EFFECTS OF COACH-DELIVERED PROMPTING AND PERFORMANCE FEEDBACK ON TEACHER USE OF EVIDENCE-BASED CLASSROOM MANAGEMENT PRACTICES AND STUDENT BEHAVIOR OUTCOMES

by

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DISSERTATION ABSTRACT

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Title: Effects of Coach-delivered Prompting and Performance Feedback on Teacher Use of Evidence-based Classroom Management Practices and Student Behavior Outcomes

Schools across the country are dedicating significant resources to the selection, adoption, and durable implementation of evidence-based practices (EBPs); however, the research-to-practice gap remains a significant challenge facing education today (DuFour & Mattos, 2013). Coaching is one of the implementation variables most consistently cited for improving the high-fidelity adoption of new practices.

This study used two concurrent multiple baseline, single-case designs across participants with counterbalanced intervention phases to examine the effects of coaching on teachers' use of evidence-based, class-wide behavior management practices. Specifically, the study examined the extent to which a functional relation exists between (a) coach-delivered prompting, (b) coach-delivered performance feedback, and (c) the interaction effects of coach-delivered prompting with performance feedback and an increase in teachers' use of evidence-based classroom management practices and a decrease in class-wide disruptive behavior.

Results indicate that coach-delivered prompting and performance feedback is functionally related to an increase in teacher use of evidence-based classroom management practices and a reduction in classroom disruption; however, no additional

effects were observed when prompting and performance feedback were delivered together. Potential contributions of the study are discussed in terms of establishing a more nuanced understanding of the active ingredients of effective coaching to support the selection, training, evaluation, and ongoing support of coaches in K-12 educational settings.

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TABLE OF CONTENTS

Chapter Page

Chapter Page

Chapter Page

Chapter Page

LIST OF FIGURES

Figure Page

LIST OF TABLES

Table Page

CHAPTER I

INTRODUCTION

Statement of Purpose

The purpose of the present study is to examine the effects of coach-delivered prompting and performance feedback on teacher implementation of evidence-based classroom management practices and classroom disruption. An emerging body of research supports the use of coaching as a bridge between initial training and implementation of evidence-based practices (EBPs) in natural settings (e.g., Cantrell & Hughes, 2008; Pas et al., 2015; Reinke, Stormont, Herman, & Newcomer, 2014). The importance of coaches and the coaching process is cited in numerous and disparate literature bases, including business (e.g., Baron, Morin, & Morin, 2011; Kumata, 2002; Utrilla, Torraleja, Nunez-Cacho Utrilla, & Grande Torraleja, 2013), healthcare (e.g., Cassatly, 2010; Rowan, 2008), leadership (e.g., Ely et al., 2010; Fiddy, 2015; Wise & Hammack, 2011), sports psychology (e.g., Miller, Ogilvie, Adams, & Diedrich, 2000; Stebbings, Taylor, Spray, & Ntoumanis, 2012), and project management (e.g., Berg & Karlsen, 2007; Mulec & Roth, 2005). Within the educational research base, coaching has been considered a critical feature of staff development for decades, beginning with the seminal works on peer coaching by Joyce and Showers (1980; 1981; 1982) and supported by Knight's research on instructional coaching (2000; 2004, 2007).

Coaching is considered a key driver to support teachers' implementation of effective classroom practices and interventions. Educational policies such as the Individuals with Disabilities Education Act (IDEA) of 2004 and the Every Student Succeeds Act (ESSA) of 2015 mandate the use of EBPs in all general and special

education settings. Despite federal policy regulations, the failure to implement EBPs in schools is a serious challenge currently facing researchers and practitioners (Coburn & Penuel, 2016; Cook & Cook, 2013; DuFour & Mattos, 2013; Klingner, Boardman, & McMaster, 2013; Weston & Bain, 2015). Known as the *research-to-practice gap*, the difficulty in translating empirically validated interventions and programs into embedded practices within K-12 classrooms has been the focus of numerous research programs and technical assistance centers in the United States. Developing a thorough understanding of the components related to the effective and durable implementation of EBPs is critical to supporting educators and promoting positive outcomes for students.

Coaching is one strategy within the implementation science framework that serves to promote and sustain behavior change in the "beginning stages of implementation and throughout the life of evidence-based practices" (Fixsen, Blase, Naoom, & Duda, 2015, p. 12). While research supports the use of coaching within the implementation framework, little is known about the mechanism(s) by which coaching is effective. Currently, most coaching evaluation is based on a binary measure of delivery (i.e., *did you receive coaching?*) as opposed to the form, quality and competence of coaching received (i.e., *what/how many/how much of the effective elements of coaching were delivered and received?*). This study will experimentally examine two purported functions of high-quality coaching – prompting and performance feedback – and the individual and combined effects of these functions on teacher use of class-wide behavior management practices and classroom disruption.

Literature Review

An abundance of credible research exists documenting effective educational practices (Cook, Tankersley, & Landrum, 2013); yet, translating research findings into practice remains an ongoing challenge in both general and special education settings (Carnine, 1997; Cook & Schirmer, 2006). General and special education policy has adopted scientific evidence as a required basis for selecting appropriate and effective teaching practices (Odom et al., 2005) and important efforts have been made toward identifying empirically supported interventions (Cook, Tankersley, & Landrum, 2009). Despite these advances, implementation of EBPs in the intended settings (i.e., schools, classrooms) remains a significant challenge (Sweigart, Landrum, & Pennington, 2015).

Researchers often refer to this phenomenon as the *research-to-practice gap* or the *implementation gap,* highlighting the challenge in translating research into effective practices (Chaparro, Smolkowski, Baker, Hanson, & Ryan-Jackson, 2012; Chaparro, Jackson, Baker, & Smolkowski, 2012; Cook & Odom, 2013; Gresham, 2009). Even when empirically supported practices are adopted, the lack of durable implementation of EBPs in K-12 classrooms captures the inherent challenge in translating research to practice over time. The research-to-practice gap has highlighted the need for increased focus on the science of implementation to ensure that EBPs are successfully adopted and sustained in schools across the country.

To support the uptake of EBPs in the natural educational context, systemic supports – including targeted professional development, ongoing feedback, collaboration with other educators, and student outcome data measuring implementation effectiveness – are required (Cook, Tankersley, Cook, & Landrum, 2015). There are multiple

implementation frameworks that elucidate the ways in which systemic supports work independently and together to support durable and sustained implementation of EBPs in real-world settings.

Implementation Science

Eccles and Mittman (2006) define implementation science as "the scientific study of methods to promote the systematic uptake of research findings and other evidence-based practices into routine practice" (p. 1). Fixsen, Blase, Naoom and Wallace (2009) state that the ever-growing interest in implementation science and research is due to the failure of better science to produce better service. Cook & Odom (2013) explain that implementation is the "critical link between research and practice" and put forth that "in the absence of implementation, even the most effective intervention will not yield desired outcomes" (p. 138). Consequently, developing an understanding of the framework for implementation, as well as the critical mechanisms within that framework, is essential to ensuring that effective educational practices and interventions are delivered to K-12 students in every classroom in the United States.

Some of the most commonly cited implementation frameworks within the field of educational research are the Active Implementation Frameworks developed by the National Implementation Research Network (NIRN). The current study is based on NIRN's implementation science framework because it is a promising approach to establishing the systems-level supports required to address the research-to-practice gap (Fixsen et al., 2005). The NIRN framework emphasizes the importance of (a) teams, (b) stages, (c) drivers and (d) cycles.

Implementation Teams. Implementation teams are comprised of individuals who support the active implementation framework and its various components (i.e., implementation stages, implementation drivers, and implementation cycles). Teams include individuals with expertise in specialized programs or practices, implementation science, and systems change (Arden, Gandhi, Zumeta Edmonds, & Danielson, 2017). Implementation teams may be developed at a variety of levels within the implementation context (e.g., schools, districts, states) or outside of the implementation context (e.g., organizations that support schools implementing a program or curriculum). The important component of implementation teams is that they are comprised of members at the implementation level. It is important to build internal capacity by allowing implementation teams to do the work associated with both initial implementation and sustained support in the local implementation context.

Implementation Stages. After conducting a synthesis on the implementation literature base, Fixsen and colleagues (2005) identified five stages of implementation: (a) exploration, (b) installation, (c) initial implementation, (d) full implementation, and (e) sustainability. Identifying the stage in which an organization is operating is important for matching supports to the distinct implementation needs associated with each stage. Table 1 identifies the phases of implementation and the defining features of each phase based on research conducted by NIRN and Metz and Bartley's (2012) article on the active implementation framework.

Implementation Drivers. According to NIRN, there are three core components of successful implementation. Commonly known as implementation drivers (Metz & Bartley, 2012), these components serve to increase competency and self-efficacy in

Table 1. Implementation phases.

Stage	Definition	Defining Features
Exploration	The first stage of the implementation process, exploration includes assessing the goodness of fit between the needs of an organization and the proposed EBP, the extent to which the organization is ready to implement a practice or intervention, and examining potential barriers to implementation.	Involvement of key stakeholders Identification of champions for the program or practice Operationalization of core features of EBP or framework
Installation	After deciding to adopt an intervention or practice, the purpose of the installation stage is to ensure that the systems-level supports are acquired (e.g., materials, financial support, employees) and local capacity is established	Acquisition of resources required for implementation Preparation of organization for implementation Developing capacity of practitioners
Initial Implementation	The initial implementation stage occurs when the new program is put into practice and issues related to systems-level implementation and problem solving are identified and addressed to ensure fidelity of implementation and durability over time	Establishing continuous improvement strategies Utilizing data-based decision making processes Addressing systems-level solutions
Full Implementation	Full implementation refers to the stage in which the new program or practice becomes incorporated into the everyday practices of an organization, the systems-level supports are established and utilized, and practitioners are able to implement the practice with efficiency and fidelity	Fidelity of implementation Integration of innovation into everyday practice Production of desired outcomes
Sustainability	Although sustainability can only be achieved once the other phases of implementation have been met, sustainability planning must be incorporated into every stage of the implementation process. Sustained and durable implementation includes both programmatic and financial sustainability considerations.	Establish reliable and sufficient funding streams Ensure training, coaching, and performance assessment supports are established and utilized Measure fidelity and outcomes of new program or practice Utilize data-driven decision making procedures Guarantee policies and procedures support durable implementation

persons responsible for implementation of EBPs and include: (a) competency drivers, (b) organization drivers, and (c) leadership drivers. Figure 1 provides an overview of the implementation drivers that serve as the core components of the implementation process.

Figure 1. Implementation drivers (Fixsen & Blase, 2008).

Note: Implementation Drivers Image © Fixsen & Blase, 2006-2012

Further, nine core drivers of successful implementation have been identified: (a) selection, (b) training, (c) coaching, (d) systems intervention, (e) facilitative administration, (f) decision support data systems, (g) technical leadership, (h) adaptive leadership, and (i) performance assessment (Bertram, Blase, & Fixsen, 2014).

Improvement Cycles. It is important to recognize that implementation is an iterative process that requires ongoing adjustment over time. Initial efforts will be

revisited for many reasons, including to improve cultural adaptation, address changes to service needs, funding, or policies, and to increase efficiency. To support the change process in a systematic manner, three improvement cycles can be considered: (a) the plan-do-study-act (PDSA) cycle (Shewhart, 1931; Varkey, Rellar, & Resar, 2007); (b) usability testing; and (c) practice-policy communication loops. The PDSA cycle is utilized by many organizations when planning to implement a change. The approach is used to study the change by developing a plan to make a modification (plan), implementing the plan (do), measuring outcomes (study), and using the results to guide next steps (act) (Lyder et al., 2001). Usability testing helps teams determine the extent to which a product, process, or intervention is easy to use and implement. Finally, practice-policy communication loops refer to the "reflective interface between practice and policy, where feedback regarding information sent out (policies that enable change in practices) returns into the component from which it originated (practices that inform policies" (Fixsen, Blase, Metz, Van Dyke, 2013, p. 224).

Coaching within Implementation Science

Selection, training, and coaching are the primary processes for obtaining personnel with the knowledge and skill to support behavioral change at the individual level within the natural implementation context (de Vries & Manfred, 2005; Joyce & Showers, 2002; Sholomskas et al., 2005). Within the implementation science framework, selection, training, and coaching are considered components of the competency driver. Freeman, Miller, and Newcomer (2015) define competency drivers as the "activities, mechanisms, and resources that are needed to improve the necessary knowledge and skills" of individuals responsible for implementation (p. 64).

Joyce and Showers (2002) postulate training and coaching are ongoing strategies for achieving adoption of EBPs. The provision of coaching support to guide implementation is recommended not only in the beginning stages of the implementation process but also "throughout the life of evidence-based practices and programs" (Fixsen et al., 2009, p. 534). Although the discrimination between *training* and *coaching* is necessary because the processes are based on different procedures, and serve different functions, this distinction is often ignored in educational research. When training and coaching are confounded or are not adequately operationalized as independent variables, it is difficult to examine the effects of each process on the dependent variable(s) being studied. Implementation drivers are integrated and compensatory (Van Meter & Van Horn, 1975); however, developing a thorough understanding of individual drivers to increase the efficiency and effectiveness of implementation is of particular importance in K-12 educational settings.

Training. Training is the process by which new skills and knowledge are acquired. The core features of effective training have been examined in numerous studies. Training typically consists of (a) providing background knowledge and the theoretical framework underpinning the practices being trained, (b) lecture and discussion regarding new knowledge, (c) modeling of new skills, and (d) behavioral rehearsal with feedback (e.g., Kealey, Peterson, Gaul, & Dinh, 2000; Sheridan, Edwards, Marvin, & Knoche, 2009). While training is a critical step to support initial acquisition of new knowledge and skills, it is insufficient for supporting sustained implementation in natural contexts.

Coaching. Coaching is the process by which new skills come under stimulus control in the natural context. Coaching highlights the natural stimuli that should control

a newly learned skill (e.g., recognizing and acknowledging appropriate student behavior), shapes the performance of the new skill (e.g., rewarding successive approximations), acknowledges or rewards performance of the new skill (e.g., providing reinforcing feedback), and guides improved precision and fluency of the new skill (e.g., increasing the speed, accuracy, and ease of new skill use). Research indicates that when individuals are trained in new practices or skills without embedded support or follow-up, implementation in the natural context is unlikely to occur (Odom, Duda, Kucharczyk, Cox, & Stabel, 2014). Without support for establishing stimulus control, existing stimuli in the natural context are likely to continue to control previous responses. While decades of research have highlighted the role of coaching as a bridge between training and implementation (e.g., Bergan, 1977; Fullan, 1987; Fullan & Knight, 2011; Knight, 2007; Noell, Witt, Slider, Connell et al., 2005; Reinke, Lewis-Palmer, & Merrell, 2008; Reinke, Stormont, Webster-Stratton, Newcomer, & Herman, 2012; Shalaway, 1985), little is known about the critical elements and mechanisms that make coaching effective.

In a brief report on consultation and coaching, NIRN authors write "at this point, we know that coaching is important but we do not know (experimentally) what a coach should do or say with a practitioner to be most effective" (n.d., p. 3). For the purpose of this study, coaching is defined as the supportive activities conducted after initial training to help individuals implement new skills in the natural environment (Horner, 2015; Massar & Horner, 2015). Coaching increases the likelihood of durable implementation of EBPs by increasing the precision, fluency, and efficiency with which skills are used in the natural context.

Research on Coaching

The field of coaching has been influenced and shaped by various fields of research and practice, including management, education, philosophy, psychology, and social science (Cox, Bachkirova, & Clutterbuck, 2010). Within these fields, myriad traditions, ontological beliefs, and conceptual frameworks influence the ways in which coaching is defined, identified, and measured. To highlight these differences, Appendix A summarizes eleven coaching approaches and perspectives that Cox, Bachkirova, and Clutterback (2014) identify in their comprehensive handbook on coaching. While numerous coaching models and approaches have been developed, few have been empirically validated (Kauffman, 2006; Koortzen & Oosthuizen, 2010; Van Zyl & Stander, 2013). Because research requires phenomena that can be measured and observed, the lack of experimental research on coaching may be due to the complexities associated with operationally defining coaching, parsing out the active ingredients of the coaching process, and/or distinguishing coaching from other phenomena (i.e., training).

One of the first published studies examining the effects of coaching on valued outcomes was conducted in the manufacturing sector nearly eight decades ago (Gorby, 1937). Although the study identified coaching as an effective process for producing desired behavior change, coaching remained relatively underutilized in both practice and research until the 1990s (Kampa-Kokesch & Anderson, 2001). Today, coaching is employed in numerous fields and a significant amount of resources are being allocated to support coaching efforts in businesses, clinics, and educational settings.

There are a large number of literature reviews that examine the role of coaching in producing desired outcomes. The literature tends to focus more on the attributes of

successful *coaches* and less on the activities and behaviors of successful *coaching*. For example, in an extensive review of the coaching literature from 1937 to 2009, Passmore and Fillery-Travis (2011) included only three paragraphs specifically discussing coaching behavior (e.g., what effective coaches do). The authors agree with other contemporary literature regarding the attributes of effective coaches, including self-awareness, coaching competency, and an understanding of the ethics and management of a coaching relationship (e.g., Dingman, 2004; Kilburg, 1996); however, the processes by which coaching is effective in producing behavior change are left unaddressed.

When evaluated in an empirical manner, coaching tends to be delivered from a specific model or approach (Biswas-Diener & Dean, 2007). Understanding the components of effective coaching is an important advancement for the field of coaching research. As noted in Table 2, the majority of the literature on coaching has focused on coaching models and the desired qualities of coaches (e.g., knowledgeable, approachable, trustworthy, kind). Despite the increased focus on coaching research, there is a paucity of information on the mechanisms by which coaching is effective in general, and the mechanisms by which it produces positive outcomes in educational contexts in particular. Developing a coaching logic model that evaluates effective *coaching* rather than effective *coaches* is the first step in developing a more nuanced understanding of the coaching process.

Research on Coaching in Educational Settings

There have been numerous studies conducted in educational settings related to the effects of coaching on valued outcomes, including teacher fidelity of implementation (e.g., Kretlow, Cooke, & Wood, 2012; Kretlow, Wood, & Cooke, 2009), teacher use of

evidence-based academic practices (e.g., Jager, Reezigt, & Creemers, 2002; Kohler, Crilley, Shearer, & Good, 1997; Stitcher, Lewis, Richter, Johnson, & Bradley, 2006), teacher use of evidence-based behavior supports (e.g., DiGennaro, Martens, & Kleinmann, 2007; Filcheck, McNeil, Greco, & Bernard, 2004), and student variables (e.g., Duchaine, Jolivette, & Fredrick, 2011; Peck, Killen, & Baumgart, 1989). Research supports the use of coaching as a bridge between training and implementation; however, there is limited research examining the active ingredients of successful coaching.

Stormont and colleagues (2015) conducted a structured literature review on the effects of social behavioral interventions that included a coaching component on teacher and student outcomes. The authors defined coaching as "a non-evaluative, ongoing process (e.g., occurring over a period of time), in which one individual observes and provides feedback to another individual targeting an intervention, supports or other variables the individual wants to increase in the classroom" (p. 70).

Twenty-nine studies met the authors' inclusion criteria. Of these studies, only nine measured coaching fidelity and the authors noted a dearth of information related to the "details of the coaching process, including how much time was spent on different activities and how often coaching occurred" (p. 78). Studies included various coach-delivered components such as performance feedback, modeling, practice, team teaching, role playing, and goal setting. Eighty-six percent of the studies found that coaching supported desired teacher behavior change. The authors note that although the research provides strong evidence of coaching effectiveness, the actual procedures of effective coaching are more assumed than stipulated.

> Research on the use of coaching, which provides a transparent look at the coaching process, the training and supervision needed for the coach to be successful, and outcomes specifically associated with the use of coaching (e.g., improved teacher skills and efficacy, increased teacher adherence and quality of implementation) are needed (p. 79).

It is common to find research studies that (a) limit coaching to performance feedback, (b) confound training and coaching, (c) do not operationally define coaching, (d) omit the components of coaching being implemented, or (e) evaluate coaching as an auxiliary component of a larger intervention. Even when studies directly evaluate the link between coaching and valued outcome variables, the coaching intervention is typically a model or packaged coaching intervention and the research is often exploratory and "lacking the rigor of true scientific development" (Cornett & Knight, 2009, p. 209). The paucity of empirical evidence on the mechanisms by which coaching is effective highlight the need for research that operationalizes coaching and evaluates the purported mechanisms that produce behavioral change and promote implementation and sustained use of EBPs in natural contexts. As Linley stated, "In thinking about how coaching works, we are really trying to identify the active ingredients of the process that engender a successful outcome, so that we can do more of those and less of the things we do not need to do, in the quest for ever greater efficiency and efficacy" (2006, p. 5).

Toward An Operational Definition of Coaching

Within the coaching research literature, there is a lack of consensus regarding what defines coaching and the active ingredients that make it an effective practice (Hershfeldt, Pell, Sechrest, Pas, & Bradshaw, 2012). Not only are there variations in the

conceptualization of coaching, there are often competing definitions within the same fields. In their cross-cultural study of empirical findings on managerial coaching effectiveness, Hamlin, Ellinger, and Beattie (2006) noted 37 definitions of coaching. The authors analyzed the results of studies across three countries and noted "sameness and congruence of meaning" among the coaching skills that emerged (p. 325). For example, the authors noted similarities across interpersonal and cognitive perspectives, wherein studies described the importance of "stepping into other to shift perspectives" (Ellinger, 1997), "caring" (Beattie, 2004), and "genuine concern for people" (Hamlin, 2004) as being critical behaviors of effective coaches (p. 325). Despite the "remarkably similar" results of the coaching skills analyzed, there is a lack of agreement on the definition of coaching and limited discussion of the functions of effective coaches (p. 326).

Due to both the lack of a consistent definition of coaching and limited research on the core coaching features from which to build upon, it is important to establish a definition of coaching based on a conceptual and theoretical framework that identifies the observable, measurable behaviors that are essential to coaching effectiveness in the promotion of behavioral change. Currently, coaching for evidence-based practices in academics and behavior (e.g., math, literacy, science, behavior, SWPBIS) is typically measured by a binary index of adherence or receipt (i.e., received or not received). Adherence is a limited, prescriptive method for measuring the fidelity of implementation of an intervention or program. It does not allow researchers to evaluate the nuanced components of complex interventions and interactions. Viewing the measurement and evaluation of coaching beyond adherence "…may be helpful in delineating critical

dimensions of an intervention and assuring those components remain when the intervention is put into practice" (Schulte, Easton, & Parker, 2009).

It is critical to define coaching before measuring its effect on desired outcomes. The coaching logic model from which the current study is based was developed from a behavioral conceptualization of coaching. A recent concept paper on multi-tiered systems of support (MTSS) also defined coaching from a behavioral lens. The authors propose that coaching is the delivery of on-site antecedent and consequence manipulation to increase the likelihood of successful implementation and sustainability (Freeman, Sugai, Simonsen, & Everett, 2017). The researchers purport that antecedents such as coach-delivered prompting and cueing and consequences like coach-delivered corrective and reinforcing performance feedback can increase the likelihood that implementation is successful in the natural context.

This study defines coaching as the supportive activities conducted after initial training that increase the speed and precision with which practices are implemented under typical conditions (Massar & Horner, 2015). The logic model describing the strategies and mechanisms by which coaching changes behavior posits four functions of coaching that should be trained and measured: (a) prompting, (b) fluency building, (c) performance feedback, and (d) adaptation. Similar to the aforementioned behavioral coaching model put forth by Freeman and her colleagues, the coaching model in this study is based on the delivery of antecedents and consequences; however, the model also posits that the provision of fluency building opportunities and supporting with adaptation will increase the likelihood that coaching is successful.

Prompting. *Prompts* are antecedent events added to a natural environment that increase the likelihood of a target behavior (Kazdin, 1975). *Prompting* is the delivery of an antecedent visual, auditory, or physical cue that increases the likelihood of a targeted response (Joseph, Alber-Morgan, & Neef, 2016). Within coaching, the delivery and fading of prompts serves the function of bringing new skills or behaviors under the control of natural stimuli. Prompting typically emphasizes *when* a new skill is used.

Prompting has been studied within in the context of human behavior for decades, but mostly in the context of teacher-delivered prompts to increase student behavior (e.g., Risley & Wolf, 1967; Rosenbaum & Breiling, 1976). Research has studied numerous methods of prompting, including the use of (a) physical prompts (e.g., Thompson, McKerchar, & Dancho, 2004); (b) tactile prompts such as vibrating pagers (e.g., Petscher & Bailey, 2006; Taylor, Hughes, Richard, Hoch, & Coello, 2004) and other electronic devices like the MotivAider (e.g., Amato-Zech, Doepke, & Hoff, 2006; Mowery, Miltenberger, & Weil, 2010); (c) gestural and visual prompts such as pointing to picture cards (e.g., Trahan, Donaldson, McNabney, & Kahng, 2014), posters (e.g., Bekker et al., 2010) and in-app touchscreen cues (e.g., Hiniker et al., 2015); and (d) verbal prompts from adults (e.g., Yakubova & Taber-Doughty, 2013) and peer verbal prompting (e.g., Flood, Wilder, Flood, & Masuda, 2002). Research has also explored the effects of prompting on numerous dependent variables, including academic outcomes (e.g., Gibson & Schuster, 1992; Knapczyk & Livingston, 1974; Muth, 1987) and behavioral outcomes (e.g., Faul, Stepensky, & Simonsen, 2012; Wilder, Atwell, & Wine, 2006). Research indicates that prompts are more effective when they are frequent (Lancioni, O'Reilly, &

Basili, 2001) and specific (Hunsaker, 1983). Typically, research evaluates prompting paired with other effective practices such as positive reinforcement.

Prompting is an important part of establishing stimulus control and is therefore considered a function of both effective training and effective coaching. The purpose of delivering prompts during training is to support fewer errors in learning during acquisition and to "over-determine correct… responses during acquisition" (McDowell, 1982, p. 1103). While prompting is an important component of training, when an individual learns a skill in the training context it can be difficult to implement the skill under naturally occurring conditions.

When behavior is differentially controlled by antecedent stimuli and is more likely to occur in the presence of the discriminative stimulus then the behavior is considered to be under stimulus control (Terrace, 1963; Touchette, 1971). The purpose of delivering prompts during coaching is to bring the desired behavior under stimulus control in the natural context. Prompts are typically stimuli that already control a desired behavior and are presented with natural stimuli in an effort to (a) elicit the target behavior and (b) occasion reinforcement of that behavior (Touchette & Howard, 1984). In coaching, stimulus control transfers away from the prompt to naturally occurring stimuli by gradually removing the prompt. Coach-delivered prompts such as reminders, modeling, or direct help establish stimulus control of newly trained skills in the classroom environment.

Fluency Building. *Fluency* is a term used to describe the accuracy and speed of behavioral responding (Binder, 1988, 1996; Howell & Lorson-Howell, 1990). *Fluency building* is the process by which multiple and sufficient opportunities for practicing

newly acquired skills are provided in order to increase the likelihood of using skills correctly and quickly in naturally occurring conditions (Horner, 2015). Building fluency is necessary for a newly acquired skill to be functional and easy to use. There is an increased likelihood that new skills will generate naturally-occurring reinforcers when the skills are developed with the necessary fluency to be easy and effective (Fabrizio & Moors, 2003; Weiss, Pearson, Foley, & Pahl, 2010). Building fluency reduces response effort and increases the likelihood that the use of a new skill will contact reinforcement in the natural environment (Billington, Skinner, & Cruchon, 2004; McCallum, Skinner, Turner, & Lee, 2006).

Numerous studies indicate positive outcomes associated with establishing behavioral fluency, including retention, endurance, and application (Beck & Clement, 1991; Haughton, 1972; Kubina & Morrison, 2000). Binder (1996) defined retention as the ability to recall and use information after a period of time without the opportunity for practice. Various studies have documented a relation between fluency and increased retention (e.g., Berens, Boyce, Berens, Doney, & Kenzer, 2003; Péladeau, Forget, & Gagné, 2003). Endurance is defined as the ability "to perform [a] skill for a long period of time without fatigue and despite distractions" (Bucklin, Dickinson, & Brethower, 2000, p. 143). Research has indicated that increasing behavioral fluency results in an increase in endurance (e.g, Binder, Haughton, & Van Eyk, 1990; Kim, Carr, Templeton, & Bird, 2001). Finally, application is defined as the ability to transfer component behaviors to composite behaviors (Kubina & Wolfe, 2005). Building fluency in component skills is related to an increase in performance of composite skills (Barrett,

1979; Kubina, Young, & Kilwein, 2004; Lin & Kubina, 2005; McDowell, McIntyre, Bones, & Keenan, 2002; Smyth & Keenan, 2002) and increases response efficiency.

Coaching to support fluency building is necessary when a skill has been accurately established in an individual's behavioral repertoire during training but (a) an individual has not developed efficient and effective use of a skill or (b) the skill is not used enough to be sustained by natural reinforcers. Coaching can support an individual to use a new skill with the requisite ease and efficiency to be sustained by natural consequences. Methods of building fluency include allocating time to practicing skills, identifying skills for development, and providing frequent opportunities for practice within the natural environment. Fluency building within the coaching framework may increase the endurance and application of newly trained behavior and increase the likelihood of using newly trained skills accurately and quickly in the natural context. Further, using skills accurately and efficiently reduces response effort and increases the likelihood that the skills will be reinforced.

Performance Feedback. *Performance feedback* is direct and specific feedback provided about the form, context, accuracy or frequency of an individual's behavior. Performance feedback can be used to change the likelihood of a new skill being used (e.g., reinforcement or punishment) or to improve the precision with which a new skill is used (e.g., shaping). Performance feedback is arguably the most widely recognized and researched coaching component (Knight, 2007; Sprick, Knight, Reinke, Skyles, & Barnes, 2010); however, the definition, behavioral principles that underlie its effectiveness, and the extent to which feedback is related to specific positive outcomes remain contested (Alvero, Bucklin, & Austin, 2001; Cavanaugh, 2013). Mortenson and

Witt (1998) state that performance feedback supports "the transfer or maintenance of knowledge and behaviors" (p. 614). For the purposes of this study, performance feedback is defined as coach-delivered consequences associated with the occurrence of targeted teacher behaviors.

A large body of research exists documenting the relation between performance feedback in professional development efforts and an increase in teachers' implementation of academic and behavioral interventions (e.g., Codding, Feinberg, Dunn, & Pace, 2005; DiGennaro, Martens, & McIntyre, 2005; Mortenson & Witt, 1998; Noell et al., 2000; Noell, Witt, Slider, & Connell, 2005; Sterling-Turner, Watson, & Moore, 2002; Wickstrom, Jones, LaFleur, & Witt, 1998). Fallon and colleagues (2015) conducted a systematic review and evaluation of single case research related to performance feedback and found strong evidence to support its designation as an evidence-based practice according to What Works Clearinghouse standards (WWC; Kratochwill & Levin, 2010).

Solomon, Klein, and Politylo (2012) conducted a meta-analysis examining the relation between performance feedback and treatment integrity and identified three key characteristics of performance feedback: (a) target behavior, (b) setting, and (c) immediacy of delivery. Although these characteristics varied across the studies, the authors found that performance feedback "resulted in significant behavioral change… regardless of setting, dependent variable, delay of feedback, or type of intervention" (p. 170). Akalin and Sucuoglu (2015) identified three characteristics of performance feedback based on the work of Van Houten (1980): content, frequency, and source. The content of the performance feedback is related to the extent to which the feedback is "corrective, general, positive, or descriptive, in addition to the way in which it is offered"

(p. 741). The frequency and timing of performance feedback delivery is another core feature of feedback. Typically, weekly performance feedback is preferable to more frequent schedules of delivery (e.g., daily) unless extra support is needed to support teacher improvement or performance. The final characteristic of performance feedback is the source, or individual(s) who is delivering the feedback (e.g., coach, peer, principal).

Coaches may deliver feedback that is reinforcing or corrective, contingent upon the observation of performance in the natural context. Coaching may consist of verbal, written, or video feedback and may be delivered immediately after an observation or on a delayed schedule. The frequency of performance feedback delivery may also vary, from daily feedback to yearly feedback. Coach-delivered performance feedback may increase the precision and frequency of desired behavior(s) and support maintenance of trained skill(s) over time.

Adaptation. *Adaptation* is the process by which the features of a program, intervention, or curriculum are aligned with the skills, resources, administrative support, and values of the local environment (e.g., school staff, students, families, and community) (Carr, 2007; Fallon, O'Keeffe, & Sugai, 2012; McIntosh, Moniz, Craft, Golby, & Steinwand-Deschambeault, 2014; Sugai & Horner, 2002). Much of the research on adaptation of EBPs and evidence-based interventions (EBIs) derives from the literature base on health and prevention science (e.g., Castro, Barrera, & Martinez, 2004). The diffusion of intervention theory (Rogers, 2002) claims that changes to an intervention are inevitable when translating from research to practice (Miller, Sorenson, Selzer, & Bringham, 2006; Tabak, Khoong, Chambers, & Brownson, 2012). Acknowledging this inevitability, numerous models of adaptation have been developed to

ensure that during the process of systematic adaptation the core features, active ingredients, or "kernels" (Embry, 2004) of an intervention are implemented with fidelity (Freire, Perkinson, Morrel-Samuels, & Zimmerman, 2015; McKleroy, Galbraith, Cummings, & Jones, 2006; Solomon, Card, & Malow, 2006; Wingood & DiClemente, 2006).

There is also a growing expectation that educational innovations be culturally responsive. Cultural responsiveness requires sustained used of the core features of an intervention but with modifications that allow these features to be realized within a local cultural context. Coaches should be able to support teams through the adaptation process, while ensuring that the core features of the intervention are implemented with fidelity.

Adaptation may be the least well-understood component of coaching because its necessity is contingent upon the specific events and contexts within which a coach works and the stage of implementation for the school or teacher. For example, adaptation may be necessary during the installation or initial implementation stages to support increasing contextual fit of a program or intervention. Within this process, the coach supports the team in assessing and identifying practices or procedures that can be adapted to increase alignment with the skills, resources, administrative support, and values of the local environment. Adaptation may also be necessary during later stages of implementation when specific barriers arise and threaten the fidelity of implementation of the program or change factors related to contextual fit. For example, when a school encounters administrator turnover or loss of district-level implementation support while in the full implementation stage, a coach can support the team to adapt certain practices to ensure

that implementation can continue, while the core features of the practice or intervention remain in place.

A Program of Coaching Research

A program of research (see Figure 3) based on the coaching logic model (see Figure 2) allows for the development of a thorough and fine-tuned analysis of the mechanisms by which coaching is effective at producing behavioral change. Experimental analysis and evaluation are necessary in order to build consensus about the mechanisms of coaching and to design effective coaching support and interventions. Measurement and evaluation of coaching through a specified conceptual framework is essential for valid and reliable assessment of impact. When evaluating the role and impact of coaching, it is imperative to measure the same operationalized concept across studies in order to ensure validity of results.

Currently, coaching to support the implementation and sustained use of EBPs is typically measured by adherence (e.g., was coaching received?) and as an auxiliary component of a larger intervention. Adherence is a limited, prescriptive method for measuring the fidelity of implementation of an intervention or program. It does not allow for researchers to evaluate the nuanced components of complex interventions and interactions. Viewing the measurement and evaluation of coaching beyond adherence "…may be helpful in delineating critical dimensions of an intervention and assuring those components remain when the intervention is put into practice" (Schulte, Easton, & Parker, 2009).

The first phase of the coaching research program is intended to define the coaching logic model with operational precision. Within this phase of research, the research agenda

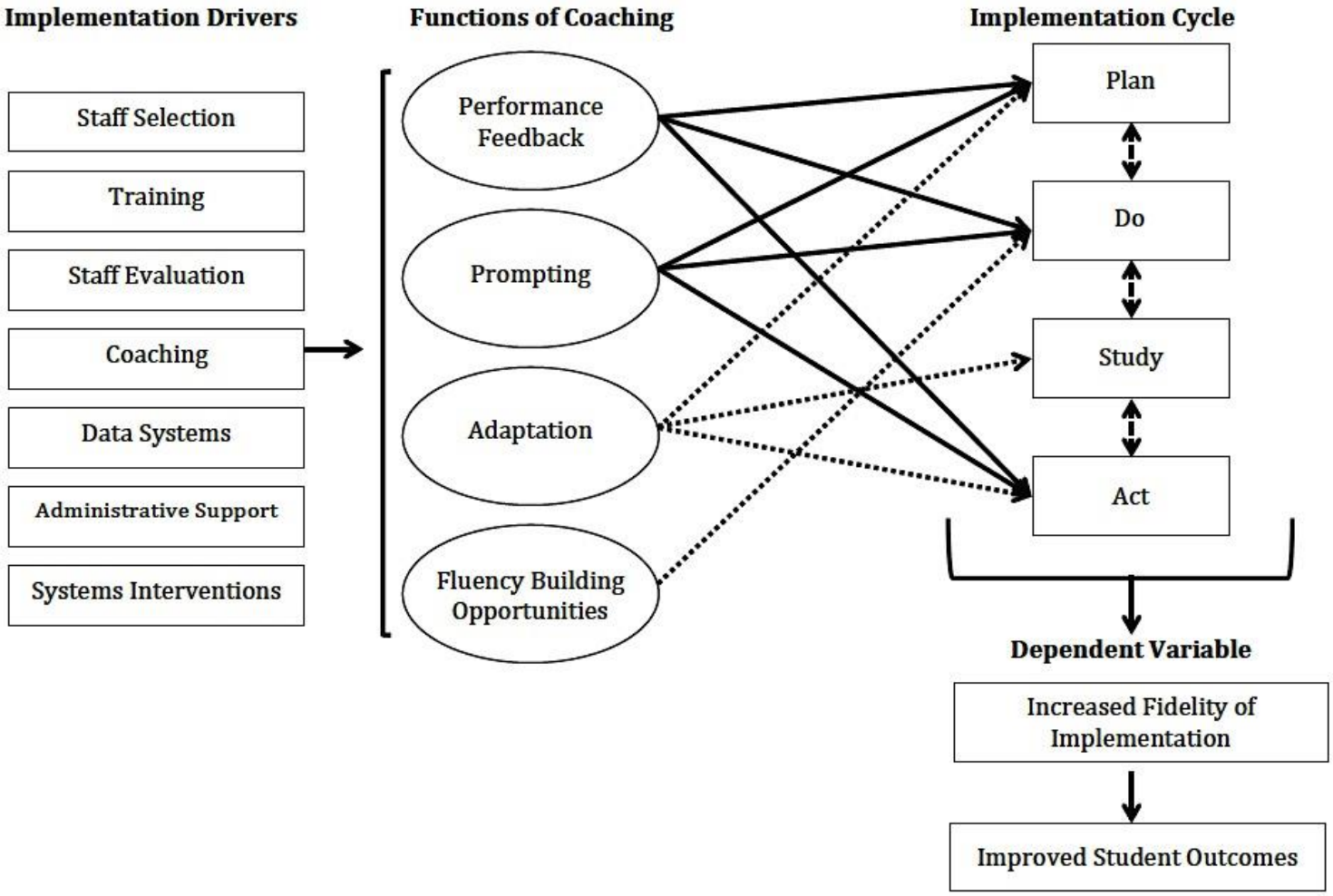
centers on (a) defining the functions of coaching, (b) determining the functions of coaching that can be analyzed experimentally, and (c) assessing the mechanisms and extent to which the purported functions of coaching are effective at producing desired change. Research methodologies that support this agenda include descriptive, case study, and survey research.

The second phase of coaching research is designed to experimentally evaluate the coaching mechanisms and functions defined within Phase 1. The research agenda consists of (a) determining the contexts and extent to which a relation exists between the functions of the coaching logic model and desired change in adult and student behavior and (b) whether the functions of coaching are more or less effective when delivered together. Single case design (SCD), group design, and component analysis research methodologies support the research agenda within Phase 2.

The third phase evaluates the effectiveness of the refined coaching model within natural contexts such as schools. The research agenda examines the extent to which (a) coaches can be trained to use the coaching model with fidelity, (b) the coaching model produces valued outcomes within natural settings, and (c) training can be designed and delivered in an efficient and effective manner. Single case and group design research methodologies can support the research agenda outlined in the third phase of the research program.

The fourth phase of the proposed program of research is designed to increase the efficiency of coaching delivery and scaling-up of coaching supports. Group design studies that examine (a) the methods by which districts can build coaching capacity, (b) the most time- and cost-efficient methods for delivering coaching, and (c) the ways in

Figure 2. Mechanisms of coaching logic model.



which coaches can provide tiered approach based on a continuum of teacher support needs.

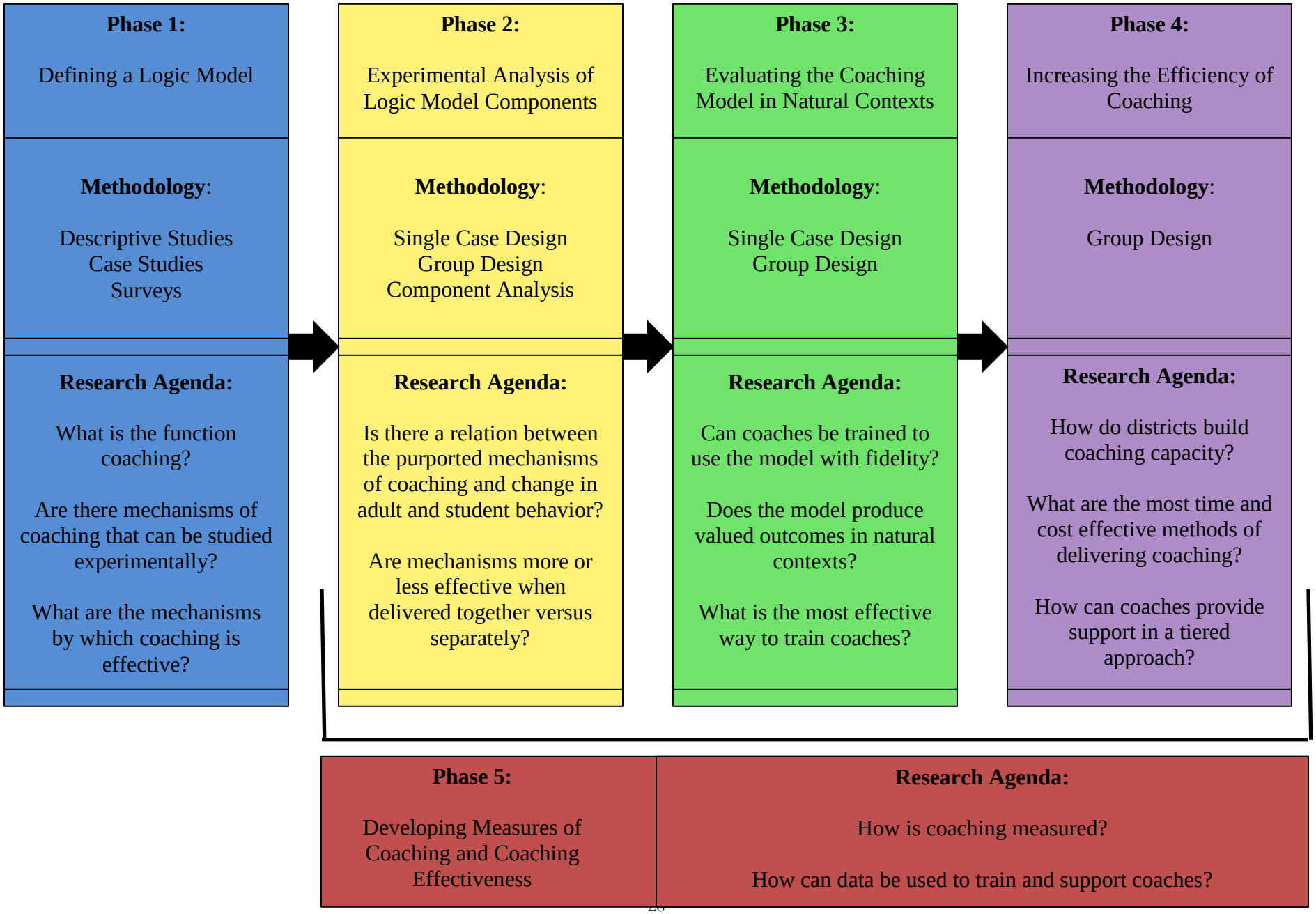
Although labeled as the fifth phase in the program of research, developing measures of coaching and coaching effectiveness will occur in an ongoing, iterative development process. The goal of this phase is to develop methods for coaching evaluation that move beyond adherence and focus on the quality and frequency with which effective coaching practices are delivered. An important component of the research agenda within this phase is to understand how to use data collected from coaching measures to better train and support coaches.

Initial Descriptive Research on the Coaching Logic Model

To develop this study, the primary investigator conducted two initial descriptive coaching studies. The purpose of these descriptive studies was to develop a logic model for coaching. Neither study establishes any causal claims related to coaching; however, the research does provide initial data supporting the coaching logic model used in the experimental dissertation study.

Mechanisms of Effective Coaching (MECA) Survey. The first study was developed from a one-year research grant funded by the WING Institute. The purpose of the MECA study was to evaluate the mechanisms of effective coaching within the context of implementing school-wide positive behavior interventions and support (SWPBIS; Horner & Sugai, 2000; Horner, Sugai, Todd, & Lewis-Palmer, 2005; Sugai & Horner, 2009). Specifically, this study aimed to descriptively analyze a conceptual model of coaching that included four mechanisms: (a) prompting, (b) fluency building, (c) performance feedback, and (d) adaptation.

Figure 3. A program of research to evaluate the mechanisms of effective coaching.



The study was conducted with experienced external coaches supporting SWPBIS implementation in elementary and middle school settings. The perceptions of both school team members and coaches were assessed to determine if the four coaching functions were used and experienced, and if the process was associated with improved implementation of SWPBIS. The study examined the following research questions:

a. Did school teams receiving direct coaching improve their implementation of SWPBIS?
b. Did coaches perceive themselves as delivering the four coaching functions?
c. Did teams perceive themselves as receiving each of the coaching functions?
d. Were there specific coaching activities that were critical to improving SWPBIS implementation, as perceived by coaches and team representatives?

The coaches and team representatives were asked to evaluate (a) how often, (b) in what way, and (c) with what effect in relation to SWPBIS implementation each mechanism of coaching was delivered or received. Results from the study indicate that coaches and SWPBIS team members consider all four mechanisms to be important components of effective coaching. Further, coaches reported delivering and team representatives reported receiving the mechanisms of prompting, fluency building, and performance feedback often. They did not report "adaptation" being delivered or received. Teams receiving coaching after initial training sustained or improved their level of implementation of SWPBIS.

Coaching Pilot Study (CPS). The coaching pilot study (CPS) was conducted to determine the feasibility, effectiveness, and usability of the research design, data collection instruments, and data collection procedures that are being proposed for the full

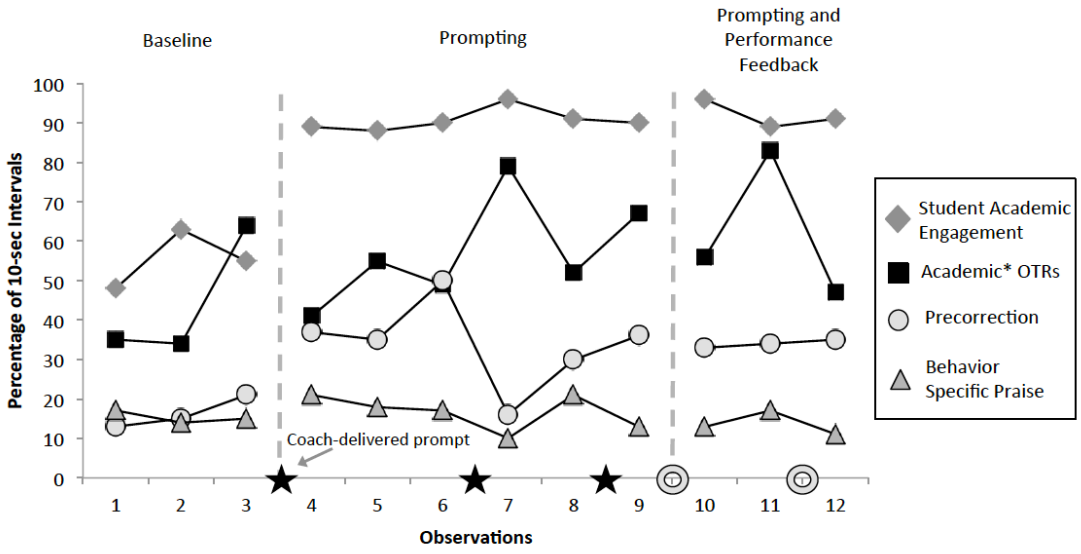
dissertation study. The study was conducted with two Kindergarten teachers with one and eight years of teaching experience. Participating teachers had requested support from the district-level coaches related to classroom management and class-wide PBIS systems implementation. The pilot study evaluated the following research questions:

a. Is coach-delivered prompting related to an increase in teacher use of evidence-based classroom management practices?
b. Is coach-delivered performance feedback related to an increase in teacher use of evidence-based classroom management practices?
c. Is coach-delivered prompting with performance feedback related to an increase in teacher use of evidence-based classroom management practices?
d. Are the (a) research design, (b) data collection materials, and (c) data collection procedures appropriate for an experimental analysis?

Results from the pilot study indicated that coach-delivered prompting and coach-delivered performance feedback were measureable and associated with increased use of targeted class-wide PBIS practices. The results for Participant 1 are included in Figure 4. The results for Participant 2 are shown in Figure 5. Participant 1 was a first year female Kindergarten teacher with 19 students. Based on initial observation data, her two target areas for coaching support were increasing academic opportunities to respond (OTRs) and increasing the delivery of prompts or precorrection. The asterisk for academic OTRs indicates a change made to the data collection materials during the first intervention phase. In baseline, all OTRs (academic and non-academic) were included in the 10-second interval recording procedures. In the prompting and prompting with performance

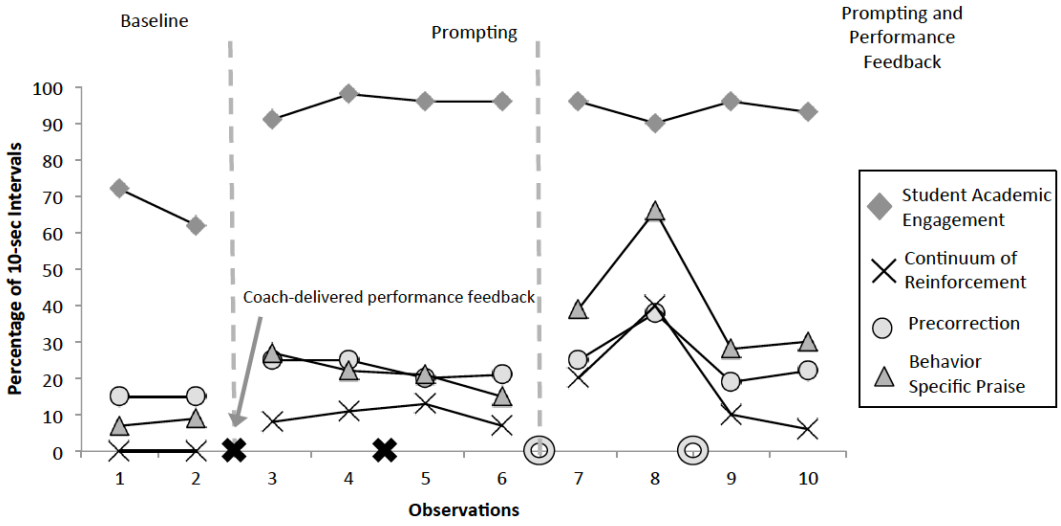
feedback phases only academic OTRs were recorded. It is important to note that although there is an increasing trend in baseline phase for rates of OTRs, the rates of academic OTRs did increase in the intervention phases. Student academic engagement was

Figure 4. Results for Participant 1 from Coaching Pilot Study.



recorded using a composite measure of all students in the classroom. A student was randomly selected every minute of the 20-minute observation session. Student behavior was recorded using a 10-second whole interval time sampling procedure. Data was collected on the delivery of behavior specific praise statements (BSPS); however, this EBP was *not coached.* The level, trend, and variability of teacher-delivered BSPS remained steady through the entire study for Participant 1. The average amount of transition time from moving to the carpet to beginning instruction was also calculated using latency recording. In baseline, the average time between moving to the carpet and beginning instruction was eight minutes and 25 seconds (506 seconds total) for Participant 1. In the intervention phases, the average time was reduced to one minute and 58 seconds (118 seconds).

Figure 5. Results for Participant 2 from Coaching Pilot Study.



Participant 2 was a female Kindergarten teacher with eight years of teaching experience and 29 students in her classroom. Based on the results of the initial observation, the two target areas for coaching were utilizing a continuum of reinforcement (e.g., verbal praise, reward system, and individual, small group, and whole group reinforcers) and increasing delivery of behavior specific praise statements (BSPS). Student academic engagement data was recorded using a composite measure of all students in the classroom. Data on the delivery of prompting and precorrection was collected but the EBP was *not coached.* The level, trend, and variability of teacher-delivered prompting remained steady across baseline and intervention phases for Participant 2.

The CPS study informed changes to the full dissertation study related to the data collection materials and data collection procedures. The initial proposal identified student problem behavior from a small group of students (three to five) as the secondary dependent variable of interest. After collecting classroom data for the CPS study, I

determined that a composite measure of student academic engagement based on a random sample of students would be a more appropriate measure of the cascading logic model. The students with the most frequent problem behavior may require more intensive supports (i.e., targeted or intensive) and may not respond to class-wide interventions in the same way as a composite of all students would be expected to respond.

Coaching was also be delivered on a weekly basis rather than multiple times per week. Performance feedback was provided in person and prompting was delivered via email on the same day each week. Data collection tools were refined and observation times were reduced from 30-minute sessions to 15-minute sessions. The initial research studies helped establish the logic model, processes, and procedures for implementing a full experimental analysis of the coaching mechanisms within classrooms.

Class-wide Positive Behavioral Interventions and Supports (CW-PBIS)

The study evaluated the effects of coaching on teacher implementation of class-wide positive behavioral interventions and supports (CW-PBIS). CW-PBIS refers to the evidence-based practices implemented in the classroom at the universal tier of SWPBIS. CW-PBIS practices include (a) maximizing structure, (b) actively engaging students during instruction, (c) establishing and teaching positively stated expectations, (d) implementing a continuum of strategies to reinforce appropriate behavior, and (e) implementing a continuum of strategies to respond to inappropriate behavior (Simonsen, Fairbanks, Briesch, Myers, & Sugai, 2008; Simonsen et al., 2014). Research has indicated that these classroom management practices are related to numerous positive student outcomes (Brophy, 2006; Haydon et al., 2010; Malone & Tietjens, 2000; Rusby, Crowley, Sprague, & Biglan, 2011).

Study Purpose, Research Questions, and Potential Contributions

The purpose of the study was to experimentally examine the effect of coach-delivered prompting and performance feedback on teachers' use of evidence-based classroom management practices. The results of this study contribute to the literature on coaching to support the durable implementation of EBPs in natural settings and can be used to (a) develop an assessment measure of coaching to guide the professional development and continued growth of coaches in K-12 educational settings and (b) improve training and support for SWPBIS coaches by identifying effective coaching practices.

The present study examined the following research questions:

1. Is there a functional relation between the use of *prompting* and an increase in teacher use of the targeted evidence-based classroom management practice?
2. Is there a functional relation between the use of *performance feedback* and an increase in teacher use of the targeted evidence-based classroom management practice?
3. Is there a functional relation between *prompting and performance feedback* versus only prompting or only performance feedback and an increase in teacher use of the targeted evidence-based classroom management practice?

In addition, secondary research questions included:

4. Does teacher use of evidence-based classroom management strategies increase levels of student academic engagement?
5. Do the level, trend, and variability of the un-coached classroom management practice remain the same across baseline and intervention phases?

6. Do teachers find the coaching intervention to be an effective and socially valid method of support for implementation of classroom management practices?

CHAPTER II

METHODS

Participants

Teacher Participants

Seven teachers were selected to participate in this study. Prior to the start of recruitment, I obtained permission to conduct the study from the University of Oregon Institutional Review Board (IRB; See Appendix B) and the participating school district. I contacted district-level instructional coaches and school psychologists to inform them of the study. A recruitment email was sent from a district-level administrator to potential participants who were interested in receiving additional coaching support in class-wide systems and evidence-based behavior management strategies.

The potential teacher participants were asked to contact me to arrange a time to meet and discuss the study expectations, timelines, and informed consent procedures. I obtained written consent from all potential participants prior to collecting any data. Prior to the first observation, teacher participants were asked to complete a 30-minute online training module that I developed and delivered (see Appendix C). The training module presented an overview of the components of class-wide positive behavioral interventions and supports (CW-PBIS; Simonsen & Myers, 2015). The content included an overview of the foundations, practices, and data systems of CW-PBIS; however, the focus of the training was on three preventative, evidence-based classroom management practices: (a) delivery of precorrection, (b) delivery of behavior specific praise, and (c) high rates of academic opportunities to respond (Myers, Freeman, Simonsen, Sugai, 2017). Upon completion of the online module, participants were asked to complete an assessment

designed to measure the extent to which they understood and could apply the three preventative classroom management practices to everyday classroom situations (see Appendix D).

All participants were required to complete the online training and assessment before they could participate in the study. The participants included in the final study were all general education classroom teachers in Grades 1 through 5. Teacher participants were considered for inclusion in the study if they met the following inclusion criteria: (a) low baseline levels of at least two of the three preventative classroom management practices measured in the study (i.e., delivery of behavior specific praise, high rates of academic opportunities to respond, and use of precorrection) and (b) low baseline levels of student academic engagement and/or unacceptably high levels of disruptive behavior.

The assigned coach and I conducted 20-minute initial observations to determine teacher eligibility using an adapted version of the *Classroom Management Self-Assessment* (Simonsen, Fairbanks, Briesch, & Sugai, 2006; see Appendix E). Table 2 presents an overview of the results of the initial classroom observations. We used the results of the initial observation to select two classroom management practices to use as dependent variables for each teacher. One practice was coached and the other was not coached; however, data was collected on both teacher dependent variables throughout the study to determine the extent to which a specificity of effect occurred.

Study 1. The first four teacher participants were assigned to the first multiple baseline (MBL) study (see Table 3 for individual demographic information):

Teacher Participant 1. Teacher Participant 1 was a first-year, female teacher. She taught in a 3rd grade, general education classroom with 26 students. Data was collected on

Table 2. Results from the initial classroom observations using the *Classroom Management Self-Assessment* (adapted).

Teacher	**Subscale 1:** Maximizes structure and predictability (4 items)	**Subscale 2:** Behavior expectations taught and reinforced (4 items)	**Subscale 3:** Engages students in observable ways (3 items)	**Subscale 4:** Uses a continuum of strategies to acknowledge appropriate behavior (3 items)	**Subscale 5:** Uses a continuum of strategies to respond to inappropriate behavior (3 items)	**Total items observed** (17 total items)
	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
1	1 (25%)	1 (25%)	0 (0%)	2 (66%)	1 (33%)	5 (29%)
2	1 (25%)	3 (75%)	1 (33%)	2 (66%)	2 (66%)	9 (53%)
3	4 (100%)	3 (75%)	3 (100%)	1 (33%)	0 (0%)	11 (65%)
4	3 (75%)	1 (25%)	1 (33%)	1 (33%)	1 (33%)	7 (41%)
5	1 (25%)	2 (50%)	2 (66%)	3 (100%)	2 (66%)	10 (58%)
6	1 (25%)	1 (25%)	0 (0%)	0 (0%)	0 (0%)	2 (12%)
7	4 (100%)	4 (100%)	3 (100%)	2 (66%)	1 (33%)	14 (82%)

delivery of precorrection (coached dependent variable) and academic opportunities to respond (uncoached dependent variable).

Teacher Participant 2. Teacher Participant 2 was a first-year, female teacher. She taught in a 4th grade, general education classroom with 28 students. Data was collected on

delivery of behavior specific praise (coached dependent variable) and delivery of precorrection (uncoached dependent variable).

Teacher Participant 3. Teacher Participant 3 was a fifth-year, female teacher. She taught in a 1st grade, general education classroom with 27 students. Data was collected on delivery of behavior specific praise (coached dependent variable) and delivery of precorrection (uncoached dependent variable).

Teacher Participant 4. Teacher Participant 4 was a first-year, female teacher. She taught in a 1st grade, general education classroom with 28 students. Data was collected on delivery of behavior specific praise (coached dependent variable) and academic opportunities to respond (uncoached dependent variable).

Study 2. The final three teacher participants were assigned to the second multiple baseline (MBL) study (see Table 4 for individual demographic information):

Teacher Participant 5. Teacher Participant 5 was a first-year, female teacher. She taught in a 1st grade, general education classroom with 22 students. Data was collected on delivery of precorrection (coached dependent variable) and academic opportunities to respond (uncoached dependent variable).

Teacher Participant 6. Teacher Participant 6 was a second-year, female teacher. She taught in a 5th grade, general education classroom with 27 students. Data was collected on delivery of behavior specific praise (coached dependent variable) and academic opportunities to respond (uncoached dependent variable).

Teacher Participant 7. Teacher Participant 7 was a fifth-year, female teacher. She taught in a 3rd grade, general education classroom with 30 students. Data was collected on

Table 3. Teacher demographic information and measured dependent variables.

Teacher Participant	Grade Level Years of Experience Number of Students	Coached DV	Uncoached DV
1	Grade 3 1 year 26 students	Precorrection	Academic opportunities to respond
2	Grade 4 1 year 28 students	Behavior specific praise	Precorrection
3	Grade 1 5 years 27 students	Behavior specific praise	Precorrection
4	Grade 1 1 year 28 students	Behavior specific praise	Academic opportunities to respond
5	Grade 2 1 year 22 students	Precorrection	Academic opportunities to respond
6	Grade 5 2 years 27 students	Behavior specific praise	Academic opportunities to respond
7	Grade 3 5 years 30 students	Behavior specific praise	Precorrection

delivery of behavior specific praise (coached dependent variable) and delivery of precorrection (uncoached dependent variable).

Teacher Participant 8. Teacher Participant 8 was a first-year, male teacher. He taught in a 5th grade, general education classroom with 29 students. Initial observation data was collected; however,

Coaches. Two doctoral students in special education at the University of Oregon served as coaches. The inclusion criteria for coaches included (a) having completed at least one year in the doctoral program, (b) having experience working in a educational or clinical setting, and (c) being able to commit to time related to training and delivering coaching. Coach A was a third-year, male doctoral candidate in the special education program. He had no prior experience with coaching but seven years of experience working with individuals in school-based and clinical settings. He was assigned to coach the teachers in Study 1 (Teachers 1, 2, 3, and 4). Coach B was a third-year, female doctoral candidate in the special education program. She had no prior experience as a coach but two years of experience working in an educational setting. She was assigned to coach the teachers in Study 2 (Teachers 5, 6, and 7). Both coaches had expertise in school-wide PBIS, implementation of multi-tiered systems of support, and educational professional development.

The coaches received training on the delivery of prompting and performance feedback. The training was based on the *Coaching for Effective Outcomes* (CEO) curriculum developed by me (see Appendix F); however, only parts of the training were delivered to the coaches to increase the likelihood that the intervention was delivered with fidelity. Coach A delivered *performance feedback* in the first intervention phase (Phase B) and *prompting with performance feedback* (Phase BC) in the second intervention phase to the four teacher participants in Study 1. Coach B delivered

prompting in the first intervention phase (Phase C) and *prompting with performance feedback* (Phase BC) to the three teacher participants in Study 2.

Prior to the first intervention phase, Coach A received training on *performance feedback* only and Coach B received training on *prompting* only. Coaches were trained to deliver only one component of the intervention in the first intervention phase to increase the likelihood of stronger intervention fidelity. Prior to commencing the second intervention phase, Coach A received training on *prompting* and Coach B received training on *performance feedback.*

Setting

The study took place in a midsize suburban school district in the Pacific Northwest with a total of 22 schools serving 10,945 students. The district provides education from Kindergarten through Grade 12. Specifically, the present study took place in three public elementary schools serving students in Kindergarten through Grade 5.

Dependent Measures

Direct Observation Data

After the coaches and I completed the initial observations, direct observations occurred three times per week for 15 min during both baseline and intervention phases. Teachers were asked to select a time when direct instruction was most likely to be delivered to the entire classroom and class-wide student problem behavior was most likely to occur. A functional behavioral assessment was conducted using an antecedent-behavior-consequence (ABC) form (see Appendix G) during the initial observations to determine (a) the classroom behaviors that occurred most frequently and (b) the

presumed behavioral function of the problem behaviors (see Table 4). For Teacher 1, observations took place from 9:45 a.m. to 10:00 a.m. during

Table 4. Functional behavioral assessment results with most common problem behaviors and presumed functions.

	Problem Behavior(s)	**Presumed Function**
Classroom		
Teacher 1	Teacher interruption	Get teacher attention
	Peer-to-peer disruption	Get peer attention
Teacher 2	Peer-to-peer disruption	Get peer attention
	Teacher interruption	Get teacher attention
Teacher 3	Teacher interruption	Get teacher attention
Teacher 4	Teacher interruption	Get teacher attention
Teacher 5	Out of seat	Get teacher attention
	Teacher interruption	Get teacher attention
Teacher 6	Teacher interruption	Get teacher attention
	Out of seat	Get peer attention
Teacher 7	Teacher interruption	Get teacher attention

whole group reading instruction. For Teacher 2, observations took place from 9:10 a.m. to 9:25 a.m. during whole group math instruction. For Teacher 3, observations took place from 10:00 a.m. to 10:15 a.m. during whole group reading instruction. For Teacher 4, observations took place from 9:30 a.m. to 9:45 a.m. during whole group reading instruction. For Teacher 5, observations took place from 9:15 a.m. to 9:30 a.m. during whole group math instruction. For Teacher 6, observations took place from 11:35 a.m. to

11:50 a.m. during whole group reading instruction. Finally, for Teacher 7, observations took place from 12:50 p.m. to 1:05 p.m. during whole group reading instruction.

Observers attended a one-time, 45-minute data collection training that I delivered (see Appendix H). Data collectors reviewed the data collection procedures, data collection tools, and applications available for 10-sec interval timing (e.g., Tabata Stopwatch Pro). Then, data collectors were asked to practice collecting data using the data collection sheets and video recordings of classrooms. Each data collector also practiced data collection with me in the classroom until reaching the 90% inter-observer agreement (IOA) criterion on all dependent variables measures. IOA was measured by dividing the intervals with agreement by the sum of all agreements and disagreements and multiplying the quotient by 100 (e.g., total agreement). A second trained observer collection IOA on a minimum of 33% of intervals across all intervention phases. Along with agreement only, occurrence-only agreement, and Cohen's Kappa were used to calculate IOA. Multiple measures of IOA were included to control for chance agreement during observations with low rates of the dependent variables being measured.

Teacher Implementation of Classroom Management Practices. Trained observers collected direct observation data on the occurrence of teacher use of *two targeted* evidence-based classroom management practices using 10 s partial interval recording (see Appendix I). One EBP was coached during the intervention phases and the other EBP was uncoached. In this study, evidence-based classroom management practices included (a) delivery of precorrection, (b) delivery of behavior-specific praise (BSPS), and (c) academic opportunities to respond (OTRs).

Precorrection was operationally defined as a positively stated verbal cue or reminder, modeling, or behavioral practice delivered before the desired behavior is expected. Examples include (a) verbal prompting (e.g., "Remember to line up quickly and quietly, with our hands by our sides"); (b) visual cueing (e.g., "Let's look at our poster and review what our Ready to Read body looks like"); and (c) modeling or practicing a skill (e.g., "I am going to show you how we walk from our desks to our stations. Watch me. First,…"). Non-examples include (a) delivering a reminder after a student has made an error (e.g., "Oh, I see you shouting out – remember that our class rule is to raise your hand quietly and wait to be called on"); (b) delivery of general cues (e.g., "Do a good job"); and (c) delivering only reminders of what not to do (e.g., "No shouting out and no talking when I'm talking").

Behavior-specific praise (BSP) was operationally defined as verbal praise delivered contingent upon student(s) demonstration of appropriate behavior that includes a statement of *specific behavior* student(s) demonstrated. Examples include (a) "Great job lining up quietly with your hands to your sides", (b) "I like the way Group 2 is on task and working quietly", and (c) "Juan, excellent job following directions the first time". Non-examples include (a) general praise such as "good job" or "well done", (b) gestures such as high-fives or thumbs up (unless accompanied with specific verbal praise, and (c) giving rewards (e.g., points, awards, tokens) without specific verbal praise.

An *academic opportunity to respond* (OTR) was operationally defined as a verbal or visual request for academic-related information from students. Examples include (a) holding a flashcard up for a student to answer, (b) calling on a student to answer an academically-related question, (c) posing a question to the class related to academic

content, and (d) requests for performance (e.g., “Write the answer to problem 1 on your whiteboards”). Non-examples include (a) questions that are not related to academic content (e.g., “How was your weekend?”); (b) rhetorical questions that the teacher does not intend for students to answer (e.g., “I wonder how we might go about this? I am going to model my thinking on this problem”); and (c) questions related to behavioral expectations that are not delivered in a social skills instructional period (e.g., “Who can remind me what our classroom routine is for transitioning from our seats to the carpet?”).

Classroom Behavior. Data was also collected on student dependent variables. The proposed classroom variable was student academic engagement.

Student academic engagement was measured using a pencil and paper 10-sec whole interval recording form to record the percentage of intervals in which students were academically engaged. Engagement was coded using a whole interval procedure (i.e., the student was required to be academically engaged during the entire 10-sec interval to be coded as “AE”).

Academic engagement was operationally defined as the student being oriented toward the instructional or work materials (e.g., teacher leading activity, assigned task on desk) during designated work time for the entire 10-sec interval (Martens, Lochner, & Kelly, 1992). If a student was not academically engaged (i.e., student was not oriented toward instructional or work materials and demonstrates minimal overt behavior) during any portion of the 10-sec interval, the student was marked as not academically engaged for the interval.

A student was randomly selected for 1 min observation periods during the 15 min observation session. The student was observed for the entire minute and data was

collected on his/her behavior during the interval. For teachers in Study 1, nearly two weeks of data was collected on student academic engagement. Teachers 1, 2, and 4 had four baseline data points measuring student academic engagement and Teacher 3 had three baseline data points measuring engagement. For teachers in Study 2, only one baseline data point measuring student academic engagement was collected. With this dependent variable, ceiling effects occurred that would have prevented an analysis of the secondary research question examining the effects on student behavior when teachers increased use of evidence-based classroom management practices. Because of this, a new secondary dependent variable was selected.

To measure the extent to which student behavior changed, I selected classroom disruption as the new secondary dependent variable. After multiple observations, it was determined that the three most common high frequency and low intensity behaviors occurring across all classrooms were: (a) being out of the assigned seating area, (b) peer-to-peer disruption, and (c) teacher interruption. These three behaviors were selected because there was variability among participating classrooms and there was the potential to demonstrate behavior change (i.e., no floor or ceiling effects). Each behavior was operationally defined and measured using 10-sec partial interval recording.

Out of seat behavior was operationally defined as a student or students being out of or leaving an assigned seat or assigned seating area (e.g., carpet) without teacher permission and/or walking around the classroom without teacher permission. *Peer-to-peer disruption* was defined as students engaging in peer-to-peer conversation unrelated to the assigned task, student(s) engaging in conversations with peers when the expectation is to be quiet, or engaging inappropriately with peer(s) (i.e., making faces at

another student, touching another peer). Finally, *classroom interruption* was defined as a student or students commenting or asking questions at a time when the expectation is to be quiet and/or shouting out or interrupting the teacher or another student when he/she is speaking.

The behaviors were coded as one composite variable of "classroom disruption", meaning that during the interval any one of the behaviors, or a combination of the behaviors, could have been observed and coded. If any of the three classroom disruptive behaviors was observed during the 10-sec interval, the interval was coded as having a "classroom disruption".

Social Validity

At the end of the study, all teacher participants were asked to complete the *Teacher Evaluation Inventory for Coaching Intervention* (see Appendix J). The questionnaire was developed by the research team and included six items designed to measure the extent to which the coaching intervention was perceived as socially valid to the participating teachers. The respondents were asked to rate the extent to which they agreed with the six items using a 5-point Likert-type scale (*Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree*). The social validity survey also included three open-ended questions related to strengths and areas for improvement related to the coaching intervention.

Design and Procedures

The study was conducted using two concurrent, multiple baseline designs across participants with two intervention phases (B or C and BC) counterbalanced across intervention phases (see Table 5). The design allowed for an examination of the extent to

which a functional relation exists between the implementation of coach-delivered prompting, performance feedback, and prompting with performance feedback and (a) an increase in teacher use of the targeted evidence-based classroom management practice and (b) a decrease in classroom disruption. The counterbalancing of intervention phases prevented sequencing effects and allowed for the examination of the extent to which an interaction effect existed between prompting and performance feedback. The study consisted of three phases as detailed below.

Table 5. Counterbalanced single-case research design.

Participants	Design	Phase order
1, 2, 3, and 4	A – B – BC	Baseline (A), prompting (B), prompting with performance feedback (BC)
5, 6, 7, and 8	A – C – BC	Baseline (A), performance feedback (C), prompting with performance feedback (BC)

Phase I: Training and Initial Assessment

The first phase of the study commenced after IRB and district research protocol permissions were obtained and initial recruitment ended. Teacher participants were asked to complete an online training module that I designed on the components of effective classroom management practices and systems. Once teacher participants were recruited and trained, the coaches and I conducted an initial, 20-min assessment of classroom management and class-wide systems implementation using the modified *Classroom Management Self-Assessment* to identify (a) areas of strength in classroom practices and (b) select targeted EBPs for measurement and coaching in Phases II and III.

Phase II: Baseline

The second phase of the study was designed to collect baseline data on teacher and classroom dependent variables. Specifically, the baseline data collection procedures included (a) direct observation of and data collection on teacher implementation of classroom management practices, (b) data collection on student academic engagement, and (c) after determining that some classes had ceiling levels of student academic engagement, an extended baseline phase to collect data on classroom disruptive behavior.

A trained observer conducted observations three times per week for 15-min sessions. Baseline data was collected for three to six weeks, depending on the order of intervention delivered to participants. During baseline, no feedback was provided to the teachers regarding classroom management practices, student behavior, or any other data collected. A secondary data collector was utilized in at least 33% of observations in baseline to facilitate inter-observer agreement (IOA) data collection. The second coder independently recorded data during the same observation period using the same recording procedure as the first observer.

Coach A and B observed approximately once per week in each assigned classroom (Teachers 1, 2, 3, and 4 and Teacher 5, 6, and 7, respectively) during baseline phase. Coaches did not deliver any feedback during this time and observed in the classrooms to (a) initiate contact with teachers, (b) understand the classroom environment, routines, and procedures, and (c) establish a routine for observing prior to the start of the Phase III.

Phase III: Intervention

The third phase began once baseline data had been collected and a stable data pattern emerged. The teacher participants had intervention introduced at a different point

in time to avoid history as a potential confound. The two intervention phases – performance feedback (B) or prompting (C) and prompting with performance feedback (BC) – were counterbalanced across intervention phases to allow for control of sequencing effects in single-case design (Ward-Horner & Sturmey, 2010). With the use of counterbalancing, Teachers 1, 2, 3, and 4 had performance feedback delivered by Coach A in the first intervention phase (B) followed by prompting with performance feedback (BC). Teachers 5, 6, and 7 had prompting (C) delivered by Coach B in the first intervention phase, followed by prompting with performance feedback (BC).

During the third phase of the study, the data collectors continued to take data on teacher and classroom behavior using the pencil and paper observation sheets used in Phase II. IOA data was collected by a secondary data collector in at least 33% of all observations in the phase. The second independent observer coded observations using the same recording procedure as the first observer.

Fidelity were also measured in all coaching sessions to ensure that the intervention is delivered as intended. Fidelity was considered acceptable if the intervention was delivered at 80% or higher on the implementation fidelity checklist in all scored sessions. All teacher participants were asked to complete a social validity questionnaire at the end of Phase III that assesses the acceptability of the coaching intervention procedures and outcomes.

Performance Feedback Phase (B). Teachers 1, 2, 3, and 4 received performance feedback only in the first intervention phase. During the performance feedback phase (B), Coach A observed each classroom once a week and met with the teacher participants once a week for a 10-minute performance feedback session. During the feedback session,

only the targeted EBP for each teacher was discussed. Coach A followed a structured feedback protocol and provided self-reported fidelity of implementation information, using the *Coaching Fidelity Checklist: Performance Feedback* measure (see Appendix K). The measure included a total of 10 items that were designed to measure the extent to which the coach delivered performance feedback as intended, including the extent to which *prompting was not delivered*. Each item was rated as *Delivered*, *Not Delivered,* or *Not Applicable.* Fidelity was calculated by dividing the number of items delivered by the total number of items and multiplying by 100. In cases where an item was marked as *Not Applicable*, that item was not included in the total number of items in the denominator.

Prompting Phase (C). Participants 5, 6, and 7 received prompting only in the first intervention phase. During the prompting phase (C), Coach B observed each teacher once per week and delivered an email prompt to each teacher once a week with a brief reminder of the targeted EBP. No performance feedback was provided and no discussion of other EBPs was included in the email prompts. To ensure that teachers received the prompt, the emails were sent with a requested read receipt (i.e., when the email was opened, a notification was sent to the coach and PI). Coach B followed a structured prompting protocol and provided self-reported fidelity of implementation information, using the *Coaching Fidelity Checklist: Prompting* measure (see Appendix L). The measure included a total of seven items that were designed to measure the extent to which the coach delivered prompting as intended, including the extent to which *performance feedback was not delivered*. Each item was rated as *Delivered*, *Not Delivered,* or *Not Applicable.* Fidelity was calculated by dividing the number of items delivered by the total number of items and multiplying by 100. In cases where an item

was marked as *Not Applicable*, that item was not included in the total number of items in the denominator.

Prompting and Performance Feedback Phase (BC). All participants received prompting and performance feedback in the final intervention phase (BC). During this phase, Coach A and B continued to observe the same teachers once per week. Following the observation, the coaches scheduled a 10-minute feedback session as soon as possible following the observation. Although the intention was to have all coaching sessions occur immediately following the coaches' observations, this was not always possible due to scheduling conflicts for the coach, the teacher participants, or both.

The weekly coaching sessions were conducted using the same procedures utilized in the performance feedback phase (B). Immediately following the coaching session (i.e., the same day), the coaches sent an email prompt to the teacher participants using the same procedures as followed in the prompting phase (C). Coaching fidelity was reported for all sessions using both the *Coaching Fidelity Checklist: Performance Feedback* and *Coaching Fidelity Checklist: Prompting* protocols.

Intervention Fidelity

Intervention fidelity data were collected in 100% of coaching sessions and coach-delivered prompting sessions across all phases and all teacher participants. The intervention fidelity measures were designed to examine the extent to which all components of the intervention phase were delivered as intended. Performance feedback was measured by a self-report of coaching fidelity using the fidelity checklist. Prompting was measured based on permanent products (i.e., copies of all email prompts) using the

fidelity checklist. Table 6 summarizes intervention fidelity across coaches, teachers, and phases.

Table 6. Coaching intervention fidelity results.

	Phase B Performance Feedback	**Phase C** Prompting	**Phase BC** Prompting and Performance Feedback
Coach A			
Teacher 1	100%	--	--
Teacher 2	100%	--	97%
Teacher 3	100%	--	100%
Teacher 4	100%	--	98%
Coach B			
Teacher 5	--	97%	96%
Teacher 6	--	98%	95%
Teacher 7	--	98%	100%

Interobserver Agreement

Interobserver agreement was calculated for at least 33% of sessions across all phases and at least 30% of the sessions within each phase. An agreement between observers was defined as an interval where both the primary and secondary observer scored a dependent variable the same (e.g., both observers coded an OTR, neither observer coded BSPS). Interobserver agreement was measured by calculating (a) total agreement, (b) occurrence only agreement, and (c) Cohen's Kappa.

Total agreement IOA was calculated by dividing the number of intervals with agreements by the total number of intervals (intervals with agreement plus intervals with

disagreement) and multiplying by 100%. The IOA percentage was considered acceptable if total agreement was above 85% in all scored sessions. *Occurrence only agreement* IOA was calculated by dividing the number of intervals in which the observers agreed that a behavior occurred by the total number of intervals in which either observer coded the behavior as occurring. Cohen's Kappa is a measure of overall agreement between two observers that adjusts for the possibility that agreement occurs by chance (Byrt, Bishop, & Carlin, 1993; Hartmann, Barrios, & Wood, 2004). Kappa was calculated after each IOA session for every teacher participant and included calculations for all three dependent variables. The results were averaged for each teacher for each dependent variable. The results were also averaged across all teacher participants in the study and across all dependent variables in the study.

IOA was calculated for both teacher behaviors and classroom disruptive behavior. Table 7 shows the results of Cohen's Kappa for each dependent variable and teacher participant. Table 8 presents both total agreement and occurrence only agreement data for each teacher participant.

Data Interpretation and Analysis

All direct observation data were graphed and both visual analysis and *Tau-U* were used to interpret the results. Using visual analysis allowed for a systematic analysis of graphed data and included evaluation of (a) level, (b) trend, (c) variability, (d) immediacy of effect, (e) overlapping data, (f) similar trends across similar phases, and (g) vertical analysis for multiple baseline designs (Horner et al., 2005). Visual analysis was employed in order to determine (a) whether documentation of a functional relation between performance feedback, prompting, and prompting with performance feedback

has been established and (b) the extent to which experimental control was established (Parsonson & Baer, 1986). *Tau-U* is a measure of effect size in single case research that allows for control of monotonic baseline trend (Parker, Vannest, & Davis, 2011). Along

Table 7. Cohen's Kappa for each teacher participant and dependent variable.

	Academic Opportunities to Respond	Behavior Specific Praise	Precorrection	Classroom Disruptive Behavior	Average
Teacher 1	.68	--	.79	.64	.70
Teacher 2	--	.67	.82	.58	.69
Teacher 3	.55	.88	--	.69	.74
Teacher 4	--	.83	.80	.71	.78
Teacher 5	.78	--	.69	.65	.71
Teacher 6	.66	.90	--	.62	.74
Teacher 7	--	.87	.83	.60	.77
Average	.67	.83	.79	.64	

with the results of visual analysis, the Tau-U analysis allowed for the determination of the magnitude of effect of the intervention on the dependent variable.

Table 8. Interobserver agreement for teacher and classroom behavior dependent variables in Study 1 and Study 2.

	Academic Opportunities to Respond %		Behavior Specific Praise %		Precorrection %		Classroom Disruptive Behavior %	
Teacher	Total Agreement	Occurrence Agreement	Total Agreement	Occurrence Agreement	Total Agreement	Occurrence Agreement	Total Agreement	Occurrence Agreement
Teacher 1	94	81			99	87	93	89
Teacher 2			99	95	99	85	85	81
Teacher 3	90	83	97	83			88	82
Teacher 4			99	85	99	78	91	88
Teacher 5	95	84			98	79	93	87
Teacher 6	94	84	99	87			91	86
Teacher 7			99	84	96	80	91	87

CHAPTER III

RESULTS

Direct Observation Data

Direct observation data were collected in 15-minute classroom observation sessions for the following dependent variables (a) one coached classroom management EBP (i.e., BSPS, precorrection, or OTRs); (b) one uncoached classroom management EBP (i.e., BSPS, precorrection, or OTRs); and (c) classroom disruption. For up to five baseline data points in Study 1 and one baseline data point in Study 2, data was collected on student academic engagement. The dependent variable data were graphed for all teacher participants; however, the dependent variable was changed to classroom disruption due to high baseline levels of student academic engagement in the majority of classrooms in the study. Figure 6 displays the percentage of 10 s intervals with teacher use of the coached EBP for Study 1. Figure 7 shows the percentage of 10 s intervals with teacher use of the uncoached EBP for Study 1. Figure 8 displays the percentage of 10 s intervals with teacher use of the coached EBP for Study 2. Figure 9 shows the percentage of 10 s intervals with teacher use of the uncoached EBP for Study 2. Figure 10 presents the percentage of 10 s intervals with student academic engagement and classroom disruption for Study 1. Figure 11 presents the percentage of 10 s intervals with student academic engagement and classroom disruption for Study 2.

The data are presented separately to facilitate the use of visual analysis for each of the three main research questions examined in this study. By presenting the data separately, it is possible to examine (a) the extent to which a functional relation exists between the intervention(s) and the coached dependent variable, (b) the extent to which a

functional relation exists between the intervention(s) and the uncoached dependent variable, and (c) the extent to which change in teacher behavior is related to a change in class-wide disruptive behavior. Measuring and presenting the uncoached data was intended to document more experimental control by demonstrating whether a specificity of effect was observed (i.e., the extent to which the introduction of the intervention produced a change in the coached classroom management practice but not the uncoached classroom management practice).

Data were collected following a concurrent multiple-baseline design for both studies. Baseline data started for all participants in Session 1. In Study 1, Teacher 1 started Phase B after Session 10, Teacher 2 started Phase B after Session 13 and Phase BC after Session 19, Teacher 3 started Phase B after Session 16 and Phase BC after Session 23, and Teacher 4 started Phase B after Session 20 and Phase BC after Session 26. In Study 2, Teacher 5 started Phase C after Session 6 and Phase BC after Session 12, Teacher 6 started Phase C after Session 10 and Phase BC after Session 17, and Teacher 7 started Phase C after Session 16 and Phase BC after Session 20. All data were analyzed visually to examine changes in (a) level, (b) trend, (c) variability, (d) immediacy of effect between phases, (e) overlapping data across phases, (f) similar trends across similar phases, and (g) vertical analysis.

Table 9 summarizes the average percentage of intervals in (a) baseline, (b) the first intervention phase, (c) the second intervention phase, and (d) both intervention phases combined of teacher use of the targeted classroom management practice, the uncoached classroom management practice, and classroom disruption for each teacher in Study 1 and Study 2.

Teacher Implementation of Classroom Management Practices

Study 1. Figures 6 and 7 show the percentage of 10-sec intervals with teacher use of the targeted classroom management EBP and teacher use of the uncoached classroom management EBP, respectively. Classroom management data are plotted on the y-axis. The x-axis denotes observations sessions and the dashed lines indicate an interruption to data collection due to the participating school district's spring break.

Teacher 1: Coached Dependent Variable

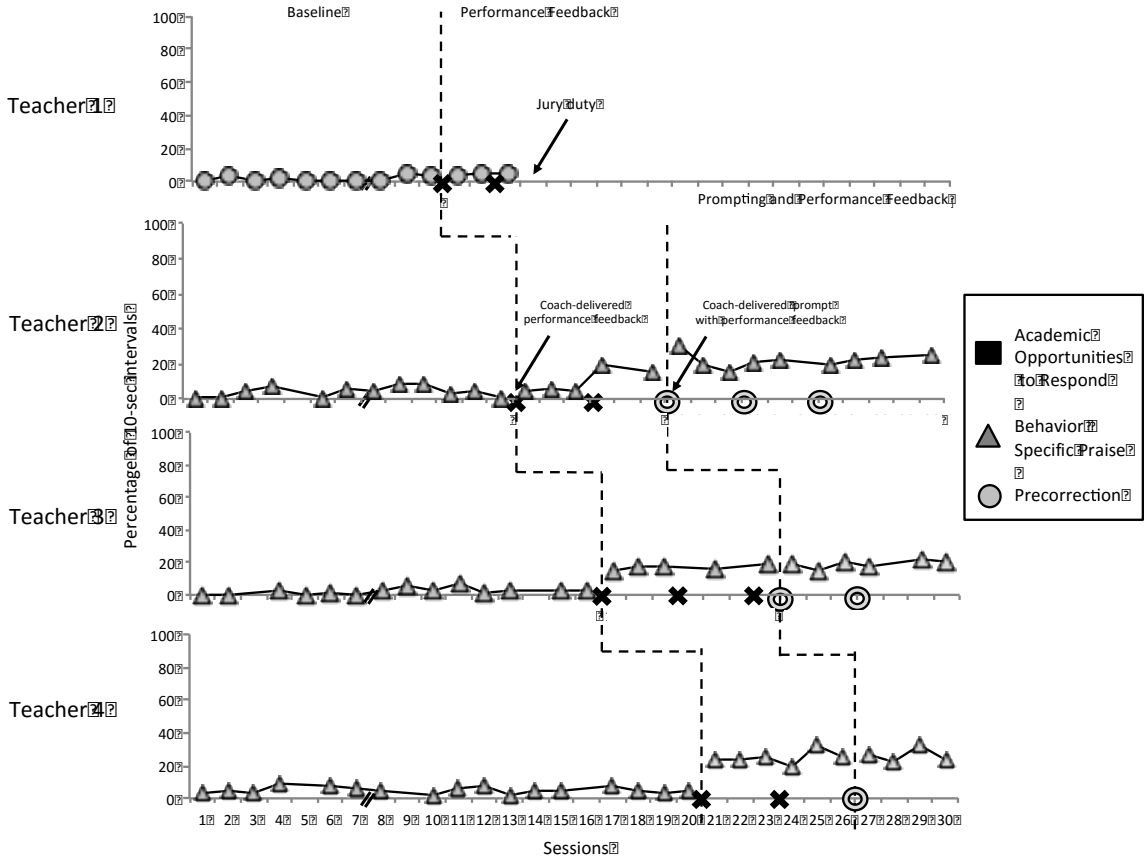
The targeted EBP for coaching with Teacher 1 was delivery of precorrection. The level of precorrection in baseline for Teacher 1 was very low and stable, with an average use in 1.8% of intervals during 15-minute observation sessions. Upon introduction of Phase B, there is no immediate change in level, trend, or variability for teacher use of precorrection after two coached meetings. The average percentage of intervals with precorrection in Phase B was 4.7%. Following the second coaching session, the teacher was summoned to jury duty and was unable to continue participation in the study. No basic effect between introduction of coach-delivered performance feedback and an increase in teacher use of precorrection was documented for Teacher 1.

Anecdotally, both Teacher 1 and Coach A reported that precorrection was being delivered during transitions (i.e., lining up for lunch, moving from whole group to small group instruction); however, the data collection time was scheduled intentionally to target whole group instructional time.

Teacher 2: Coached Dependent Variable

The targeted classroom management EBP for Teacher 2 was delivery of BSPS. In baseline, the level of BSPS was low and stable with no trend. The average percentage

Figure 6. Percentage of 10-second intervals with teacher use of targeted classroom management EBP observed during 15-minute observation sessions in Study 1.



of intervals with BSPS in baseline was 4.2%. Upon introduction of coach-delivered performance feedback in Phase B, there was no immediate change in level, trend, or variability for delivery of BSPS. Following the second coaching session, a delayed effect was noted, with an increased level of teacher delivery of BSPS. The average percentage of intervals with BSPS in Phase B was 9.6%. After introduction of the second intervention phase (BC), there was another immediate increase in level of BSPS use; however, the level stabilizes after the first data point, remaining higher than in baseline but lower than the first data point in Phase BC. There was no increasing or decreasing trend noted in Phase BC and the trend remained stable throughout the phase. The average percentage of intervals with BSPS in Phase BC was 22.1%.

There was a basic effect between the introduction of coach-delivered performance feedback and an increase in teacher use of BSPS that endured over both intervention phases; however, there interaction between coach-delivered prompting with performance feedback did not produce an increase in teacher use of BSPS as compared to coach-delivered performance feedback only.

Teacher 3: Coached Dependent Variable

The targeted classroom management EBP for Teacher 3 was also delivery of BSPS. In baseline, the level of BSPS was low and stable with no trend. The average percentage of intervals with BSPS in baseline was 2.1%. Upon introduction of coach-delivered performance feedback in Phase B, there was an immediate change in level of teacher use of precorrection. The data remained stable throughout Phase B, with an average percentage of intervals with BSPS of 17.0%. After introduction of the second intervention phase (BC), there was no change to the level, trend, or variability in teacher implementation of precorrection; however, the effect noted in Phase B endured throughout the second intervention phase. The average percentage of intervals with BSPS in Phase BC was 19.3%.

There was a basic effect between the introduction of coach-delivered performance feedback and an increase in teacher use of BSPS. The interaction between coach-delivered prompting with performance feedback did not produce an increase in use of BSPS for Teacher 3.

Teacher 4: Coached Dependent Variable

Like Teacher 2 and 3, the targeted classroom management EBP for Teacher 4 was delivery of BSPS. In baseline, Teacher 4 had a low level of BSPS delivery with some

variability and no trend. The average percentage of intervals with BSPS in baseline was 4.9%. After initiating Phase B there was an immediate change in teacher use of BSPS, with some variability and a stable trend throughout the phase. The average percentage of intervals with BSPS in Phase B was 24.5%. After introduction of coach-delivered prompting with performance feedback (Phase BC), the level, trend, and variability did not change. The average percentage of intervals with BSPS in Phase BC was 26.3%.

There was a basic effect between the introduction of coach-delivered performance feedback and an increase in teacher use of BSPS. The interaction between coach-delivered prompting with performance feedback did not produce an increase in use of BSPS for Teacher 4.

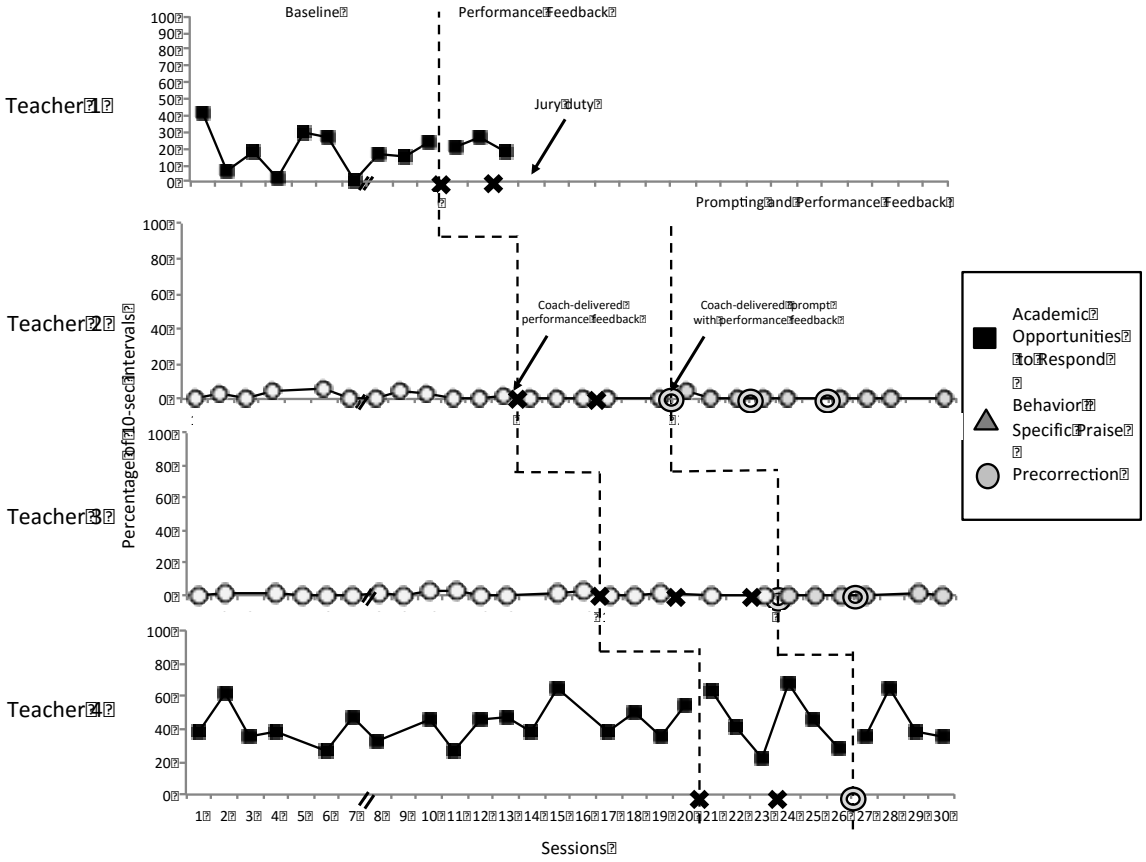
Teacher 1: Uncoached Dependent Variable

The uncoached EBP for Teacher 1 was academic OTRs. In baseline, there was a moderately low level of teacher use of OTRs with some variability and no trend. Upon introduction of Phase B, there was no change in level, trend, or variability in teacher use of OTRs. The average percentage of intervals with OTRs in baseline was 18.0% and in Phase B was 22.0%.

Teacher 2: Uncoached Dependent Variable

The uncoached EBP for Teacher 2 was delivery of precorrection. In baseline, there was a very low level of precorrection with no variability or trend. Upon introduction of Phase B, there was no change in level, trend, or variability in teacher-delivered precorrection. Similarly, in Phase BC there was no change to the level, trend, or

Figure 7. Percentage of 10-second intervals with teacher use of uncoached classroom management EBP observed during 15-minute observation sessions in Study 1.



variability of precorrection use. The average percentage of intervals with precorrection in baseline was 2.1%, in Phase B was 0.6%, and in Phase BC was 0.9%.

Teacher 3: Uncoached Dependent Variable

The delivery of precorrection was the uncoached EBP for Teacher 3. In baseline, there were near-zero levels of precorrection delivery. These floor effects were noted throughout both intervention phases as well, with no marked change in level, trend, or variability in Teacher 3's delivery of precorrection. The average percentage of intervals with precorrection in baseline was 0.7%, in Phase B was 0.2%, and in Phase BC was 0.2%.

Teacher 4: Uncoached Dependent Variable

The uncoached EBP for Teacher 4 was provision of OTRs. The level of use of OTRs in baseline was moderately high, with some variability and a slightly increasing trend. Upon introduction of Phase B, there were no marked changes in level or trend, although there was a slight increase in variability in the data patterns. The level, trend, and variability remained relatively similar in Phase BC. The changes from baseline to Phase B were very small and no basic effects were noted for either intervention phase. The average percentage of intervals with OTRs in baseline was 42.7%, in Phase B was 44.5%, and in Phase BC was 43.5%.

Overall

To establish a functional relation between an intervention and the dependent variable(s) measured in a study, at least three basic effects across three different points in time must be demonstrated (Horner et al., 2005; Kratochwill et al., 2010). In Study 1, a functional relation was documented between the introduction of coach-delivered performance feedback and an increase in teacher use of targeted classroom management EBPs. Three basic effects (Teachers 2, 3, and 4) were established across three different points in time.

A specificity of effect was also documented because the introduction of the independent variable(s) did not produce a change in use of the uncoached EBPs for any of the teacher participants. The fact that the intervention(s) produced a change in one dependent variable (i.e., the coached classroom management practice) but not the other dependent variable (i.e., the uncoached classroom management practice) offers more evidence that a functional relation exists.

There is no documentation of a functional relation between the combined effect of prompting and performance feedback (Phase BC) because three separate demonstrations of effect at three different points in time were not demonstrated. These results suggest that the delivery of coach-delivered performance feedback produce change in the dependent variable and that the interaction effects of both coach behaviors did not change the initial effect (i.e., change in level, trend, and variability from Phase B endured) but did not produce an increase in level or change in trend or variability.

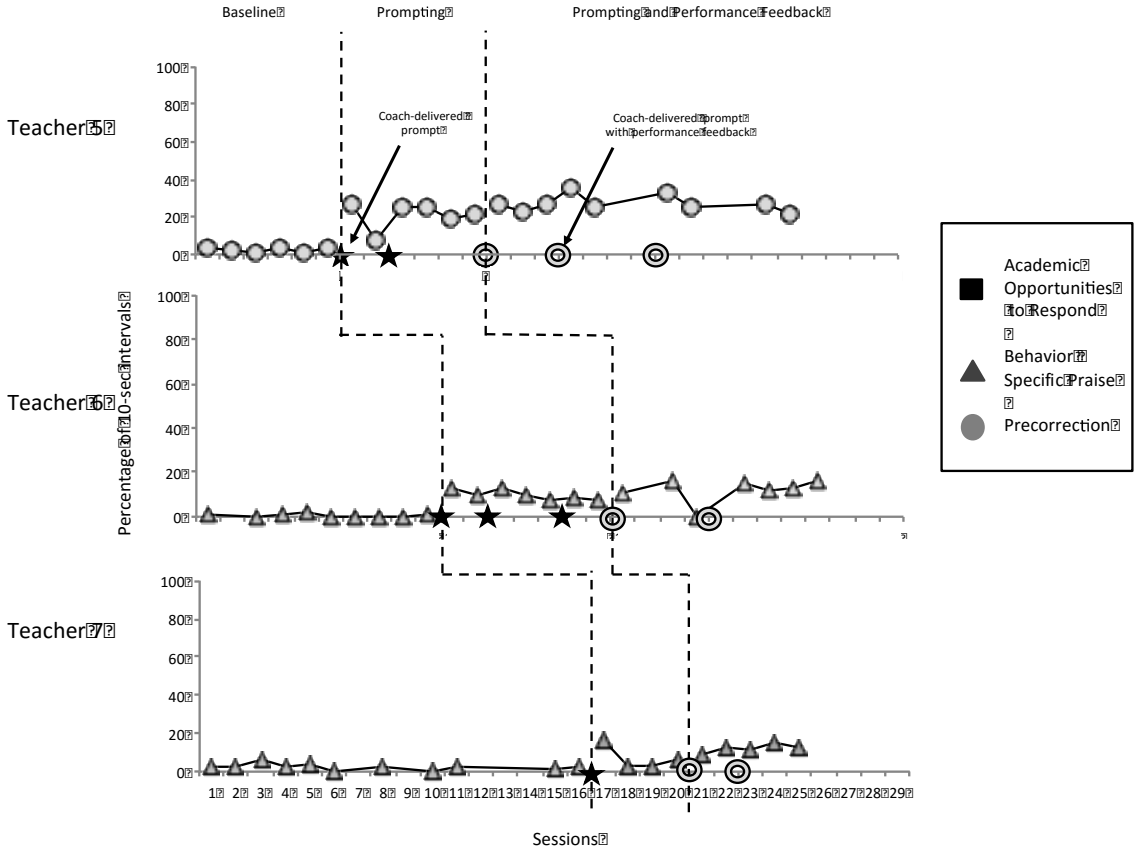
Study 2. Figure 8 displays the percentage of 10-second intervals with teacher use of the targeted classroom management EBP. Figure 9 shows the percentage of 10-second intervals with teacher use of the uncoached classroom management EBP. Similarly to Study 1, classroom management data are plotted on the y-axis. The x-axis denotes observations sessions and the dashed lines indicate an interruption to data collection due to the participating school district's spring break.

Teacher 5: Coached Dependent Variable

The focus of coaching with Teacher 5 was to increase delivery of precorrection. Baseline levels of precorrection were very low and stable, with near-zero levels of delivery and no variability or increasing trend. For Teacher 5, the average percentage of intervals with precorrection was 2.2%. Upon introduction of coach-delivered prompting (Phase C), there was an immediate and significant increase in level of precorrection; however, the second data point marked a return to baseline levels of precorrection delivery. Following the second coach-delivered prompt, levels of precorrection increased immediately again and remained stable throughout the first intervention phase. With the exception of the second data point in the phase, the data remained stable and there were

no trends observed. The average percentage of intervals with precorrection in Phase C was 20.8%. After the introduction of Phase BC (coach-delivered prompting with performance feedback) there was no discernable change to level, trend, or variability in

Figure 8. Percentage of 10-second intervals with teacher use of targeted classroom management EBP observed during 15-minute observation sessions in Study 2.



Teacher 5's use of precorrection; however, the average percentage of intervals did increase significantly to 27.2%.

There was a basic effect between the introduction of coach-delivered prompting and an increase in Teacher 5's use of precorrection. The interaction between coach-delivered prompting with performance feedback did not produce an increase in use of precorrection for Teacher 5.

Teacher 6: Coached Dependent Variable

The coached EBP for Teacher 6 was delivery of BSPS. The baseline level of BSPS was almost zero, with no variability or trend in evident in the data pattern. The average percentage of intervals with BSPS delivery in baseline was 0.6%. After introducing coach-delivered prompting, there was a small but immediate change in level of BSPS delivery. The data were stable, with a slightly decreasing trend and an average percentage of intervals with BSPS delivery of 10.0%. Upon the addition of performance feedback (Phase BC), there was no change to level or variability of teacher use of BSPS; however, there was no decreasing trend noted in Phase BC. The third data point in BC marks a return to baseline levels of teacher use of BSPS; however, after a second coaching session with performance feedback and prompting, the level increased immediately and endured throughout the second phase of intervention. It was noted that the teacher was preparing for state standardized testing and the lesson observed was different than the other observation days because of test preparation. The average percentage of intervals with BSPS in Phase BC was 11.9%.

There was a basic effect between the introduction of coach-delivered prompting and an increase in the delivery of BSPS for Teacher 6; however, the introduction of coach-delivered performance feedback and prompting (Phase BC) did not produce a change in Teacher 6's use of BSPS.

Teacher 7: Coached Dependent Variable

Delivery of BSPS was the targeted EBP for Teacher 7. In baseline, BSPS delivery was at a floor level with a stable data pattern and no trend. The average percentage of intervals with BSPS delivery was 2.4%. After commencing Phase C there was an

immediate increase in teacher delivery of BSPS; however, this only lasted one data point before the level of BSPS delivery dropped again. There was no variability but a slightly increasing trend throughout the remainder of Phase C, with an average percentage of intervals with BSPS at 7.3%. In Phase BC, the increasing trend continued, with no variability or level change observed. The average percentage of intervals with BSPS delivery in the second intervention phase was 12.4%.

There was a basic effect between the introduction of coach-delivered prompting and a change in trend of delivery of BSPS for Teacher 7 that endured throughout the second intervention phase (Phase BC). It is interesting to note that, similar to Teacher 2 in Study 1, Teacher 7 required two coaching exchanges before a discernable and enduring change occurred.

Teacher 5: Uncoached Dependent Variable

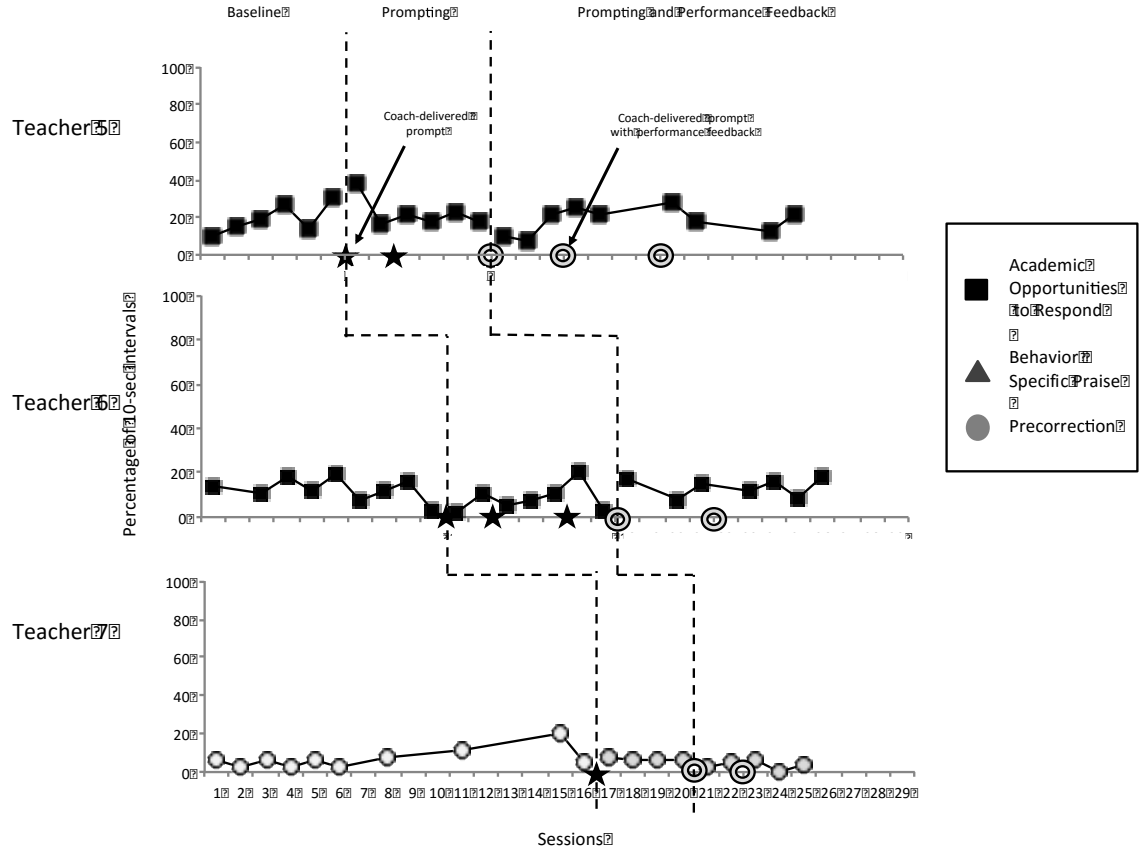
The provision of academic OTRs was the uncoached EBP for Teacher 5. Baseline levels of OTR use were moderately low, with some variability and a slightly increasing trend. There were no discernable changes to the level, trend, or variability in data patterns for academic OTRs in either intervention phase. The average percentage of intervals with academic OTRs in baseline was 72.0%, in Phase C was 59.5%, and in Phase BC was 31.3%.

Teacher 6: Uncoached Dependent Variable

The uncoached EBP for Teacher 6 was the provision of academic OTRs. The baseline level of OTR use was low, with slight variability and no increasing or decreasing trend. No changes to the data pattern was observed upon introduction of either intervention

phase for the uncoached EBP. The average percentage of intervals with academic OTRs in baseline was 12.4%, in Phase C was 8.6%, and in Phase BC was 13.6%.

Figure 9. Percentage of 10-second intervals with teacher use of uncoached classroom management EBP observed during 15-minute observation sessions in Study 2.



Teacher 7: Uncoached Dependent Variable

Precorrection was the uncoached EBP for Teacher 7. The baseline level of precorrection use was low, with initial levels near zero and a slightly increasing trend noted in three of the last four data points. No changes to the level or variability were noted after the introduction of Phase C or Phase BC. The average percentage of intervals with precorrection in baseline was 6.8%, in Phase C was 7.0%, and in Phase BC was 3.6%.

Overall

In Study 2, a functional relation was documented between the introduction of coach-delivered prompting and an increase in teacher use of targeted classroom management EBPs. Three basic effects (Teachers 5, 6, and 7) were established across three different points in time. There were no changes to teacher use of the uncoached EBPs for any of the participants, documenting a specificity of effect for the coaching intervention.

Similarly to Study 1, there is no documentation of an interaction effect between coach-delivered prompting with performance feedback (Phase BC). A functional relation between the combined effect of prompting and performance feedback (Phase BC) was not observed. These results suggest that the delivery of coach-delivered prompting and produce change in the dependent variable and that the interaction effects of both coach behaviors did not change the initial effect (i.e., change in level, trend, and variability from Phase C endured) but did not produce an increase in level or change in trend or variability.

Classroom Behavior

Study 1. Figure 10 displays the percentage of 10-second intervals with student academic engagement (for up to five data points) and class-wide classroom disruption. The student and classroom data are plotted on the y-axis. The x-axis denotes observations sessions and the dashed lines indicate an interruption to data collection due to the participating school district's spring break.

Teacher 1

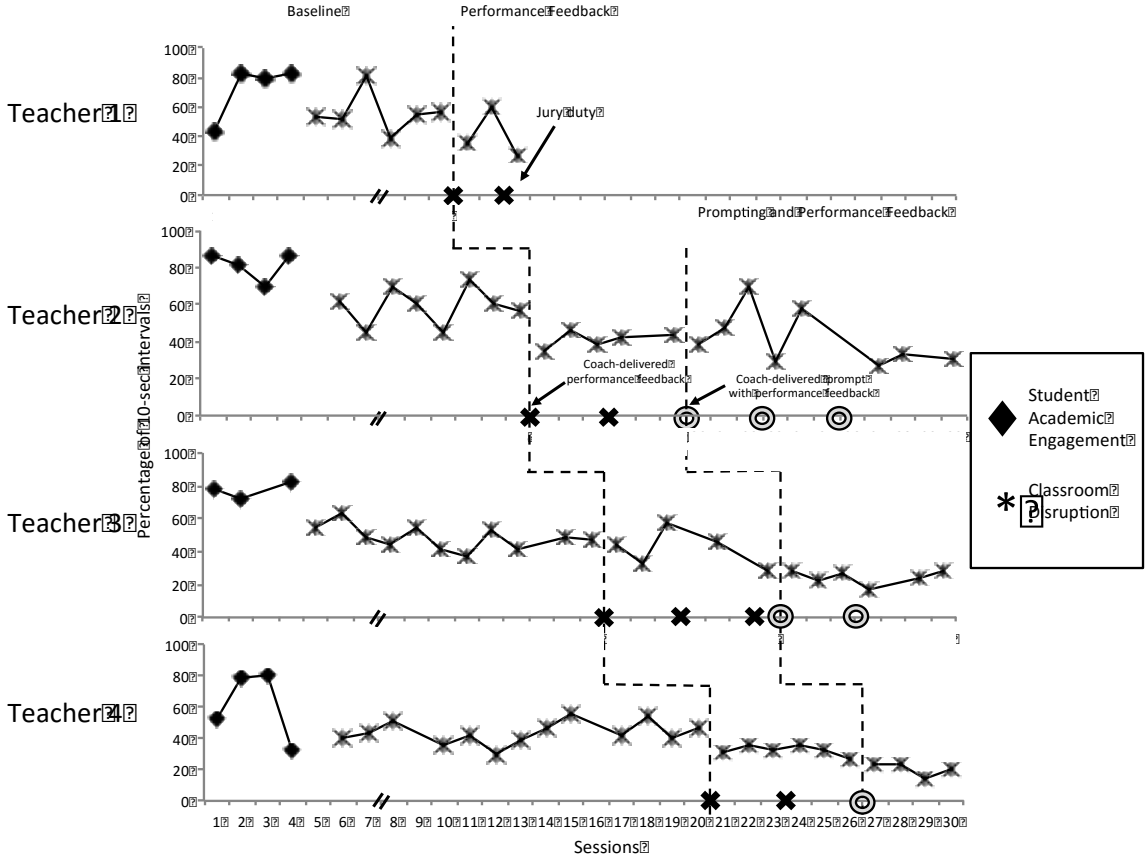
Before switching the student behavior variable, four data points were collected on classroom academic engagement. There were relatively high rates of academic engagement in baseline. After beginning data collection on classroom disruptions, high levels were noted throughout the baseline phase, with an average percentage of intervals with classroom disruption of 56.2%. There was variability but no increasing or decreasing trend in this phase. After introducing Phase B, there was an immediate change in level; however, the second data point indicated a return to baseline levels of classroom disruption. Only three data points were collected before Teacher 1 was removed from the study. Caution is appropriate when determining the extent to which data patterns were established in Phase B with only three data points, but with an average of 40.7% intervals with disruptions, there was an overall decrease in the average percentage of intervals with classroom disruption once coaching was initiated.

Teacher 2

Teacher 2 had very high levels of student academic engagement in the first four baseline data points. Baseline levels of classroom disruption were also high, with some variability in the data and an increasing trend. On average, 59.0% of intervals had classroom disruption in baseline. Upon introduction of coach-delivered performance feedback, there was an immediate decrease in level of classroom disruption and a more stable pattern in Phase B; however, a very slight increasing trend in the first intervention phase was observed. The average percentage of intervals with classroom disruption was 40.8%. There was no immediate change in level upon introduction of the second intervention phase. Across the Prompting with Performance Feedback phase, the level of

classroom disruption decreased, the trend of the data pattern was decreasing, and there was an increase in the level of variability, with an overall phase average of 41.5% of intervals with classroom disruption.

Figure 10. Percentage of 10-second intervals with student academic engagement and classroom disruption observed during 15-minute observation sessions in Study 1.



Teacher 3

Baseline levels of student academic engagement for Teacher 3 were high, with a slightly increasing trend across the first three data points in baseline. The level of classroom disruption in baseline was moderately high, with low variability and a slightly decreasing trend. The average percentage of intervals with classroom disruption was 48.4%. Upon introduction of the first intervention phase, there was no immediate change in level or variability of classroom disruption. A more marked decreasing trend was

observed in Phase B, with an average of 42.0% intervals with classroom disruption in the phase. After introducing the second intervention, there is no immediate change in level of classroom disruption; however, the data pattern is much more stable, with limited variability and no increasing or decreasing trend. In Phase BC, classroom disruptions significantly decreased to an average percentage of intervals with disruption of 24.5%.

Teacher 4

For the final teacher in Study 1, baseline levels of student academic engagement were high, with a significant decrease in level noted in the fourth and final data point in baseline. The level of classroom disruption in baseline was moderately high with limited variability and a slightly increasing trend. The average percentage of intervals with classroom disruption in baseline was 44.0%. Upon introduction of the first intervention, there was an immediate decrease in level of classroom disruption, with a stable data pattern and a slightly decreasing trend. The average percentage of intervals with classroom disruption was 27.3% in Phase B. In the second intervention phase there was no change in level, trend, or variability noted. The decreasing trend that was noted in Phase B endured in Phase BC, with an average of 25.8% of intervals with classroom disruption.

Overall

A functional relation between the introduction of coach-delivered performance feedback and a decrease in classroom disruptions was established, with basic effects noted for Teachers 2, 3, and 4. For Teacher 2, there was a delayed effect, with more significant change observed in Phase BC.

A functional relation between the introduction of coach-delivered prompting with performance feedback (Phase BC) was not documented. Although class-wide problem behavior continued to decrease in the second intervention phase for Teachers 2, 3, and 4 and mean levels of disruptive behavior were lower for Teachers 3 and 4 in the second intervention phase, visual analysis did not show a significant change in level, trend, or variability across all three teachers.

Study 2. Figure 11 shows the percentage of 10-second intervals with classroom disruption across all three classrooms in the second study. Similarly to Study 1, the x-axis indicates the percentage of 10-sec intervals with classroom disruption. The y-axis denotes sessions and the dashed lines on the axis indicate a break in data collection due to spring break.

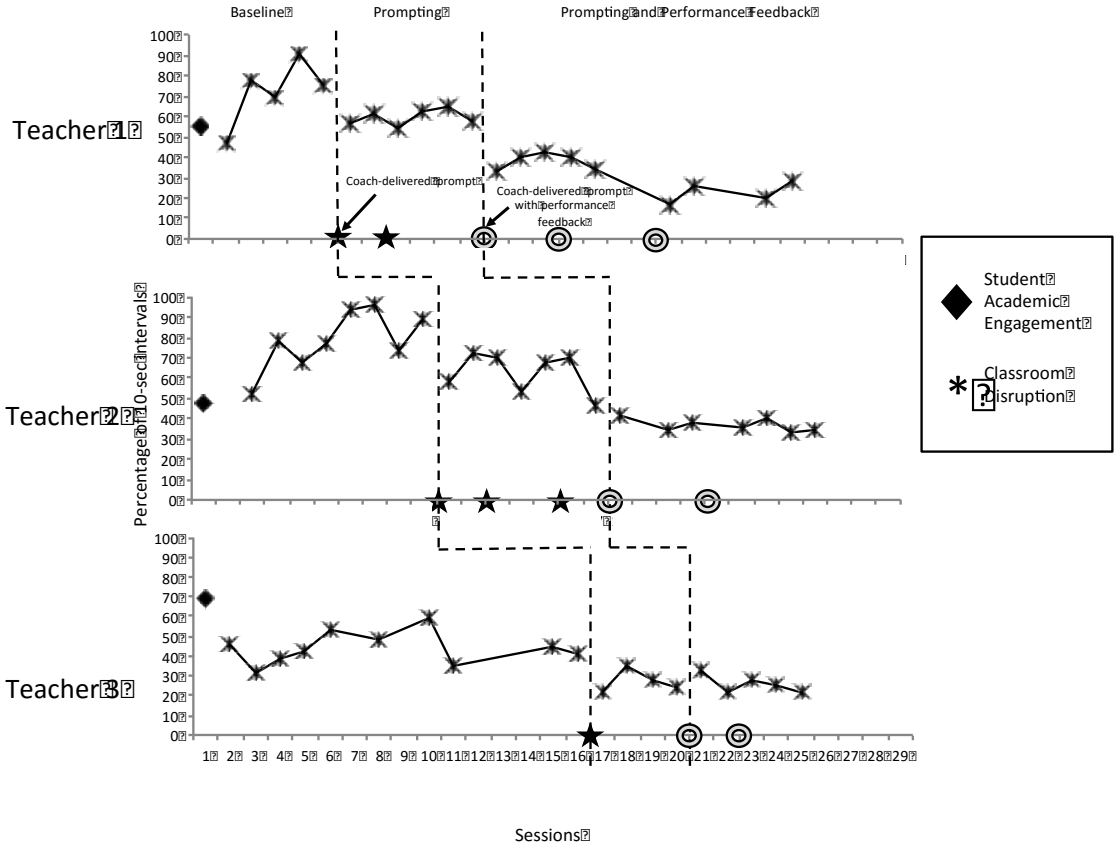
Teacher 5

The baseline level of classroom disruption for Teacher 5 was high, with a marked increasing trend over time and some variability. The average percentage of intervals with classroom disruption in baseline was 72.0%. In Phase C, there was an immediate decrease in level, with a very slight increasing trend across the phase. An average of 59.5% of intervals with classroom disruptions were observed. Upon introduction of the second intervention phase, there was another immediate decrease in level of classroom disruption. There was some variability in the data, with a slightly decreasing trend throughout Phase BC. In the final phase, an average of 31.3% of intervals had classroom disruption.

Teacher 6

For Teacher 6, baseline levels of classroom disruption were high, with a significant increasing trend and near-ceiling levels of disruption at the end of the baseline data collection phase. On average, 78.5% of intervals had some form of classroom disruption in baseline. Upon introduction of coach-delivered prompting, there was an

Figure 11. Percentage of 10-second intervals with student academic engagement and classroom disruption observed during 15-minute observation sessions in Study 2.



immediate decrease in classroom disruption and a change in trend (from increasing to decreasing). There was some variability in classroom disruption data across the phase, with an average percentage of intervals with classroom disruption of 62.4%. In Phase BC, there was no immediate change in level; however, classroom disruption continued to

decrease throughout the phase. The average percentage of intervals with classroom disruption was 36.9% in the final phase.

Teacher 7

There were moderate levels of classroom disruption in baseline for Teacher 7, with limited variability and no marked trend. There was an average of 44.0% of intervals with classroom disruption in baseline phase. Upon introduction of intervention in Phase C, there was a small but immediate decrease in level of classroom disruption with some variability and no trend. The average percentage of intervals with disruption decreased to 27.3%. In the final intervention phase, there was no change in level, trend, or variability and the average percentage of intervals with classroom disruption was 25.8%.

Overall

A functional relation between coach-delivered prompting and a decrease in classroom disruption was documented. There were basic effects observed across all classrooms in Study 2 upon introduction of promoting (Phase C). For Teachers 5 and 6, a basic effect was also demonstrated between coach-delivered prompting with performance feedback (Phase BC) and a decrease in classroom disruptions. A basic effect was not noted in Teacher 7's classroom and therefore a functional relation between coach-delivered prompting with performance feedback and a decrease in classroom disruption was not established.

Statistical Analysis of Direct Observation Data

Tau-U was calculated to determine the magnitude of effect of coach-delivered performance feedback, coach-delivered prompting, and coach-delivered prompting with performance feedback on teacher use of the coached EBP and classroom disruption. As a

Table 9. Average percentage of intervals in baseline and intervention phases for teacher use of coached and uncoached classroom management EBPs and classroom disruption.

	Average percentage of intervals		
	Baseline	Intervention Phase 1 (B or C)	Intervention Phase 2 (BC)
Teacher 1			
Coached EBP	1.8	4.7	--
Uncoached EBP	18.0	22.0	--
Classroom Disruption	56.2	40.7	--
Teacher 2			
Coached EBP	4.2	9.6	22.1
Uncoached EBP	2.1	0.6	0.9
Classroom Disruption	59.0	40.8	41.5
Teacher 3			
Coached EBP	2.1	17.0	19.3
Uncoached EBP	0.7	0.2	0.2
Classroom Disruption	48.4	42.0	24.5
Teacher 4			
Coached EBP	4.9	24.5	26.3
Uncoached EBP	42.7	44.5	43.5
Classroom Disruption	43.5	32.3	20.3
Teacher 5			
Coached EBP	2.2	20.8	27.2
Uncoached EBP	19.3	22.3	18.3
Classroom Disruption	72.0	59.5	31.3

Teacher 6			
Coached EBP	0.6	10.0	11.9
Uncoached EBP	12.4	8.6	13.6
Classroom Disruption	78.5	62.4	36.9
Teacher 7			
Coached EBP	2.4	7.3	12.4
Uncoached EBP	6.8	7.0	3.6
Classroom Disruption	44.0	27.3	25.8

measure of effect size in singe case research, Tau-U allows for control of monotonic baseline trend and serial dependency in the data (Parker, Vannest, & Davis, 2014). The range of Tau-U scores is -1.0 to 1.0.

Study 1

Teacher Implementation of Classroom Management Practices. In Study 1, Tau-U was calculated to measure the non-overlap between baseline and Phase B. The results are as follows: Teacher 1, Tau-U = 0.80 (p = 0.0425); Teacher 2, Tau-U = 0.48 (p = 0.1264); Teacher 3, Tau-U = 1.00 (p = 0.0012); and Teacher 4, Tau-U = 1.00 (p = 0.0004). The overall weighted average across all four teachers was Tau-U = 0.84 (p = 0.0000). To examine the non-overlap between Phase B and Phase BC, Tau-U was calculated across all teacher participants. The results are as follows: Teacher 2, Tau-U = 0.91 (p = 0.0063); Teacher 3, Tau-U = 0.57 (p = 0.1207); and Teacher 4, Tau-U = 0.17 (p = 0.6698). The overall weighted average across all four teachers between Phase B and Phase BC was Tau-U = 0.57 (p = .0069).

Classroom Behavior. Tau-U was calculated to examine the difference between baseline and Phase B for classroom disruption data only. The results are as follows:

Teacher 1, Tau-U = -0.44 (p = 0.3017); Teacher 2, Tau-U = -0.90 (p = 0.0084); Teacher 3, Tau-U = -0.35 (p = 0.2818); and Teacher 4, Tau-U = -0.83 (p = 0.0044). The overall weighted average across all four teachers was Tau-U = -0.64 (p = 0.0002). The effects between Phase B and Phase BC are as follows: Teacher 2, Tau-U = -0.18 (p = .6084); Teacher 3, Tau-U = -0.90 (p = .0137); and Teacher 4, Tau-U = -1.0 (p = .0105). The overall weighted average across all four teachers between Phase B and Phase BC was Tau-U = -0.67 (p = .0015).

Study 2

Teacher Implementation of Classroom Management Practices. Tau-U was calculated to measure the non-overlap between baseline and Phase C in Study 2. The results are as follows: Teacher 5, Tau-U = 1.00 (p = 0.0039); Teacher 6, Tau-U = 1.00 (p = 0.0009); and Teacher 7, Tau-U = 0.66 (p = 0.0583). The overall weighted average across all three teachers wass Tau-U = 0.89 (p = 0.0000). To examine the effects between Phase B and Phase BC, Tau-U was calculated across all teacher participants. The results are as follows: Teacher 5, Tau-U = 0.56 (p = .0771); Teacher 6, Tau-U = 0.51 (p = .1102); and Teacher 7, Tau-U = 0.50 (p = .2207). The overall weighted average across all four teachers between Phase B and Phase BC was Tau-U = 0.52 (p = .0095).

Classroom Behavior. To assess the difference between classroom disruption between baseline and Phase B, Tau-U was calculated for all three teachers in Study 2. The results are as follows: Teacher 5, Tau-U = -0.60 (p = 0.1003); Teacher 6, Tau-U = -0.67 (p = 0.0323); and Teacher 7, Tau-U = -0.93 (p = 0.0089). The overall weighted average across all four teachers was Tau-U = -0.73 (p = 0.0002). To examine the effects between Phase B and Phase BC, Tau-U was calculated across all teacher participants.

The results are as follows: Teacher 5, Tau-U = -1.00 (p = .0015); Teacher 6, Tau-U = 1.00 (p = .0017); and Teacher 7, Tau-U = -0.20 (p = .62). The overall weighted average across all three teachers between Phase B and Phase BC was Tau-U = -0.78 (p = .0001).

Social Validity

Of the seven participants in full study who were invited to complete the *Teacher Evaluation Inventory for Coaching Intervention* survey, 5 participants responded. The results are summarized in Table 10. Responses were on a 5-point Likert-type scale, from *Strongly Disagree* (1) to *Strongly Agree* (5). Higher mean scores indicate statements that participants agree with more strongly. Participants indicated the greatest agreement with the statement that the coaching intervention was easy to receive (M = 4.80) and the strongest disagreement with the statement that the intervention required more time and

Table 10. Participant responses (n = 5) to the Teacher Evaluation Inventory for Coaching Intervention survey.

Item	*M*	Range
1. It has been relatively easy to receive the coaching intervention (e.g., amount of time and effort)	4.80	4 – 5
2. The coaching intervention process has required more time and effort than it has been worth	1.60	1 – 3
3. I would like to continue to receive coaching in this manner	4.0	3 – 5
4. I have noticed positive differences in my class-wide behavior management practices since receiving the intervention	4.40	4 – 5
5. I have noticed positive differences in student behavior since receiving the intervention	4.40	4 – 5
6. Overall, my teaching practice has benefitted from receiving this coaching intervention	4.40	4 – 5

effort than it was worth (M = 1.60). There were three opportunities to participants to provide open-ended responses. These responses are summarized in Table 11.

Table 11. Open-ended participant responses to the Teacher Evaluation Inventory for Coaching Intervention survey.

Item	Open-ended Response
1. In what ways was the coaching intervention effective and/or beneficial to your practice?	The team was very positive and comfortable to be around. I didn't feel judged and felt like the constructive feedback they provided was specific and greatly benefitted my classroom management practices.
	It has been most beneficial to see actual data of my classroom behaviors improving. Sometimes it is hard to tell when you are using a new strategy or technique if it is actually making a difference in your room. Seeing the numbers provide that it was making a positive impact in my room.
	It got me thinking about how to give behavior specific praise/feedback to all of my students; not just the ones that consistently “do the right thing”.
	It got me thinking about how to give behavior specific praise/feedback to all of my students; not just the ones that consistently "do the right thing". I notice an improvement in student behavior when I give specific praise around the class.
2. In what ways could the coaching intervention be improved?	I liked the structure of the intervention, mini-meetings, checkpoints of data, and the repeated emails were helpful. Maybe an end observation speech to the class expressing what you were looking for.
3. What other comments do you have about the intervention?	I appreciate the opportunity to support research in the field of education and hope I can help with further research as I love psychology and education.
	I thought it was wonderful. Thank you!

CHAPTER IV

DISCUSSION

General Discussion

The provision of coaching support is an important component of successful initial and ongoing implementation of EBPs that support students (Pas et al, 2015). While considerable resources have been devoted to scaling up coaching supports in schools and districts across the country, it is critical to understand the functions by which coaching is effective in producing behavior change. When the functions of effective coaching are understood, training and support for coaches and others who deliver coaching within their professional roles (e.g., school psychologists, administrators) can be directly linked to the functions by which coaching is more effective. When coaches are better prepared and supported then it is more likely that teachers and students will benefit. Further, developing a more thorough understanding of the active ingredients of effect coaching can support the

The roles of training and coaching are often conflated in the literature on educational coaching. While both training and coaching play important roles in the transfer of knowledge from professional development to implementation in everyday practice (Freeman, Sugai, Simonsen, & Everett, 2017) it is important to discriminate between the two in order to more directly study the effective components of each. Research indicates that training is most effective for teacher professional development when it is (a) job-embedded, (b) focused on the content area(s) that teachers are assigned,

(c) utilizes active learning principles, and (d) coherent (Showers, Joyce, & Bennett, 1987; Wayne, Yoon, Zhu, Cronen, & Garet, 2008; Wilson & Berne, 1999). Training allows individuals and teams to acquire the knowledge and skills necessary to improve practice. Training is a prerequisite to coaching and the purpose of coaching is unique and distinct from the purpose of training.

Decades of research demonstrates that training alone in insufficient in supporting individuals to implement evidence-based practices and programs, regardless of the quality of training received (e.g., Onchwari & Keengwe, 2010; Phillips, Nichols, Rupley, Paige, & Rasinski, 2016; Rennie, 2011). To support transfer of knowledge to practice, coaching is recommended. From a behavioral perspective, coaching is effective in supporting individuals to implement EBPs because it is "focused on understanding and arranging environmental conditions and contexts such that implementation is more likely to be occasioned and reinforced" (Freeman et al., 2017, p. 31). To individuals to implement EBPs, the coaching logic model presented in this study is based on four functions: prompting, performance feedback, fluency building opportunities, and adaptation. In terms of a tiered coaching model, the type of coaching delivered in this study could be considered "Tier I coaching". The frequency of coaching was relatively low (once per week), the dosage was low (10 minute coaching sessions and/or a brief email prompt), and the intensity was low (focused on only one discrete teacher behavior). We recognize that coaching is a complex and multi-faceted process; however, the focus of this study was to document the effects of only two purported mechanisms of effective coaching. We examined the extent to which a functional relation exists between coach-delivered prompting, performance feedback, and prompting with performance feedback

on teacher use of evidence-based classroom management practices and student behavior outcomes. This chapter presents a summary of the results and interpretations of the findings, including considerations for coaches. The limitations of the study, implications for practice, and future research considerations will be discussed.

Coach-delivered Prompting. The results of the study documented a functional relation between the implementation of coach-delivered prompting and an increase in teacher use of evidence-based classroom management practices and improved student behavior. The prompts were delivered once a week via email and were delivered as soon as possible before a scheduled observation. This is a relatively low dosage of coaching and the results clearly indicated an increase in teacher use of the targeted evidence-based practice.

Although we hypothesized that prompting would produce some change in teacher behavior, results indicate that prompting alone was just as effective as prompting with performance feedback (i.e., there was no functional relation documented between coach-delivered prompting with performance feedback and an increase in teacher use of EBPs in Study 2). These results suggest that for some teachers, prompting alone is effective in producing significant change. A possible explanation for these results is that teachers received training prior to the start of this study, meaning that they had some foundational knowledge of the targeted EBP prior to coaching.

Coach-delivered Performance Feedback. Similarly to coach-delivered prompting, the effects of coach-delivered performance feedback produced more significant changes alone than when paired with prompting. In other words, a functional relation between coach-delivered performance feedback and an increase in teacher use of

the targeted classroom management EBPs was documented; however, the results of this study did show a functional relation between coach-delivered prompting with performance feedback and an additional increase in teacher use of the targeted classroom management practices.

These results were less surprising, given the extensive literature on the effects of performance feedback on desired outcomes. We hypothesized that there would be more significant effects from coach-delivered prompting with performance feedback than from performance feedback alone; however, the results indicate that coach-delivered prompting did not significantly contribute to additional improvement in teacher behavior when added to performance feedback.

We did expect to see greater changes in teacher behavior than what was documented in this study, however. Given the research on the effects of performance feedback, we hypothesized much higher levels of implementation of classroom management EBPs following the performance feedback phase of the study. One possible reason for the weaker effects was the low dosage of coaching received by participants (i,e,, one, 10-minute session per week). It is possible that with more frequent (i.e., two to three times per week) or more intensive (i.e., longer duration, more components of feedback implemented) performance feedback we would have seen a greater increase in implementation over time. Another possibility is that we are observing the effects of performance feedback that is not confounded with other components of professional development, namely training. In many studies, conflating training and coaching prevents researchers for distinguishing between the effects of re-teaching during feedback (e.g., training) and performance feedback alone. It is possible that when performance feedback

is specifically isolated from other training or coaching functions, it has less dramatic effects.

Interaction Effects on Teacher Behavior. The results from Study 1 and Study 2 do not document a functional relation between coach-delivered prompting with performance feedback and an increase in teacher use of targeted evidence-based classroom management practices above what is achieved when either prompting or performance feedback are provided. Although these results were unexpected, we do not propose coaches to do either prompting or performance feedback, nor do we suggest that either one is likely to be used in isolation. Rather, we believe that the distinction between performance feedback and prompting in this study may have been arbitrary. Although the functions do serve different purposes, they are almost always used in combination, even when coaches do not necessarily realize they are delivering both a prompt and feedback.

The delivery of performance feedback can serve as a prompt in cases where the individual and coach discuss how the targeted skill or practice will be implemented in the following lesson (i.e., establishing *when* to use the skill). This discussion facilitates the establishment of stimulus control, even if the prompt is delivered after the observation. Similarly, a prompt can also serve as performance feedback, especially when coaches deliver specific praise (e.g., "You've increased your rate of opportunities to respond by nearly 50% since we started. I'm looking forward to observing how you utilize OTRs during today's observation"). Further, it is likely that we underestimated the natural feedback from the environment and did not consider methods by which teachers could self-recruit performance feedback. In sum, our hypothesis is not that prompting with performance feedback is ineffective or less effective that either function alone, but rather

that the two functions may have been working together in the natural environment during the study, despite our best efforts to separate the two in intervention phases.

Specificity of Effect on Teacher Behavior. To determine the extent to which there was a specificity of effect on teacher behavior, we measured one classroom management EBP that the teachers received training on but did not receive coaching on. The results of both studies demonstrate that no functional relation exists between the introduction of coach-delivered prompting, coach-delivered performance feedback, or coach-delivered prompting with performance feedback and a change in teacher use of the uncoached EBP.

These results support other findings that training alone is typically insufficient to change teacher behavior within the natural implementation context. It is also interesting to note that there is no spontaneous generalization for skills such as delivery of behavior specific praise, despite the likelihood that there was an increase in opportunities for appropriate behavior to be reinforced in both intervention phases across all participating classrooms.

Cascading Effects on Classroom Behavior. Within our logic model, we hypothesized that when teacher behavior changes there will be a related change in student behavior. In this study, we first measured student academic engagement; however, rates were very high in the majority of the classrooms. With high baseline rates of academic engagement, it would be unlikely to see any change significant change in intervention. Therefore, we changed the dependent variable to classroom disruption, where we anticipated seeing a decrease when teacher use of evidence-based classroom management practices increased. The results of Study 1 and Study 2 demonstrate that a functional

relation exists between an increase in teacher use of classroom management practices and a decrease in classroom disruption.

The fact that change in teacher behavior has an effect on student behavior is not unexpected; however, it is interesting to note how much student behavior was influenced by small changes to teacher behavior. As presented in Table 10, we see changes in student behavior continuing into the second intervention phase (Phase BC) even when little to no changes occur in teacher behavior after introduction of Phase BC. For example, for Teacher 3 in Study 1, the delivery of behavior specific praise only changed by 2.3% from Phase B (where praise was delivered in 17.0% of intervals, on average) to Phase BC (where praise was delivered in 19.3% of intervals, on average). The classroom behavior continued to change significantly, with classroom disruption decreasing from an average of 42.0% on intervals in Phase B to an average of 24.5% in Phase BC. It is possible that these changes are directly related to teacher implementation of one targeted classroom management practice; however, we anticipate that there are more factors involved in the continued reduction of classroom disruption. We hypothesize that the results are due in part to the implementation of the specific coached practice and in part to other contributing factors such as overall teacher confidence in classroom management, greater focus on academic lesson, and a reduction in the reward for engaging in disruptive classroom behavior (i.e., the function of the problem behavior is being met by the teacher and/or students in the classroom).

Implications for Practice

The results of this study indicate that coaching is effective and can change teacher and student behavior with a relatively low-dosage and low-intensity coaching

intervention. The findings suggest that prompting and performance feedback are effective coaching functions that increase teacher use of evidence-based classroom management practices. The results did not demonstrate an additional effect when prompting and performance were delivered together, possibly because prompting and performance feedback are separate and effective functions of coaching or that separating the two functions is arbitrary and both functions were influencing teacher behavior, even when the coach only delivered prompting or performance feedback. Results demonstrate that after initial training is provided, teachers with low rates of EBP implementation can improve practice with relatively limited coaching; however, coaching that combines prompting with performance feedback is not necessarily more effective than coaching with prompting or performance feedback alone. As aforementioned, we believe that the distinction between prompting and performance feedback was too artificial and that for highly motivated teachers such as the ones who volunteered to participate in this study, it is possible that they were self-recruiting feedback and receiving natural feedback from the environment. Both functions are important to the coaching process and to producing desired behavior change.

Based on the results of this study, we propose that (a) coaching should be differentiated to serve the needs of individuals and teams, (b) regardless of the level of coaching support needed, coaches should remain cognizant of four functions (i.e., prompting, performance feedback, opportunities for fluency building, and adaptation), and (c) following training or acquisition of a new skill, coaches should try to deliver coaching twice within the week following the training.

Differentiated Coaching. To determine the functions of effective coaching, this study focused on a universal approach to coaching; however, each classroom and teacher requires different levels of support. Similarly to supporting students, coaches need to consider what level of coaching is necessary to support individual teachers and to understand that coaching support needs may change *over time* (e.g., teacher needs less coaching as she becomes more fluent with a skill) and *depending on contextual factors* (e.g., teacher needs more help when a student with high intensity support needs is assigned to his classroom). Although the level of coaching support may change, the functions of effective coaching do not. We argue that, while some features of coaching may be more or less important at different levels, successful coaches will have a solid understanding of all four functions. Future research is necessary to support this coaching logic model, as well as the differentiation of coaching based on teacher needs. Table 12 presents the tiered coaching model and possible coaching activities aligned to the needs presented within each level.

Coaching Across All Levels of Support. Before delivering coaching, it is important to determine the **subject(s)** being coached (e.g., universal classroom management practices, district-mandated math curriculum, social skills) and the **evidence-based practices** associated with the content (e.g., the empirically-supported practices and interventions in this content area). Coaches must consider the desired outcomes and establish data collection procedures that allow for data collection to guide data-driven decision making. Then, coaches should consider the content (i.e., the coaching functions being delivered), level of precision (i.e., global or specific feedback),

timing (i.e., frequency and immediacy), and communication form (i.e., method by which coaching delivered).

Train Once, Coach Twice. Finally, results indicate that for teachers who do not immediately respond to coaching, behavior began to change after the second coaching episode. These results indicate that, following initial training, coaching is more likely to be effective at supporting implementation if two coaching sessions follow the training as soon as possible. We recommend arranging two coaching sessions within a week following initial training, with each coaching session including an observation and coach-delivered prompting and performance feedback. From there, coaches can determine the extent to which individuals need additional coaching support and the level of support needed for the teacher to be successful with implementation over time.

Future Research

There are many research questions to guide future coaching research. Three specific lines of research that are prompted from the present results include: (a) manipulating the content, level of precision, timing, and/or communication form of the independent variable, (b) examining the effects of the other purported mechanisms of coaching in the coaching logic model, or (c) establishing a measure of coaching that examines the extent to which the effective components of coaching were delivered and received rather than a binary measure of coaching receipt.

First, similar studies using the same methodology could be employed to answer the general question of *what modifications to coaching can be made* and *do these modifications make coaching more or less effective and for whom?* Studies could examine the extent to which prompting or performance feedback are more effective for

different types of teachers with differentiated needs (e.g., *is prompting with performance feedback more or less effective than prompting or performance feedback alone for teachers with high levels of support needs versus teachers with low levels of support needs?*). Researchers could compare coaching interventions in whic

Table 12. Coaching activities aligned to support needs.

Level of Coaching Support	Support Needs and Skill Use		Features of Coaching and Possible Coaching Activities
	Facilitative	• Minimal everyday support needs. • Stimulus control established. • Fluent with skill or practice. • Skill used with accuracy, ease, and precision.	• Focus on adapting practices to increase contextual fit and promote sustainability • Individually-led and coach-supported implementation and adaptation • Allow teacher to lead feedback sessions and select targeted areas for coaching • Provide ongoing feedback
	Low	• May need additional support embedding practice into everyday routines. • Stimulus control established. • Some fluency with skill or practice. • Skill used the majority of the time with accuracy, ease, and/or precision.	• Focus on moving from coach-led to coach-supported coaching conversations • Prompt when necessary • Provide reinforcing performance feedback • Provide corrective feedback when necessary • Support teacher to reflect on and evaluate his/her own performance
	Moderate	• Needs support to ensure practice is implemented. • Stimulus control is not established. • Limited fluency with skill or practice. • Skill is either not used at the appropriate time and/or when the skill is used, it is not used with accuracy, ease, and/or precision.	• Focus on increasing teacher use of skill(s) in natural environment • Prompt frequently • Provide reinforcing performance feedback often • Provide corrective feedback when necessary • Target 1 or 2 areas for improvement only • Provide multiple and sufficient opportunities for fluency building

	High	• Needs hands-on, intensive support to ensure practice is implemented and used correctly. • Stimulus control is not established. • Little to no fluency with skill or practice. • Skill is either not used at all or not used at appropriate time. If skill is used, it is not used with accuracy, ease, or precision.	• Focus on supporting teacher implementation of skill(s) in simulated and natural environments • Ensure teacher has been trained on skill and re-teach as necessary • Establish ongoing schedule of observations and feedback • Prompt often • Provide reinforcing performance feedback often • Provide corrective feedback frequently • Target 1 or 2 areas for improvement only • Provide multiple and sufficient opportunities for fluency building • Model and/or co-teach, as necessary
	All Levels	• Assist with barriers to implementation that may occur at any level (e.g., lack of staff buy-in, removal of district support, administrator turnover)	

coaches provide global feedback versus specific feedback (e.g., *is specific feedback more effective at producing desired behavior change than global feedback?*). Studies may modify timing to determine the ideal scheduling of prompt delivery and performance feedback delivery (e.g., *what is the ideal time to send a prompt to a teacher and how long after an observation can performance feedback still be effective?*). Finally, the communication form could be modified, especially with the rise in telecommunication research (e.g., *is performance feedback as effective when delivered via telecommunication versus when delivered in person?*).

Next, research could examine the extent to which there is proof of logic for the purported coaching logic model put forth in this study. Namely, researchers may assess the effects of fluency building opportunities and adaptation on valued teacher and student outcomes. The guiding research questions in this area of study may include *is there a functional relation between coach-facilitated fluency building opportunities and an increase in teacher use of evidence-based classroom management practices* and *how can coaches support adaptation and is adaptation related to higher levels of contextual fit and increased likelihood of durable implementation?*

Finally, a measure of coaching that assesses the delivery and receipt of effective coaching components has yet to be research validated. The guiding questions for this line of research would include *how is effective coaching measured* and *how can we use data to train and support coaches*?

Limitations

There are several limitations to this study worth noting. First, the delivery of coach-delivered performance feedback was not provided to every participant on the same

schedule. Although all participants received coaching once per week and had three data collection sessions per week, some participants received coach-delivered performance feedback later in the week and with a longer duration until the next observation. Ideally, all teachers would have had performance feedback delivered immediately after an observation and as close as possible to the next one. Due to scheduling constraints, feedback was delivered within a range (within at least one school day following an observation, but not always on the same day as the observation and no more than two school days before the next observation). Narrowing the range of time between both observing and providing feedback and providing feedback and observing may influence the strength of effect.

Another limitation to the study was the introduction of intervention before five data points for Teacher 7 in Study 2. Intervention was introduced due to scheduling constraints and lack of time to extend data collection. Because coach-delivered prompting with performance feedback (Phase BC) began after only four data points, it is impossible to determine if the level of teacher use of behavior specific praise increased in the second intervention phase because she needed another coaching session in general, or because the effects of coach-delivered prompting with performance feedback were more effective for her. Without enough data points to establish a data trend in Phase C, we cannot determine whether she would have responded to coach-delivered prompting only in the same manner that she responded to coach-delivered prompting with performance feedback.

The participants self-selected to participate and therefore selection bias is a possible confound in this research study. Teachers who self-select to receive coaching

may be more likely to respond to coaching efforts or they may respond in a differential manner from teachers who do not want to receive coaching. It is important to understand that the results of this study are not generalizable to the entire population of teachers because this is not a representative sample.

Finally, the decision to use a secondary variable that measured specific disruptive behaviors across all students in the classroom may not be the best representation of the actual classroom environment. Using the partial-interval recording procedure, any time a student engaged in one of the three classroom disruptive behaviors, that interval was coded as having classroom disruption. The two biggest issues with this variable are that (a) one or two students could be skewing the data, meaning the measure is more about individual student behavior than an accurate proxy for class-wide behavior and (b) the behaviors that were tracked may be more acceptable to some teachers than to others in the study, meaning that some teachers might be less likely to precorrect or correct these behaviors than others.

Conclusion

The current study provides evidence that (a) coaching is effective, (b) coach-delivered prompting and coach-delivered performance feedback are related to an increase in teacher use of evidence-based classroom management practices, and (c) when teachers increase their use of classroom management practices, classroom disruption decreases. These results are encouraging, particularly because of the change in teacher behavior that was observed after the delivery of relatively low-intensity and low-dosage coaching. The findings from this study provide a more nuanced understanding of the active ingredients of successful coaching. The results contribute to our understanding of the ways in which

effective coaching can be researched, measured, and implemented in K-12 educational settings.

APPENDIX A

COACHING APPROACHES AND PERSPECTIVES

(Cox, Bachkirova, & Clutterback, 2014)

Type	Definition	Critical Features of Coaching	Valued Outcomes
Psychodynamic	Examines coachees' unconscious agenda as the center of challenge in enabling change	• Establishing a holding environment • Recognizing defense mechanisms • Valuing creative living (Winnicott, 1971)	"The goal of the coach is essentially to expand the coachee's capacity for emotional regulation" (Lee, 2014, p. 24)
Cognitive Behavioral	"An integrative approach that which combines the use of cognitive, behavioral, imaginal, and problem solving techniques techniques and strategies within a cognitive behavioural framework to enable coachees to achieve their realistic goals" (Palmer & Szymanska, 2007, p. 86)	• Exploring self awareness • Developing thinking skills (e.g., is the belief or idea logical, realistic, or correct) • Self-acceptance • Essential processes and dynamics • Coach utilizes active participation, Socratic questioning, discussion	Facilitate the client in achieving their realistic goals Facilitate self-awareness of underlying cognitive and emotional barriers to goal attainment Equip the coachee with more effective thinking and behavioral skills Build internal resources, stability, and self-acceptance Enable client to become their own self-coach (Williams, Palmer & Edgerton, 2014)

Solution-focused	"A strengths-based approach which emphasizes people's resources and resilience and how these can be used in the pursuit of purposeful, positive change" (Grant et al., 2012, p. 334)	• Goal orientation • Problem disengagement • Resource activation (Grant, 2011)	The "enhancement of performance, life experience, self-directed learning and personal growth of people from normal (non-clinical) populations" (Grant, 2001, p.1)
Person-centered	Coaching based on the "meta-theoretical assumption that people are intrinsically motivated toward creative, fulfilling, and optimal ways of living" (Joseph, 2005, p. 3)	• Establishing client responsibility • Engaging in shared journey of growth (client and coach) • Defining therapeutic goals (Rogers & Wood, 1974)	"Openness to experience (less defensive, more aware of reality), achieving self-trust, internal source of evaluation (looking to oneself for the answers), willingness to continue growing" (Hedman, 2011, p. 106)
Gestalt	"The Gestalt coach is trained to a) use self as instrument; b) provide a presence that is otherwise lacking in the system and c) help the client to complete units of work that result in new insights, behavior or action" (Stevenson, 2005, p. 35)	• Enhancement of client awareness • Identification of redundant behavioral patterns • Establishing a "safe holding environment" for clients (Gillie & Shackleton, 2009)	"The heart of all gestalt coaching is… increasing awareness of and contact with self and self-in-the-environment and increasing self-acceptance" (Spoth, Toman, Leichtmen, & Allan, 2013, p. 392)
Existential	Coaching based on the exploration of client's viewpoint through three principles of the human	• Use of the phenomenological method • Application of existential theory to inform practice • A commitment to being goal- and	To support individuals to live their best and most authentic lives through the four dimensions of existence – physical, self, social

	condition – relatedness, uncertainty, and existential anxiety	solution-focused (Langdridge, 2012, p. 86)	and strategic (Fusco, O'Riordan, & Palmer, 2015)
Ontological	"The approach presents a coherent, interrelated model of human 'way of being' that identifies the core constructs of language, emotion and physiology (or body) as the means by which human reality is constructed and maintained. Each of these ontological domains interacts to shape the individual's experience of, and reaction to, his/her subjective reality." (Vaartjes, 2005, p. 4)	• Establish understanding of ontology of language • Support reflective dialogue through "way of being" • Identify change through language, emotions, and the body	"The essential goal of the coach is to be a catalyst for change by respectfully and constructively triggering a shift in the coachee's way of being to enable him or her to develop perceptions and behaviours that were previously unavailable, all of which are consistent with what the coachee wants to gain from coaching." (Sieler, 2010, p. 89)
Transpersonal	Supported by theories from transpersonal psychology, this approach to coaching focuses on moving individuals "beyond the person" to a uncover the core values of an individual and help an individual recognize his or her own strengths and creativity (Sparrow, 2007)	• Acknowledge two dimensions of growth • Uncover self-imposed boundaries • Dis-identification • Exploration of purpose and values • Establishing goals that are "bigger than self" • Movement from self-actualization to self-realization	"The main goal of the transpersonal coach is to enable the client to disengage from whatever beliefs are holding him or her back from his or her higher or deeper possibilities… The task for the coach is to enable the client to work at the level most appropriate for him or her" (Rowan, 2010, p. 151)
Positive Psychology	An approach to coaching that focuses on "the practitioner's	• Assessment • Establishing expectations and	To help clients "increase well-being, enhance and apply

	choice to shift attention away from pathology and pain and direct it toward a clear-eyed concentration on strength, vision, and dreams" (Kauffman, 2006, p. 220)	orienting client to coaching • Supporting the coaching relationship with the client	strengths, improve performance, and achieve valued goals" (Kauffman, Boniwell, & Silberman, 2010, p. 158)
Transactional	Based on Berne's theory of personality development (1961), transactional coaching is based on a client's ego states: parent ego state, adult ego state, and child ego state (McLean, 2012)	• Focuses on the current • Emphasizes personal change • Person-centered • Works with the individual • Offers modeling of effective behavior • Based on cognitive-behavioral framework • Belief that change occurs through learning and action	Transactional coaching focuses on the individual client and his or her actions and performance within a specific context. Valued outcomes include increased performance and personal growth.
Neurolinguistic Programming (NLP)	NLP coaching utilizes a broad range of techniques from cognitive-behavioral research such as behavioral anchoring, visualization, and hypnosis to support clients' development of effectiveness and self-motivation (Peel, 2005)	• Create rapport • Utilize sensory acuity to model client's internal and external states • Uses precise questioning techniques • Addresses neurophysiological or neuroliguistic states • Supports different "perceptual positions" (Linder-Pelz, 2010)	To support the development of an individual to be his or her own coach through improving and developing skills and techniques to support him or her to reach desired goals or levels of performance

APPENDIX B

UNIVERSITY OF OREGON INSTITUTIONAL REVIEW BOARD APPROVAL

UNIVERSITY OF OREGON

DATE: February 01, 2016 IRB Protocol Number: 01052016.001

TO: Michelle Massar, Principal Investigator
Department of Special Education

RE: Protocol entitled, "Effects of Coach-Delivered Prompting and Performance Feedback on Teacher Use of Evidence-based Classroom Management Practices and Student Behavior Outcomes"

Notice of IRB Review and Approval
Expedited Review as per Title 45 CFR Part 46 # 7

The project identified above has been reviewed by the University of Oregon Institutional Review Board (IRB) and Research Compliance Services using an expedited review procedure. This is a minimal risk study. This approval is based on the assumption that the materials, including changes/clarifications that you submitted to the IRB contain a complete and accurate description of all the ways in which human subjects are involved in your research.

Please note IRB approval of this protocol is subject to the following contingencies:

- Once the school(s) where this research will be conducted is known, the protocol will need to be amended to identify the school(s).
- Permission must also be obtained from the school/school district(s) where this research will be conducted. Please provide documentation of this approval to Research Compliance Services once obtained.

For this research, the following additional determinations have been made:

- The study as described satisfies the requirements for additional protections for children involved as subjects in research under 45 CFR Part 46.404.
- The permission of one parent or guardian is sufficient for a child's involvement in the research.

This approval is given with the following standard conditions:

1. You are approved to conduct this research only during the period of approval cited below;
2. You will conduct the research according to the plans and protocol submitted (approved copy enclosed);
3. You will immediately inform Research Compliance Services of any injuries or adverse research events involving subjects;

COMMITTEE FOR THE PROTECTION OF HUMAN SUBJECTS • RESEARCH COMPLIANCE SERVICES
677 E. 12· Ave., Suite 500, 5237 University of Oregon, Eugene OR 97401-5237
T 541-346-2510 F 541-346-5138 http://rcs.uoregon.edu

UNIVERSITY OF OREGON

4. You will immediately request approval from the IRB of any proposed changes in your research, and you will not initiate any changes until they have been reviewed and approved by the IRB;
5. You will only use the approved informed consent document(s) (enclosed);
6. You will give each research subject a copy of the informed consent document;
7. If your research is anticipated to continue beyond the IRB approval dates, you must submit a Continuing Review Request to the IRB approximately 60 days prior to the IRB approval expiration date. Without continuing approval the Protocol will automatically expire on January 31, 2017.

Additional Conditions: *Any research personnel that have not completed CITI certificates should be removed from the project until they have completed the training. When they have completed the training, you must submit a Protocol Amendment Application Form to add their names to the protocol, along with a copy of their CITI certificates.*

Approval period: February 01, 2016 - January 31, 2017

The University of Oregon and Research Compliance Services appreciate your efforts to conduct research in compliance with University of Oregon Policy and federal regulations that have been established to ensure the protection of human subjects in research. Thank you for your cooperation with the IRB process.

Sincerely,

Christina (Davis) Spicer, J.D., C.I.P.
Research Compliance Administrator
Research Compliance Services
University of Oregon
677 East 12th Avenue, Suite 500
Eugene, OR 97403-5237
541-346-2510 (phone)
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CC: Robert Horner, Faculty Advisor

APPENDIX C

CLASSROOM MANAGEMENT TRAINING

2/22/17

Establishing Safe, Positive, Consistent, and Predictable Classrooms:

Implementing Evidence-based, Preventative Classroom Management Practices

Michelle Massar, Ph.D. Candidate
University of Oregon
February 2017

Objectives

- To identify 10 evidence-based classroom management practices
- To discuss three preventative classroom management practices
- To model three preventative classroom management practices
- To demonstrate knowledge of three preventative classroom management practices

Why focus on classroom management?

Ineffective classroom management can lead to disengagement, high rates of problem behavior, and school violence (Angus et al., 2009; Lewis et al., 2005)

1

Evidence-based Classroom Management Practices

DATA SYSTEMS

- **Counting**
  - Record how often or how many times a behavior occurs (i.e., frequency recording)
- **Timing**
  - Record how long a behavior lasts (i.e., duration recording)
    - Duration, latency, and inter-response time
- **Sampling**
  - Estimate how often a behavior occurs during part of an interval or the entire interval
    - Partial interval, whole interval, and momentary time sampling
- **Incident Reports or Office Discipline Referrals (ODRs)**
  - Record information about the events that occurred before, during, and after a behavior incident

Preventative Classroom Management Practices: Opportunities to Respond

- What is an **opportunity to respond?**
  - A verbal or visual request from the teacher that solicits a student response
    - **Types of OTRs**
      - Individual or small group questioning
      - Choral responding
      - Nonverbal responses
    - **Examples**
      - Flashcard is held up for student to answer
      - Teacher poses a question or request to the class related to academic content
      - Teacher says "write the answer to problem 1 on your whiteboards"
    - **Non-examples**
      - Teacher presents 20-minute lesson without asking any questions or prompting responses
      - Rhetorical questions that the teacher does not intend students to answer (e.g., "I wonder how we might go about solving this problem. The first step is to…" and the teacher completes the modeling)

Preventative Classroom Management Practices: Opportunities to Respond

- What does a classroom with high rates of **opportunity to respond** look like**?**
  - http://video.louisville.edu/vod/flashmgr/sefrey01/Video/1438616369801-iPhone.mp4
- Am I currently incorporating OTRs in my instruction?
  - Do I provide OTRs at high rates throughout my lessons?
  - Are my OTRs varied (e.g., small group/whole class delivery, verbal/written/signals)?
- Where can I find more resources?
  - http://pbismissouri.org/wp-content/uploads/2012/05/1.6_Opportunities_to_Respond_Teacher_Tool_092914.pdf

Preventative Classroom Management Practices: Behavior Specific Praise

- What is **behavior specific praise?**
  - Verbal statement of praise that includes the specific behavior the student(s) demonstrated
  - **Features of behavior specific praise**
    - Can be delivered to individual students, small groups, or whole classrooms
    - At least five praise statements should be delivered for every one correction
    - Can be paired with other school- and class-wide reinforcement systems (e.g., points, tallies, "bucks")
  - **Examples**
    - "Great job lining up quietly with your hands to your sides"
    - "Jamal, excellent job following directions the first time"
    - "I like the way Group 2 is on task and working quietly"
  - **Non-examples**
    - General verbal praise such as "good job" or "well done"
    - Gestures such as high-fives or thumbs up (unless accompanied with specific verbal praise)
    - Giving points/awards/tokens without specific verbal praise

Preventative Classroom Management Practices: Behavior Specific Praise

- What does a classroom with high rates of **behavior specific praise delivery** look like**?**
  - http://video.louisville.edu/vod/flashmgr/sefrey01/Video/1438608945040-iPhone.mp4
- Am I currently incorporating high rates of behavior specific praise?
  - Do I deliver 5 praise statements for every 1 corrective statement?
  - Am I specific about the behavior being praised when I deliver my statement?
  - Do I pair my praise statements with other class-wide and school-wide reinforcers?
- Where can I find more resources?
  - http://www.wisconsinpbisnetwork.org/assets/files/resources/1365109392_5to1IncrPraise.pdf
  - http://www.interventioncentral.org/behavioral-interventions/motivation/teacher-praise-efficient-tool-motivate-students

Preventative Classroom Management Practices: Prompting/Precorrection

- What is **prompting/precorrection?**
  - Positively stated reminders that are delivered before desired behavior is expected that describes what is expected
  - **Features of prompts/precorrection**
    - Prompts are preventative
    - Describe the expected behavior *explicitly* and *specifically*
    - Teach and support use of self-managed prompts
  - **Examples**
    - Verbal prompting (e.g., "Remember to line up quickly and quietly, with your hands by your sides")
    - Providing reminders before a small group activity about how to access help and materials
    - Modeling or practicing a skill (e.g., "I am going to show you how we walk from our desks to our stations. Watch me. First,…")
  - **Non-examples**
    - Delivering a reminder after a student has made an error (e.g., "Oh, I hear lots of shouting out – remember that our class rule is to raise your hand quietly and wait to be called on")
    - Delivery of general cues such as "do a good job"
    - Delivering only reminders of what not to do (e.g., "No shouting out")

Preventative Classroom Management Practices: Prompting/Precorrection

- What does effective **prompting/precorrection** look like?
  - http://video.louisville.edu/vod/flashmgr/sefrey01/Video/1438266452576-iPhone.mp4
- Am **I** currently incorporating high rates of prompting/precorrection?
  - Do I consistently deliver reminders before a behavior is expected to occur?
  - Do I help students use self-managed prompts?

Additional Resources

- Supporting and Responding to Behavior (OSEP)
  - https://www.pbis.org/common/cms/files/pbisresources/Supporting%20and%20Responding%20to%20Behavior.pdf
- Missouri SW-PBS Team Workbook
  - http://pbismissouri.org/wp-content/uploads/2015/05/Tier-1_Ch.-8-2015.pdf
- PBIS Technical Assistance Center
  - https://www.pbis.org/school/pbis-in-the-classroom

Next Steps

- Please go to the following link to take an 8–question quiz
  - Remember to enter your name and mailing address on the final page of the quiz to receive your $25 Target gift card

Thank you!

APPENDIX D

CLASSROOM MANAGEMENT TRAINING QUIZ

Quiz for Training

1. Four categories of evidence-based classroom management interventions and supports include (1):
    a. Practices, foundations, consequences, data systems
    b. Foundations, prevention practices, response practices, data systems**
    c. Settings, routines, expectations, and supervision
    d. Foundations, expectations, practices, error corrections

2. Examples of prevention practices include (2):
    a. Behavior specific praise, routines, academic engagement
    b. Opportunities to respond, classroom expectations, routines
    c. General praise, student engagement, rewards
    d. Opportunities to respond, behavior specific praise statements, prompting/precorrection **

3. There are multiple types of opportunities to respond, including (3):
    a. Individual or small group questioning, choral responding, nonverbal responses **
    b. Teacher modeling, teacher-delivered lecturing, nonverbal responses
    c. Teacher modeling, guided practice, independent practice
    d. Independent reading, choral responding, teacher modeling

4. Examples of opportunities to respond include (select all that apply) (6):
    a. Teacher asks rhetorical question while modeling that students are not expected to answer (e.g., "I wonder how we would solve this problem…")
    b. Teacher asks partners to talk to each other about the plot of a story **
    c. Teacher asks students to write the answer to a math problem on whiteboards **
    d. Teacher asks class to answer question using choral responding **

5. What distinguishes general praise from behavior specific praise (7)?
    a. Behavior specific praise is delivered immediately after the appropriate behavior
    b. Behavior specific praise names the appropriate behavior explicitly **
    c. General praise can be paired with school- and class-wide reinforcement systems
    d. General praise may be directed toward an individual or group

6. Examples of behavior specific praise include (select all that apply) (8):
    a. "Great work Team 2!"
    b. "I notice that Juan is on task and working quietly. Good job!" *

c. “Way to go!” with a high-five
d. “Remember to raise your hand if you want to get my attention appropriately”

7. Prompting or precorrection is (9):
    a. A reminder of what behaviors are not acceptable that is delivered before the desired behavior is expected
    b. A positively stated reminder of appropriate behavior that is delivered before the desired behavior is expected **
    c. A reminder of what behaviors are not acceptable that is delivered after a problem behavior has occurred
    d. A positively stated reminder of appropriate behavior that is delivered after a problem behavior has occurred

8. Examples of prompts/precorrection include (select all that apply) (11):
    a. A verbal prompt reminding students of the transition routine before the transition begins **
    b. A visual on a student’s desk that shows how to get teacher attention appropriately **
    c. Providing a general reminder such as, “Remember to do a good job”
    d. A reminder to students about how they are expected to line up quietly after two students got in line while talking

APPENDIX E

CLASSROOM MANAGEMENT SELF-ASSESSMENT (MODIFIED)

(Simonsen, Fairbanks, Briesch, & Sugai, 2006)

Teacher Initials	Rater	Date
Time Start	Time End	Instructional Activity/Period
Tally of Positive Verbal Interactions:		
Tally of Positive Signaled Interactions:		
Tally of Negative Student Interactions:		
Tally of Opportunities to Respond (OTRs):		
Ratio of Positives to Negatives: _____ Rate of Positive Interactions/minute _____		
OTR Rate (OTRs per minute): _____		

1. Teacher maximizes structure and predictability in the classroom.			
a) Students demonstrate understanding of **routines and procedures.**	YES	NO	N/A
b) Classroom is arranged to minimize crowding and distraction.	YES	NO	N/A
c) Materials are organized	YES	NO	N/A
d) Routines limit downtime and transitions between activities	YES	NO	N/A
2. Positively stated behavior expectations are taught and reinforced.			
a) 3-5 behavior expectations are defined and posted	YES	NO	N/A
b) Evidence that the expectations have been taught in the context of routines.	YES	NO	N/A
c) Teacher provides prompts and/or precorrections before students are expected to demonstrate expectations	YES	NO	N/A
d) Teacher actively supervises the classroom.	YES	NO	N/A
3. Teacher engages students in observable ways.			
a) Teacher provides high rates of opportunities to respond.	YES	NO	N/A
b) Teacher engages students in observable ways during teacher-directed instruction (e.g., using response cards, choral responding, etc.)	YES	NO	N/A
c) Methods of using OTRs differ across lesson (e.g., clickers, whiteboards, verbal response, etc.)	YES	NO	N/A

4. Teacher uses a continuum of strategies to acknowledge appropriate behavior.			
a) Teacher provides specific, contingent praise for **academic behaviors**.	YES	NO	N/A
b) Teacher provides specific, contingent praise for **social behaviors**.	YES	NO	N/A
c) Teacher uses other systems to acknowledge appropriate behavior (e.g., token economies, group contingencies, etc.)	YES	NO	N/A
5. Teacher uses a continuum of strategies to respond to inappropriate behavior.			
a) Teacher provides specific, contingent, and brief error correction for **academic errors**.	YES	NO	N/A
b) Teacher provides specific, contingent, and brief error correction for **social errors**.	YES	NO	N/A
c) Teacher uses least restrictive procedure to address inappropriate behavior (e.g., differential reinforcement, planned ignoring etc.)	YES	NO	N/A

APPENDIX F

COACHING FOR EFFECTIVE OUTCOMES CURRICULUM

(Massar & Horner, 2016)

Purpose:

To present an overview of the four functions of effective coaching to be used with individuals and teams in school-based settings. The content and activities included in this manual are designed to be used with individuals who deliver coaching to individuals and/or teams in schools or educational programs.

Format of the ECO Training Manual:

- Six mini-lessons designed to be delivered together as an initial comprehensive coach training. Lessons 2 through 5 can be delivered individually as refresher trainings as needed.
    - Within each mini-lesson:
        - Objectives
        - Content background
        - Activities and Application
        - Checks for understanding
    - Each session includes options for *increasing* or *decreasing* training time. Modifications, including **group brainstorms** and **final reviews** for each session, will be discussed in each Session Script
- PowerPoint presentation
- Participant Handouts
- Final knowledge assessment and self-report performance assessment for participants

Knowledge Assessment:

- Participants will be given an assessment after the training to determine the extent to which mastery of the objective(s) was obtained and coaches are prepared to deliver the effective coaching components with individuals and school teams. The assessment is attached below.

Effective Coaching for Desired Outcomes Knowledge Assessment

1. What is the difference between training and coaching?

a) Training occurs before coaching
b) Training is the presentation of new content to increase skills or knowledge
c) Coaching is on-going, embedded support to support durable implementation
d) A and B
e) A and C
f) All of the above (*)

2. What is prompting?

a) Delivery of reminders or cues after observation
b) Delivery of reminders or cues before a desired behavior should occur (*)
c) Provision of multiple opportunities for practice
d) A and B
e) All of the above

3. Which of the following is an example of a coach-delivered prompt?

a) A coach sends an email to a teacher with data and comments from the most recent classroom observation
b) A coach arranges multiple opportunities for a grade level team to practice delivering behavior specific praise
c) A coach reminds a teacher to utilize multiple opportunities to respond prior to observing the lesson*
d) All of the above

4. What are the two functions of performance feedback?

a) Increasing skill and decreasing errors
b) Reinforcement and correction*
c) Praise and support
d) B and C
e) All of the above

5. Effective performance feedback has multiple characteristics, including:

a. Behavior specific feedback
b. Including a replacement behavior and/or suggestions for improvement when delivering corrective feedback
c. Starting with corrective feedback and then delivering reinforcing feedback
d. A and B*
e. B and C
f. All of the above

6. Fluency describes the _____ and _____ of behavioral responding.

a. performance, application
b. knowledge, skill
c. accuracy, speed*
d. precision, achievement

7. What is fluency building?

a. Provision of multiple opportunities to practice new skills
b. Sufficient opportunities to practice new skills
c. Providing feedback on speed of skill use
d. A and B*
e. A and C
f. All of the above

8. The RtI team at Markham Elementary would like to begin tracking student academic and behavior data. They have not been trained to use the School-wide Information System (SWIS) to enter and retrieve data. Their coach is considering incorporating fluency building opportunities related to use SWIS into the upcoming team meetings. As a coach, what would be the appropriate next steps in supporting the team?

a. First, arrange for the team to receive training on SWIS, then provide fluency building support*
b. First, provide opportunities for fluency building, then arrange for the team to receive training on SWIS

c. First, provide performance feedback during meetings, then provide fluency building support
d. First, provide fluency building support, then provide performance feedback

9. What is adaptation?

a. Changes to the core features of an intervention to ensure efficiency and effectiveness
b. The provision of differentiated coaching supports to help schools in different stages of implementation
c. Alignment of the features of an interventions to the skills, resources, administrative support, and values of the implementers*
d. Utilizing data to change and improve implementation of an intervention
e. None of the above

10. Components of interventions can be adapted but _____ cannot be adapted without threatening the effectiveness of the intervention at producing desired outcomes.

a. Practices
b. Core features*
c. Fidelity of implementation
d. Values

Tool for Assessing Coaching Performance:

- Participants will be given a Coach Performance Self-Assessment Tool at the end of training. The self-report assessment is designed to assess the extent to which participants have applied the core components of the training to their everyday coaching practice. Coaches can use the results to guide their practice. The assessment is attached below.

Coach Performance Self-Assessment

Directions: After completing a coaching cycle (including an in-person observation and a coaching debrief) with one teacher or one team please answer the following questions to the best of your ability.

1. **Are you completing this after coaching an individual or a team?**

   a. (Circle one) Individual Team

2. **Do you have a specific coaching target or goal with this individual or team?**

   a. (Circle one) Yes No Unsure

   b. If yes, what is the target or goal:
   _____

   c. If yes, how are you measuring progress toward the goal?
   _____

   d. If no, what data are you tracking?
   _____

3. Did you provide prompts to the individual or team?

a. (Circle one) Yes No Unsure

b. If no, please skip to Question 4. If yes, please complete the following checklist:

Prompting Checklist			
	Yes	**No**	**N/A**
1. I prompted skill(s) that were being used at the incorrect time			
2. I prompted skill(s) that were not being used in the appropriate context			
3. I delivered reminders/cues before the skill(s) were to be used			
4. When delivering a prompt, I provided performance feedback (i.e., feedback on how the individual or team was using the skill)			
5. I prompted skills that the individual or team had been previously trained on.			
6. Provide one example of prompt you delivered to the individual or team:			

4. Did you provide performance feedback to the individual or team?

a. (Circle one) Yes No Unsure

b. If no, please skip to Question 5. If yes, please complete the following checklist:

Performance Feedback Checklist			
	Yes	**No**	**N/A**
1. I observed the individual or team in person			
2. I delivered reinforcing performance feedback			
3. I delivered corrective performance feedback			
4. When I delivered corrective feedback, I provided a replacement skill or suggestions/tips for improvement			
5. When I delivered corrective feedback, I focused on 1 or 2 coaching targets			
6. I used data when delivering performance feedback			
7. I delivered performance feedback as quickly as possible after the observation			
9. I provided performance feedback on skills that the individual or team had been previously trained on.			
10. Provide one example of reinforcing feedback and one example of corrective feedback that you delivered to the individual or team:			

5. **Did you provide fluency building opportunities to the individual or team?**
   a. (Circle one) Yes No Unsure

   b. If no, please skip to Question 6. If yes, please complete the following checklist:

Fluency Building Checklist			
	Yes	**No**	**N/A**
1. I provided fluency building opportunities for a skill(s) that was being used inaccurately			
2. I provided fluency building opportunities for a skill(s) that was being used inefficiently or slowly			
3. I provided fluency building opportunities for skills that the individual or team had been previously trained on.			
4. Provide one example of a fluency building opportunity you provided to the individual or team.			

6. **Did you support adaptations to a program or intervention being used by the individual or team?**
   a. (Circle one) Yes No Unsure

   b. If no, please skip to Question 7. If yes, please complete the following checklist:

Adaptation Checklist			
	Yes	**No**	**N/A**
1. I supported the adaptation of a program or intervention to align to the skills of the persons in the local context			
2. I supported the adaptation of a program or intervention to align to the resources of the persons in the local context			
3. I supported the adaptation of a program or intervention to align to the administrative support of the persons in the local context			
4. I supported the adaptation of a program or intervention to align to the values of the persons in the local context			
5. I supported the identification of the core features			

	of the program or intervention			
	6. I ensured that the core features of the program or intervention were not adapted			
	7. I supported adaptation during installation or initial implementation to increase contextual fit			
	8. I supported adaptation during initial or full implementation to address barriers or challenges to implementation			
	9. Explain the adaptation(s) that you supported the individual or team to make.			

7. Has the individual or team you coached improved performance?

a. (Circle one) Yes No Unsure

b. If yes, how do you know?

_____

Overview of Session Content

Introduction **Slides:** 1 – 3 **Estimated Time:** 3 minutes	Objective: • Orient audience to purpose of training and layout of materials and sessions
Session 1: Overview of Coaching **Slides**: 4 – 19 **Estimated Time:** 20 – 45 minutes	Objectives: • To describe difference between the role of a coach and the process of coaching • To discriminate between training and coaching • To review evidence-based practices (EBPs) • To name the four components of effective coaching • To identify two to three coaching real-world scenarios to utilize throughout the training
Session 2: Prompting **Slides:** 20 – 28 **Estimated Time**: 20 – 35 minutes	Objectives: • To define prompting • To review the purpose of prompting • To identify when to use prompting with individuals and teams • To apply prompting to coaching scenarios
Session 3: Performance Feedback	Objectives: • To define performance feedback

Slides: 29 – 37 **Estimated Time:** 30 – 50 minutes	• To review the purpose of delivering performance feedback • To discriminate between reinforcing and corrective functions of performance feedback • To identify when to use performance feedback with individuals and teams • To apply performance feedback to coaching scenarios
Session 4: Fluency Building **Slides:** 38 – 45 **Estimated Time:** 20 – 35 minutes	Objectives: • To define fluency building • To review the purpose of building fluency • To identify when to use fluency building with individuals and teams • To apply fluency building to coaching scenarios
Session 5: Adaptation **Slides:** 46 – 54 **Estimated Time:** 30 – 45 minutes	Objectives: • To define adaptation • To review the purpose of adaptation • To discriminate between adapting products, processes, and/or practices versus changing core features • To identify when adaptation is necessary with individuals and teams • To apply adaptation to coaching scenarios
Session 6: Coaching for Outcomes **Slides:** 55 – 65 **Estimated Time:** 30 – 45 minutes	Objectives: • To discuss specific challenges to delivery of effective coaching • To review tools and practices to support coaching in schools • To brainstorm solutions that have been effective in similar contexts or scenarios
Performance Assessment Slide **Slide:** 66 **Estimated Time:** 5 – 30 minutes	Objectives: • To assess participants' knowledge and application of part or all of the training • Recommended if **at least one** of the following sessions were presented in training: Session 2, Session 3, Session 4, and/or Session 5 • Modifications: Presenters can choose to show this slide during any of the sessions **or** presenters can use it as a comprehensive assessment at the end of the entire training series. Modifications are outlined further in the slide.

Effective Coaching for Desired Outcomes:

Supporting Individuals and Teams

Michelle Massar and Robert Horner
University of Oregon

Training Overview

- Six%mini-lessons:%
  1. Overview%of%Coaching%
  2. Prompt?ng%
  3. Performance%Feedback%
  4. Fluency%Building%
  5. Adapta?on%
  6. Coaching%for%Outcomes%
- Opportuni?es%for%discussion%and%applica?on%
- Post-test%

ECDO Training Objectives

1. To%define%coaching%and%discuss%the%role%of%coaching%in%suppor?ng%durable%implementa?on%of%evidence-based%prac?ces%
2. To%review%the%four%components%of%effec?ve%coaching%%
3. To%apply%coaching%components%to%current%work%in%schools%with%individuals%and%teams%

SESSION&ONE:&&

OVERVIEW%OF%COACHING%

Session 1: Overview of Coaching

Objec, ves&of&Session:&

- To%define%coaching%
- To%discriminate%between%training%and%coaching%
- To%review%evidence-based%prac?ces%
- To%name%and%define%the%four%components%of%coaching%
- To%iden?fy%1%to%2%real-world%coaching%scenarios%

What is Coaching?

What is Coaching?

- Coach *(characteris*cs)* versus Coaching *(func*ons)*
- Training versus Coaching
- Coaching Defined:
  - The on-site supportive activities conducted after initial training that support the durable implementation of newly trained skills (Horner, 2009)

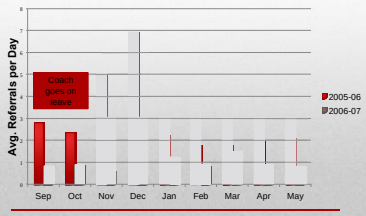
Brainstorm

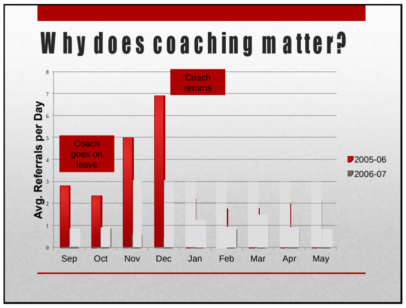
In&your&able&groups,&please&discuss&and&be& prepared&to&share&out&the&following:&

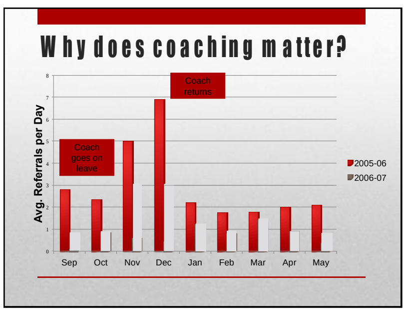
After observing a lesson, you determine that the teacher would benefit from increasing academic opportunities to respond (OTRS).

- Discuss the difference between training the teacher to increase OTRs and coaching the teacher to increase OTRs. How do you know when to use training? Coaching?
- How will you know if your coaching has been effective?

Why does coaching matter?




Why does coaching matter?
Coach returns
Coach goes on leave
Avg. Referrals per Day
2005-06
2006-07
Sep Oct Nov Dec Jan Feb Mar Apr May


Why does coaching matter?
Coach returns
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Avg. Referrals per Day
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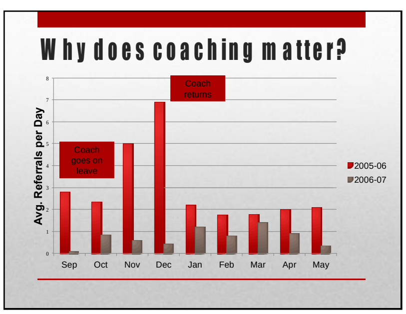
Sep Oct Nov Dec Jan Feb Mar Apr May


Why does coaching matter?
Coach returns
Coach goes on leave
Avg. Referrals per Day
2005-06
2006-07
Sep Oct Nov Dec Jan Feb Mar Apr May

What do coaches coach?

What do coaches coach?

- Evidence-based practices (EBPs) and promising practices
- What are EBPs?
  - Interventions with consistent scientific evidence documenting effectiveness in improving outcomes (Drake et al., 2001; Dunst, Trivette, & Cutspec 2002; Odom et al., 2005)
- What is a practice?
  - "A practice refers to a curriculum, behavioral intervention, systems change, or educational approach designed for use by families, educators, or students with the express expectation that implementation will result in measureable educational, social, behavioral, or physical benefit" (Horner et al., 2005, p. 175)
    - Precise intervention, procedure, or larger program

What do coaches coach?

- What is the evidence used to identify EBPs?
  - "Strong" versus "possible" evidence of effectiveness
  - Evaluation of research methodology and study dimensions
    - Randomized control trials (RCTs) are considered *gold standard*
    - Rigorous quasi-experimental and single case designs
    - Internal validity, external validity, generalization, and strength of evidence
- Evidence-based versus "promising practices"

What do coaches coach?

- References for coaches, teachers, administrators, and parents
  - "Identifying and Implementing Educational Practices Supported by Rigorous Evidence: A User Friendly Guide" (IES) – Appendix A
    - The What Works Clearinghouse
    - The Promising Practices Network
    - Blueprints for Violence Prevention
    - The International Campbell Coalition
    - Social Programs That Work

Defining the Core Components of Coaching

1. Prompting
   - Delivery of a cue or reminder *before* a skill should be used *3*
2. Performance Feedback
   - Delivery of *reinforcing* and *correc*ve* feedback after observation
3. Fluency Building
   - Provision of multiple and sufficient opportunities for practicing newly acquired skills
4. Adaptation
   - Alignment of practice, program, or intervention features to the skills, resources, administrative support, and values of the local context

Coaching Scenarios

- Using the Session 1 Application handout, define 1 to 2 coaching scenarios you have worked with in the past or are currently working in
- If you do not have coaching experience, please review the Coaching Scenarios listed on the Session 1 Application handout
- Your scenarios will be used for the application of key objectives in each session

Session 1 Review

Objec, ves&f&Session:&

- To%define%coaching%
- To%discriminate%between%training%and%coaching%
- To%review%evidence-based%prac?ces%
- To%name%and%define%the%four%components%of%coaching%
- To%den?fy%1%o%2%real-world%coaching%scenarios%

SESSION&TWO:&&

PROMPTING%

Session 2: Prompting

Objec, ves&f&Session:&

- To%defin %romp?ng%
- To%review%the%purpose%f%romp?ng%
- To%den?fy%when%o%use%romp?ng%with%individuals%and%teams%
- To%apply%romp?ng%o%coaching%scenarios%

What is prompting?

- The delivery of a cue or reminder *before* a skill should be used
- Prompting increases the likelihood that individuals will use a skill correctly
- Prompting can include verbal, visual, and written reminders or cues

Let's take a look!

- Mr. Owens
  - High school English teacher
  - Goal: To increase academic OTRs
- SWPBIS Tier II and III Team
  - Middle school teachers, school psychologist, and administrator
  - Goal: To develop and utilize meeting agenda

Why use prompting?

- Prompting focuses on when a skill should be used and under what context
- Prompting helps bring desired behavior under stimulus control (Terrace, 1963; Touchette, 1971)
  - Stimulus control transfers away from coach-delivered prompt to the naturally occurring stimuli in the classroom environment
  - Teachers use desired behaviors in natural settings and contexts without prompts from the coach

When to use prompting?

- Promp?ng%%necessary%when%%skill%%ot%under%?mulus% control%
  - Behavior%%under%?mulus%control%when%(a)%the%behavior% happens%when%the%discrimina?ve%?mulus%(cue)%%present% and%(b)%behavior%does%ot%happen%when%the%discrimina?ve% s?mulus%(cue)%%ot%present%
- Prompts%are%used%o%educe%rrors%during%cquisi?on%f%ew% skills%ut%are%faded%s%individual%becomes%more%fluent%with% skill(s)%

Application

Please&omplete&he&session&&Applica, on& Handout.&

- Table%discussions%are%ncouraged!%
- Please%e%prepared%o%share%ut%with%he% whole%group%%

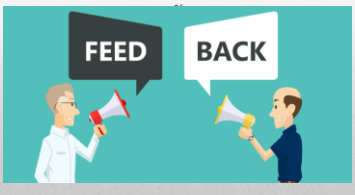
Session 2 Review

Objec, ves&f&session:&

- To%defin %promp?ng%
- To%eview%he%urpose%f%romp?ng%
- To%den?fy%when%o%use%romp?ng%with% individuals%and%eams%
- To%apply%romp?ng%o%oaching%cenarios%

SESSION&THREE:&&

PERFORMANCE%EEDBACK%



Session 3: Performance Feedback

Objec, ves&f&Session:&

- To%efine%performance%eedback%
- To%eview%he%urpose%f%performance% feedback%
- To%iscriminate%etween%einforcing%nd% correc? ve%unc? ons%f%eedback%
- To%en? fy%when%o%se%performance%eedback% with%ndividuals%nd%eams%
- To%pply%performance%eedback%o%oaching% scenarios%

What is performance feedback?

- The%elivery%f%*einforcing*%nd%*orrec* ve%* feedback%Y er%bserva? on%
- Performance%eedback%ncreases%he%peed,%ate,% accuracy,%nd%ase%with%which%ew%kills%re% used%
- Feedback%an%e%elivered%n+person%r%hrough% wri? ng%formal%valua? on,%mail)%nd%may% include%ualita? ve%nd%uan? ta? ve%ata%

10%

Reinforcing and Corrective Functions

Reinforcement&

- Increases%the%likelihood%that%an%individual%will%use%the%skill/behavior%again%in%the%future%
- Deliver%when%an%individual%uses%a%desired%behavior%or%skill%correctly%

Correc, on&

- Provides%feedback%to%individual%related%to%a%behavioral%or%skill%error,%including%how%to%correct%(e.g.,%replacement%behavior)%
- Deliver%when%an%individual%uses%a%skill%incorrectly%or%inconsistently%

Reinforcing and Corrective Functions

- Include%replacement%behavior(s)%or%tips%when%delivering%correc?ve%feedback%%

%

Let's take a look!

- Mrs.%Gates%
  - Kindergarten%teacher%
  - **Goal**:%To%decrease%transi?on%?me%by%establishing,%teaching,%prompt?ng,%and%reinforcing%transi?on%procedure%

Why use performance feedback?

- Performance feedback can be used to change the likelihood of a new skill being used (e.g., reinforcement) or improve precision (e.g., shaping)
- A 2012 meta-analysis examining relation between performance feedback and treatment integrity found that feedback "resulted in significant behavioral change… regardless of setting, dependent variable, delay of feedback, or type of intervention" (Solomon, Klein, & Politylo, 2012, p. 170)

When to use performance feedback?

- Following direct observation
- Frequently (frequency will differ from role to role)
- When individuals and/or teams are implementing new skills, behaviors, practices, interventions, or programs
- When supporting "the transfer or maintenance of knowledge and behaviors" (Mortenson & Witt, 1998, p. 614)

Application

Please complete the session Application, on Handout.

- Table discussions are encouraged!
- Please be prepared to share out with the whole group

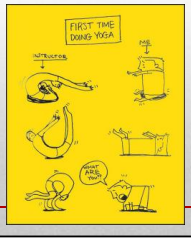
Session 3 Review

Objec, ves&f&session:&

- To%define%performance%feedback%
- To%review%the%purpose%f%performance% feedback%
- To%discriminate%between%einforcing%nd% correc?ve%unc?ons%f%eedback%
- To%den?fy%when%o%use%performance%eedback% with%ndividuals%nd%eams%
- To%pply%performance%eedback%o%oaching% scenarios%

SESSION&OUR:&&

FLUENCY%UILDING%



Session 4: Fluency Building

Objec, ves&f&session:&

- To%define%u ncy%uilding%
- To%review%the%purpose%f%uilding%uency%
- To%den?fy%when%o%use%uency%uilding%with% individuals%nd%eams%
- To%pply%uency%uilding%o%oaching% scenarios%%

What is fluency building?

- The%provision%of%multiple%and%sufficient%opportunities%for%practicing%newly%acquired%skills3
- *Fluency*%describes%the%accuracy%and%speed%of%behavioral%responding%(Binder,%1988,%1996)%
- Fluency%building%opportunities%should%increase%the%ease%and%unconfidence%of%new%skills%(Horner,%2015)%

%

Let's take a look!

- Ms.%Stephenson%
  - Middle%school,%self-contained%special%education%teacher%
  - Goal:%to%utilize%a%continuum%of%consequences%for%problem%behavior%
- SWPBIS%Tier%3%Team%
  - Elementary%school%teachers,%speech%language%pathologist,%school%psychologist,%and%administrator%
  - Goal:%to%use%SWIS%data%to%identify%problems%with%precision%and%measure%progress%toward%identified%school-wide%goals%

Why use fluency building?

- Building%fluency%increases%efficiency%of%skill%use%
- Numerous%studies%indicate%positive%outcomes%associated%with%establishing%behavioral%fluency,%including%retention,%endurance,%and%application%(Beck%&%Clement,%1991;%Haughton,%1972;%Kubina%&%Morrison,%2000)%
  - **Retention**%ability%to%recall%and%use%information%over%a%long%period%of%time%(Binder,%1996)%
  - **Endurance**%ability%to%perform%skill%for%a%long%period%of%time%without%fatigue%and%despite%distractions"%(Bucklin,%Dickinson,%&%Brethower,%2000,%p.%143)%
  - **Application**%ability%to%transfer%component%behaviors%to%composite%behaviors%(Kubina%&%Wolfe,%2005)%

When to use fluency building?

- Fluency%building%%%ecessary%when%(a)%an%individual%as%not%developed%efficient%and%effec?ve%use%f%a%skill%or%(b)%the%skill%%%ot%used%enough%o%be%sustained%by%natural%reinforcement%

%

- Fluency%building%pportuni?es%are%designed%o%increase%prac?ce%f%a%new%skill%n?!%he%skill%an%be%sed%with%he%efficiency%and%ffec?veness%equired%o%access%natural%reinforcement%

Application

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Session 4 Review

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ADAPTATION%

Session 5: Adaptation

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What is adaptation?

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Systematic Adaptation

Before adaptation, it is critical to identify **core features**

- The "functions or principles and related activities [of an intervention] necessary to achieve outcomes" (Blase & Fixsen, 2013)
- **Cannot be adapted** without jeopardizing outcomes

Products, processes, and practices **can be adapted** to meet the needs of the local context

Let's take a look!

Core Features of SWPBIS	Examples of Products, Processes, and Practices
1. **3-5 positively stated behavioral expectations** defined and taught	• Expectations and settings • Lesson plans • Teaching matrix • Method of delivery
2. **Rewards** delivered contingent on demonstration of pro-social behavior	• Individual, small group, and school-wide exchange system • Data collection system • Communication plan (staff, parents, etc.)
3. **Continuum of consequences** established and delivered predictably	• Consequence flowchart • Classroom-managed versus office-managed
4. Formal systems for **data** collection and use in decision making	• Type of data collection system used • Additional data sources
5. The **PBIS team** is established with clear roles and responsibilities and has **administrator support**	• Team representation • Tier I, II, and III representation • Scheduling meeting times

Why use adaptation?

- The *diffusion of innovation theory* (Rogers, 2002) claims that changes to an intervention are inevitable when translating from research to practice
- Adaptation may increase the contextual fit of a program or intervention, increasing the likelihood of fidelity of implementation and sustainability
- Adaptation helps to address inevitable challenges in implementation over time
  - **Organizational barriers**: Administrator turnover, budget cuts, competing initiatives, lack of staff buy-in, etc.
  - **Cultural variations**: Addressing differences in social, historical, and geographical implementation contexts

When to use adaptation?

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Session 5 Review

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SESSION SIX:

COACHING FOR OUTCOMES

Session 6: Coaching for Outcomes

Objectives of Session:

- To discuss specific challenges to delivery of effective coaching
- To review tools and practices to support coaching in schools
- To brainstorm solutions that have been effective in similar contexts or scenarios

Brainstorm

In your table groups, please discuss and be prepared to share out the following:

- What are some specific challenges to delivering effective coaching you have encountered?
- Work with your groups to categorize these challenges (See Session 6 Brainstorm Handout).

Focusing on What We Can Control

- Coaches work in complex environments: districts, schools, classrooms
- Barriers to coaching exist in all settings
- Defining roles and responsibilities (the who, when, and where), operationalizing desired outcome(s) (the what), and establishing a coaching plan (the how) can help coaches address barriers to delivery

Defining Roles and Responsibilities

- Consider the who, when, and where of coaching
- What is my role? What is my role compared to others in similar positions (e.g., instructional coaches, behavior specialists, specific curriculum coaches)? What are my responsibilities for delivering coaching? What are my responsibilities for documenting coaching? Are teachers expected to work with me?
- How often am I expected to deliver coaching? Is this time allotted in my FTE? How much time do teachers have to engage in observations and coaching conversations? Am I responsible for developing the schedule?
- Am I expected to visit multiple sites? Am I coaching all classroom settings? All other school settings (e.g., front office, cafeteria)?

Operationalizing Outcomes

- Consider the what of coaching
- What am I working with teachers to accomplish? What behaviors/skills/knowledge do I need to measure in the individuals I coach? What tools are available to monitor progress and growth? What will I do with the data I collect?
- What type of data is appropriate to measure?
  - Teacher-based and team-based outcomes: classroom management, instruction, fidelity of implementation
  - Student-based outcomes: student behavior, student achievement, student growth (in a specific academic area, IEP goals, etc.)

Establishing a Coaching Plan

- Consider the how of coaching
- How will I utilize my time to reach the desired outcomes? How will I know when I have reached the outcomes? How will I ensure that I am using my time efficiently and effectively? How will I handle individuals who are resistant to coaching?

Work Time

Please complete the Session 6 Application Handout, focusing on any areas that you feel are appropriate for your coaching practice:

- Have I defined my role and responsibilities? If not, what are the steps I need to take in order to do so?
- Have I operationalized my outcomes? If not, what are my desired teacher and student outcomes? How can these be observed and measured?
- Have I established a coaching plan? If not, what are my next steps in creating the plan?

Brainstorm

In your table groups, please discuss and be prepared to share out the following:

- Looking back on the challenges identified at the beginning of this session, what are concrete steps you can take to address some (or all) of these challenges?
- Have you ever successfully addressed any challenges that others listed? If so, what are some suggestions or tips you would share with others?

Session 6 Review

Objec, ves&f&session:&

- To discuss specific challenges to delivery of effective coaching
- To review tools and practices to support coaching in schools
- To brainstorm solutions that have been effective in similar contexts or scenarios

Questions?

Performance Assessment

Please&watch&the&following&video(s)&and&answer&these&ques, ons:&

- **Teacher&1:&**lementary&lassroom&ideo&(show 0:24-1:02)&
- **Teacher&2:&**econdary&lassroom&ideo&(show 0:00-0:30)
- **All&essions:&**lease identify in behavior specific terms what you would like the teacher to do differently. &
- **Session&2**: Considering the teacher's current performance and the desired behavior you would like to coach, how would you prompt the teacher in this situation?
- **Session&3**: Considering the teacher's current performance and the desired behavior you would like to coach, how would you support the teacher to build fluency in this situation?
- **Session&4**: Considering the teacher's current performance and the desired behavior you would like to coach, how would you support deliver performance feedback to the teacher following this observation?
- **Session&5**: Considering the teacher's current performance and the desired behavior you would like to coach, what are some potential organizational or cultural barriers to consider? How would you problem solve with the teacher to address these barriers?

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SUGGESTED SCRIPT FOR TRAINING SLIDES

Slide	Suggested Script
1	Today, we are going to focus less on the characteristics of an effective COACH and focus on what comprises effective COACHING. The purpose of the sessions are not to train on a structured or scripted "coaching model" but to discuss the core components of the coaching process that are likely to produce desired behavior change in the people we coach. If there are any questions throughout the session, please feel free to ask as they arise. The presentation will include [enter number of sessions being trained]. There will be multiple opportunities for group discussion and application so please be prepared to work with the individuals at your table group and to share insights with the larger group.
2	The entire Effective Coaching for Desired Outcomes (ECDO) training is comprised of six sessions listed on this slide. Today we will cover [discuss the content of the presentation]. Session 6 is specifically designed to discuss some of the challenges and successes that you have all encountered with coaching and is not as structured as the other 5 sessions in this series. There will be a post-test at the end of the training that covers the content being discussed today. A follow-up, self-report performance assessment will also be assigned at the end of the training. You will be asked to return the assessment within the next month. More information and specific directions will be discussed at the end of today's training.
3	The comprehensive ECDO Training is designed to help participants meet three specific training objectives: (a) we will define coaching and discuss the role of coaching in support the durable and sustained implementation of evidence-based practices (EBPs) in school settings; (b) the review the four components of coaching in-depth and to discuss the importance of each component in supporting behavior change in the individuals and groups that we coach; and (c) to apply the four coaching components to the current work we are engaged in.
4	Let's begin with Session One which will present an overview of coaching.
5	The first session includes 5 specific objectives: (a) to define coaching, (b) to discriminate between training and coaching, (c) to review evidence-based practices (or EBPs), (d) to name and define the four components of coaching, and (e) to identify 2 to 3 real-world coaching scenarios in order for you to apply today's content to actual situations you encounter in your everyday practice.
6	It is important for us to define coaching before we begin to discuss the core features of effective coaching. When you say the word "coaching", many things come to mind. **Click to Picture 1:** Some people think of the supporter and organizer. This is the individual who supports you in your day-to-day job and understands the big picture – where the school or program is headed and how he or she can support us in getting there. **Click to Picture 2:** Some people think of the cheerleader. This is the individual who provides emotional support, rallies behind you when you are feeling down, and mentors individuals toward being their best. Typically feedback focuses on the positive and little to no constructive or corrective feedback is offered. **Click to Picture 3:** Depending on previous experiences and/or assumptions about the coach's role, some people think of the enforcer, the person who is there to make sure deadlines are met, progress is being made, and "constructive" criticism is the only way to meet goals. **Click to Picture 4:** Some people think of the "genius" (like Chip Kelly!), the person who has all of the answers and is the expert in everything
7	While all of these perceptions are valid and coaches often play many roles, including all of the ones I just mentioned, it is important to make the discrimination between *coach* and *coaching*.

	The examples we just went through are illustrations of a "coach". When we think about coaches, we think about individuals who have been hired in a specific coaching role and tend to discuss them in terms of their characteristics, traits, and knowledge. It is important to make clear that today we are going to talk about *coaching*, the process by which we support individuals to successfully implement new skills in the natural context (like a school or educational program). Anyone can *deliver coaching* and coaches often do much more than *coaching* within their roles. The characteristics of an effective coach are important to consider when developing selection criteria and hiring individuals for coaching positions. It is important for coaches to have deep knowledge related to the areas in which they coach, experience in the implementation context, and the ability to building strong rapport and trust with the individuals they coach; however, our task today is to discuss the functions by which coaching is effective. **Click to Bullet Point 2:** Next, it is critical to distinguish between *training* and *coaching*. Training is the presentation of material to build new knowledge or skill. Right now, you are in a training. Training often takes place outside of the natural environment and is often delivered in a "one shot" approach. **Training is a necessary precursor to coaching**. If the individuals you are working with have not been trained on a given skill, then those skills cannot be coached. Coaching follows initial training and is intended to support implementation and sustained use of trained skills in the natural environment. **Click to Bullet Point 3:** Coaching is defined as the on-site supportive activities conducted after initial training that support durable implementation of newly trained skills. Let's unpack this a little further. First, coaching takes place on-site. It is embedded support that takes place in schools, classrooms, front offices, etc. It is much less likely for trained skills to be implemented if there is no ongoing support and feedback once individuals are applying the skills in their everyday work environment. Next, coaching is a verb – it is comprised of activities that coaches engage in. Again, coaching is a process/action, not a person. "After initial training" is highlighted because, as we discussed, training must happen before coaching can take place. If you are "coaching" someone without the necessary training and you begin to teach them about the skill/knowledge you want them to start using, you have shifted from delivering coaching to delivering training. Finally, coaching supports durable implementation or the sustained use of trained skills over time. Decades of research from a wide range of professions has documented the effect of coaching on sustainability of new practices. When delivered consistently and effectively, coaching is the bridge between training and long-term implementation of new practices, skills, and behaviors. Are there any questions?
8	Now it's time for another brainstorm. In your table groups, please take the next [enter time based on pacing needs] to discuss the following prompt and questions (read aloud). Please be prepared to share out with the larger group. **Possible Modifications:** • Adjust time • Ask individuals to write down their answers first, then share with their groups • Ask volunteers to write down group answers on large poster paper for later reference • Ask groups to write answers and review them under a document camera
9	Coaching matters because it works! Here is a graph showing the impact of coaching on student outcomes or, more specifically, the impact of coaching on the average major discipline referrals per day per month at one school. This information comes to us from Steve Goodman in Michigan. On the x-axis we have the months of the school year, from September to May. On the y-axis we have the average number of major referrals per day. The blue bars represent the 2005-2006 school year. Here we can see that the average rate of ODRs per day per month in September and October are under 3 per day. At the end of October, the coach goes on maternity leave. All of a sudden we have a huge increase in the number of ODRs, to 5 per day in November and nearly 7 per day in December. The coach returns from maternity leave at the beginning of January and for the rest of the year we see a return to low average rates of ODRs. The following school year the numbers decrease even more and remain steady throughout the

	year with the coach supporting throughout the entire year.
10	All of a sudden we have a huge increase in the number of ODRs, to 5 per day in November and nearly 7 per day in December. The coach returns from maternity leave at the beginning of January.
11	For the rest of the year we see a return to low average rates of ODRs.
12	The following school year the numbers decrease even more and remain steady throughout the year with the coach supporting throughout the entire year.
13	So, now that we have defined coaching and discussed the importance of coaching and coaching research, let's discuss what is done during effective coaching. Once again, this is not a coaching model, these are the core components of effective coaching that can be delivered in a multitude of ways. We often talk about essential skills and attributes of effective coaches – being trustworthy, knowledgeable, managing time, communication skills, networking, building professional relationships, etc. – all of which are important to the **coaching role**, however, finding individuals with these characteristics often occurs during the selection and hiring process… You have all been selected for this very reason. So now you're tasked with delivering coaching to meet specific goals and targets – what do you do? What exactly are you coaching?
14	Coaches can be hired in schools for many reasons. Coaches can be hired to support a specific curriculum (such as a Success For All or Everyday Math), to support a framework (for example, SWPBIS or RtI) or as a more general academic or behavioral support (such as behavior specialist or instructional coaches). Each position may slightly differ in terms of the area(s) being coached; however, all coaches should be aware of the evidence-based practices (EBPs) relevant to their content area. It is the goal of the coach to support individuals and groups in implementing EBPs and promising practices in classroom and school settings. It is important to be able to identify an evidence-based practice and to locate information for your own coaching practice as well as to support the teacher, educational assistants, and other educators you are working with. Evidence-based practices are interventions with consistent scientific evidence documenting effectiveness in improving outcomes (for student behavior, academic achievement, etc.). The word "practice" is used frequently within the general and special education fields; however, the definition is rarely discussed with educators. As Horner and colleagues wrote in 2005, a practice "refers to a curriculum, behavioral intervention, systems change, or educational approach designed for use by families, educators, or students with the express expectations that implementation will result in measureable educational, social, behavioral, or physical benefit". As both of these definitions explicitly discuss, our job is to coach practices that results in positive outcomes for teachers, students, and/or families. It is critical that as coaches, we understand the outcomes we are using to measure our progress and understand the practices that have empirical support documenting their effectiveness at improving outcomes.
15	Not all practices that are currently in use in schools are evidence-based. In fact, research has demonstrated that teachers often select and implement practices that have little or no documented effectiveness in improving outcomes for students and families. When searching for EBPs, there are important indicators to look for. The US Department of Education's Institute for Education Sciences (IES) categorizes interventions that have been researched and indicate some effectiveness as either having "strong" or "possible" evidence of effectiveness. When evaluating research done on an intervention, look for the methodology and the study's dimensions, including: internal and external validity, generalization, and strength of evidence. IES defines "strong" evidence of intervention effectiveness as including "that the intervention be demonstrated effective, through well-designed and randomized control trials, in more than one site of implementation and that these sites be typical school or community settings, such as

	public school classrooms taught by regular teachers". IES defines "possible" evidence of effectiveness for an intervention as including "only non-randomized studies, only one well-designed randomized control trial showing the intervention's effectiveness at a single site, RCTs with one or more flaw in design or implementation, RCTs showing effectiveness in laboratory-like setting, and RCTs that document effectiveness with students whose academic skills and socioeconomic backgrounds differ from the students in your classroom or school". While EBPs are always preferred over any other practices, conducting RCTs in educational research is relatively rare. With this in mind, you may be supporting the implementation of "promising practices" over evidence-based practices at times.
16	[Handout Appendix A from IES report] There are numerous references to identify evidence-based and promising practices for coaches, teachers, administrators, and parents. The list on your handout is provided by a report by IES titled "Identifying and Implementing Educational Practices Supported by Rigorous Evidence: A User Friendly Guide". As coaches, I would recommend reviewing these websites to support your own practice as well as to identify references and supports for the individuals you work with. Some of the content on these sites can be overwhelming so reviewing them prior to suggesting them to teachers, administrators, and parents is good practice.
17	So now you're tasked with delivering coaching to meet specific goals and targets – what do you do? There are four core components to coaching – **(Click to 1)** prompting, **(Click to 2)** performance feedback, **(Click to 3)** fluency building opportunities, and **(Click to 4)** adaptation. We will discuss each core component in depth in Sessions 2 through 5; however, we will identify and define the coaching components before moving forward with the final activity in Session 1. **(Click to 5)** Prompting is the delivery of a cue or reminder before a skill should be used. For example, you may deliver a visual prompt to a teacher during a lesson to remind them to deliver behavior specific praise to students during independent work time or you may deliver an email prompt to a team member asking them to print off data reports prior to the meeting. **(Click to 6)** Performance feedback is the component most typically associated with coaching. Performance feedback is the delivery of reinforcing and corrective feedback following an observation of an individual or team. **(Click to 7)** Fluency building is used less often than both prompting and performance feedback but is critically important when coaching people who do not have ease and efficiency with using a newly trained skill. Fluency building is the provision of multiple and sufficient opportunities for practicing newly acquired skills. **(Click to 8)** Finally, adaptation refers to the extent to which changes must be made to a program or intervention to align the features of the practice, program, or intervention to the skills, resources, administrative support, and values of the local implementation context (in our work, this most often refers to schools and classrooms). As I mentioned, we will be going over each of these in much greater depth in the upcoming sessions but are there any questions before we move on to the next slide?
18	Please read the Session 1 Application handout on your tables. You will be asked to identify 1 or 2 coaching scenarios that you encounter in your everyday practice and would like to try use for application of today's activities. The instructions are listed on the handout. If you are not currently coaching or are moving buildings this year, please review the coaching scenarios listed on Page 2 and Page 3. Add any other details and relevant information that will help you get a more comprehensive picture of the scenarios. You will have [enter appropriate # of minutes here] to complete this task
19	Thank you very much for your hard work and participation in session 1 of the ECDO training series. We are going to take the opportunity to review the objectives of Session 1, as well as to check for understanding on the main points of the session. Our objectives were to (a) define coaching, (b) to discriminate between training and coaching, (c) to review evidence-based practices, (d) to name and define the four components of coaching, and (e) to identify 1 to 2 real world coaching scenarios. We are going to take a quick quiz to review the content from Session

	1. **Quiz Questions:** What is the difference between training and coaching? Training occurs before coaching Training is the delivery of information to support the development of news skills and/or knowledge and coaching is the on-site support provided after initial training that supports implementation Neither A nor B Both A and B* The four core components of coaching are: Reminding, reinforcing, correcting, and adaptation Prompting, praising, fluency building, and supporting change Prompting, performance feedback, fluency building, and adaptation Cueing, performance feedback, correction, and emotional support **Possible Modifications:** • Give as a pen and paper quiz – have individuals score their own tests and give a "Fist to Five" of their understanding of each question after review • Present as a group quiz, allow them to discuss and share their answers with the larger group before review • Ask teams to identify one question that they are not understanding, discuss as group, share out and discuss in whole group • Use free service from https://www.polleverywhere.com/ to add questions, allow participants to text their answers anonymously, and see results in real time
20	We are ready to begin Session 2. This session will discuss the first core component of coaching – prompting.
21	Session 2 includes 4 specific objectives: (a) to define prompting, (b) to review the purpose of prompting, (c) to identify when to use prompting with individuals and teams, and (d) to apply prompting to the real-world coaching scenarios you identified in Session 1.
22	Prompting is a simple and efficient way of reminding or cueing people to use a skill. Prompting focuses on **when** to use a skill and **under what circumstances** or **within what contexts** to use a skill. Prompting can be delivered in many different ways, including verbal prompts (such as reminders before an observation or on the PA system before classes begin), visual prompts (such as posters or signals during a lesson) or written prompts (such as text messages and emails). The important thing to remember about prompting is that it occurs **before** the skill should be used. For example, if you have been working with a grade-level PLC on increasing behavior specific praise you may remind the group after the PLC meeting but prior to returning to their classrooms that you will be coming to their classes to observe the rate of delivery of behavior specific praise. This is a simple example of a verbal prompt that can be delivered quickly and will increase the likelihood that teachers will increase their delivery of praise when you observe them in their classrooms after the PLC meeting.

23	There are many different ways that a coach can deliver prompts. Let's take a look at Mr. Owens and a middle school SWPBIS Tier II/III team as examples. Mr. Owens is a high school English teacher with 5 years of teaching experience. As a coach, you have been using a walkthrough tool that tracks the evidence-based practices associated with quality classroom management. Mr. Owens has established behavioral expectations, he has clear and explicit routines and procedures, has a consequence system that is used to address problem behavior, and uses behavior specific praise frequently. However, during nearly every observation you have noticed that his primary instructional practice is teacher-led lectures. There is little to no student talk and rarely an opportunity for students to demonstrate knowledge or participate in the lesson. Together, you and Mr. Owens identified increasing academic OTRs as a desired coaching target. During a coaching session, you asked Mr. Owens to identify in his lesson plans areas in which he could include OTRs for individuals, small groups, and the whole class. You deliver weekly prompts via email to continue noting OTRs in his lesson plans and you deliver a verbal prompt before observing him that you will be specifically looking for academic OTRs. As the rate of OTRs increases, the frequency of prompting will decrease and the type of prompts delivered may change. Now, let's look at a group example, You are working as a PBIS coach in a middle school. The school has been implementing Tier I for five years but is in its second year of Tier II implementation and first year of Tier III implementation. The Tier II/III team has new members and you have noticed that the team does not have an agenda. They often begin discussing other topics or focus on one student the entire meeting. You have shown them a meeting agenda format that they agreed to use and have designated roles. You send a text message before the meeting to the note taker, asking him to have the agenda ready and posted before today's meeting begins. You also begin the meeting by reminding everyone about using the agenda, making sure the note taker has documented all agenda items, and referring to the agenda as they monitor their progress toward goals. Like Mr. Owens, as the team begins to use the agenda and the note taker has the agenda prepared and posted regularly, you begin to fade your prompts until they are no longer needed by the team.
24	Prompting is important because it focuses on when and under what contexts to use a new skill. This increases the likelihood that individuals will establish stimulus control and move toward independent use of the skill. Stimulus control is achieved when a behavior is more likely to occur in the presence of a stimulus and not occur in the absence of the same stimulus. For example, when a driver has established stimulus control, seeing a stop sign will increase the conditional probability that he or she will press on the car break and stop the car. If stimulus control has not been established, the likelihood that the driver will stop at the stop sign does not increase and the driver may be more likely to stop at inappropriate times (such as during a green light or a upon seeing a speed sign). The purpose of delivering prompts during coaching is to bring the desired behavior under stimulus control in the natural context. When we think of prompting, we can think of it as a way to address the challenge of people knowing what to do (for example, using contingent praise to reinforce a student for appropriate behavior) but failing to do so because another behavior is already under stimulus control (for example, delivering only behavioral correction and ignoring a student for appropriate behavior). People have habits (or patterns of behavior that occur within specific contexts). Teaching new habits can be easy (like teaching the teacher how and when to deliver contingent praise) but getting an individual to replace an old habit with a new habit (like getting the aforementioned teacher to deliver contingent praise instead of ignoring a student behaving appropriately) *and* getting her to use the new skill in the intended context (in this case, the classroom) is much more difficult. Prompting is the mechanism by which coaches can support teachers to establish new habits in the classroom. With Mr. Owens, we want him to begin recognizing the naturally occurring cues in his own classroom that will prompt his to include an OTR. In coaching, stimulus control transfers away from coach-delivered prompts to naturally occurring stimuli in the classroom or school setting. Coach-delivered prompts such as reminders, modeling, or direct help establish stimulus control of newly trained skills in the classroom environment.
25	Prompting is not always necessary during coaching. When a skill is under stimulus control and

	a teacher or team uses a skill in the appropriate contexts and during the appropriate time, prompting is not necessary. As discussed in the last slide, behavior is under stimulus control when (a) the behavior happens when the cue is present and (b) behavior does not happen when the cue is not present. If prompting is necessary, make sure to fade prompts over time to establish stimulus control with naturally occurring cues.
26	Using the 1 or 2 coaching scenarios you identified in Session 1, please complete the questions on the Session 2 application handout. If you did not identify coaching scenarios of your own, please use the ones provided on Pages 2 and 3 of the Session 1 handout. Table discussions are encouraged. Please be prepared to share out to the whole group. You will have [enter # of minutes] to complete this Application Activity.
27	Thank you very much for your hard work and participation in session 2 of the ECDO training series. We are going to take the opportunity to review the objectives of Session 2, as well as to check for understanding on the main points of the session. Our objectives were to (a) define prompting, (b) to review the purpose of prompting, (c) to identify when to use prompting with individuals and team, and (d) to apply prompting to real-world coaching scenarios. To wrap up this session, we are going to take a quiz to ensure the objectives of Session 2 were met. **Quiz Questions:** Prompting is important because it helps individuals understand When and under what contexts to use a behavior or skill With whom to use a behavior or skill Why a skill or behavior is important How to increase the frequency with which they use skills Prompting should not be used when a behavior or skill is Highly complex Used infrequently in practice Under stimulus control Used ineffectively **Possible Modifications:** • Give as a pen and paper quiz – have individuals score their own tests and give a "Fist to Five" of their understanding of each question after review • Present as a group quiz, allow them to discuss and share their answers with the larger group before review • Ask teams to identify one question that they are not understanding, discuss as group, share out and discuss in whole group • Use free service from https://www.polleverywhere.com/ to add questions, allow participants to text their answers anonymously, and see results in real time
28	We are ready to begin Session 3. This session will discuss the second core component of coaching – performance feedback.
29	Session 3 includes 5 specific objectives: (a) to define performance feedback, (b) to review the purpose of performance feedback, (c) to discriminate between reinforcing and corrective

	functions of feedback, (d) to identify when to use performance feedback with individuals and teams, and (e) to apply performance feedback to the real-world coaching scenarios you identified in Session 1.
30	Performance feedback is the activity most typically associated with coaching. Performance feedback is the delivery of both corrective and positive feedback after observing an individual. It is important to note that performance feedback does include a corrective function, although this is often a harder component for individuals to implement than positive feedback. The purpose of using performance feedback is to increase the accurate use of a skill and increase the speed, rate and ease of a new skills. When performance feedback is used correctly, individuals will be more likely to use skills effectively in their natural setting (like the front office or classroom), thereby increasing the likelihood that they will continue to use them in the future (durable implementation). Performance feedback can be delivered in many different ways, but it is important that feedback is delivered as soon as possible following an observation. When delivering performance feedback, it is important to deliver **behavior specific** feedback that addresses the behavior/skills you are targeting. For example, "Good job, you're doing great" is positive praise; however, it is not specific positive feedback that will increase the likelihood of individuals using skills consistently. A better example is, "You consistently provide students with opportunities for higher level thinking by asking complex questions and allowing students to work with one another to tackle difficult problems. Excellent work!" The individual knows that the behavior to continue using is providing opportunities for higher level thinking during instruction. Feedback can be delivered formally and informally as well as in person or through writing. Data can include qualitative and or quantitative sources. We will talk more about delivering corrective feedback on the next slide.
31	Performance feedback serves two distinct functions – reinforcing and corrective. Reinforcing positive feedback is intended to positively reinforce individuals or teams for the correct use of a behavior or skill. As coaches, when we want to see a particular behavior or skill used in the same way in the future, we can deliver reinforcing feedback. Reinforcement increases the likelihood that an individuals will use the skill or behavior again in the future. It is important to deliver specific reinforcement. For example, after observing Mrs. Montoya consistently praising her students, you may say, "Excellent job today!". More specific feedback may include, "You do a wonderful job establishing a positive environment for your students". However, being as specific as possible regarding the behavior or skill (in this case, delivering high rates of praise to students) is even more likely to support her using the skill again in the future, "Today you delivered behavior specific praise to nearly every student and to groups of students working together. You increased your rate of delivery from 1 praise statement every 5 minutes to 1 praise statement every minute. Well done!". An important part of our work as coaches is to correct behavioral or skill use errors. It is critical that corrective feedback be specific, behavioral, and limited to 1 to 2 behaviors during each coaching session. Corrective feedback is effective insofar as it focuses on a behavior or skill error, not *on the person who made the error*. Using Mrs. Montoya as an example once again, let's imagine that her and her coach had identified increasing behavior specific praise delivery as their targeted coaching goal prior to her most recent observation. The coach noticed that Mrs. Montoya praised individual students and in a 20-minute observation only delivered 4 positive praise statements. When discussing the observation, if the coach was focused on *Mrs. Montoya* rather than her *behavior*, the coach may say something like, "You aren't very warm or positive with your students. Your students never get praise for what they do. Let's focus on delivering more praise so students feel more comfortable and acknowledged in your classroom". This feedback is laden with judgments related to Mrs. Montoya, her approach to teacher-student relationships, and her students' feelings in the classroom. Focusing on the behavior or skill that we want to see changed is critical. "Mrs. Montoya, I noticed that you delivered praise four times during the observation. This means that you are currently delivering praise once every 5 minutes, on average. Praising students more often can increase the likelihood they will engage in the behavior(s) you expect of them. Let's talk about some ways to increase the rate of delivering praise throughout your lessons." When delivering corrective feedback, it is also important to discuss a replacement

	behavior or strategies for increasing or decreasing the targeted behavior. This is where your expertise as coaches comes in and one of the many ways you can establish and grow a strong, collaborative bond with the individuals you coach.
32	Now we will discuss some strategies and tips for delivering performance feedback. **Click to comic.** [read comic for group] – This is a great non-example of delivering performance feedback. One thing to remember as we move into tips for delivering performance feedback is that it can be very hard to deliver corrective feedback. When feedback (both positive and corrective) is delivered appropriately, individuals should feel more motivated and supported to engage in their work and in coaching with you. The purpose of coaching is to help people develop the skills necessary to be more effective educators in order to support students. People should leave the coaching debrief/conversation feeling clear about (a) what they are doing well, (b) an area or two for growth, and (c) concrete steps for addressing their growth area(s). People should not leave a coaching conversation feeling defeated or alone in the process of growth and improvement. **Click to Bullet Point 1.** Researchers have examined the features of performance feedback that make it more or less effective in producing behavioral change. They found that the content of the feedback, the frequency and immediacy of the feedback, and the targeted behaviors discussed during feedback are critical to its effectiveness. Feedback content should include corrective feedback (when necessary), reinforcing feedback, and should be descriptive and behavioral – remember, we want to move away from "good job" and "excellent lesson" to concrete behaviors and skills to reinforce and correct. Next, the frequency and immediacy of feedback is an important consideration. Research has indicated that feedback once a week or once every two weeks is ideal for promoting behavior change. It is important to deliver feedback as soon as possible after an observation. Finally, the targeted behaviors that are discussed during coaching conversations are critical. Make sure before you engage in a coaching conversation that you are clear about the measureable and observable behaviors you would like to reinforce and/or correct. **Click to Bullet Point 2.** Remember to begin and end delivery of performance feedback on a positive note. Just like we do with our students, we want to ensure that the number of reinforcing statements outnumber correction. **Click to Bullet Point 3.** Once again, be specific with your feedback and target behaviors, not the people or character traits of the people you are coaching. **Click to Bullet Point 4.** Try to be as objective as possible when delivering feedback. When possible, use objective data over subjective information. With Mrs. Montoya, it was more objective feedback when we shared with her the rates of praise observed (1 praise statement every 5 minutes to 1 praise statement every minute) than it would have been to say "Your rates of praise are low". **Click to Bullet Point 5.** Finally, remember to include replacement behaviors or tips and strategies when correcting behavior. It is possible that the individual or team you are coaching simply doesn't know how to improve in a specific area or needs direct guidance and ideas on how to reach his or her targeted coaching goals.
33	Now that we have discussed the content of performance feedback, let's take a look at Mrs. Gates and an elementary school teacher and an RtI Tier I team at the elementary school level. Mrs. Gates and her coach have been working on decreasing transition time from table groups to the carpet. At baseline, Mrs. Gates spent nearly 12 minutes getting students from their table groups to being seated and ready for instruction on the carpet. After observing Mrs. Gates and noticing the decrease in transition time and the increase in both prompting prior to transition and reinforcement for following the procedure, the coach begins with reinforcing feedback. "Mrs. Gates, you have clearly taught your students the transition routine that we discussed after last week's observation – well done! Last week, the transition from the carpet took 11 minutes and 48 seconds. There were no prompts given to the students. This time, the transition took 5 minutes and 41 seconds and you reminded each table group of the transition procedure and expectations before the transition. Well done!" After delivering reinforcing feedback, the coach will deliver corrective feedback to improve the transition time further. "The transition times are half what they were before so let's keep pushing for our goal of 3 minutes or less. I noticed that you did not reinforce any students for following the transition procedure. Do you think if you continue to use high rates of prompting and pair that with positive reinforcement students may be more likely to transition quickly and quietly? Since you use both table points and classroom

	points throughout the day, this may be a great time to incorporate those, along with verbal praise." This corrective feedback included the targeted behaviors for Mrs. Gates to focus on as well as a strategy for increasing the value of reinforcement for the students (through table points and class-wide points).
34	Performance feedback is important in the coaching process because it gives individuals and teams an understanding of their performance and knowledge of what is working and what can be improved. Feedback can be used to change the likelihood of a new skill being used correctly or used again in the future through functions such as reinforcement and correction. Performance feedback can also improve the precision with which new skills are used in the natural environment. A comprehensive meta-analysis conducted by Solomon, Klein, and Politylo examined the relation between performance feedback and treatment integrity (or fidelity). The researchers found that performance feedback "results in significant behavioral change… regardless of setting, dependent variable, delay of feedback, or type of intervention". Clearly, performance feedback is an important component of coaching for change.
35	Performance feedback is appropriate to use in any coaching situation, including with individuals and teams who are still acquiring and implementing new skills and behaviors with low fidelity, with highly experienced individuals, and with teams who have been implementing with fidelity for many years. Deliver performance feedback after direct observation. You cannot deliver feedback when an individual or group has not been observed. Deliver feedback frequently and routinely. The frequency of feedback will differ from role to role; however, it is important to make feedback a routine so that you can support individuals and teams to perform to their highest ability and you are not only coaching those individuals and teams who are struggling. When this becomes the case, you may become associated with "putting out fires" rather than proactively and collaboratively engaging in the learning and growth process with the people you coach. Performance feedback is especially useful when individuals or teams are implementing something new. It supports fewer errors being made, establishes fluency of use more quickly, and increases the likelihood that they will continue implementing over time (sustainability). Performance feedback supports the "transfer or maintenance of knowledge and behaviors" so it is helpful during all phases of implementation.
36	Using the 1 or 2 coaching scenarios you identified in Session 1, please complete the questions on the Session 3 application handout. If you did not identify coaching scenarios of your own, please use the ones provided on Pages 2 and 3 of the Session 1 handout. Table discussions are encouraged. Please be prepared to share out to the whole group. You will have [enter # of minutes] to complete this Application Activity.
37	Thank you very much for your hard work and participation in session 3 of the ECDO training series. We are going to take the opportunity to review the objectives of Session 3, as well as to check for understanding on the main points of the session. Our objectives were to (a) define performance feedback, (b) to review the purpose of performance feedback, (c) to discriminate between reinforcing and corrective functions of feedback, (d) to identify when to use performance feedback with individuals and teams, and (d) to apply performance feedback to real-world coaching scenarios. To wrap up this session, we are going to take a quiz to ensure the objectives of Session 3 were met. **Quiz Questions:** Performance feedback is important because it helps individuals Increase the speed, rate, accuracy, and ease with which new skills are used Decrease the time and resources needed for mastery of new skills Understand why the new skills or behaviors are important to use

	Develop untrained skills naturally Corrective feedback should always include Objective data Practice of the new skill or behavior Replacement behavior(s) or suggestions for improvement Reminders or prompts of the targeted skill **Possible Modifications:** • Give as a pen and paper quiz – have individuals score their own tests and give a "Fist to Five" of their understanding of each question after review • Present as a group quiz, allow them to discuss and share their answers with the larger group before review • Ask teams to identify one question that they are not understanding, discuss as group, share out and discuss in whole group • Use free service from https://www.polleverywhere.com/ to add questions, allow participants to text their answers anonymously, and see results in real time
38	We are ready to begin Session 4. This session will discuss the third core component of coaching – fluency building.
39	Session 4 includes 4 specific objectives: (a) to define fluency building, (b) to review the purpose of fluency building, (c) to identify when to use fluency building with individuals and teams, and (d) to apply fluency building to the real-world coaching scenarios you identified in Session 1.
40	Fluency building is the provision of multiple and sufficient opportunities for practicing newly acquired skills. Fluency building opportunities are designed to increase the fluency with which individuals and teams use new skills. Fluency is defined as the accuracy and speed of behavior responding. Fluency is typically associated with academic skills such as reading and completing basic math facts; however, fluency is important in all of the behaviors and skills we use in our lives and in our work in schools and classrooms. Fluency increases the ease and functionality of new skills.
41	Let's take a look at a Ms. Stephenson, a middle school special education teacher for students with emotional and behavioral disorders (EBD), Her school is implementing SWPBIS and applying the principles of class-wide PBIS in all settings. Given the unique classroom setting that she is in, she has had a difficult time implementing a continuum of consequences for problem behavior. This has resulted in mostly reactive practices such as removing students from the classroom and sending them to the principal's office. At the last observation, the coach noticed that students were displaying high rates of mild to moderate problem behavior such as getting out of their seats without permission, telling other students to "shut up", and refusing to participate in classroom activities. Ms. Stephenson used planned ignoring until the situations escalated. In the last observation, a fight between two students broke out after multiple insults were said back and forth and another student was sent out of the classroom for threatening Ms. Stephenson and a classroom assistant. The coach and Ms. Stephenson decided that implementing a continuum of consequences and addressing mild and moderate behavior before it escalated to a major incident were important goals. Ms. Stephenson did not feel comfortable implementing this in her classroom before she was able to get more familiar (i.e., increase fluency with) addressing problem behaviors in a proactive way. Ms. Stephenson, two

	educational assistants, and the coach met after school for three days to practice how to address various types of problem behavior. The classroom staff was unified in their approach to addressing problem behavior and Ms. Stephenson was able to begin implementing the continuum of consequences in her classroom after building fluency with addressing problem behavior. Now shifting to a team fluency building example, let's look at a SWPBIS Tier I team who is in the first year of SWPBIS implementation. They have been trained on the School-wide Information System (SWIS) but have not pulled any data since the first week after the data. After inquiring about the SWIS data reports, the team facilitator tells the coach that the team hasn't used SWIS data because it took too long to remember all of the steps. The coach offered to model how to use SWIS during the team meeting and then asked that they arrange a different meeting time to review the SWIS process. The coach offered multiple opportunities for the team to enter data into SWIS and pull specific data reports. The coach repeated these opportunities until each member of the team was able to quickly and accurately enter data and pull reports. The team began using SWIS data at all subsequent SWPBIS meetings.
42	Fluency building increases the efficiency of skill use. When skills are easier to use, people are more likely to continue using them in their natural working environment. Research indicates that fluency building is associated with retention, endurance, and application. Retention refers to the ability to recall and use information after a long period of time. This is especially important for skills that individuals or teams need in order to be successful, but do not necessarily use them frequently. For example, a special education team that is trained in non-violent crisis prevention and intervention may not need to use deescalation skills with a student in crisis often; however, when the situation arises, it is important that the SPED team is able to handle the crisis appropriately. Endurance is the ability to perform a skill for a long period of time without fatigue and despite distractions. Teachers' ability to manage a classroom or to plan and deliver highly engaging lessons requires endurance. Application is the ability to transfer component behaviors to composite skills. For example, a teacher who attends a math training and learns to track student progress data is able to apply that skill to using data to inform instruction in math, reading, and other academic subjects.
43	Similar to prompting, fluency building is not always necessary when coaching individuals or teams. When an individual has not developed efficient and effective use of a skill or the skill is not used enough to be sustained by naturally occurring reinforcers, fluency building is necessary. What does it mean for a behavior to be sustained by natural reinforcers? Natural reinforcers are those that are not delivered by the coach but occur naturally when a person is using a skill or behavior. For example, if a teacher is working on preparing lesson plans and having his materials ready for instruction, natural reinforcement might come in the way of improved student behavior, higher levels of engagement, or more time spent on instruction and less time spent on rushing to prepare for the next lesson. When a skill is not used enough to encounter naturally occurring reinforcement, fluency building can be a helpful coaching component to utilize. Fluency building opportunities are designed to increase the amount of practice an individual or group has with a new skill or behavior, resulting in the skill being used with the efficiency and effectiveness required to access natural reinforcement.
44	Using the 1 or 2 coaching scenarios you identified in Session 1, please complete the questions on the Session 4 application handout. If you did not identify coaching scenarios of your own, please use the ones provided on Pages 2 and 3 of the Session 1 handout. Table discussions are encouraged. Please be prepared to share out to the whole group. You will have [enter # of minutes] to complete this Application Activity.
45	Thank you very much for your hard work and participation in session 4 of the ECDO training series. We are going to take the opportunity to review the objectives of Session 4, as well as to check for understanding on the main points of the session. Our objectives were to (a) define fluency building, (b) to review the purpose of fluency building, (c) to identify when to use fluency building with individuals and teams, and (d) to apply fluency building to real-world

	coaching scenarios. To wrap up this session, we are going to take a quiz to ensure the objectives of Session 4 were met. **Quiz Questions:** Fluency is the combination of _____ and _____ performance, application knowledge, skill accuracy, speed precision, achievement Fluency building is necessary to use when An individual has not developed efficient and effective use of a skill Practice of the new skill or behavior The skill is not used enough to be sustained by natural reinforcement Both A and B Neither A nor B **Possible Modifications:** • Give as a pen and paper quiz – have individuals score their own tests and give a "Fist to Five" of their understanding of each question after review • Present as a group quiz, allow them to discuss and share their answers with the larger group before review • Ask teams to identify one question that they are not understanding, discuss as group, share out and discuss in whole group • Use free service from https://www.polleverywhere.com/ to add questions, allow participants to text their answers anonymously, and see results in real time
46	We are ready to begin Session 5. This session will discuss the fourth and final core component of coaching – adaptation.
47	Session 5 includes 5 specific objectives: (a) to define adaptation, (b) to discriminate between adapting products, processes, and practices versus changing core features, (c) to review the purpose of adaptation, (d) to identify when to use adaptation with individuals and teams, and (e) to apply adaptation to the real-world coaching scenarios you identified in Session 1.
48	Adaptation refers to the process of aligning the features of a practice, program, or intervention to the skills, resources, administrative support, and values of the local context. A critical component of understanding adaptation is to recognize the difference between systematically adapting features of an intervention or program to the unique variables and needs of the local context versus changing the core features of an intervention. Systematic adaptation allows for changes to the features of an intervention or program insofar as those changes do not affect the core features of the intervention. Core features of an intervention or program must remain the same and be implemented with fidelity in order to ensure that the valued outcomes associated with the program or intervention are met. If changes to the core features are made, the effectiveness of the program or intervention is compromised.
49	**[Read comic].** There are many features, elements, and components in any given program, intervention, or curriculum. However, as Dilbert's comic points out, when too many core features are added to a program, it can render it useless or ineffective. Research-based

	interventions and practices have a small number of core features that make it effective at producing desired outcomes. Before making any adaptations to a program or intervention that you are coaching an individual or team to use, it is imperative that you identify the core features that make the program or intervention effective. Researchers Blase and Fixsen define core features as the "functions or principles and related activities [of an intervention] necessary to achieve outcomes". By this definition, core features cannot be adapted without jeopardizing outcomes. For example, one core feature of school-wide positive behavioral interventions and supports (SWPBIS) is having 3-5 positively stated behavioral expectations that are posted and explicitly taught to staff and students. Having 3-5 positively stated behavior expectations is a **core feature** of SWPBIS; however, the expectations, methods for teaching staff and students, and the types of products posted around the school can all be adapted to meet the needs of the school, staff, and students.
50	Adaptation can occur with small practices or across various parts of a comprehensive, tiered framework such as SWPBIS. Using Tier I SWPBIS as an example, the left column indicates the core features of SWPBIS. These are the "active ingredients" of Tier I that make it effective at producing desired staff and student outcomes. As we have discussed, these core features cannot be adapted without jeopardizing the effectiveness of SWPBIS. The right column features multiple examples of the products, processes, and practices aligned with the five core features of SWPBIS. These are examples of features that can be adapted to align to the skills, resources, administrative support, and values of the local implementation context. For example, having a system wherein adults reward students contingent upon appropriate behavior is a core feature of SWPBIS; however, the types of individual, small group, and/or school-wide rewards can be changed and adapted to meet the needs of the school or program.
51	Adaptation is important to discuss within the context of coaching because it is important for increasing the contextual fit of a program or intervention and increases the likelihood that implementation will sustain over time. Rogers coined the diffusion of innovation theory during his research on the adoption and implementation of interventions in real-world settings and contexts. According to his research, whenever an intervention is translated from research to practice, changes to that intervention are inevitable. Based on the diffusion of innovation theory, other researchers began studying methods for systematic adaptation of interventions, whereby features of interventions are changed to match the skills, resources, administrative support, and values of the local implementation context without compromising the core features by which the intervention is effective. Adaptation may increase the contextual fit of a program or intervention. When contextual fit is maximized, the intervention or program is more likely to be implemented with fidelity and sustained over time. Adaptation is necessary when challenges to implementation arise, including both organizational and cultural barriers. Organizational barriers such as administrator turnover, budget cuts, and competing initiatives can all threaten the implementation of program, unless adaptations are made to minimize or eliminate the effects of the barriers. Cultural differences may include variations in social, historical, and geographical contexts for both the people charged with implementing a program or intervention (teachers, administrators, other staff members) and the students and families being served within the local context. If the interventions and practices being implemented do not align with the local culture, implementation fidelity is likely to decrease.
52	Adaptation can be used during different stages of implementation for both individuals and teams that you coach. Installation and initial implementation are the earliest stages of the implementation process. Installation refers to the stage in which the implementers (e.g., schools, districts) have decided to adopt a new intervention and are setting the stage for successful implementation. Tasks such as allocating resources, forming teams, and ensuring that sufficient infrastructure is establishing are common during the installation stage. The initial implementation stage refers to the time in which practitioners are actively using the new skills and knowledge related to the practice or program. Those in charge of implementing are learning and accommodating to a new way of doing things. During these stages, individuals and school teams can benefit from coach-led adaptation. The purpose of adaptation in these stages is to

	increase the contextual fit in order to align the features of the intervention with "the values, skills, resources, and administrative support of those who must implement [the program]". Full implementation refers to the stage in which the new program or intervention has become integrated into everyday practices and procedures within the local context. Because initial and full implementation can span many years, any number of challenges or barriers to successful implementation and sustainability can arise. When these challenges occur, adaptation can help support the sustained use of the program over time.
53	Using the 1 or 2 coaching scenarios you identified in Session 1, please complete the questions on the Session 5 application handout. If you did not identify coaching scenarios of your own, please use the ones provided on Pages 2 and 3 of the Session 1 handout. Table discussions are encouraged. Please be prepared to share out to the whole group. You will have [enter # of minutes] to complete this Application Activity.
54	Thank you very much for your hard work and participation in session 5 of the ECDO training series. We are going to take the opportunity to review the objectives of Session 5, as well as to check for understanding on the main points of the session. Our objectives were to (a) define adaptation, (b) to discriminate between adapting products, processes, and practices versus changing core features, (c) review the purpose of adaptation, (d) to identify when to use adaptation with individuals and teams, and (e) to apply adaptation to real-world coaching scenarios. To wrap up this session, we are going to take a quiz to ensure the objectives of Session 5 were met. **Quiz Questions:** It is appropriate to adapt the features of a program or intervention but not to change the _____ _____ of a program or intervention. Active parts Core features Intervention plan Assessment procedures Adaptation can be used during installation and initial implementation to _____ and during initial and full implementation to _____. Increase contextual fit; address challenges/barriers to implementation Address challenges/barriers to implementation; increase contextual fit Increase the speed and precision with which SWPBIS is implemented; improve implementation fidelity Improve implementation fidelity; increase the speed and precision with which SWPBIS is implemented **Possible Modifications:** • Give as a pen and paper quiz – have individuals score their own tests and give a "Fist to Five" of their understanding of each question after review • Present as a group quiz, allow them to discuss and share their answers with the larger group before review • Ask teams to identify one question that they are not understanding, discuss as group, share out and discuss in whole group • Use free service from https://www.polleverywhere.com/ to add questions, allow

	participants to text their answers anonymously, and see results in real time
55	We are ready to begin Session 6. This session is different from the previous 4 sessions. Session 6 is designed to discuss some of the challenges and barriers that we encounter as coaches. It is designed to allow you to work with your table groups and learn from the experiences and strategies of the other coaches in the room.
56	Session 6 includes 3 specific objectives: (a) to discuss specific challenges to the delivery of effective coaching, (b) to review tools and practices to support coaching in schools, and (c) to brainstorm solutions that have been effective for others in similar contexts or scenarios.
57	Now let's get to work! In your table groups, please take the next [enter time based on pacing needs] to discuss the following question: what are some specific challenges to delivering effective coaching that you have encountered? Use the Session 6 Brainstorm Handout, organize these challenges into three groups – systems barriers (or those barriers related to the larger system or context in which you work – school-level, district-level, state-level barriers), coachee barriers (or those barriers related to the individuals and teams that you coach), coach barriers (barriers related to you and your own coaching practice). Some items may go into more than one category – but if possible, try to organize them into one category. For example, if you feel that you lack the resources and knowledge necessary for coaching effectiveness then you may decide to put "Lack of resources provided to coaches" and "Lack of ongoing PD for coaches" in the "Systems Barriers" column and "Lack of understanding of how to increase my own effectiveness as a coach" in the "Coach Barriers" column. **Possible Modifications:** • Adjust time • Ask individuals to write down their answers first, then share with their groups • Ask volunteers to write down group answers on large poster paper for later reference • Ask groups to write answers and review them under a document camera • Presenter can ask someone in the audience to write all of the answers down (summarize longer answers) on chart paper divided into 3 categories **Note:** Common coaching challenges that may be discussed and brought up in conversation: Lack of time, confusion on role(s), lack of system support, lack of alignment of initiatives/being pulled multiple directions as a coach, lack of clear next steps or coaching plan, working with people who are not interested in receiving coaching, working with people who haven't improved regardless of amount of coaching provided
58	Just like the teachers, educational assistants, and administrators that we work with, our work as coaches is not without its challenges! The districts, schools, and classrooms that we support are extremely complex environments and, as we noted from our brainstorm activity, there are many barriers that we face in our everyday practice. It is important to focus on what we can control in our role as coaches because there are innumerable variables outside of our control. All settings present some barriers to coaching. To prepare ourselves for the barriers and challenges that come with the coaching role, we can commit to three things: (1) defining roles and responsibilities. Think of this as the "who", "when", and "where" of coaching; (2) operationalizing desired outcomes. This is the "what" of coaching; and (3) establishing a coaching plan. This is the "how" of coaching. We will now take a more in-depth look at these three elements of planning for coaching success.
59	To define your role and responsibilities (along with the roles and responsibilities of others in positions similar to yours at your school sites), it is important to consider the who, when, and where of coaching. All of these questions are included on the Session 6 Application Handout. The who questions are designed to help you get a sense of who you are as a coach in your

	school or district setting. Ask yourself about your role, the similarities and differences between your role and the roles of others who are in similar positions, your responsibilities for delivering coaching, your responsibilities for documenting the coaching you deliver, and the expectations of the teachers and other individuals who you are working with. The when questions are designed to help you understand when and under what schedule or timeline you will be delivering coaching. Think about how often you are expected to deliver coaching, if this time is allotted in your FTE, how much (or more likely, how little) time teachers have to engage in observations and coaching schedules, and whether or not you are responsible for developing the coaching schedule and if you will receive support in that scheduling from the administration. Finally, when considering the where of coaching, ask yourself about the number of sites you are responsible for support and how often you will be supporting these sites. Within each site, be clear about where you are delivering coaching – will you be working in all classrooms, including general education, special education, and any additional non-content area classrooms? Are you expected to work with staff in other locations such as the hallways, gym, playground, front office, and cafeteria. By asking yourself these questions – and seeking clarification from your supervisor prior to the school year – you can address many of the organizational challenges that come with coaching.
60	After defining your role and responsibility as a coach, the next step is to operationalize the outcomes you are targeting for the individuals and teams that you work with. This can be considered the "what" of coaching. Think about what you are working with teachers to accomplish? What behaviors, skills, and/or knowledge do I need to measure with the individuals and teams I coach? What type of growth do I want to see and what tools are available to help me monitor progress and growth for individuals and teams? How can I use that data to inform my coaching and make data-based decisions with the people I coach? How do I know when goals and targets have been met? Consider both teacher/team-based outcomes and student outcomes. Discuss this with the individuals you coach and try to align your coaching and data measurement with school improvement goals or school-wide initiatives. Think about how you would measure outcomes such as classroom management, evidence-based instruction, and fidelity of implementation of a program or framework. Consider the valued student outcomes that should be assessed such as behavior, academic achievement, student growth on IEP goals, and so on. Working to identify these areas with the teachers you coach can be a very effective collaborative step and you can help them collect important data for their classrooms – all while meeting your expectations as in your coaching role!
61	The third step in establishing a successful coaching foundation is to establish a coaching plan. This is the "how" of the coaching process. Now that you have established your role and the responsibilities within that role and operationalized the valued outcomes associated with your coaching work, it is important to develop an implementation plan. Consider how you will utilize and divide your time to reach desired outcomes. This is especially important when taking into account teachers' schedules and the time spent at different school sites (if you are supporting multiple schools or school teams). We discussed how to track goals for your work with individual teachers and teams (how will I know when Mrs. Jones has met her goal? How will I know when Tier I RtI team has reached their targets?) but it is also critical to have outcomes for your own role. How will you know when you have reached your coaching goals? Will this be an average measure of teacher performance, a teacher satisfaction survey, end-of-the-year assessment results? Be clear about the goals you have and how your coaching impact can be assessed over time. Think about how you will use your time and others' time efficiently and effectively. Will you have coaching goal trackers? How will teachers know when they are being observed? How will you deliver feedback and follow up with the teachers and teams you are working with? Finally, it is important to consider how you will address situations in which the individuals or teams you work with are resistant to coaching. Is receiving coaching mandatory at the school site? How will you establish trust over time? Will you engage in coaching immediately or wait until you are invited to the classroom or team meeting? What is the administration's stance on this issue? Have you discussed in advance what ideas or plans they may suggest to address resistance among staff members? By thinking through all of these

	questions and having early discussions with administrators, teachers, and other staff members you can prevent many barriers from arising.
62	Please take a look at the Session 6 Application Handout and the Session 6 Coaching Conversation Template. The Coaching Conversation Template is one tool that I have found useful when preparing for a coaching conversation. Of course, it is not always necessary to script out a coaching session; however, this is a tool that you can use and modify if you find it helpful to your practice. It focuses on the delivery of performance feedback. Please note that this is simply a guide for coaching conversations and in no way needs to be followed step by step. The handout gives an example of a coaching conversation in which the coach and teacher are focusing on two targets – (1) increasing the rate of academic OTRs and (2) increasing the rate of prompting/precorrection in the classroom. There is also a blank template. Please use the next [enter # minutes here] to complete the Session 6 Application. If you feel that you are clear in your roles and responsibilities, outcomes, and coaching plan then you can script a coaching conversation that you would use for one of the individuals or teams you identified in Session 1. Table discussions are encouraged. Please be prepared to share out in [enter # of minutes].
63	Now it's time for your final brainstorm. In your table groups, please take the next [enter time based on pacing needs] to discuss the following two questions: (a) looking back on the challenges identified at the beginning of this session, what are concrete steps you can take to address some (or all) of these challenges? and (b) have you ever successfully addressed challenges that others listed? If so, what are some suggestions or tips you would share with others? Please be prepared to share out with the larger group after working in your table groups for the next [enter # of minutes]. **Possible Modifications:** • Adjust time • Ask only one of the questions, especially if Question 2 was addressed during earlier parts of Session 6 • Ask individuals to write down their answers first, then share with their groups • Ask volunteers to write down group answers on large poster paper for later reference • Ask groups to write answers and review them under a document camera
64	Thank you very much for your hard work and participation in session 6 of the ECDO training series and for your participation throughout today's training. We will not take a Session 6 quiz but we will be taking a comprehensive knowledge test covering information and content from all 6 sessions. Following the knowledge test, you will be asked to complete a self-assessment on your coaching. We ask that you email this performance assessment to today's presenter at [enter email address]. Please send these back within three weeks of today's date. An email prompt will be sent out to you at the end of the first week with a reminder to complete the assessment and email it back. These results will be used to tailor a coaching assessment tool currently under development and will inform changes to the training content and products. [Hand out knowledge assessment and give at least 30 minutes for completion].
65	Thanks again for your time and for your focus on the knowledge assessment. Are there any other questions about the content, the performance assessment, or anything else before we wrap up?
66	The purpose of this slide is to assess participants' knowledge of the training content and the application of the coaching functions to real-world scenarios. This assessment can be given in multiple ways, depending on time and number of training sessions presented. The form of the assessment can be modified for the group. Options include group discussion and share out or individual written responses to question prompts. This slide is recommended for presentations

	that have included **at least one** of the following sessions: Session 2, Session 3, Session 4, and/or Session 5. If you did not cover a session, please remove the question for that session from the slide and the suggested script. There are two very short video clips included. One or both videos can be shown and discussed. Hyperlinks are included in the slide and the links are also included here: https://www.youtube.com/watch?v=sx1cbZ3zMs4 https://www.youtube.com/watch?v=THxnhN5ulV4 **Suggested Script:** Now that we have finished Session [enter here]/the training series, we are going to take a look at two videos of teachers in the classroom setting. We will watch the video and consider the following questions [read questions for the sessions covered aloud]. After watching the video, you will have [enter number] minutes to discuss the question and your answer with your table group. Each group will share out at least one answer to the entire group. Let's watch Teacher 1 in action! [After showing video, re-read the question(s) for the group to answer]. Let's watch Teacher 2 in action! [After showing video, re-read the question(s) for the group to answer].
67	---
68	---

Appendix A:
Where to find evidence-based interventions

The following web sites can be useful in finding evidence-based educational interventions. These sites use varying criteria for determining which interventions are supported by evidence, but all distinguish between randomized controlled trials and other types of supporting evidence. We recommend that, in navigating these web sites, you use this Guide to help you make independent judgments about whether the listed interventions are supported by "strong" evidence, "possible" evidence, or neither.

The What Works Clearinghouse (http://www.w-w-c.org/) established by the U.S. Department of Education's Institute of Education Sciences to provide educators, policymakers, and the public with a central, independent, and trusted source of scientific evidence of what works in education.

The Promising Practices Network (http://www.promisingpractices.net/) web site highlights programs and practices that credible research indicates are effective in improving outcomes for children, youth, and families.

Blueprints for Violence Prevention (http://www.colorado.edu/cspv/blueprints/index.html) is a national violence prevention initiative to identify programs that are effective in reducing adolescent violent crime, aggression, delinquency, and substance abuse.

The International Campbell Collaboration (http://www.campbellcollaboration.org/Fralibrary.html) offers a registry of systematic reviews of evidence on the effects of interventions in the social, behavioral, and educational arenas.

Social Programs That Work (http://www.excelgov.org/displayContent.asp?Keyword=prppcSocial) offers a series of papers developed by the Coalition for Evidence-Based Policy on social programs that are backed by rigorous evidence of effectiveness.

Session 1 Application

Please identify one to two coaching scenarios that you encounter in your everyday practice. Be as specific as possible. List the **individual or team, noting any relevant contextual variables** (e.g., type of school or classroom, grade level, subject area(s) taught, additional information about the setting or context for instruction), identify the **subject area(s) requiring coaching support** (e.g., math instruction, literacy instruction, behavior management), note **unique challenges or barriers to delivering coaching with the individual or team** (e.g., lack of interest in engaging in the coaching process, lack of progress despite heavy coaching efforts), and **define one to two coaching targets** for the individual or team.

Scenario

Scenario 2

Optional Scenario 1

Individual:

- Mr. C, 2nd year teacher, second career (48 years old)
- Middle school special education teacher for students with emotional and behavioral disorders (EBD)
- Little administrative oversight of self-contained SPED classrooms and no relevant PD to support SPED teachers specifically

Subject Areas Requiring Support:

- Classroom management
- General instructional practices (implementing evidence-based instructional practices)
-

Coaching Targets:

- To increase the rate of opportunities to respond (OTRs) during instruction
- To establish, explicitly teach, and reinforce classroom routines and procedures

Optional Scenario 2

Group:

- SWPBIS Tier I team
- Elementary school with > 500 students, 92% FRL and 39% ELL
- First year of SWPBIS implementation, staff buy in and admin support but student problem behavior and rate of ODRs very high

Areas Requiring Support:

- Team foundations
- Facilitating effective and efficient team meetings

Coaching Targets:

- To establishing roles and team procedures
- Using data to define problems with precision

Session 2 Application

Prompting is the delivery of a cue or reminder before a skill should be used. Coaches can use prompting when individuals or teams do not know when and under what contexts to use skills. Based on the real-world scenario(s) you identified, please answer the following questions.

Scenario 1

What are the skills/knowledge/behaviors required to meet the coaching goal(s)?

When should these skill(s) or behavior(s) occur? When should an individual use and not use this skill/behavior?

What type of prompts could you deliver to support this skill/behavior being used when it should occur?

Scenario 2

What are the skills/knowledge/behaviors required to meet the coaching goal(s)?

When should these skill(s) or behavior(s) occur? When should an individual use and not use this skill/behavior?

What type of prompts could you deliver to support this skill/behavior being used when it should occur?

Session 3 Application

Performance feedback is the delivery of reinforcing and corrective feedback after observation. Coaches can use performance feedback with all individuals and teams, regardless of level of skill or years implementing a program or curriculum. Based on the real-world scenario(s) you identified, please answer the following questions.

Scenario 1

What are common areas of strength for the individual or team you identified? How would you deliver positive feedback in a behavior-specific way?

What are the areas of growth for the individual or team you identified? List the behaviors or skills that the individual or team would need in order to improve in these areas. What are some concrete examples you could provide the individual or team who was unsure what these behaviors or skills looked like or sounded like in a classroom or school setting?

How do you typically deliver performance feedback to this individual or team? How

would you deliver performance feedback differently for this individual or team versus someone who needs very little support?

Scenario 2

What are common areas of strength for the individual or team you identified? How would you deliver positive feedback in a behavior-specific way?

What are the areas of growth for the individual or team you identified? List the behaviors

or skills that the individual or team would need in order to improve in these areas. What are some concrete examples you could provide the individual or team who was unsure what these behaviors or skills looked like or sounded like in a classroom or school setting?

How do you typically deliver performance feedback to this individual or team? How would you deliver performance feedback differently for this individual or team versus someone who needs very little support?

Session 4 Application

Fluency building is the provision of multiple and sufficient opportunities for practicing a newly acquired skill. Coaches can use fluency building when an individual has not developed efficient and effective use of skill or when the skill is not used enough to be sustained by natural reinforcement. Based on the real-world scenario(s) you identified, please answer the following questions.

Scenario 1

What are the skills or behaviors needed by the individual or team you identified? Which of these skills or behaviors would benefit from fluency building opportunities?

What activities or practice opportunities could you provide to the identified individual or team? Consider fluency building opportunities that will increase the likelihood that the skills or behaviors are used with the efficiency needed to be practical and effective.

Scenario 2

What are the skills or behaviors needed by the individual or team you identified? Which of these skills or behaviors would benefit from fluency building opportunities?

What activities or practice opportunities could you provide to the identified individual or team? Consider fluency building opportunities that will increase the likelihood that the skills or behaviors are used with the efficiency needed to be practical and effective.

Session 5 Application

Adaptation is the process of aligning the features of a program or intervention to the values, skills, resources, and administrative support of the local implementation context. Coaches can use adaptation to increase contextual fit and/or to address specific barriers or challenges to implementation. Based on the real-world scenario(s) you identified, please answer the following questions.

Scenario 1

Consider the content area(s) in which you are supporting the identified individual or team that may require adaptation. Would the adaptation be cultural (i.e., aligning to the values and/or skills of the local context) or organizational (i.e., aligning to the resources and/or administrative support of the local context)?

What are the current barriers (e.g., lack of staff buy-in, misaligned with the cultural values of the teachers)? What adaptation(s) could be made to increase contextual fit while maintaining the core feature(s) of the intervention or program?

Scenario 2

Consider the content area(s) in which you are supporting the identified individual or team that may require adaptation. Would the adaptation be cultural (i.e., aligning to the values and/or skills of the local context) or organizational (i.e., aligning to the resources and/or administrative support of the local context)?

What are the current barriers (e.g., lack of staff buy-in, misaligned with the cultural values of the teachers)? What adaptation(s) could be made to increase contextual fit while maintaining the core feature(s) of the intervention or program?

Session 6 Brainstorm

After brainstorming some common challenges or barriers to the coaching process, categorize the coaching barriers below.

Systems Barrier	Coachee Barrier	Coach Barrier

Session 6 Application

1. Defining Roles and Responsibilities

The Who, When, and Where

Who.
Who is responsible for what tasks? What is my role? What is my role compared to others in similar positions (e.g., instructional coaches, behavior specialists, specific curriculum coaches)? What are my responsibilities for delivering coaching? What are my responsibilities for documenting coaching? Are teachers expected to work with me?

When.
When do I coach? How often am I expected to deliver coaching? Is this time allotted in my FTE? How much time do teachers have to engage in observations and coaching conversations? Am I responsible for developing the schedule?

Where.
Where am I assigned to coach? Am I expected to visit multiple sites? Am I coaching all classroom settings? All other school settings (e.g., front office, cafeteria)?

2. Operationalizing Outcomes

The What

What.

What am I working with teachers to accomplish? What behaviors/skills/knowledge do I need to measure in the individuals I coach? What tools are available to monitor progress and growth? What will I do with the data I collect? How will you use the data to (a) measure individual progress, (b) examine effectiveness of coaching, (c) track group progress toward outcomes, and (d) guide coaching conversations?

What type of data is appropriate to measure? What information would tell you that an individual or team has met a targeted goal?

- Teacher-based and team-based outcomes: classroom management, instruction, fidelity of implementation
- Student-based outcomes: student behavior, student achievement, student growth (in a specific academic area, IEP goals, etc.)

3. Establishing a Coaching Plan

The How

How.

How will I utilize my time to reach the desired outcomes? How will I know when I have reached the outcomes? How will I ensure that I am using my time efficiently and effectively? How will I handle individuals who are resistant to coaching?

Session 6 Coaching Conversation Template

Coaching Steps	**Possible Script**
1. Coach begins with a greeting and "check in"	*"Good morning! Thank you so much for meeting with me today. How are you?"*
2. Coach reviews objectives of the coaching session	*"Today we will be meeting for 15-20 minutes to talk about our focus area for the classroom this meeting. We will discuss the opportunities to respond, prompting/precorrecting, and limiting transition time."*
3. Coach provides praise related to the observation	"Your lesson was highly engaging and you did an excellent job praising individual students and groups throughout the observation using behavior specific praise – well done!"
4. Coach asks the coachee to assess strengths in use of targeted behavior	*1. "Let's start with academic OTRs. What is going well re: increasing group OTRs in the classroom?"* *2. Now let's discuss prompting/precorrection. What is going well with prompting throughout your lessons?*
5. Coach provides positive feedback with 1 or more concrete examples of how the coachee has implemented the targeted behavior	*1. "Thanks for sharing. I am noticing that when you provide an opportunity to respond, you do an excellent job of including many different students. In today's lesson, you provided 5 individual OTRs and 1 whole group OTR. Well done!"* *2. I notice that you have done an excellent job prompting students about the expected behavior (academic and social behavior), and these prompts occur before major transitions and smaller transitions (e.g., between word blending and letter naming).*

6. Coach asks the coachee to assess challenges in use of targeted behavior over the previous week	*1. "You shared with me what was going well with this area. What have been some of the challenges in increasing OTRs in your class?"* *2. What have been the challenges in providing prompts/precorrections?*
7. Coach acknowledges coachee response and provides corrective feedback with 1 concrete example of how the coachee could strengthen implementation of the targeted behavior	*(1) So you're having a hard time remembering to use group OTRs during the lesson? What if you planned your group work time around opportunities to respond and added them into your lesson plan? That way, you can plan ahead for the various types of questions you want to ask and activities you want table groups to work on, rather than just calling on individual students to answer questions.* *(2) "I agree that it can feel repetitive to prompt and precorrect before almost all transitions. As your students become more familiar with the routines and procedures of the classroom, they may only need a quick verbal prompt or a visual prompt"*
8. Coach prompts coachee to identify one strategy for increasing targeted coachee behavior.	*"Do you have any other ideas of ways to…* *(1) increase group OTRs throughout the lesson?* *(2) continue using prompting and precorrection?*
9. Coach provides praise following the coachee identifying another strategy to implement the behavior of focus.	*"Excellent ideas!"*
10. If coachee defines an incorrect or low impact strategy, the coach will prompt with a question or suggestion for another strategy.	*(1) "That could work, but what about targeting small group and whole group OTRs rather than calling only on individual students? That way, more students are participating and working together at any given time. Do you think that may be helpful in increasing the number of OTRs you*

	incorporate throughout the lesson?"
11. Coach will review positive feedback and strategy(ies) for increasing targeted coachee behavior.	*"To review, you have increased your average use of individual OTRs from 1 to 5 times per 20-minute session – keep up the good work! You will be focusing on increasing group OTRs throughout the lesson by documenting them in your lesson plans.*
12. Coach will praise coachee for another behavior.	*"It is so much fun to be in your classroom. You provide students with so many opportunities to respond and engage in your lesson! Thanks for allowing me to spend time with you and your students."*
13. Coach will ask coachee for any specific questions, thank them for their time, and set up the following observation and coaching sessions.	*"Anything else I can help you with today?"*

Coaching Steps	**Practice**
1. Coach begins with a greeting and "check in"	
2. Coach reviews objectives of the coaching session	

3. Coach provides praise related to the observation	
4. Coach asks the coachee to assess strengths in use of targeted behavior	
5. Coach provides positive feedback with 1 or more concrete examples of how the coachee has implemented the targeted behavior	
6. Coach asks the coachee to assess challenges in use of targeted behavior over the previous week	
7. Coach acknowledges coachee response and provides corrective feedback with 1 concrete example of how the coachee could strengthen implementation of the targeted behavior	
8. Coach prompts coachee to identify one strategy for increasing targeted coachee behavior.	
9. Coach provides praise following the coachee identifying another strategy to implement the behavior of focus.	

10. If coachee defines an incorrect or low impact strategy, the coach will prompt with a question or suggestion for another strategy.	
11. Coach will review positive feedback and strategy(ies) for increasing targeted coachee behavior.	
12. Coach will praise coachee for another behavior.	
13. Coach will ask coachee for any specific questions, thank them for their time, and set up the following observation and coaching sessions.	

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APPENDIX G

SAMPLE ANTECEDENT-BEHAVIOR-CONSEQUENCE FORM

Date/Time	**Activity** Description of the activity going on when the behavior occurred	**Antecedent** Description of the environment and what occurred prior to the behavior	**Behavior** What the child did or said and how long the behavior lasted	**Consequence** What the responder did immediately following the behavior or how the environment changed
				`

APPENDIX H

DATA COLLECTOR TRAINING MATERIALS

7/6/17

Agenda

- Summarize study
- Provide overview of data collector responsibilities
- Discuss en vivo data collection
- Practice collecting data

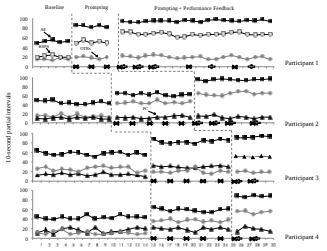
Summary of Study

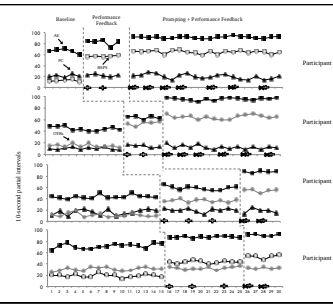
- The effects of coaching on desired teacher and student outcome variables
- Independent Variables (Coach-delivered):
  - Prompting
  - Performance feedback
  - Prompting with performance feedback
- Dependent Variables (Teacher and Student):
  - Teacher use of evidence-based classroom management practices
  - Student academic engagement

1

Design

Participants	Design	Phase Order
1, 2, 3, and 4	A – B – BC	Baseline (A), Prompting (B), Prompting with Performance Feedback (BC)
5, 6, 7, and 8	A – C – BC	Baseline (A), Performance Feedback (C), Prompting with Performance Feedback (BC)





Overview of Responsibilities

- CITI certification – send certificate to me upon completion
- Practice data collection procedures
- Determine number of teachers/classrooms per data collector (after teacher recruitment)
- Collect data 2-4 times per week for 15-min observation sessions (appx. January – April)
  - I will be collecting IOA data 1-2 times per week
  - I will be at every first observation to introduce you to the staff and make sure you have materials
- Return all data sheets to me after each day of data collection

En Vivo Data Collection

- Select an app for interval recording that you feel comfortable with (I use Tabata – free on Apple)
- Have all materials prepared
- Unless teacher directs you where to sit, try to select a location that allows you to see students and teacher but is out of the way
- Always be respectful of the teacher, educational assistants, and students
- Limit engagement with students if spoken to – do not initiate interaction or support with any instruction or transition
- If emergency or unusual event occurs *before observation* then contact me for directions. If it happens *during observation* then make an anecdotal record and follow teacher's instructions
- Return all data collection materials to me after observation

En Vivo Data Collection

- 10-sec partial ***and*** whole interval recording
- Collecting data on **three** DVs:
  - Two teacher variables – partial interval recording
  - One student variable – whole interval recording
- All DVs will be operationally defined
  - Questions will come up. It is encouraged to make notes and follow up with me if something is not clear or a behavior is not clearly operationally defined.

Data Collection Tool

- **Prompting/Precorrection (PC)**
  - Positively stated verbal cue or reminder, modeling, or behavioral practice delivered before desired behavior is expected.
  - **Examples include:** (a) verbal prompting, (b) visual cueing, and (c) modeling or practicing a skill.
  - **Non-examples include:** (a) delivering a reminder after a student has made an error (e.g., "Oh, I see you shouting out – remember that our class rule is to raise your hand quietly and wait to be called on", (b) delivery of general cues such as "do a good job", and (c) delivering only reminders of what not to do (e.g., "No shouting out")

Data Collection Tool

- **Behavior Specific Praise Statements (BSPS)**
  - Verbal praise delivered contingent upon student(s) demonstration of appropriate behavior. Praise statement includes statement of *specific behavior* student(s) demonstrated.
  - **Examples include:** (a) "Great job lining up quietly with your hands to your sides", (b) "I like the way Group 2 is on task and working quietly", and (c) "Ella, excellent job following directions the first time".
  - **Non-examples include:** (a) general verbal praise such as "good job" or "well done", (b) gestures such as high-fives or thumbs up (unless accompanied with specific verbal praise), and (c) giving points/awards/tokens without specific verbal praise.

Data Collection Tool

- **Academic opportunities to respond (OTRs)**
  - Verbal or visual request for academic-related information from students.
  - **Examples include:** (a) flashcard is held up for student to answer, (b) teacher calls on student to answer, (c) teacher poses a question to the class related to academic content and (d) teacher says "write the answer to problem 1".
  - **Non-examples include:** (a) questions that are not related to academic content such as "how was your weekend?", (b) rhetorical questions that the teacher does not intend for students to answer such as "I wonder how we might go about answering this…" and then modeling, and (c) questions related to behavioral expectations that are not delivered in a social skills instruction period such as "Who can remind me what our classroom rule is for transitioning from our seats to the carpet?"

Data Collection Tool

- **Student Academic Engagement (AE)**
  - During work/academic time (academic or social, 1:1 or group), student's body and eyes are directed toward the assigned activity/task or teacher. Attending to teacher instructions during academic time (i.e., all other times but breaks or free choice).
  - **Examples include**: (a) sitting with eyes on teacher during carpet time, (b) working with an assigned partner on an academic task, and (c) completing work independently, as assigned.
  - **Non-examples include**: (a) student sitting at carpet with class with his eyes on his neighbor (unless partner work is the expectation); (b) student refusing to complete assigned task; and (c) student working on unassigned task

Data Collection Tool

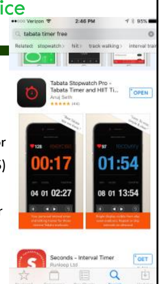
Classroom ID:	1	Date:		Time Start:	
Observer:		IOA Observer:		Activity:	

1	Opportunity to Respond	Verbal or visual request for academic-related information from students. Examples include: (a) flashcard is held up for student to answer, (b) teacher calls on student to answer, (c) teacher poses a questions to the class related to academic content and (d) teacher says "write the answer to problem 1".
2	Precorrection	Positively stated verbal cue or reminder, modeling, or behavioral practice delivered before desired behavior is expected. Examples include: (a) verbal prompting, (b) visual cueing, and (c) modeling or practicing a skill.
3	Student Academic Engagement (AE)	During work/academic time (academic or social, 1:1 or group), student's body and eyes are directed toward the assigned activity/task or teacher. Attending to teacher instructions during academic time (i.e., all other times but breaks or free choice).

	0-10s	11-20s	21-30s	31-40s	41-50s	51-60s
1	OTR PC AE	OTR PC AE	OTR PC AE	OTR PC AE	OTR PC AE	OTR PC AE
2	OTR PC AE	OTR PC AE	OTR PC AE	OTR PC AE	OTR PC AE	OTR PC AE
3	OTR PC AE	OTR PC AE	OTR PC AE	OTR PC AE	OTR PC AE	OTR PC AE
4	OTR PC AE	OTR PC AE	OTR PC AE	OTR PC AE	OTR PC AE	OTR PC AE
5	OTR PC AE	OTR PC AE	OTR PC AE	OTR PC AE	OTR PC AE	OTR PC AE

Opportunity for Practice

- Timer options
- Use the first 2 minutes on the sample data collection tool
- Keep data on teacher behavior only (**Example 2**: OTRs and BSPS)
- Check results
- Keep data on student behavior
- Check results



Current Progress and Questions?

- Teacher recruiting will begin ASAP
- I will contact you once teacher schedules have been established (appx. 1-2 weeks from today)
- After today's meeting I will add each of you to the shared Dropbox folder with PowerPoint and handouts
- Send me your CITI completion reports (I will send a reminder after today's training)
- Any questions?

Operational Definitions of Coached Evidence-based Practices

Prompting/Precorrection Positively stated verbal cue or reminder, modeling, or behavioral practice delivered before desired behavior is expected	
Examples	**Non-examples**
▪ Verbal prompting (e.g., "Remember to line up quickly and quietly, with our hands by our sides") ▪ Visual cueing (e.g., "Let's look at our poster and review what our Ready to Read body looks like") ▪ Modeling or practicing a skill (e.g., "I am going to show you how we walk from our desks to our stations. Watch me. First,…")	▪ Delivering a reminder after a student has made an error (e.g., "Oh, I see you shouting out – remember that our class rule is to raise your hand quietly and wait to be called on" ▪ Delivery of general cues such as "do a good job" ▪ Delivering only reminders of what <u>not</u> to do (e.g., "No shouting out")

Behavior Specific Praise Statements Verbal praise delivered contingent upon student(s) demonstration of appropriate behavior. Praise statement includes statement of *specific behavior* student(s) demonstrated	
Examples	**Non-examples**
▪ "Great job lining up quietly with your hands to your sides" ▪ "I like the way Group 2 is on task and working quietly" ▪ "Ella, excellent job following directions the first time"	▪ General verbal praise such as "good job" or "well done" ▪ Gestures such as high-fives or thumbs up (unless accompanied with specific verbal praise) ▪ Giving points/awards/tokens without specific verbal praise

Academic Opportunities to Respond Verbal or visual request for academic-related information from students	
Examples	**Non-examples**
▪ Flashcard is held up for student to answer ▪ Teacher calls on student to answer an academically-related question	▪ Questions that are not related to academic content such as "how was your weekend?" ▪ Rhetorical questions that the teacher does not intend for students to answer such as "I wonder

▪ Teacher poses a question to the class related to academic content ▪ Teacher says "write the answer to problem 1"	how we might go about answering this…" and then modeling ▪ Questions related to behavioral expectations that are not delivered in a social skills instruction period such as "Who can remind me what our classroom rule is for transitioning from our seats to the carpet?"

APPENDIX I

SAMPLE DIRECT OBSERVATION DATA COLLECTION FORM

Classroom ID:	Date:	Time Start:
Observer:	IOA Observer:	Activity:

BSPS	Behavior Specific Praise Statement (BSPS)	Verbal praise delivered contingent upon student(s) demonstration of appropriate behavior. Praise statement includes statement of *specific behavior* student(s) demonstrated.
OTR	Academic Opportunity to Respond (OTR)	Verbal or visual request for academic-related information from students. Examples include: (a) flashcard is held up for student to answer, (b) teacher calls on student to answer, (c) teacher poses a questions to the class related to academic content and (d) teacher says "write the answer to problem 1".
OS	**Out of Seat**	Being out of or leaving seat/seating area (e.g., carpet) without teacher permission; walking around the classroom or leaving without teacher permission
PD	**Peer-to-Peer Disruption**	Peer-to-peer conversation unrelated to task; student(s) engaging in peer-to-peer conversation when expectation is to be quiet; poking, making faces at, or touching another peer
TI	**Teacher Interruption**	Commenting or asking questions at a time when the expectation is to be quiet; shouting out or interrupting teacher or another student when speaking

	0-10s	11-20s	21-30s	31-40s	41-50s	51-60s
1	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI
2	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI
3	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI
4	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI
5	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI
6	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI
7	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI
8	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI
9	BSPS OTR	BSPS OTR	BSPS OTR	BSPS OTR	BSPS OTR	BSPS OTR

	OS PD TI	OS PD TI	OS PD TI	OS PD TI	OS PD TI	OS PD TI
10	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI
11	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI
12	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI
13	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI
14	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI
15	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI	BSPS OTR OS PD TI

Totals:

Behavior Specific Praise	/ 90	%
Opportunities to Respond	/ 90	%
Classroom Disruptions	/ 90	%

APPENDIX J

TEACHER EVALUATION INVENTORY FOR COACHING INTERVENTION

TEACHER EVALUATION INVENTORY
FOR COACHING INTERVENTION

Please select one response that reflects your opinion of the coaching intervention.

It has been relatively easy to receive the coaching intervention (e.g., amount of time and effort).	**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
The coaching intervention process has required more time and effort than it has been worth.	**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
I would like to continue receiving coaching in this manner.	**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
I have noticed positive differences in my class-wide behavior management practices since receiving the intervention.	**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
I have noticed positive differences in student behavior since receiving the intervention.	**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
Overall, my teaching practice has benefitted from receiving this coaching intervention.	**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**

In what ways was the coaching intervention effective and/or beneficial to your practice?

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In what ways was the coaching intervention effective and/or beneficial to your practice?

In what ways could the coaching intervention be improved?

What other comments do you have about this intervention?

APPENDIX K

COACHING FIDELITY CHECKLIST (PERFORMANCE FEEDBACK)

Coaching Fidelity Checklist: Performance Feedback

Teacher:_____ Coach: _____ Date: _____ Observer: _____

Coaching ACTIVITIES – **Performance Feedback Phase**	Delivered	Not delivered	N/A
1. Meeting/session occurs **after** lesson has been observed.			
2. Coach begins by reviewing targeted behavior management skill.			
3. Coach provides reinforcing feedback with 1-2 specific examples of how the teacher used the skill successfully in the lesson (e.g., "I noticed that you delivered specific verbal praise to individual students 11 times during the lesson").			
4. Coach provides corrective feedback with a replacement skill or 1-2 suggestions/tips for improvement (e.g., "To increase opportunities for students to receive praise, consider delivering small and whole group praise more often throughout the lesson").			
5. Coach prompts teacher to identify methods for increasing the use of targeted behavior management skill into lessons (e.g., "What are some ways you could increase your delivery of small and whole group praise?").			
6a. Coach provides praise following the teacher identifying another strategy to implement the behavior of focus.			
6b. If teacher defines an incorrect or low impact strategy, the coach will prompt with a question or suggestion for another strategy. "That could work, but what about delivering small group praise when you award team cooperation points? Do you think that would work for you?"			
7. Coach uses data when delivering performance feedback.			
8. Coach does not provide feedback on any other behavior management skills.			
9. Coach ensures coaching session is no longer than 10 minutes.			
10. Coach thanks the teacher, adds additional praise, and reminds teacher of next scheduled observation (e.g., "I'm excited to observe your writing lesson tomorrow at 11:15!").			

Total fidelity = Observed/Observed + Not observed X 100		

APPENDIX L

COACHING FIDELITY CHECKLIST (PROMPTING)

Coaching Fidelity Checklist: Prompting

Teacher:_____ Coach: _____ Date: _____ Observer: _____

Coaching ACTIVITIES – **Prompting Phase**	Delivered	Not delivered	N/A
1. Prompt is delivered **before** lesson being observed.			
2. Coach delivers reminder or cue about a specific behavior.			
3. Coach offers 1-2 concrete examples of the behavior.			
4. Coach does not provide any feedback re: teacher performance using the skill.			
5. Coach does not provide any feedback re: any other teacher skills or behavior			
6. Coach thanks the teacher and provides reminder of next scheduled observation (e.g., "I'm excited to observe your writing lesson tomorrow at 11:15!").			
7. Coach receives indication (i.e., response to email) that teacher has received prompt.			
Total fidelity = Observed/Observed + Not observed X 100			

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