

Strategies for Effective Classroom Coaching

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Although implementation of evidence-based behavioral and instructional practices has been identified as an educational priority, popular methods for increasing implementation of evidence-based practices (i.e., professional development) have not had the desired effect. This article aimed to present frameworks and practices coaches can use with classroom teachers to facilitate the implementation of evidence-based interventions in schools. Examples are provided to illustrate how the strategies can be implemented.

Keywords: classroom management, coaching, consultation, educational coaching, instructional management

The unmet needs of children and youth are well documented (Kataoka, Zhang, & Wells, 2002). Schools are an ideal setting for preventing and intervening with children and youth because schools are one of the primary settings children and youth spend their time. In schools, prevention practices can prevent significant concerns from developing and interventions can promote positive outcomes for those who would benefit from additional support (Horner et al., 2009; Sheridan et al., 2012). Evidence-based interventions (EBIs) are prevention and intervention programs that have research to support their use through well-controlled studies (Stoiber & DeSmet, 2010). Despite the importance of EBIs, without effective implementation (Forman et al., 2013) even the best EBIs are unlikely to attain the desired effect. The key task of classroom coaching is to facilitate the implementation of EBIs in a contextually appropriate manner.

Despite the importance of using EBIs, findings suggest they are not often used in schools (Ennett et al., 2003). In-service and preservice teacher training has historically been a primary mechanism for building teacher skills and competencies. Unfortunately, training alone does not create robust outcomes (Joyce & Showers, 1980, 2002). Moreover, no known empirical evidence exists that suggests simply providing teachers with didactic instruction on strategies leads to the use of strategies (DuFrene et al., 2012). Thus, it is clear that continued direct support to teachers is necessary to

maintain intervention use after an initial training (Reinke, Stormont, Herman, & Newcomer, 2014).

Coaching typically refers to an indirect service delivery model wherein a coach provides direct support to an individual who implements strategies for a client or group (Erchul & Martens, 2010; Gutkin & Curtis, 2009; Knight, 2011; Sheridan, Welch, & Orme, 1996). Extant literature across disciplines advocates for the use of ongoing coaching to enhance effective implementation of professional practices. Coaching has been used and evaluated in organizational behavior (Reid & Parsons, 2000), psychological therapy (Newman, 2010), and business settings to increase the sustainability of practices (Fixsen & Blasé, 1993). Based in large part on work conducted in those disciplines, a framework for coaching to support classroom teachers has emerged (e.g., Jeffrey, McCurdy, Ewing, & Polis, 2009; Sprick, Knight, Reinke, & McKale, 2006). Moreover, when in-service teacher training is used in tandem with coaching, implementation of specific classroom strategies increases (Ager & O'May, 2001; Sawka, McCurdy, & Mannella, 2002).

There is a well-documented literature suggesting coaching is important to build teacher skills and facilitate effective implementation (e.g., Reinke et al., 2014). In addition, many studies have examined specific practices (e.g., Gilbertson, Witt, LaFleur, Singletary, & VanDerHeyden, 2007) and coaching models (Sheridan et al., 2012) coaches can use with teachers to build skills in EBIs and support implementation. However, a cohesive, up-to-date, and pragmatic set of guidelines for effective coaching that coaches may use as a resource when coaching teachers does not exist. This article aimed to present frameworks and practices coaches can use with classroom teachers to facilitate the implementation of EBIs in schools.

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Procedural Overview

To glean guidelines for effective classroom coaching, a narrative review of the literature was completed. Specifically, we conducted a targeted literature search of evidence-based coaching practices in education and educational psychology. Search terms included topics relevant to educational coaching (e.g., coaching, consultation, classroom management). Several educationally relevant databases were searched (e.g., PsycNET). In addition, reference lists of relevant papers were reviewed. Papers were included if they presented data, were peer reviewed, included a study implemented in or relevant to schools, and targeted teacher or consultant/coach behaviors and/or student academic or social behavior. Papers that dealt with other forms of coaching (e.g., athletic coaching) or that did not meet the aforementioned inclusion criteria were excluded. In addition, carefully selected conceptual and seminal works were reviewed and integrated. For the purposes of this review, papers that described a consultation model as well as those that described a coaching model are included, and referred to as *coaching* herein. The following core components of coaching were gleaned from the review, and are discussed in detail in the sections that follow (see Table 1 for a summarized review): characteristics of effective coaches, coaching structure, intervention implementation, strategies to increase intervention implementation, and problem solving. We use the core components of coaching to describe five implications for coaching practice and classroom teachers.

Characteristics of Effective Coaches

Effective coaching requires a coach to possess a specific skill set along with significant competencies (e.g., Scott & Martinek, 2006). Specifically, effective coaches possess (a) prior

coaching experiences that have built skills and competencies about coaching and school-based interventions, (b) good interpersonal skills, (c) collaborative abilities, and (d) cultural competence. Competency-based training (Sheridan, 1992) may be particularly beneficial for coaches. In addition, novice coaches may consider shadowing and/or eliciting feedback from a more seasoned coach. It can also be useful for coaches to have training and experience delivering performance feedback to teachers (Handler et al., 2007; Scott & Martinek, 2006). Intervention tactics suggested to teachers during coaching should (a) have evidence to suggest they will be effective and (b) are related to the environmental features of the context (e.g., modifying a teacher’s use of attention). Thus, coaches should be familiar with relevant professional literature (Kratowill & Bergan, 1990), EBIs, and know when and how to find appropriate resources.

Effective coaches also possess excellent interpersonal skills, such as listening skills, appropriate empathy, and are trustworthy and supportive (Hooijberg & Lane, 2009). The use of collaborative procedures is an additional critical feature of an effective coach (Denton, Hasbrouk, & Sekaquapewa, 2001; Garbacz et al., 2008; Knight, 2011). Coaching interactions that include teaming are associated with numerous beneficial outcomes, including improved school personnel skills and student behavior (Erchul, Hughes, Meyers, Hickman, & Braden, 1992). Coaches can demonstrate collaboration by being responsive to a teacher’s needs, using effective communication, promoting the development of skills, and sharing resources (Garbacz et al., 2008; Shidler, 2009).

It is useful for coaches to consistently evaluate their skills and competencies, and seek feedback from those with whom they work. There are measures that can facilitate that process. The consultant evaluation form (Erchul, 1987) includes a set of items school personnel can complete that assesses their satisfaction with the coach. The relational communication coding system (Rogers & Farace, 1975) can examine interpersonal factors during interactions, and has been used in coaching research. The Scale of Consultant Interpersonal Skills (Sheridan, 1990; Sheridan, Salmon, Kratochwill, & Carrington Rotto, 1992) evaluates a consultant’s use of specific interpersonal tactics (e.g., attending, empathy/understanding). Regardless of the method used to examine the interpersonal qualities of coaching interactions, it is helpful to use the method consistently within and across coaching experiences.

Coaches must practice in a culturally competent manner. Ingraham (2000) presented a comprehensive set of recommendations for multicultural coaching. Interested readers should explore Ingraham (2000) for an in-depth analysis. As a first step, coaches should become familiar with their own culture and its influence on others (Ingraham, 2000). In addition, teacher and student needs are considered in context, and the accuracies of a coach’s interpretations are continually assessed (Henning-Stout & Meyers, 2000). When working within a multicultural coaching framework, a coach may work with a parent or teacher who is not fluent in the same language. Thus, the use of an interpreter may be considered. When including interpreters, specific recommendations exist (Ortiz,

Table 1. Components of Effective Coaching

Characteristics of effective coaches	<ul style="list-style-type: none"> ▪ Prior coaching experience ▪ Excellent interpersonal skills ▪ Collaborative ▪ Culturally competent
Coaching structure	<ul style="list-style-type: none"> ▪ The Classroom Check-up ▪ Classroom Evaluation Tool ▪ Behavioral consultation ▪ Conjoint behavioral consultation ▪ Instructional coaching
Intervention implementation	<ul style="list-style-type: none"> ▪ Multidimensional assessments ▪ Two tiers of implementation ▪ Multimethod, multisource approaches
Strategies to increase intervention implementation	<ul style="list-style-type: none"> ▪ Treatment Integrity Planning Protocol ▪ Skill building ▪ Support for implementation
Problem solving	<ul style="list-style-type: none"> ▪ Identify the concern ▪ Set measurable goals

Flanagan, & Dynda, 2008), and should be considered before including an interpreter in coaching sessions.

Coaching Structure

Coaching frameworks exist, and can be tailored depending on the type of coaching that is needed. For example, if a teacher requests assistance managing a whole class, the framework may be different than if a teacher requests assistance with one student. In general, coaching frameworks (classwide or individual) include common stages (e.g., problem identification), focusing first on identifying strengths and needs. After a single priority need is identified, intervention plans are created. When interventions are implemented, coaches often teach and rehearse intervention tactics with teachers and provide performance feedback. Finally, the coach and teacher evaluate the effectiveness of the intervention plan. We briefly describe two classwide coaching frameworks, and three individual coaching frameworks. We end with examples about how classwide and individual coaching may be implemented.

Classwide Coaching

Two structured classwide coaching frameworks are as follows: The Classroom Check-up (Reinke, Herman, & Sprick, 2011; Reinke, Lewis-Palmer, & Merrell, 2008) and the Classroom Evaluation Tool (Jeffrey et al., 2009). Expanded discussions of The Classroom Check-up and the Classroom Evaluation Tool are available elsewhere (e.g., Jeffrey et al., 2009; Reinke et al., 2011). Thus, our review is limited to providing introductory information that may be helpful for coaches to determine which framework may best meet their needs. The Classroom Check-up follows a structured process that begins with a coach conducting a classroom assessment and teacher interview. The structured observation of the classroom includes teacher and student behaviors (e.g., behavior specific praise delivered by the teacher, rates of student on-task behavior) and environmental considerations (e.g., the physical classroom arrangement). This multidimensional approach to assessing the classroom environment is also used in the Classroom Evaluation Tool (Jeffrey et al., 2009). For example, the Classroom Evaluation Tool and the Classroom Check-up assess ecological features of the classroom (e.g., arrangement of desks) and instructional management (e.g., opportunities to respond). In addition, each assesses teacher praise. The Classroom Check-up is manualized as a series of interviews and observations. The Classroom Evaluation Tool was originally designed as a tool to quickly identify core features of a teacher's classroom to provide performance feedback. Thus, the Classroom Check-up may be better suited to a coach who would like to complete an in-depth, scripted process over several weeks. The Classroom Evaluation Tool may be most useful for a coach who would like a quick assessment of a classroom. However, use of the Classroom Evaluation tool can also serve as a springboard to develop interventions and evaluate progress.

Individual Coaching

For teachers who have concerns about a target child, one model with empirical support is behavioral consultation (Kratochwill & Bergan, 1990; Sheridan, Welch, & Orme, 1996). Behavioral consultation involves a coach working with a teacher regarding a concern for a specific student (Kratochwill & Bergan, 1990). There are four stages of behavioral consultation: Problem Identification, Problem Analysis, Plan Implementation, and Problem Evaluation. Problem identification includes specifying the target behavior and setting (e.g., following instructions during "circle time") and establishing procedures to collect data about the target behavior in the target setting. Problem analysis includes identifying a data-based goal and developing an intervention plan. During plan implementation, the teacher implements the agreed upon intervention plan with the coach's assistance. Finally, problem evaluation involves evaluating the effectiveness of the intervention based on data collected during the baseline and intervention phases.

Conjoint behavioral consultation (Sheridan & Kratochwill, 2008) is an extension of behavioral consultation that includes families and teachers as partners in decision making. Thus, in Conjoint Behavioral Consultation target behaviors are typically specified in home and school settings, collaborative intervention plans are co-created and implemented by parents and teachers, and progress toward goals is assessed by the parent-teacher-coach team. Conjoint Behavioral Consultation may be particularly useful when a teacher and coach wish to improve the quality of the parent-teacher relationship and support student success across settings.

Instructional coaching (Knight, 2011) may be considered by a coach who is interested in providing instructional recommendations to a teacher through the use of a partnership-centered orientation. In instructional coaching, a coach and teacher partner to collect data, identify a specific goal that will serve as the primary focus, implement an evidence-based intervention (with support from the coach), review data about implementation of the intervention, and refine the intervention so that it is aligned with the classroom and teacher's repertoire (Knight, 2011; Knight & van Nieuwerburgh, 2012). Instructional coaching typically focuses on implementing a practice in one of four domains: content planning, formative assessment to assess student learning, instructional practices to increase engagement (e.g., Strategic Instruction Model; Bulgren & Lenz, 1996), and community building (e.g., teaching and reinforcing classwide expectations; Knight & van Nieuwerburgh, 2012).

Whether a coach is engaging in classwide coaching or coaching for a specific student or teacher, it is critical that the coach is present in the classroom and available to the teacher to support implementation (e.g., Shidler, 2009). The coach and teacher collaborate to conduct observations and gauge progress toward the goal. During plan implementation, monitoring, reviewing, and revising the intervention plan occur as necessary through formal and

informal teacher-coach interactions (e.g., meetings, brief check-ins). When a goal is met, the coach and teacher work together to fade the intervention plan and/or generalize the strategies to another setting. The decision about when and how to conclude coaching should be collaboratively determined based on progress toward predetermined goals and procedural guidelines set at the outset of the coaching relationship.

Coaching Examples

As displayed in Table 2, individual and classwide coaching can be aligned with common stages (e.g., problem identification; Kratochwill & Bergan, 1990). Table 2 illustrates the coaching process for the same problem exhibited by one student and a class of students. As the scenarios in Table 2 demonstrate, coaches complete similar activities with teachers regardless of whether the focus is on one student or a class of students. It is important to understand that although there are a variety of coaching models, all models follow similar stages. A given model may categorize the activities differently; however, the steps of identifying the problem, analyzing the problem, and evaluating the problem are consistent and integral.

Intervention Implementation

Supporting implementation of intervention plans is critical to effective coaching. A coach typically works with a teacher who has primary responsibility for implementing intervention plans. It is the coach's responsibility to support the teacher with implementation, and monitor implementation to assess student progress and treatment integrity. Treatment integrity refers to how well (Noell, 2008) components of an intervention are applied "comprehensively and consistently" (Sanetti & Kratochwill, 2009a, p. 448). A growing body of literature has revealed that treatment integrity has not been sufficiently emphasized and documented in many intervention studies (McIntyre, Gresham, DiGennaro, & Reed, 2007; Sanetti, Gritter, & Dobby, 2011). Within coaching, there are two tiers of treatment integrity to attend to: procedural integrity to the coaching process and treatment plan implementation by the teacher (Noell, 2008). It is important for coaches to attend to both tiers so they can determine the anticipated outcomes when interventions are implemented under specified conditions (Gresham & Vanderwood, 2008).

A more in-depth consideration of treatment plan implementation involves conceptualizing treatment integrity as a multidimensional construct (O'Donnell, 2008). Five dimensions that routinely characterize treatment integrity include: adherence, dosage, quality of the program/intervention delivery, participant responsiveness, and program differentiation (Dusenbury, Brannigan, Falco, & Hansen, 2003; O'Donnell, 2008). The main dimensions of treatment integrity applicable to school-based practice are: adherence, dosage, quality of the program/intervention delivery, and participant

responsiveness. Adherence refers to implementation of intervention strategies as designed by program developers. Dosage is the overall amount of intervention that is delivered to participants (Sechrest & Yeaton, 1981). The quality of intervention delivery is a step beyond adherence indicating the quality, or effectiveness with which intervention strategies are delivered (Cordray & Pion, 2006). Participant responsiveness indicates the participants' level of engagement in and receptiveness to intervention programming.

In general, treatment integrity is characterized and measured by coaches in one or more of the three aforementioned ways. The ideal measurement of treatment integrity includes multiple methods and multiple informants. Assessment of the various dimensions of treatment plan implementation can occur through self-report, direct observation, and/or through the review of permanent products. Self-report measures are used to assess the adherence of implementation as perceived by the teacher and typically include procedural steps of the intervention and teachers' own record of completion (Sanetti & Kratochwill, 2009b). Permanent product assessment can occur when the strategies or intervention tactics result in tangible records that may reveal evidence of implementation (Mortenson & Witt, 1998; Noell, 2008). Direct observation involves a live or recorded review of a teacher's implementation of the intervention by an independent rater or classroom coach (e.g., Jones, Wickstrom, & Friman, 1997; Mills & Ragan, 2000).

It is useful for coaches to consider contextual factors (e.g., whether treatment plan strategies can be captured on a permanent product) when deciding how to collect treatment integrity data. Some suggest that using permanent products is most desirable because of the lower degree of inference needed (e.g., Wickstrom, Jones, LaFleur, & Witt, 1998). However, others report concordance across permanent products and self-report methods (Sheridan, Swanger-Gagné, Welch, Kwon, & Garbacz, 2009), which may suggest that self-report data are valid. Until more work is done that clarifies the nature of relations among treatment integrity methods (Sheridan, Rispoli, & Holmes, 2014), a multimethod, multisource assessment should be used.

There are many factors that can negatively affect a teacher's implementation of an intervention plan, including but not limited to, teachers' prior experience with certain practices and their acceptability of procedures (Noell et al., 2000). Fortunately, there are several strategies that can be used to increase treatment plan implementation. For example, if a student has not made adequate progress toward a prespecified goal, it is useful to know what components of the intervention were implemented consistently. If very few intervention components were implemented consistently, and the intervention tactics have evidence to support their use and are linked to the student's individual needs, it would be plausible to hypothesize that a student's lack of progress may be related to low implementation. Thus, discussing with the teacher ways to increase implementation may become vital. Specific procedures that can be used to improve a teacher's implementation of intervention tactics are discussed in the section that follows.

Table 2. Individual and Classwide Coaching Examples

		Individual coaching	Classwide coaching
Demographics	Consultee setting	Teacher General education second-grade classroom	Teacher General education second-grade classroom
Problem identification	Client Target behavior Assessment methods	One student Disruptions Record review, teacher interview, parent interview, student interview as applicable, observation of one student's behavior and environmental features	Whole class Classwide disruptions Teacher interview, observation of all students' behavior, teacher observation, review of teacher behavior and classroom ecology (e.g., Classroom Check-up)
Problem analysis	Extent of problem	5 disruptions per class period on average	15 disruptions per class period on average
	Plan developed	<ul style="list-style-type: none"> • Goals set for reduction of disruptions • Token economy for 2 or fewer disruptions (target student exchanges tokens for reward) 	<ul style="list-style-type: none"> • Goals set for reduction of disruptions • Classwide token economy 6 or fewer disruptions (class exchanges tokens for group reward)
	Plan implementation	<ul style="list-style-type: none"> • Coach delivers training on token economy <ul style="list-style-type: none"> ○ Models delivery of tokens to student and daily exchange ○ Role plays with teacher • Coach observes during first 2 days of implementation using checklist that includes components of token economy implementation. Delivers brief performance feedback to teacher (verbal and graphed of components implemented) 	<ul style="list-style-type: none"> • Coach delivers training on token economy <ul style="list-style-type: none"> ○ Models delivery of tokens to student and daily exchange ○ Role plays with teacher • Coach observes during first 2 days of implementation using checklist that includes components of token economy implementation. Delivers brief performance feedback to teacher (verbal and graphed of components implemented)
Problem evaluation	Treatment integrity	<ul style="list-style-type: none"> • Teacher keeps self-monitoring checklist (same as used by coach) • Coach observes twice per week for one period and delivers brief performance feedback to teacher 	<ul style="list-style-type: none"> • Teacher keeps self-monitoring checklist (same as used by coach) • Coach observes twice per week for one period and delivers brief performance feedback to teacher
	Progress monitoring	<ul style="list-style-type: none"> • Teacher records frequency count of disruptions during math period (period with most disruptions) • Student records daily number of tokens earned 	<ul style="list-style-type: none"> • Teacher records frequency count of disruptions during math period (period with most disruptions) • Student records daily number of tokens earned by whole class

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Strategies to Increase Intervention Implementation

There are many strategies with empirical support that may be used to increase teacher implementation of intervention plans including EBIs. In particular, evidence suggests using scripts and implementation protocols can produce positive treatment plan implementation results (Hiralall & Martens, 1998); however, most literature points to the use of step-by-step treatment protocols in combination with performance feedback strategies (Coddling, Feinberg, Dunn, & Pace, 2005; Witt, Noell, LaFleur, & Mortenson, 1997). In the sections that follow, we provide an overview of specific ways to increase teacher implementation of intervention plans, focused around ways to train teachers in intervention tactics, and procedures to support teacher implementation.

Skill Building

Modeling With Practice

Modeling is generally defined as a demonstration of a targeted skill by a coach prior to a teacher's implementation of the skill. For example, if part of the intervention includes increased rates of behavior specific praise (e.g., "Steve, excellent job lining up on the first signal"), a coach may come into the teacher's classroom to facilitate an activity with students, where the coach then models the delivery of behavior specific praise at a ratio of at least four praise statements to every one corrective statement. Modeling can be conducted in vivo or via video and viewed asynchronously (Catania, Almedida, Liu-Constant, & DiGennaro Reed, 2009).

Behavioral Rehearsal

Behavioral rehearsal involves reciting or otherwise practicing the steps of a strategy before it is used in an authentic situation. Continuing with the behavior specific praise example, a coach may meet with the teacher prior to implementing the intervention and outside of class time to have the teacher practice delivering a variety of different behavior specific praise statements. Behavioral rehearsal is frequently used in combination with other techniques (e.g., verbal feedback) to develop new skills. Behavioral rehearsal has been effectively used in many contexts (e.g., in community-based settings; Wallace, Horan, Baker, & Hudson, 1975; Wood, Luiselli, & Harchik, 2007).

Live Prompting

Combining live prompting with verbal feedback and/or modeling can be a powerful feedback package. Live prompting involves providing in vivo feedback to individuals while they are implementing or practicing treatment plan implementation (e.g., a bug-in-the-ear device). For example, if a teacher is having difficulty implementing a specific strategy, a coach may observe the session and provide the teacher in vivo verbal feedback about his or her use of the strategy. With the behavior specific praise

example, a coach could schedule time during the first few days of implementation to visit the teacher's classroom. During these visits, the coach could sit in the back of the room and provide a nonverbal prompt (e.g., hand signal or hold up a small green card) to signal the teacher to provide a praise statement. Live prompting used in combination with other feedback procedures can increase strategy or plan use (Gilbertson et al., 2007; LaFleur, Witt, Naquin, Harwell, & Gilbertson, 1998).

Support for Implementation

Verbal Performance Feedback

Verbal performance feedback involves verbally providing descriptive information to an individual regarding their performance (Reid & Parsons, 2000). For example, after observing a teacher's use of behavior specific praise, the coach may verbally communicate to the teacher the amount and quality of his or her behavior specific praise statements. Verbal performance feedback can help maintain intervention implementation integrity for educators (Arco & Millett, 1996), including paraprofessional staff's use of instructional skills (Leblanc, Ricciardi, & Luiselli, 2005). In addition, verbal performance feedback has been compared with a performance feedback package that included graphic and written strategies and found both strategies to be effective in positively affecting staff and student behavior (Arco, 1997).

Graphic and/or Written Performance Feedback

Evidence also supports the use of a feedback procedure that uses graphic, verbal, and/or written approaches. Graphic feedback involves systematically graphing behavior across time points. For example, after observing a teacher's use of behavior specific praise, a coach may graph the number of behavior specific praise statements and provide the graph to the teacher with written remarks (see below for characteristics of performance feedback). Verbal with graphic feedback has been found to be effective in supporting teacher implementation of behavior support plans (Sanetti, Luiselli, & Handler, 2007), providing behavior specific praise to students (Reinke, Lewis-Palmer, & Martin, 2007; Sutherland & Wehby, 2001), as well as increasing teacher behavior and student engagement and decreasing transition times (Coddling & Smyth, 2008).

Providing written performance feedback to teachers can positively influence many classroom management strategies (Jeffrey et al., 2009). A primarily written performance feedback strategy has been shown to increase teacher use of praise statements and appropriate student behavior (Martens, Hiralall, & Bradley, 1997). Finally, written feedback when used with negative reinforcement, can increase treatment plan implementation (DiGennaro, Martens, & Kleinmann, 2007; DiGennaro, Martens, & McIntyre, 2005).

Reinforcement

Many empirical investigations using performance feedback procedures include some form of reinforcement to teachers

who demonstrate high treatment plan implementation. Providing praise to teachers contingent on effective implementation of strategies is commonly integrated with performance feedback (e.g., Gilbertson et al., 2007; Leblanc et al., 2005; Noell et al., 2005; Wood et al., 2007). For example, the coach and teacher may set a goal for the desirable number of behavior specific praise statements during a selected period (cf. Sutherland, Wehby, & Copeland, 2000). When the goal is met, the coach can deliver praise to the teacher during the performance feedback session. There is also evidence to suggest implementing a negative reinforcement component wherein teachers avoid meetings with coaches and/or additional trainings if they meet a predetermined level of implementation can be effective (DiGennaro et al., 2007; DiGennaro et al., 2005). If using a negative reinforcement technique, the teacher may be required to meet with the coach for performance feedback sessions until the teacher meets the predetermined goal for behavior specific praise for three consecutive sessions. To determine what items or activities may be reinforcing for teachers, coaches may choose to talk with teachers about what they find reinforcing. For example, while one teacher may like to get out of a meeting, another teacher may want to meet and discuss progress.

Characteristics of Feedback

There are many characteristics to consider when providing feedback to teachers. Some scholars have identified “active” components of feedback as spanning five dimensions: precision, schedule, immediacy, valence, and frequency (Eckert et al., 2006). Similarly, providing feedback that is timely, concrete, and specific is important (Veenman & Denessen, 2001). In addition to providing praise for correct implementation, performance feedback should include a discussion of

implementation errors and graphs of the percentage of steps completed (Noell et al., 2005). Finally, performance feedback delivered by coaches should use a collaborative or cooperative, no-fault approach (Denton et al., 2003).

When considering how to provide feedback to teachers, it is important to recognize that teachers have different skill sets, competencies, and previous experiences. Thus, the way feedback is delivered and the type of support a coach provides may depend on a teacher’s preferences, prior experience, and existing skills. Evidence suggests that the type of intervention support that is necessary varies across teachers (Noell et al., 2000). Coaches and teachers should engage in a dynamic process wherein ongoing discussions about features of the coaching relationship that are working and not working are frequently reviewed.

Criteria for Feedback

It is important to systematize criteria for providing performance feedback so that expectations are clear; however, empirical investigations have not provided clear guidelines for when to provide feedback. Some suggest providing performance feedback when implementation is below 100% (e.g., Gilbertson et al., 2007) or 80% (e.g., Sanetti et al., 2007). Others have suggested that the cessation or fading of performance feedback may be appropriate when improved and stable data patterns are evident across observation sessions (Coddling et al., 2005). Taken together, these findings suggest that it is appropriate to provide performance feedback when implementation drops below a predetermined criteria (e.g., 80%) and fade feedback when implementation above 80% is documented across three consecutive sessions.

Table 3. Top Five Implications for Coaching Practice

Implication	Description	Exemplars
1. Assessment	Conduct a multimethod, multisource assessment of teacher skills, student behavior (s) and classroom environment	<ul style="list-style-type: none"> ▪ Conduct structured interviews ▪ Conduct an assessment of environmental ecology ▪ Complete direct observations in the classroom ▪ Evaluate classroom routines and procedures
2. Train to mastery	Provide training to teachers to implement the intervention plan	<ul style="list-style-type: none"> ▪ Model strategies for teacher ▪ Engage the teacher in behavioral rehearsal ▪ Prompt teacher during implementation
3. Treatment integrity	Proactively plan to ensure the intervention is implemented as intended	<ul style="list-style-type: none"> ▪ Encourage teacher to generate intervention ideas ▪ Secure teacher approval of intervention strategies ▪ Assist teacher in securing/developing materials needed for intervention ▪ Provide teacher with task analysis of intervention
4. Performance feedback	Provide feedback to teacher on how well the intervention is being implemented	<ul style="list-style-type: none"> ▪ Complete observations of plan implementation ▪ Meet with teacher and provide verbal feedback ▪ Graph treatment integrity data and share with teacher
5. Interpersonal skills	Use techniques to enhance communication and overall tenor of relationship with teacher	<ul style="list-style-type: none"> ▪ Engage in active listening ▪ Demonstrate empathy ▪ Engage teacher in the teaming process

Goal Setting

Setting clear goals with teachers (Martens et al., 1997) can provide a useful framework for problem solving in coaching. After a coaching relationship is initiated, the coach and teacher should set goals. For example, a teacher may decide he or she aims to provide a ratio of four positive statements to every one corrective statement to a target child. In addition, a teacher may desire that a child complete 7 out of 10 math worksheets each week with 90% accuracy or better. It is helpful for goals to be concrete and measurable, and include goals for teacher use of strategies and student behavior. In that way, goals can become the observable units of analysis, which can be the basis for problem-solving discussions. A discussion of goals can facilitate ongoing problem solving. For example, if a goal has not been met by a predetermined time, barriers to implementation can be discussed.

Implications for Coaching Practice

For coaching to be maximally effective at implementing EBIs that build teacher skills and achieve desired student outcomes, coaching must be done systematically. Strategies gleaned from the current review provide a number of implications coaches may integrate into their practice. The implications are in five areas: assessment, train to mastery, treatment integrity, performance feedback, and interpersonal skills. Table 3 includes descriptions and exemplars for the five key implications.

Top Five Implications for Classroom Teachers

Implementation of EBIs is automatic for some teachers, but not all teachers have preservice coursework in evidence-based instructional practices (Joshi et al., 2009). Teachers may consider expanding their continuing education by working with a coach to (a) seek out EBIs, (b) match EBIs with the function of target behaviors, (c) implement EBIs as designed, (d) problem-solve logistical barriers to implementation, and (e) prevent more intensive instructional and behavioral issues through classwide interventions.

It is best to learn about EBIs and how they may be implemented through the aforementioned strategies: behavioral rehearsal, observing modeling, and receiving feedback. However, free online access to a variety of EBIs can be obtained from the What Works Clearinghouse. For example, the What Works Clearinghouse publishes practice guides on a variety of topics (e.g., strategies to reduce behavior problems in elementary classrooms [Epstein, Atkins, Cullinan, Kutash, & Weaver, 2008]) that may be useful for coaches and classroom teachers to use together as they consider what procedures may be relevant in their settings.

Matching EBIs to the hypothesized target behavior functions is critical for contextually appropriate implementation. The five most common reasons (i.e., functions) for academic problems are (a) the activity is too difficult, (b) the student has not had enough help to do the activity, (c) the student has

not engaged with the activity frequently enough, (d) the student can demonstrate the skill but cannot generalize to a new situation, and (e) the student is not motivated to do it (Daly, Witt, Martens, & Dool, 1997). For example, if a teacher determines that a group of students in her class struggle with reading fluency (i.e., they have not engaged with the activity frequently enough), the coach may suggest that the students engage in partner reading with material matched to their instructional level. The most common reasons for behavior problems are to access something (e.g., social attention) or avoid something (e.g., a difficult task). In addition, students may lack the necessary skills to exhibit an appropriate behavior and may require explicit instruction. If a teacher and coach determine that a student may be engaging in a problem behavior to escape a task, they may decide to offer the student a choice of academic activities.

Choosing an EBI and correctly matching it to the functional properties of student behavior is necessary, but not sufficient to induce behavior change. Implementation of the active components of an EBI is necessary to achieve desired outcomes. Following with the example of offering a student a choice of academic activities, this strategy may not be effective if the teacher provides the activity choice after the student engages in problem behavior instead of before the problem behavior. Furthermore, educators may become frustrated when an EBI does not seem to be working, or logistical barriers make implementation difficult. In these instances, newly adopted practices are likely to be abandoned. It is incumbent upon a coach to monitor treatment integrity and logistical barriers to implementation.

When considering concerns about a single student, it may be useful to implement a classwide intervention. When coaches are asked to consult about a specific student for low-intensity behaviors, using data derived from a classroom observation tool, like the Classroom Checkup, may suggest a classwide intervention is indicated. For example, those data may indicate classroom behavior expectations are not clearly visible to students. Implementing classwide strategies such as posting, teaching, and reinforcing classwide behavior expectations (Horner et al., 2009) may address minor concerns about one student and positively affect a class of students.

Conclusions, Limitations, and Future Research Directions

Coaching teachers on the implementation of classroom instructional and behavior management can increase intervention plan implementation and use of EBIs. Through coaching, teachers are more likely to learn critical instructional and behavior management skills and implement those strategies in their classrooms (Ager & O'May, 2001; Sawka et al., 2002). The importance of using EBIs is well documented (Stoiber & DeSmet, 2010); however, without effective implementation (Forman et al., 2013) the effect of EBIs is limited.

Evidence suggests that the most effective coaching procedures include a variety of components. Before engaging in coaching, it is first important to consider how performance/

implementation will be evaluated. Regardless of the coaching method used, multiple dimensions of treatment plan implementation should be evaluated through multimethod, multi-source assessments. A substantial body of literature supports the use of performance feedback as a primary strategy to increase treatment plan implementation. Performance feedback may be most effective when combined with one or more coaching practices, including modeling (Catania et al., 2009; Lachat & Smith, 2005) live prompting (Gilbertson et al., 2007), and behavioral rehearsal (Sheridan, 1992; Wood et al., 2007).

It is important to note that although empirical evidence exists to support the use of coaching with teachers, there are limitations to the body of work. For example, it is unclear how much feedback to provide. The question of “How much is enough?” should be evaluated empirically. In addition, future research should empirically evaluate evidence that exists for certain strategies (e.g., verbal performance feedback) implemented under specific conditions (e.g., problem-solving coaching; Gresham & Vanderwood, 2008).

The present narrative synthesis identified several procedural recommendations for coaching. However, there are limitations to this review that should be considered. First, this synthesis used a review of the published literature to glean studies. Thus, there may be findings in reports or technical documents that would augment this review. In addition, when only published studies are used, findings that were not published (e.g., as a result of nonsignificant findings) are missed. A narrative synthesis does not provide evidence about the amount of empirical evidence that exists or the magnitude/clinical significance of effects. Future investigations should seek to use quantitative procedures to summarize evidence across and within coaching models and specific coaching strategies.

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