My Teaching Partner-Secondary: A video-based coaching model

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Abstract

In the *My Teaching Partner (MTP)* program, coaches engage teachers in six to nine coaching cycles across a school year. Guided by the program's theory, coaches help teachers reflect on the emotional, organizational, and instructional features of classrooms. MTP was originally developed for Pre-K and early elementary classrooms (MTP Pre-K), but the current paper focuses on the secondary school version of this program, MTP-Secondary (MTP-S), given the need for coaching models with middle and high school teachers. The paper presents the guiding theory of MTP-S and how it relates to key components of the coaching cycle. We then offer a brief synthesis of research demonstrating its effectiveness in raising achievement, promoting positive peer interactions, and reducing racial disparities in teachers' discipline practices. We provide ideas for future research that would help advance theory on the essential components of effective coaching programs in secondary schools.

My Teaching Partner (MTP) is an intensive, year-long program which consists of a collaborative intervention process that increases teachers' knowledge of and skills related to effective teacher-student interactions through application in their actual classroom (Pianta, Kinzie, Pullen, Justice, Fan & Lloyd, 2003). In the MTP program, coaches are paired with individual teachers over 1 to 2 school years. Coaches aim to improve the quality of teacher-student interactions so as to enhance student engagement, reduce problematic social and behavioral outcomes, and increase student achievement. MTP was originally developed for Pre-K and early elementary classrooms (MTP Pre-K) and has demonstrated effectiveness in improving teacher-student interactions and student outcomes in these early years (e.g., Downer et al., 2012; Hamre, Pianta, Mashburn, & Downer, 2012; Pianta, Mashburn, Downer, Hamre, & Justice, 2008). The secondary version of the program (MTP-S) shares similar intervention procedures and strategies with the MTP Pre-K program. The current

article focuses on MTP-S given the need for coaching models with middle and high school teachers. Although we primarily describe MTP-S, the underlying model of the program also applies to MTP with PreK and elementary school teachers.

Theoretical underpinnings of MTP-S

MTP-S is guided by the Teaching through Interactions framework, which draws on diverse theories that highlight the emotional, organizational, and instructional features of classrooms (Hafen et al., 2015, Hamre et al., 2013).

Emotional support in the classroom

According to attachment theory, students need emotionally supportive relationships that are predictable and consistent (Bowlby, 1968). With the safety and security of emotionally positive and reliable adults, students can take appropriate risks and become more self-reliant. In MTP-S, coaches help teachers reflect on the emotionally-supportive quality of their interactions with their students. Self-determination theory (Connell & Wellborn, 1991) provides further grounding for the MTP-S focus on strengthening teachers' sensitivity to students' socioemotional and developmental needs. The theory posits that students' academic motivation depends on a sense of *relational support,* a sense of *autonomy and competence* within settings, and a need to make clear the *relevance and meaning* of what is being taught (Allen, Hauser, Bell, & O'Connor, 1994; Allen, Kuperminc, Philliber, & Herre, 1994; Allen et al., 2002; Ruzek, Hafen, Allen, Gregory, Mikami, & Pianta, 2016; Ryan & Deci, 2000).

Instructional and organizational support

The Teaching through Interactions framework is also guided by theories about students' executive functioning and cognitive development. Teachers are effective in directing student attention and fostering engagement when they set behavioral expectations, enforce positive classroom norms, and structure dynamic activities (Doyle, 2006; Pianta & Hamre, 2009; Yair, 2000). When teachers appropriately organize classroom routines and lessons, they support the development of their students' self-regulatory and executive functioning skills (Ponitz, Rimm-Kaufman, Brock, & Nathanson, 2009). Thus, the framework emphasizes the organizational and instructional features of classrooms. It also draws on studies of cognitive development. Students are more engaged when they have cognitively challenging tasks (Stodolsky, 1988) and opportunities to solve meaningful problems (Newmann, Wehlage, & Lamborn, 1992). Compared to when simply memorizing discrete, disjointed facts, students learn more when they are asked to demonstrate higher order thinking skills and apply knowledge and procedures to new problems (National Research Council, 2005).

Classroom Assessment Scoring System-Secondary Observational Tool

Practically speaking, MTP-S coaches draw on the diverse theories underlying the Teaching through Interactions framework, which are embedded within the Classroom Assessment Scoring System-Secondary (CLASS-S; Pianta, Hamre, Haynes, Mintz, & LaParo, 2008) observation tool that is at the heart of MTP-S, and that measures teacher-student interactions

in a reliable and valid manner (e.g., Allen et al., 2013; Hafen et al., 2015). The CLASS-S is comprised of classroom behaviors that fall into the 3 domains of Emotional Support, Classroom Organization, and Instructional Support, each of which is made up of a handful of more discrete and concrete dimensions. Coaches focus teachers' attention on each of the CLASS-S dimensions through "coaching cycles" held across the school year (My Teaching Partner Consultancy Manual, 2010). To give readers a sense of how the CLASS-S is operationalized and utilized by coaches in MTP-S, we briefly describe the lower-level constituent dimensions that make up each higher-level domain.

CLASS-S dimensions of the Emotional Support domain

The MTP coaches emphasize the social and emotional nature of teacher-student interactions with three CLASS-S dimensions. Specifically, the coach looks for behaviors fostering *Positive Climate* or the emotional tone of warmth and connection among teachers and students. The coach identifies behaviors showing *Teacher Sensitivity*, or effective responses to the academic and social/emotional needs of students. The coach also looks for moments when the teacher offers students content relevance, and opportunities for leadership and autonomy (*Regard for Adolescent Perspectives*).

CLASS-S dimensions of the Classroom Organization domain

The coach examines teacher behaviors through the lens of the two CLASS-S dimensions related to the organizational features of the classroom. The coach considers how teacher behavior may contribute to the *Negative Climate* as seen in the expression of irritability, frustration, or anger. The coach also addresses *Behavior Management* and *Productivity* which reflect the teacher's management of time to maximize instruction.

CLASS-S dimensions of the Instructional Support domain

Coaches consider how the teacher provides academic supports through four CLASS-S dimensions. With the *Instructional Learning Formats* dimension, the coach considers the teacher's provision of interesting, varied lessons and materials. The *Content Understanding* dimension prompts the coach to examine the depth of lesson content and integration of facts, skills, concepts, and principles. The coach also addresses the degree to which the teacher facilitates higher level thinking skills, problem solving, and metacognition (*Analysis and Inquiry*). With the *Quality of Feedback* dimension, the coach examines how the teacher provides feedback that expands or extends learning and understanding. And, finally, the coach addresses the degree to which there is *Instructional Dialogue* or the teacher's purposeful use of dialogue-structured, questioning and discussion to further students' language development and understanding of content.

Components of the coaching model

The MTP-S coaching program is launched with a workshop introducing teachers to the dimensions and domains of the CLASS-S. Teachers are also given access to a video library in which dimensions of the CLASS-S are exemplified through short segments of video-recorded instruction drawn from real classrooms. Teachers participate in 6 to 9 coaching cycles a year. Each cycle lasts about 2 weeks and is comprised of the following 5 steps

involving a series of back and forth exchanges between the teacher and the coach (Pianta et al., 2008).

1. The teacher video records instruction from his or her focal classroom. Splicing the video, the coach isolates illustrative examples of one or more dimensions of the CLASS-S. The coach submits a "nice work" clip and "consider this" clip, with recorded interactions reflecting a CLASS-S dimension upon which the teacher can improve.

2. The coach sends the clips back to the teacher and describes the observed teacher-student interaction in CLASS-S terms and prompts the teacher to reflect on the clips.

3. The teacher reviews the clips and responds in writing to the prompts.

4. The teacher and the coach discuss the video clips, written prompts, and responses.

5. The coach sends a written summary of the conference that includes an action plan for future improvement.

Across the 6 to 9 cycles, the coach systematically applies each of the CLASS-S dimensions to the teacher's behavior. To make the process more concrete, it is useful to see an example of a prompt a coach might write in response to a teacher-student interaction they observed during the class session the teacher videotaped. Let us assume that the coach is working with a high school Algebra 1 teacher, and the particular interaction the coach wants to highlight involves the teacher's assignment of homework. The coach writes the following "consider this" prompt:

> At the high end of the dimension Regard for Adolescent Perspectives, the teacher provides opportunities for students to make meaningful choices about the nature of their work. In this clip you ask your students whether they would prefer to do a particular group homework assignment on their own time or have time set aside in class to work on it. They decided to work on it together in class. As you view this clip, what did you notice about your students' level of engagement as they made their choice and then engaged in the assignment during classtime? How might you offer students more opportunities to make choices during the course of a lesson?

The teacher receives this prompt and the associated short video clip that shows the particular interaction highlighted by the prompt (here the teacher offering choices to the students who then select to work in class on the assignment). The teacher then writes responses to the two questions asked in this prompt and respond to any questions embedded in the "nice work" prompt. The video clips, the prompts, and teacher's responses are the main ingredients that then guide the coach-teacher conference discussion. During the conference, the coach is able to probe the teacher for further thoughts, examples, or clarifications around her response to the prompts, and jointly, the teacher and coach develop an action plan grounded in one of the CLASS-S dimensions for the teacher to implement new behaviors in the teacher's next video-recorded instructional period. The coach writes up a summary of the conference that includes the agreed upon action plan with explicit links between the teacher's upcoming instruction and a CLASS-S dimension.

When districts consider the use of coaching models for teacher professional development, it is important to closely examine the empirical support for their effectiveness and understand how they have been adapted to fit local needs. As reviewed below, MTP has been closely studied in rigorous research using standardized procedures. Yet, with its dissemination, it has also proven to be adaptable to local needs. For example, in some districts, coaches have substituted the CLASS-S with district-developed instructional frameworks already widely used in their schools. The number of back-and-forth exchanges between coaches and teachers has also been tailored to the specific needs of schools and districts. School leaders can be intimately involved in the planning and support of MTP coaching, although the program itself has not been carried out by school leaders either in prior research or in subsequent implementations. This is largely because MTP is viewed as a *professional development* program and not an *evaluation* program, and the direct involvement of leaders (e.g., principals) could signal an evaluation focus that might limit teachers' willingness to engage fully in the process.

Accumulating empirical evidence supporting the use of MTP-S

The theoretical underpinning of the MTP-S coaching model, The Teaching through Interactions framework, has gained some support through a validity study of CLASS-S (Allen et al., 2013). Allen and colleagues (2013) found that classrooms observed as demonstrating higher emotional and instructional supports, as measured through the CLASS-S, were associated with performance improvements in their students' end-of-year standardized achievement tests. Specifically, gains in observed *Positive Climate*, *Teacher Sensitivity*, and *Regard for Adolescent Perspective*s (the 3 dimensions Emotional Support domain) and *Instructional Learning Formats* and *Analysis and Inquiry*. (2 of the 4 dimensions in the Instructional Support domain) predicted higher academic performance.

The results of two MTP-S randomized controlled trials (RCT) provide additional support for MTP-S and its underlying theory. The initial trial was conducted with 78 middle and high school teachers and over 1,400 of their students (22% of whom were African American students). Based on observational reports, the MTP-S program was found to increase students' behavioral engagement, (Gregory, Allen, Mikami, Hafen, & Pianta, 2014) and improve peer interactions (Mikami, Gregory, Allen, Pianta, & Lun, 2011). Importantly, the intervention also produced substantial gains in measured student achievement which were explained by MTP-S teachers' gains on CLASS-S dimensions (Allen et al., 2011).

Findings from a second RCT of MTP-S replicated and extended the achievement findings in a predominantly high school population from a more urban, socio-demographically diverse school district than the first trial (Allen, Hafen, Gregory, Mikami, & Pianta, 2015). MTP-S produced substantial gains in student achievement across 86 secondary school classrooms involving 1,194 students (Allen et al., 2015). In addition, after one year of coaching, MTP-S teachers had no significant disparities in discipline referral between African American students and their classmates, compared to teachers in the control condition, for whom racial discipline gaps remained (Gregory, Allen, Mikami, Hafen, & Pianta, 2015). A follow-up mediational study showed that increases in the CLASS-S dimension, *Analysis and Inquiry*, explained the effects (Gregory et al., 2016). This suggests that improving the instructional

support in the classroom by providing students with more opportunities for higher level thinking skills and problem-solving (via MTP-S coaching) is a strategy for reducing racial disparities in classroom discipline.

It is also noteworthy that in both RCTs the coaching process was experienced by teachers as acceptable and feasible: 100% of MTP-S teachers said the coaching cycles were "worth the time it took," and over 95% of the teachers agreed that the cycles were "productive" (Gregory et al., 2016; Gregory et al., 2014). This suggests that the 2 week cycles involving multiple steps including video recording instruction, sharing the recording with the coach, reflecting on coach feedback, and communicating with the coach were experienced as a valuable professional development experience.

Future MTP-S research to inform practice

Despite evidence for the effectiveness of MTP-S as an instructional coaching intervention, there remain significant gaps in our understanding of the program. Three particularly fruitful avenues for further investigation include continued research to inform the theoretical underpinnings of the coaching model, its potential for addressing educational disparities, and the degree to which changes in teacher practice are widespread and enduring.

In MTP-S, coaches help teachers strengthen their interactions with students through nine CLASS-S dimensions that address the emotional, organizational, and instructional features of their classrooms. This broad scope is based on the Teaching through Interactions framework which highlights the interlocking nature of these features. Future research could help hone the theory, perhaps resulting in a more streamlined coaching model. Specifically, prior research on the secondary version of CLASS and MTP highlight the role of *emotional* and *instructional* supports as they relate to positive outcomes for students (e.g., Allen et al., 2013; Gregory et al., 2016). For example, mediational analyses in the 2 MTP-S trials found that strengthened *instructional* supports were associated with improved student engagement (Gregory et al., 2014) and reduced discipline referrals (Gregory et al., 2016). A new iteration of MTP-S might be more instructionally focused, with coaches and teachers devoting more time to the instructional CLASS-S dimensions relative to the other dimensions. A future study could then compare the effects of the current MTP-S model with that of an instructionally-focused model of MTP-S. If the revised model resulted in greater behavioral change (e.g., student engagement and discipline), then it would hone the underlying theory of the program and suggest that some emotional, organizational, and instructional features of the classroom are more tightly linked to some types of student outcomes than others.

MTP-S was found to improve students' peer interactions (Mikami et al., 2011), engagement (Gregory et al., 2014), and achievement (Allen et al., 2011; Allen et al., 2015) for students from a range of racial/ethnic groups and socioeconomic statuses. In this way, the program serves many groups through its *promotion* of positive outcomes. Yet, MTP-S was also found to have a *preventative* role by buffering African American students' risk of receiving classroom discipline referrals, while not affecting discipline referral rates for white students (which were already low; Gregory et al., 2016). In this manner, the program has been shown to reduce racial inequality related to behavioral outcomes. Educators will benefit from

continued research on the promotive and preventative nature of MTP-S. Results will help district leaders make informed decisions about adoption of a coaching program that has the potential to improve a particular outcome for a vulnerable group (thereby narrowing a "gap") while also fostering the positive development of students from all groups (thereby "raising the bar" for all).

Teachers receiving MTP-S coaching select, record, and reflect on a single, *focal* classroom for intensive and sustained coaching. The coaching, therefore, targets a single classroom out of the 4 to 6 classrooms in a typical middle or high school teacher's daily schedule. The implication for shifting teaching practices is profound if MTP-S alters teachers' behavior at a fundamental level, increasing the likelihood for sustained change as teachers interact with hundreds of students year after year. We already have hints that such ripple effects might be occurring; our analyses from the post-intervention year in classrooms instructed by the MTP-S teachers showed that infrequent use of discipline referrals with African American students continued with a *completely new classroom of studentsand without coach support* (Gregory et al., 2016). This suggests teachers continued to draw on their developing MTP-S skills once coaching was discontinued. Future research needs to determine to what extent *widespread* effects might be occurring across the instructional day on a range of outcomes including peer relations, engagement, and achievement. Just like dropping a stone in water produces ripple effects, MTP-S-elicited change may generalize to teachers' full schedule of classes. If this is shown to be the case, intervening intensively in one course in a secondary teacher's instructional schedule may be an efficient way to leverage widespread change.

Summary

The classroom is a focus of educational reform efforts, and no aspect of the classroom has come under more scrutiny than teachers and their "effectiveness" at promoting student learning. MTP-S is one of the few instructional coaching programs proven effective at raising student achievement. But beyond its positive effects on achievement, MTP-S also has a record of promoting student engagement and more positive peer interactions as well as reducing racial disparities in teachers' discipline practices. Effects on such a wide array of outcomes may stem from the program's focus on teacher-student interactions, which are not generally viewed as critical ingredients in educational reform efforts, particularly in secondary schools. The evidence from MTP-S suggests the need for a re-examination of traditional policy assumptions about why middle and high school teachers matter for student learning and engagement. Supportive, caring, and interested adults connect with students in ways that abstract content or curriculum cannot, and in so doing, open up new possibilities for reengaging youth in schooling.

Acknowledgments

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