

Abstract Title Page

Title: Coaching Support, Context, and Fidelity of Implementation in *Responsive Classroom*[®] Schools

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Background / Context:

Research in social and emotional learning interventions confirms the importance of fidelity of implementation in predicting intervention effectiveness (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011). The present mixed-methods study was conducted in the context of the Responsive Classroom Efficacy Study (RCES). This was a randomized controlled trial of the *Responsive Classroom*[®] (RC) approach, a social and emotional learning intervention designed to improve teachers' capacity to create caring and well-organized classroom environments to facilitate learning. The main finding emanating from RCES is that the efficacy of the RC approach hinges upon schools' high fidelity of implementation of the intervention (Rimm-Kaufman et al., 2012). This finding turns attention to examining factors and processes that lead to high versus low levels of fidelity of implementation among schools randomized into the intervention condition.

The present study draws from the Domitrovich et al. (2008) conceptual framework for program implementation. The model illustrates how macro-, school-, and individual-level factors interact with each other, as well as with the quality of the intervention, to support or hinder fidelity of intervention (FOI) (Figure 1). The Domitrovich, et al. model describes a number of avenues through which FOI can be supported, including coaching with teachers (Domitrovich et al., 2008). Within the conceptual framework, program coaches assisting teachers with intervention implementation represents one potential aspect of the support system, as shown in Figure 1.

Fidelity of implementation requires confidence in one's ability to effectively execute a program and the belief in a program's effectiveness (Domitrovich & Greenberg, 2000). Coaching appears to be a logical approach to fostering this sense of self-efficacy and technical competence in teachers. However, although coaches are popularly used in schools to instructionally support teachers, surprisingly little has been written about the nature and effectiveness of the coaching process for supporting teacher fidelity in the implementation of school-wide socioemotional learning programs.

Wheby, Maggin, Partin, and Robertson (2011) state that the "working alliance" between coach and teacher is key for improving implementation fidelity. It not only enhances teacher competence and self-confidence, but Wheby et al. also found the working alliance behaving as a mechanism to boost a program's "social validity," or teacher buy-in to the program. Of the school-level factors, principal buy-in is also listed among the most important. In Wanless, Patton, Rimm-Kaufman, and Deutsch's 2012 article about setting-level influences on the implementation of RC, teachers perceived the principal as the greatest barrier to intervention implementation and the coach as the greatest support. In the course of providing coaching support for FOI, coaches may facilitate positive relationships between teachers and principals. Alternatively, coaches may also face principals or teacher attitudes as obstacles to overcome.

The Consortium on Chicago School Research (CCSR) new teacher coaching support model (Lesnick et al., 2010) places at its center the goal of helping a developing teacher become an autonomous professional. The present study adopts CCSR's elements of context, interaction focus, and the nature of the teacher-coach relationship. We extend CCSR's teacher-coach relationship (2010) to emphasize the importance of Wehby and colleagues' working alliance (2011), and examine not only how the coach and individual teacher interact, but how the coach facilitates working alliances among groups of teachers and between the teachers and principal, as well.

The present study uses coaches' summary descriptions in order to better understand the support system underlying implementation quality. Figure 2 is a graphical depiction of coaching

as part of a support system; it is an adapted cross-section of the central implementation quality disc resting on the support system in Domitrovich et al.'s (2008) framework (Figure 1). Ideally either *strategic focus with strong relational support* or *strategic focus with incidental relational support* are the most favorable coaching types. The strategic element should always be the present. Positive social facilitation between the coach, among the teachers, and with the principal should be woven into coaching. This reduces the likelihood of school-level influences such as lack of principal or lack of teacher buy-in creating barriers to fidelity of implementation. The top portion of Table 1 defines and illustrates examples of how four types of coaching support were provided in facilitating teacher implementation fidelity.

Purpose / Objective / Research Question / Focus of Study:

The present study examines types of coaching support provided to promote implementation of the *RC* socioemotional learning approach in high- and low-fidelity level schools. Specifically, we use coach summaries to assess how coaching support and dosage differ between high- and low- fidelity schools. We also describe school psychological context surrounding decisions about coaching support offered to teachers. The following research questions are posed: RQ1) What types of relational and strategic support do coaches use to assist teachers implementing the Responsive Classroom® approach? and RQ2) How do types of coaching support and dosage differ between the high- and low- fidelity of implementation schools?

Setting:

Six intervention schools were selected from 24 elementary schools engaged in a randomized controlled trial on the *RC* approach in one Mid-Atlantic state.

Population / Participants / Subjects:

Participants in this study were four certified, veteran *RC* coaches training fifth grade teachers who were beginning their first year of *RC*. Using final composite fidelity of implementation index scores for these fifth grade teachers at the end of this initial year of *RC*, this study reviews coach reports of the three highest and three lowest fifth grade teams during the course of their training. Table 3 illustrates school demographic information.

Intervention / Program / Practice:

Following completion of NEFC's coaching certification training, coaches are sent to facilitate *RC* implementation in districts and schools across the nation (Rimm-Kaufman et al., 2012). In the present study, a district coaching coordinator from NEFC, also serving as a *RC* trainer for principals and teachers, managed coaches delivering services to schools. *RC* coaches trained teachers in approach practices via two one-week summer workshops, called RC1 and RC2. RC1 is taken the summer prior to a school's implementation year, and RC2 is taken in the summer following the implementation year. Throughout the year, a coach, or coaches, assigned to each school made three on-site training visitations to facilitate workshops, conduct classroom observations, and engage in individual consultation. Although coaching support and workshops follow proscribed steps, the training structure includes flexibility to adjust to school needs. Adjustments are made based on conversations with principals and teachers, and on coaches' reflections upon implementation progress.

Research Design:

Domitrovich et al. (2008) recommend focusing on fidelity, dosage (units of a support system and intervention), and quality of delivery (in this study, types of coaching) to measure the quality of an intervention and its support system. The present study employed a sequential, mixed methods design (Greene, Caracelli, & Graham, 1989). High- and low-fidelity schools

were categorized and selected using a quantitative, FOI composite measure index score determined at the end of the study year. Following Wanless and colleagues' (2012) assertion that coaches provide reliable accounts of program implementation, this study then analyzed coach post-visit summaries provided during the final year of implementation in these six selected schools. Qualitative data were then analyzed to describe coaching as part of the teachers' support system and school-level influences affecting the coaching process.

Data Collection and Analysis:

Three measures were used to gauge fidelity. The CPOM (Abry, Brewer, Nathanson, Sawyer, & Rimm-Kaufman, 2010) is an FOI measure rated on a three-point Likert scale with higher scores indicating observed items are very characteristic of the *RC* approach. Study team members used the *Classroom Practices Observational Measure* (CPOM) five times across the span of the school year for one hour each. Morning Meeting times were rated using a 16-item version of the measure. A shortened 10-item version of the measure was used during math instruction. Inter-rater reliability had ICCs > .74 and internal $\alpha = .89$. The overall FOI level for each teacher was calculated using the mean of teachers' scores across all of the year's five observations. Individual implementation level means were then aggregated to the school level, providing the level of implementation for the entire school. Also used to determine FOI were two other measures collected at baseline and at the end of the study. The *Classroom Practices Teacher Survey* (CPTS) is a 46-item teacher-report of adherence to *RC* practices, $\alpha = .93$ (Nathanson, Sawyer, & Rimm-Kaufman, 2007a). The *Classroom Practices Frequency Survey* (CPFS) is an 11-item teacher-report of frequency of use of *RC* practices, $\alpha = .89$ (Nathanson, Sawyer, & Rimm-Kaufman, 2007b).

Coaches provided qualitative data in the form of summaries written after each of their three training visits to each school. These Post Visit Summaries (Wanless, 2009) were used for analysis of coaching support, coaching dosage, and individual- and school-level climate. For each visit to the six schools in the study year, coaches returned written reports of their activities and observations. These 18 semi-structured documents ranged from 1318 to 8251 words. Coaches provided specific feedback regarding how administrators, the school climate, teachers, students, and the coach's relationship with teachers were being affected by, and affecting, program implementation. Summaries were coded according to the *four types of coaching support* provided, as previously described (Table 1). By following which coaches filled out each summary per school visit, we were able to track one form of dosage: whether a school was visited by one or multiple coaches during the training year, potentially affecting the teacher-coach working alliance.

In addition to coding the four types of coaching, three coders also identified excerpts for teacher and principal buy-in, with positive and negative valence, as well (Table 1). With pooled kappas > .90 for inter-rater reliability, these excerpts highlighted content supporting the emergence of themes in the high- and low-fidelity schools (Miles & Huberman, 1994). Taking into consideration setting-level factors, the review of summaries provided additional information about coaching and training dosage, as well as indicators of quality of training delivery. Summaries of these findings were compiled into Coaching Characteristics and School Context Profiles charts (Table 6), with a shortened version of analysis compiled on the Coaching and Context Characteristics Profile Pattern Chart (Table 5).

Results and Discussion:

An independent t-test was conducted to validate the distinctness of the high and low fidelity schools based on their fifth grade group level factor scores (Table 2). Findings showed

greater adherence to fidelity in the higher-scoring schools than in the lower-scoring schools, $t(4) = 8.38, p = .001$ at $\alpha = .05$, two-tailed, $d = 5.14$. High-fidelity schools a group level fidelity factor score mean of 1.27 ($SD = .18$) and a low-fidelity schools had a mean of .31 ($SD = .08$).

For research question 1, the types of relational and strategic support by coaches was similar for all schools but tailored to individual school needs (Table 6). Coaches were careful to provide empathy through relational support without sacrificing training focus. Relational support was frequently facilitated through team-building activities, and strategic support always included components of modeling and direct instruction. However, the manner and nature of classroom observations and coaching feedback varied. Coach-teacher working alliances were always civil and polite, but the richness of interactions depended on teacher engagement in training.

For research question 1, examining the amount and types of coaching support excerpts belonging to the high- and low-fidelity schools (Table 4), more relational support appears to occur in the low-fidelity schools while a balance of relational and strategic support appear to be more prevalent in the high-fidelity schools, although neither to a statistically significant extent. High-fidelity schools more often engage in positive relational coaching support interactions, with strategic coaching support focused on school-specific application of *RC* approaches beyond the basic program curriculum (Table 6). Low-fidelity schools appear to engage in a variety of relational coaching support interactions, with strategic coaching support focused on review of basic program curriculum components.

Dosage and quality of coaching were similar for the two groups of schools (Table 6). Both groups had one or two coaches providing training during the study year. All schools received approximately the same amount of training. The exception was School F's prearranged second scheduled visit denied by the principal.

Regarding research question 2, coaching characteristics appeared to have little impact on fidelity of implementation levels. With the exception of school climate, school context characteristics appeared to play a larger role. Schools A, B, D, and F (Table 5) had fidelity of implementation levels corresponding to principal buy-in levels. But although both the principal and teachers at School E were highly invested in *RC*, many other initiatives were simultaneously imposed on the school to help them make AYP. School C also had many programs in operation simultaneously, but with a science and math emphasis co-existing with a foreign-language immersion program. It is possible that best practices already in place in these programs overlapped with *RC* practices, resulting in a high fidelity of implementation index score.

Conclusions:

This research provides insight about coaching and contextual considerations to guide implementation theory and subsequent implementation. The school-level context embracing program implementation may require strong leadership and principal buy-in in order for coaching effects to be seen clearly. The RCT upon which this work was based showed large variability in schools' use of *RC* practices. Next steps involve examining the coaching characteristics and school conditions that contribute to fidelity in a broader sample.

Appendices

Appendix A. References

- Abry, T., Brewer, A., Nathanson, L., Sawyer, B., & Rimm-Kaufman, S. E. (2010). *Classroom Practices Observation Measure (CPOM)*. Unpublished measure, Curry School of Education, University of Virginia, Charlottesville, Virginia, U.S.A
- Charney, R. T. (1992). *Teaching children to care: Management in the Responsive Classroom*. Boston, MA: Northeast Foundation for Children.
- Domitrovich, C. E., & Greenberg, M. T. (2000). The study of implementation: Current findings from effective programs that prevent mental disorders in school-aged children. *Journal of Educational and Psychological Consultation, 11*(2), 193-221.
- Domitrovich, C. E., Bradshaw, C. P., Poduska, J. M., Hoagwood, K., Buckley, J. A., Olin, S., Romanelli, L. H., Leaf, P. L., Greenberg, M. T., & Iaongo, N. S. (2008). Maximizing the implementation quality of evidence-based preventive interventions in schools: A conceptual framework. *Advances in School Mental Health Promotion, 1*(3), 6-28.
- Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development, 82*(1), 405-432.
- Greene, J. C., Caracelli, V. J., Graham, W. F., (1989). Toward a conceptual framework for mixed-method evaluation designs. *Education Evaluation and Policy Analysis, 11*(3), 255-274.
- Lesnick, J., Jiang, J., Spote, S. E., Sartain, L., & Hart, H. (2010). A Study of Chicago New Teacher Induction Coaching in Chicago Public Schools: 2009-2010. *Conducted by the Consortium on Chicago School Research*.
- Miles, M. B., & Huberman, A. M. (1994). *An expanded sourcebook: Qualitative data analysis* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Nathanson, L., Sawyer, B., & Rimm-Kaufman, S.E. (2007a). *Classroom Practices Teacher Survey*. Unpublished measure. University of Virginia.
- Nathanson, L., Sawyer, B., & Rimm-Kaufman, S.E. (2007b). *Classroom Practices Frequency Survey*. Unpublished measure. University of Virginia.
- Northeast Foundation for Children (NEFC) (2010). *Guidelines for the Responsive Classroom*. Greenfield, MA: Northeast Foundation for Children.
- Rimm-Kaufman, S., Larsen, R., Curby, T., Baroody, A., Merritt, E., Abry, T., Ko, M., & Thomas, J. (2012, September). *Efficacy of the Responsive Classroom Approach*:

Results from a three year, longitudinal randomized control trial. Paper presented at the annual fall conference of the Society of Research in Educational Effectiveness.

Wehby, J. H., Maggin, D. M., Moore Partin, T. C., & Robertson, R. (2012). The impact of working alliance, social validity, and teacher burnout on implementation fidelity of the Good Behavior Game. *School Mental Health, 4*(1), 22-33.

Wanless, S. B. (2009). *Responsive Classroom Post Visit Summary Log*. Unpublished Measure, Curry School of Education, University of Virginia, Charlottesville, Virginia, U.S.A.

Wanless, S. B., Patton, C. L., Rimm-Kaufman, S. E., & Deutsch, N. L. (in press). Setting-level influences on implementation of the Responsive Classroom approach. *Prevention Science*.

Appendix B. Tables and Figures

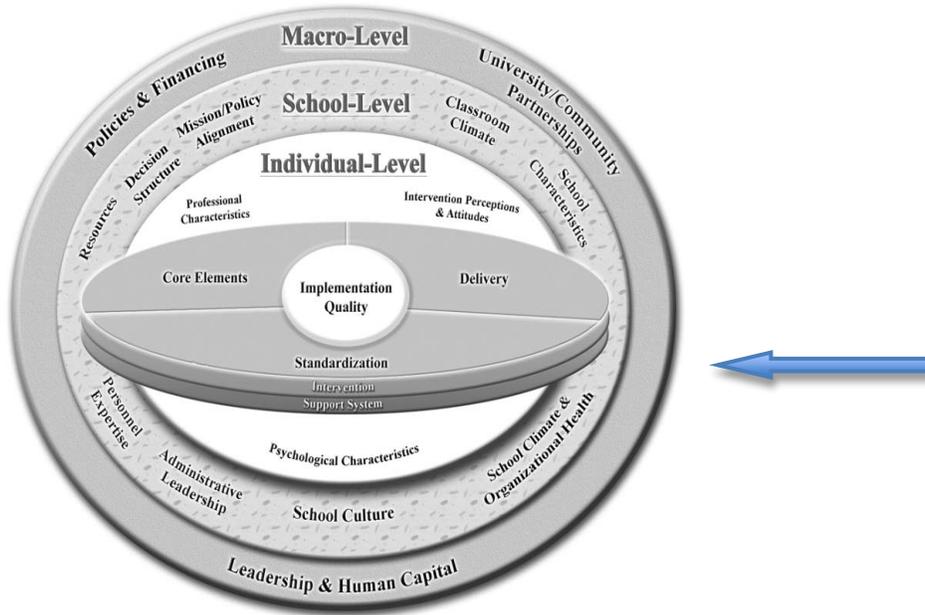


Figure 1. Domitrovich et al.'s 2008 Conceptual Framework: Support System Layer

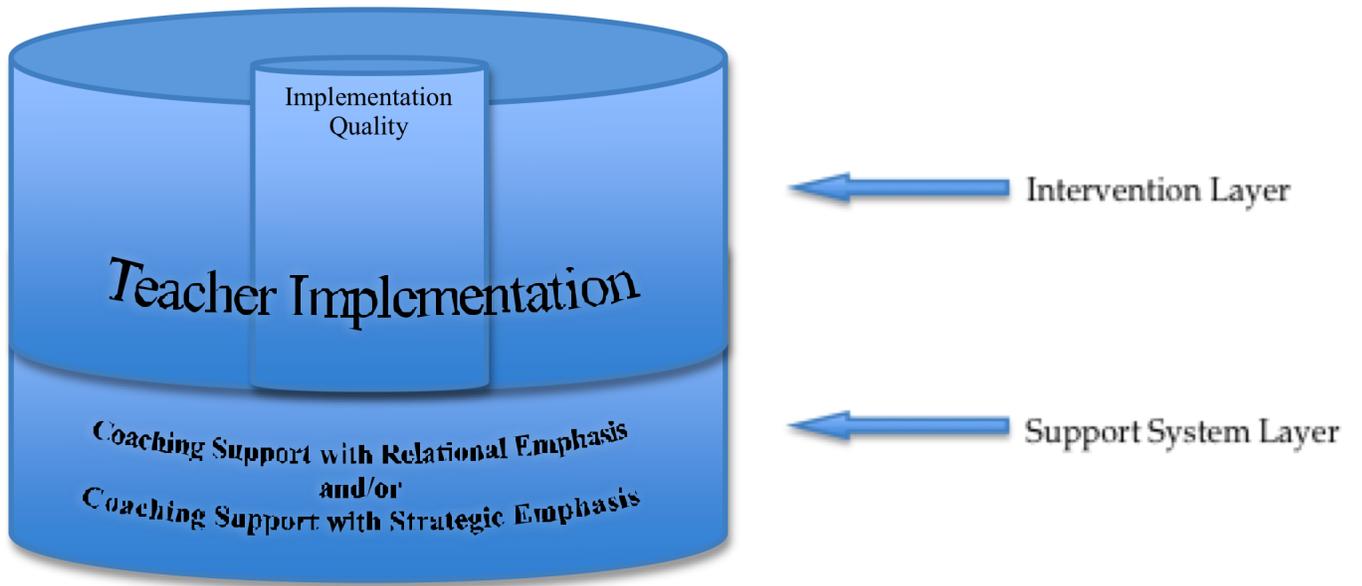


Figure 2. Proposed Coaching Support Model in Domitrovich et al.'s 2008 Support System layer

Table 1

Code and Summary Profile Definitions

Coaching Characteristics

		Definition	Example
Strategic Emphasis in Coaching Support	<i>Strategic Coaching Support Only</i>	Direct technical instruction provided by the coach.	On the final visit, the coach reviewed the <i>RC</i> program and listed the process for problem solving.
	<i>Strategic Coaching Focus with Incidental Relational Support</i>	The relational component is present, but it is incidentally in service to the strategic focus.	On the coach's first visit to stay with the fifth grade for the year, teachers said they felt as if many misconceptions about <i>RC</i> had been cleared up that day through their initial conversations together.
	<i>Relational Coaching Support Only</i>	Strategic support is set-aside in the service of supporting an immediate relational focus.	The coach felt that the teachers continually appreciated the empathy that the coach showed to them.
Relational Emphasis in Coaching Support	<i>Strategic Coaching Focus with Strong Relational Support</i>	Strategic support is integrated with providing relational support.	The coach encourages the teacher-initiated formation of a <i>RC</i> support work group after formal training ends.
	<i>Working Alliance</i>	The quality of the professional relationship between the coach and teachers.	The coach feels that they have a strong relationship with teachers because the teachers are so willing to receive feedback.
	<i>Coaching Dosage</i>	The amount of training provided through coaching services.	The coach provides an hour or two extra in the training day to make up for another coach's absence on a scheduled training day.

Context Characteristics

		Definition	Example
	<i>Principal Buy-in</i>	The level of motivation, consistency, and evidence of accommodation demonstrated by the principal during implementation.	The principal has encouraged the fifth grade teachers to implement new <i>RC</i> practices and sat in on part of the coach training.
	<i>Teacher Buy-in</i>	The level of motivation and engagement demonstrated by teachers during implementation.	The teacher volunteers to do a demo lesson in her classroom and collaborates with the coach on the phone the night before.
	<i>Student Characteristics</i>	Student-related factors tied to implementation.	There is a high student mobility rate at the school affecting the establishment of classroom routines.
	<i>School Climate</i>	The overall impression of the school.	The coach noted that they were warmly welcomed by adults and children in the hallways.
	<i>Psychological Context for Teachers</i>	Any psychological factors that directly relate to teachers feeling safe and willing to take risks, supporting or hindering implementation.	The coach encourages two of the teachers who are interested in participating in the <i>RC</i> teacher-leader certification process.

Table 2
Fidelity Factor Scores

High Fidelity Schools		Fifth Grade Teacher Level Factor Scores	Fifth Grade Group Level Factor Scores
A			
	Mean (SD)	1.39717 (.46)	1.48097
	Range	(.93 - 1.85)	
B			
	Mean (SD)	1.21857 (.16)	1.17961
	Range	(1.04 - 1.36)	
C			
	Mean (SD)	0.8591	1.15749
	Range	(.86 - .86)	
All			
	Mean	1.15828	1.27269
Low Fidelity Schools			
D			
	Mean (SD)	0.44805	0.37691
	Range	(.45 -.45)	
E			
	Mean (SD)	0.41447 (.71)	0.33621
	Range	(-.09 - 1.23)	
F			
	Mean (SD)	0.30238 (.49)	0.21702
	Range	(-.19 - .78)	
All			
	Mean	0.3883	0.31004

Table 3
School Descriptives

	Number of 5th Grade Teachers	Number of 5th Grade Students	Male Students (%)	Female Students (%)	Asian (%)	African American (%)	Hispanic American (%)	Caucasian (%)	Native Hawaiian (%)	Multi-racial (%)	Final Year % FRL	Title I	AYP	Mobility Rate of Students (%)
High Fidelity Schools														
A	3	43	49	51	14	12	72	2	0	0	39	Yes	Made	17.78
B	3	113	42	58	15	3	32	56	0	4	43	No	Made	17.18
C	5	105	49	51	18	4	46	25	0	8	16	Yes	Made	12.82
Low Fidelity Schools														
D	2	33	39	61	15	6	27	48	0	3	28	No	Made	27.63
E	3	48	54	46	10	31	25	23	4	6	63	Yes	Not Made	23.98
F	4	75	39	61	17	0	35	45	0	3	63	No	Made	11.94

Table 4
Relational and Strategic Coaching Emphasis Excerpt Counts

	Relational Emphasis %	Strategic Emphasis %		Relational Emphasis %	Strategic Emphasis %
High Fidelity Schools			Low Fidelity Schools		
A 35 excerpts Coach: 1	66	44	D 44 excerpts Coach: 1	64	36
B 19 excerpts Coaches: 5, 5, 4	47	53	E 82 excerpts Coach: 3	49	51
C 75 excerpts Coach: 4	40	60	F 13 excerpts Coaches: 5, 4	77	23
Mean %	50	50	Mean %	63	37

Table 5
Coaching and Context Characteristics Profile Pattern Chart

	Coaching Characteristics				School Characteristics			
	Relational	Strategic	Working Alliance	Dosage	Principal Buy-in	Teacher Buy-in	Student Characteristics	School Climate
A	HIGH	HIGH	HIGH	MED	HIGH	HIGH	MED	MED
B	MED	MED	LOW	MED	HIGH	MED	HIGH	HIGH
C	LOW	HIGH	LOW	MED	LOW	LOW	HIGH	MED
D	HIGH	MED	MED	MED	LOW	LOW	HIGH	MED
E	HIGH	HIGH	HIGH	MED	HIGH	HIGH	LOW	MED
F	MED	MED	MED	LOW	LOW	MED	MED	MED

Table 6
Coaching and Context Characteristics Profile Pattern Charts – School A – High Fidelity

Relational Emphasis in Coaching Support	Strategic Emphasis in Coaching Support	Working Alliance	Coaching Dosage	Principal Buy-in	Teacher Buy-in	Student Characteristics	School Climate
The coach provided a strong relational emphasis in support. Teachers enjoyed working with the coach. The coach was sensitive to teacher stress levels and adjusting to teacher scheduling needs. Teachers in one activity read and reflected with each other regarding teacher language. The coach ended by reminding them that they are competent in many strategies and that it takes years to perfect RC.	The coach provided strong strategic support. This included helping a teacher model an RC lesson and planning with her over the phone prior to her presentation. Other support included direct instruction for implementing strategies. Teachers were also provided with materials and guided through planning lessons.	The coach/teacher working alliance was strong. The school was served by the same coach all three years of the study. Teachers conveyed that they enjoyed the coach's visits and also felt that the work everyone accomplished was worthwhile. Many teachers wished to keep in touch with the coach after the study's end.	The coach provided the scripted amount and timing of training provided for a school during the year. However, the sole focus was not on the 5th grade teachers. Other teachers from the 3rd and 4th grade levels also attended trainings.	The school had strong principal support. When school morning schedule conflicts interfered with Morning Meeting, the principal saw this while observing the first training and made adjustments in routines to support uninterrupted implementation. The coach also noted evidence of schoolwide RC implementation.	Teacher buy-in was strong. On the second coach visit, one teacher volunteered to do an RC demo lesson for the other teachers. She had planned with the coach previously. Teachers also arranged to voluntarily meet the week after the coach visit to share experiences with RC lessons. RC teacher leaders emerged.	Students in classes were calm, welcoming, and engaged with the lessons when Coach #4 modeled. Their hallway behavior varied; some were calm and some were disruptive.	The school was characterized as a pleasant and welcoming place, but it had the feel of being "a bit harried."

Table 6 (Continued)

Coaching and Context Characteristics Profile Pattern Charts – School B – High Fidelity

Relational Emphasis in Coaching Support	Strategic Emphasis in Coaching Support	Working Alliance	Coaching Dosage	Principal Buy-in	Teacher Buy-in	Student Characteristics	School Climate
The coaches provided average relational support. Although this was a new coach, teachers embraced having a new perspective on RC. On the second visit when teachers did not feel prepared for the AC activity and wanted to discuss MM, the coach eased them into AC and planning a week's worth of lessons together. On the last visit, the coach asked teachers to reflect upon and share successes and struggles with implementation.	The coaches provided standard strategic support. Activities included "make-and-take" workshops, modeling for teachers, and direct instruction for planning.	The coach/teacher working alliance was not strong. The school had a strong relationship with coach #2 over the previous two years. In the first two visits of the final year, coach #5 served the school, and coach #4 had to substitute for #5 with a much belated final visit. Coaches wrote little in their reports, but indicated that teachers amicably participated.	Coaching dosage was unusual. The coach who had served the school in the first two years of the study was replaced in the third year. None of the 5th grade teachers had been to the RC1 summer training. Also in the final year, the new coach was out for the final Feb/March visit. A third coach visited later than intended by the coaching support program, in April, to make up for the missed visit. The final coach invited PE/Music teachers to that training. Training included additional hours.	The school had strong principal support, as evidenced by his expression of concern on the coach's second visit that the 5th grade teachers were behind in their training.	Teacher buy-in was average. Teachers amiably participated in the coaches' activities, but did not do preparatory homework for the coach's second visit.	Students were well-behaved. Coach #5 said that they were welcoming, cooperative, and excited to have another person model lessons in their classrooms.	The school climate was very positive. Coach #5 characterized the school as being quiet, respectful, welcoming, and conducive to learning.

Table 6 (Continued)

Coaching and Context Characteristics Profile Pattern Charts – School C – High Fidelity

Relational Emphasis in Coaching Support	Strategic Emphasis in Coaching Support	Working Alliance	Coaching Dosage	Principal Buy-in	Teacher Buy-in	Student Characteristics	School Climate
The coach provided a low level of relational support to teachers. The coach felt that teachers were stressed from being required to engage in many professional development initiatives. The coach felt the need to redirect teachers' tendencies to "put some of this stress back on the children and families." Although teachers were consistently polite to the coach, they were not interested in engaging in training.	The coach provided a high level of strategic support. This included supporting teachers in goal-setting, providing a common template for planning, and facilitating the investigation of approaches teachers could use in their own classrooms. The coach also provided examples of 5th grade RC lessons. The coach also attempted recruiting teachers to attend the RC training make-up sessions since they chose not to attend summer training.	The coach/teacher working alliance was weak. Although the school was served over all three years by the same coach, a head RC coach for the division, teachers resisted training. Teachers were civil and somewhat warm while continually expressing to the coach that they were not interested in learning about RC. They did not respond to coach emails.	The targeted group of 5th grade teachers chose not to attend the RC summer training prior to the final year. They did attend the mandatory fall make-up workshop. The coach provided the scheduled training services only to the targeted group of 5th grade teachers throughout the year.	Principal buy-in was positive, but weak. Absent a head principal, the school's assistant principal present at the beginning of the year supported RC but struggled to enforce RC implementation in the school. A new principal came to the school later in the year with a generally positive attitude toward RC.	Teachers actively opposed participating in RC training. They expressed several times that they felt as though they had too many other professional obligations.	Students appeared happy. They also managed switching classes and learning two languages throughout the day well.	The school was characterized as being large, diverse, and very active. There were many programs simultaneous in operation, causing the coach to sometimes feel "like too much [was] going on."

Table 6 (Continued)

Coaching and Context Characteristics Profile Pattern Charts – School D – Low Fidelity

Relational Emphasis in Coaching Support	Strategic Emphasis in Coaching Support	Working Alliance	Coaching Dosage	Principal Buy-in	Teacher Buy-in	Student Characteristics	School Climate
The coach had to provide a great deal of relational support at the expense of strategic support. The coach listened to teachers in training complain about their students, administration, other teachers in the school, and other teachers in the training. The quality of training activities were diminished by teacher distractions, such as choosing to leave training to finish report cards.	The coach provided standard training, but the fifth grade teachers' engagement was low. Third and fourth grade teachers, included in the training to support the two fifth grade teachers' development, fully participated in planning. Direct instruction and lesson modeling were included in training. The coach also observed frequently in the fifth grade teachers classrooms and provided feedback. Training in Morning Meeting and Academic Choice was adapted for the non-Math teacher.	The coach developed an average level of working alliance with teachers. Teachers were welcoming and polite to the coach, and the expressed regret at not being able to work with the coach when the year ended. One teacher was initially resentful of being in the workshops, but they had a much more positive attitude by then end of the first day. Primarily positive relations between coach and teachers had limited positive effects on training productivity.	The coach provided the standard amount of training with more emphasis on classroom observations and individual feedback. However, teachers sometimes chose to leave training early.	Principal buy-in was low. The assistant principal was designated as overseeing RC implementation and talking with the coach, but the assistant principal did not have the power to sufficiently support implementation. Schoolwide initiatives ran contrary to RC philosophy. Teachers said they felt that administration wanted them to "do" RC, but they were not willing to sufficiently support teachers. The coach doubted that school RC use would continue after the study ended.	Teacher buy-in was low. The fifth grade teachers, while appreciating planning time during the RC training, produced little. The interactive role play activity in training was abandoned due to lack of teacher cooperation. Teachers left trainings as they saw fit. One teacher's uptake of RC practices was observed as being slow, but present. There was no evidence for creating sustainable structures to keep RC in place after the end of the study.	Students were actively engaged and behaved orderly in lessons. They were warm and welcoming to the coach. The school schedule required students to come in and out of math class and Morning Meeting times, but students transitioned smoothly.	The school climate had an average feel. The coach found the school "pleasant, but not overly warm." Some individuals greeted the coach in the hallway, and some did not. Some individuals working in the office were warm and helpful, and some were not. There was a great deal of activity in the school. Students switched classes.

Table 6 (Continued)

Coaching and Context Characteristics Profile Pattern Charts – School E – Low Fidelity

Relational Emphasis in Coaching Support	Strategic Emphasis in Coaching Support	Working Alliance	Coaching Dosage	Principal Buy-in	Teacher Buy-in	Student Characteristics	School Climate
The coach supplied a high degree of relational support within the bounds of mutually set social norms established on the first training day. The coach explicitly made efforts to facilitate positive relationships among the teachers during training activities, and the coach noticed a strong level of trust and collegiality developing. At the same time, the coach listened to teachers discuss professional stressors related to academic performance improvement.	The coach provided strong strategic support. The coach sometimes assigned pre-reflection activities for teachers in preparation for an upcoming training day activity. Structured feedback was provided after observation visits to teacher classrooms. The coach also engaged in direct instruction, provided RC support materials, and modeled lessons.	The coach-teacher working alliance was strong. The coach tailored training in response to teacher needs, and teachers appreciated the coach's consideration. As one example, a scheduled training day was shifted to accommodate snow day make-up pressures.	Comparatively, the fifth grade teachers received a slightly lower amount of coaching support than other schools with a focus solely on training fifth grade. Third, fourth, and fifth grade teachers usually participated in training together, resulting in the sole focus not being on the fifth grade teachers. Blocks of time were set aside during training days to observe third and fourth grade classrooms. Lesson modeling took place in 5th grade classes, however.	Principal Buy-in was high. The principal collaborated with the coach, was openly supportive of RC to the teachers, and spent time in RC trainings. The principal also encouraged RC book study outside of coach days, and the principal encouraged teachers to lead these supplemental activities.	Teacher buy-in was high. Teachers were often seen practicing RC during coach observation visits, and they were open to feedback in order to improve. Some were participating in a supplemental RC reading group run by a teacher at the school. They appreciated the training activities and especially the time to plan RC lessons.	Students were sometimes behaved and were sometimes appropriately engaged in school activities. Rezoning in the school division, however, created overcrowded conditions and a high level of student mobility due to population characteristics.	The coach was greeted by many teachers and students as they walked through the school. The atmosphere was pleasant, and children's work hung on the walls. However, the school climate was stressful. Many professional development directives were in place to help the school pass AYP and snow days left less academic time.

Table 6 (Continued)

Coaching and Context Characteristics Profile Pattern Charts – School F – Low Fidelity

Relational Emphasis in Coaching Support	Strategic Emphasis in Coaching Support	Working Alliance	Coaching Dosage	Principal Buy-in	Teacher Buy-in	Student Characteristics	School Climate
Coaches provided average relational support to teachers. Coach #5 helped teachers overcome their hesitancy to implement more math with MM. Coach #4 was sensitive to teachers' end-of-year testing concerns, but reinforced their willingness to maintain positive attitudes during training by encouraging reflection upon progress.	Coaches provided the standard level of strategic support. This included scaffolding steps for planning RC lessons and introducing materials to support implementation.	Coach/teacher working alliance was average. The first coach serving the school had also served the school over the previous two years. Another coach who served the school instead on the last visitation day was an RC division-wide training coach who had met some of the teachers previously. The relationship between teachers and both coaches was amicable.	The school received less than the standard amount of training for the year. The first and final coach day visits included the standard amount of training. Due to last-minute principal rescheduling conflicts on the second prearranged coach visit day, the coach was not able to provide scheduled services. There was no makeup day for this visit.	Principal buy-in was low for the school. The principal had originally agreed to a pre-arranged coach training day schedule for the second visit, but the principal did not allow the coach to carry out training upon arrival. The principal was not seen on the last visit.	Teacher buy-in was average. They were warm and willing to participate in the training activities provided by coaches on the first and final visits.	Students behaved appropriately in the hallways and welcomed the coach.	The school appeared calm and welcoming on the first coach's initial visit. The other coach visiting at the end of the school year noticed a focus on testing and end-of-year events.