key point of contact for RP at each implementation school. Discuss    |
| (Monthly)      | teachers, CST members, school resource officers              | action plans, accomplishments and challenges, coordinate onsite       |
|                | (SROs), counselors, etc. (2) IRJRD (in Y1 and 2) (3)         | observations and technical assistance visits.                         |
|                | May also include: District-level RP Coordinator,             |   |
|                | Coordinator of Cultural Proficiency and Inclusiveness,       |   |
|                | service provider partners                                    |   |
| Expert         | District-level RP Coordinator and IRJRD                      | Check in regarding progress on RP implementation and troubleshoot     |
| Consultation   | May also include: District-level RP Coordinator,             | obstacles, including a review of LRT activities, campus-specific      |
| (Weekly)       | Coordinator of Cultural Proficiency and Inclusiveness        | concerns and fidelity of implementation checklists.                   |
| District and   | District-level RP Coordinator will meet with district (i.e.  | Review progress toward major milestones, assess any areas that        |
| School         | Associate Superintendents, Chief Officer of Teaching         | require modifications, and if necessary, develop an action plan for   |
| Leadership     | and Learning) and school leadership                          | modification. This meeting will include at least one check-in to      |
| Check Ins      |  | review student and campus data to assess changes in behavior.         |
| (Quarterly)    |  |   |
| Implementation | District-level RP Coordinator & RP Associates in             | Gather from administrators, staff, students, including periodic focus |
| Feedback       | partnership with AIR and DRE, as needed                      | groups regarding the perception of RP's value and impact              |
| (Ongoing)      |  |   |
| Annual Summit  | (1) District-level RP Coordinator, (2) Campus-level          | Offer annually for campus staff across sites to review the previous   |
|                | Associates, (3) School staff, (4) Students, (5) Parents, (6) | academic year's program, share successes and challenges, receive      |
|                | Community/Service Providers                                  | mentorship from other successful implementation campuses, review      |
|                |  | data, prepare for integration of any program enhancements, and        |
|                |  | prioritize areas of improvement for the following school year.        |

Table 3: Project Strategies and Responsibilities

The logic model and drafted objectives will be used to guide planning, implementation,

communication and evaluation to ensure results-based performance. Depicting the logical

relationship between proposed resources, activities, outputs and outcomes, these tools will offer

timely and authentic feedback and information, charting actual progress versus targets, so the

evaluator and stakeholders can make informed decisions related to program delivery for continuous improvement.

## **Broad Dissemination for Further Development and Replication**

AISD's proposed project will draw upon a range of dissemination mechanisms and partnership strategies to maximize the impact of the project, contributing to the knowledge base of practitioners and policymakers about which practices are effective, for which types of students and in what contexts. Project milestones and findings will be shared broadly over the course of the project period, with the final six months of the grant period being devoted exclusively to dissemination and sustainability activities.

*IRJRD*: IRJRD will assist in disseminating project findings by publishing in journals, including social work journals and that of the European Forum collaboration between all European countries around RP in schools. IRJRD will also integrate lessons learned into the extensive training and consultation they currently do with schools and districts throughout the state. The project will leverage Dr. Armour's professional networks, including her position as secretary for the National Association of Community and Restorative Justice, which serves as the home base for RP in education and has a website where we will disseminate findings.
 *AIR*: One of the largest education and social science research organizations in the world, AIR will carry out the independent evaluation of the project, producing reports that are useful to both practitioners (implementation study and manual) and researchers (QED). These reports will allow for larger replication of RP nationally by illuminating the lessons learned from implementing the IRJRD model, including adaptations for ES v. MS, whether the professional development model utilized was effective and why, and the extent to which a campus-based staff person is integral to success.

17

3) *AISD*: Well-versed in measurement and research methods, including psychometrics, statistics, study design, logic modeling and survey design, the staff of professional researchers and evaluators of AISD's DRE will present project findings at professional conferences such as the American Educational Research Association (AERA) and American Evaluation Association (AEA). Staff will also share lessons learned and explore opportunities for replication via our participation in CASEL's Collaborating Districts Initiative, including through CASEL's professional learning communities in which district superintendents and staff meet regularly to exchange best practices. As a nationally-trusted source for SEL best-practices and current research, CASEL's newsletters and academic publications regularly reach its broad network of contacts in federal and state education agencies, school districts, human service organizations and academic institutions. (Appendix D: letter of support from CASEL.) Project staff will also identify at least two demonstration classrooms and/or schools, and facilitate site visits for those within and outside AISD, in collaboration with the SEL Department's model schools initiative.

### **Project Evaluation**

The proposed evaluation involves two phases: (1) a formative evaluation focused on measuring FOI and providing timely feedback to further program development and implementation; and (2) a summative QED of the program's efficacy using propensity score matching (PSM) to identify an appropriate comparison group of teachers and students. The evaluation is guided by the following research questions and aligns with the project goals listed in Table 1 above:

|                                     | Research Questions  | Project Goal |
|-------------------------------------|---|--------------|
|                                     | To what extent was the RP intervention implemented with fidelity in treatment classrooms and schools over time? |              |
| Fidelity of Implementation<br>(FOI) | How do school factors related to the implementation fidelity differ across RP and comparison schools over time? | Goal 1       |
|                                     | Is there significant variation in implementation fidelity across RP schools and teachers over time?             |              |

| Impact  | Student<br>(Confirmatory) | How does the RP program impact students' academic (STAAR scores), and social-behavioral<br>(e.g., social competence, disciplinary referrals) outcomes relative to comparison students in<br>Grades 4-8?<br>What is the impact of RP on students' academic, and social-behavioral outcomes during the<br>transition into middle school?<br>What is the impact of RP on academic and social-behavioral student outcomes over time?   | Goal 2, 3    |
|---|---------------------------|--|--------------|
|   | Teacher<br>(Exploratory)  | How does the implementation of RP impact teachers' instructional quality, classroom climate<br>and disciplinary referrals?<br>What is the impact of RP implementation on teachers' attitudes about their teaching<br>experience (e.g., school climate, and job satisfaction) and teacher retention rates?<br>What is the impact of RP on teachers' practices and social-behavior outcomes over time?   | Goal 4       |
| Subgroup Impacts  |                           | For which subgroups and under which conditions does the program have its greatest impact?  | Goal 2, 3    |
|   |                           | <ul> <li>How are the effects of RP moderated or mediated by:</li> <li>Student factors (i.e., grade, gender, race/ethnicity, free or reduced-price lunch status,<br/>English language learner (ELL) status, and academic performance at baseline)?</li> <li>School factors (i.e., size, percentage ELL, percentage low income, parent perception of<br/>school climate, and level of implementation)?</li> <li>Teacher factors (i.e., teaching experience, grade, gender, and race/ethnicity)?</li> </ul> | Goal 2, 3, 4 |
| Mediator Impacts         Is there a significant relation outcomes (i.e, student action) |                           | Is there a significant relationship among teacher (i.e, fidelity of implementation) and student outcomes (i.e, student academic achievement, and SEL skills)?  | Goal 2, 4    |

Impact evaluation: The impact evaluation will occur during Implementation Years 1-4 and will use PSM to match students within RP schools to students in similar, non-RP schools. The use of a PSM design will allow AIR to compare students across multiple grade levels (third through eighth grade) in three cohorts (Cohort 1 in 2018-19; Cohort 2 in 2019-20; and Cohort 3 in 2020-21. See Table 1 in Appendix G)<sup>2</sup>. Students in each cohort will be matched at baseline on multiple academic and social-behavioral outcomes such as, performance on STAAR assessments (reading and mathematics), social-behavioral indicators (social competence, attendance, disciplinary referrals), and key demographic indicators. In addition, PSM will also be used to match teachers in RP schools to teachers in similar non-RP schools. Teachers will be matched on multiple characteristics (i.e., teaching experience, gender, grade level) and social-behavioral outcomes (i.e., classroom climate and job satisfaction). PSM is a nonparametric approach that

 $<sup>^{2}</sup>$  Although scientifically preferable, random assignment is not always practical or feasible, as in this case, for example, a preexisting feeder pattern for students that determines which middle school they will attend or program requirements limiting the number of schools in which an intervention can be effectively implemented and schools to be randomized. Propensity score matching attenuates some of the bias associated with nonrandom assignment, allowing researchers to more closely estimate the causal effect of interest (the difference between students attending RP schools versus those students not attending RP schools).

helps reduce potential selection bias by matching treated and control participants across a spectrum of pretreatment and exogenous characteristics that could theoretically confound the impacts of the treatment. PSM provides relatively unbiased comparisons of differences in outcomes across the two groups. This methodology will enable AIR to establish equivalence of the analytic sample on baseline measures for academic and non-social-behavioral outcomes for students and meet What Works Clearinghouse (WWC) standards with reservations.

In Years 3 and 4, AIR will follow each student cohort across grade levels (and schools) to determine if the RP intervention has longitudinal impacts on students' academic and social-behavioral outcomes at the student and school level. Students will be tracked, along with their matched comparison group, on targeted academic and social-behavioral outcomes.<sup>3</sup> In addition, the transition of students will be tracked from ES to MS. Due to school feeder patterns, four groups of students will be created: RP to RP, RP to non-RP, non-RP to RP, and non-RP to non-RP schools.

AIR will also follow teachers across the study to determine if the RP intervention has longitudinal impacts on their classroom practices and non-cognitive outcomes. In addition, teacher's fidelity of implementation will be measured each year of the study and tracked longitudinally to examine if teachers improve, maintain, or decrease their level of fidelity. Finally, focus groups with teachers and principals will be conducted throughout the study to not only help address challenges that should be addressed as the project scales up, but to also identify best practices to be used in the development of a manual of operating procedures to be used by other school districts wishing to implement a similar intervention.

## **Sampling Plan**

<sup>&</sup>lt;sup>3</sup> Table 1 provides key benchmarks linked to our project goals, objectives and outcomes.

Students enrolled in participating MS (N = 4) and ES (N = 6) schools will be matched across the district with students enrolled in similar non-implementing ES and MS. Based on AISD data, AIR anticipates that there will be at least 500 students enrolled in grades three through eight (approximately 50 students each grade level) across the 10 schools implementing RP per year. Teachers will also be matched using the same methodology. Based on AISD archival data, AIR anticipates that there will be at least 400 teachers delivering classroom instruction in grades three through eight (an average of 12 teachers at each ES and 28 at each MS) across the 10 participating schools. Across the district, there will be 90 non-implementing schools (ES = 74and MS = 14) from which to draw matches on key characteristics using the PSM method. Students will be matched on multiple baseline indicators including, but not limited to: grade, gender, ethnicity, free or reduced-price lunch eligibility, STAAR scores and social-behavioral factors. AISD will share student demographics, survey results, and STAAR scores for students enrolled in third through eighth grade across the district, which will serve as the basis for matching (Appendix G: Table 2). Assuming 1,000 students will be matched (N = 500 RP and 500 non-RP students; number to be determined by the most robust PSM) across 20 schools yields a Minimum Detectable Effect Size (MDES) of 0.12 (alpha = 0.05; ICC = 0.05; R2 = 0.55; Appendix G: power analysis). This MDES is sufficient to detect both academic and socialbehavior impacts of RP overall. The MDES for subgroup analyses is 0.17 (50 percent of sample).

Teachers will be matched on multiple indicators including, but not limited to grade taught, teaching experience, gender, race/ethnicity, classroom climate, job satisfaction, and self-efficacy. Assuming 240 teachers will be matched (N = 120 RP and 120 non-RP teachers; number to be determined by the most robust PSM) across 20 schools yields an MDES of .38 (alpha = 0.05; ICC = 0.05; R2 = 0.35; see Appendix G for power analysis). This MDES may not allow us to

detect educationally significant effects in both classroom practice and non-cognitive impacts of RP on teachers. For that reason, our teacher analyses will be considered exploratory.

The longitudinal sample will be students who have remained in the RP condition across the course of the impact study (Fall 2018-Spring 2022). The transition sample is a subset of the longitudinal student sample and will be limited to students who remain within AISD across fifth and sixth grades. AIR anticipates tracking the transition sample across MS conditions (i.e., RP or non-RP schools) as students move from ES to MS.

The longitudinal sample for teachers will focus on ES and MS staff who are delivering classroom instruction in RP schools across the impact study (Fall 2018-22). AISD will be gathering data as part of ongoing district initiatives, and AIR will conduct additional classroom observations to capture the implementation of RP and teacher-student interactions.

### **Measures and Data Collection Schedule**

Table 3 in Appendix G provides an overview of the time points at which outcomes will be collected and the measures used to assess the proximal and distal outcomes of the RP intervention as shown in the logic model. Most data collection will be supported by AISD using district-administered measures currently in place for both students and teachers. AISD will provide data to AIR for analysis. AIR will be responsible for collecting the FOI data.

### **Analysis Plan**

<u>Fidelity of Implementation</u>: During the planning phase and initial year of implementation, AIR will finalize measures of implementation in collaboration with AISD and IRJRD and determine the expectations for thresholds based on measures of dosage and fidelity indicators. For the FOI evaluation, indicators and thresholds of program fidelity will be analyzed using a mixed methods approach, with variation across schools explored based on level of fidelity (i.e., observed and reported by teachers and administrators). AIR will triangulate data sources (classroom observations/checklists, teacher/principal/RP coordinator interviews, focus groups and student/teacher surveys) to assess how well critical components of the intervention were implemented. Exploratory analyses using implementation levels as mediators also will be conducted. During the first year of implementation, AIR will meet with key stakeholders to discuss school-level implementation and will examine data gathered using the FOI data collection. Implementation data will be gathered across the project to inform the development of a manual, which will document the local context for implementation, as well as any adaptations made by administrators, teachers, and students to the RP model. The implementation manual will help support replication of AISD's RP model within and across elementary and middle schools.

<u>Overall Impact</u>: In the proposed PSM evaluation, a key aspect of analyses will be matching students accurately at baseline to establish a comparison group composed of carefully selected students who did not attend RP schools. Table 2 in Appendix G provides information on potential measures for matching students and grade level administration. Once we have established a PSM model, AIR will perform multiple methods for matching students (i.e., one-toone, and nearest neighbor with replacement) and will compare the balance and Average Treatment Effects (ATE) across the matching methodologies to test for robustness of results. Once students have been matched, estimates for differences in gains across the school year for each outcome (academic and social-behavioral outcomes) will be examined. The same process will be utilized when matching RP teachers to non-RP teachers.

AIR will conduct impact analyses within a hierarchical linear modeling (HLM) approach to accommodate the nested nature of the design. The impact of the RP intervention on student outcomes will be estimated using a series of two-level hierarchical linear models (Appendix G),

with students nested within schools and treatment at school level. To determine the potential bias of cohorts, AIR will complete baseline comparisons and adjust for any potential differences within the analyses. Exploratory impacts of RP on teacher outcomes will also be estimated using a series of two-level hierarchical linear models (Appendix G), with teachers nested within schools and treatment at the school level.

Impact by Subgroup: It is possible that particular subgroups of students may benefit more from the RP intervention than other subgroups. An interaction term between the treatment and the student subgroup characteristic will be added to the HLM model for the overall impacts to determine how student characteristics may interact with the program to determine student outcomes. The interaction effects between the treatment condition variables and particular baseline characteristics of students (i.e., grade level, gender, ethnic minority status, and prior year academic achievement), teachers/classrooms (i.e., number of years teaching, fidelity of implementation, and duration of implementation) and schools (i.e., size; school percentage of students identified as economically disadvantaged, school percentage of students identified as ELL, school climate as measured by parent surveys, and school percentage of students identified as special education) will enable us to assess whether the impacts were greater or smaller under particular circumstances. AIR will be guided by a strategy for multiple comparisons' testing in impact evaluation of education interventions (Schochet, 2008) with consideration given to using confirmatory analytic approaches that control familywise error rates for correlated test statistics.

<u>Transition and Longitudinal Analyses</u>: Given the data collection cycle and the unknown longitudinal impact of the program, AIR will conduct exploratory analyses during the summer between school years to determine the program impact on the transition into middle school with students either remaining in RP schools or moving to those without RP in place. These analyses

24

will focus on the number of years students have participated in RP (one, two or three) across the study. Because some students will leave the district across time, approximately 25 percent from fifth to sixth grade during the 2014-15 school year (based on data provided by AISD), the transition and longitudinal analyses will be based upon a subsample of students. Table 3 in Appendix G demonstrates the cohorts that will be tracked across the study.

Power analysis indicates a 0.27 effect size if there are 25 percent or more students in these subgroups. Estimates of the potential effect of RP on student outcomes across the ES to MS transition, as well as longitudinally, will be calculated using a series of three-level HLMs (Appendix G) that account for repeated measures of academic and social-behavior outcomes and estimate the growth of students in the treatment condition compared to students in the comparison group.

Exploratory longitudinal analysis will also be conducted with our teachers on key outcomes (fidelity of implementation, classroom instructional quality and non-cognitive factors). Estimates of the potential impacts of RP on teacher outcomes will be calculated using a series of three-level models (Appendix G).

Exploratory Analyses of Mediators of the Impacts: Exploratory mediator analyses will be specified for select student, school and teacher proximal outcomes to assess the potential impact of RP. AIR will use AISD's logic model to determine proximal variables that should be considered for mediational analyses and will follow the appropriate model to establish mediation where estimated treatment effects and the mediator effect are nonzero and in the expected direction (Preacher, Zyphur, & Zhang, 2010; Heck & Thomas, 2015; Imai, Keele, & Tingley, 2010; Schochet, 2009; Sobel, 2008; Stapleton, 2010).