



**Colorado Multi-Tiered System of Supports (CO-MTSS):
Evidence-Based Personnel Development Planning and Evaluation
Technical Guide
Andrew Schaper**



As educators continue to adapt to evolving educational priorities, policies, and shifting student needs, school districts and local education agencies are continually implementing personnel development (PD) to meet these needs. PD is a purposeful, ongoing, and systemic process aimed at influencing adult behaviors (e.g., behavioral management) in order to improve student outcomes (Guskey, 2000). Evidence-based PD (EBPD) refers to PD methods that explicitly incorporate adult-learning principles, training and coaching, and implementation science principles to best support teachers.

To optimize PD opportunities, adult learning principles help ensure that educators can gain knowledge and apply new skills in educational settings. Drawing on the research of Dunst, Trivette and colleagues, adult learning opportunities should include introductions of information, illustrations and demonstrations, practice, evaluation, and opportunities to reflect on the mastery of new skills (Dunst & Trivette, 2012; Trivette, Dunst, Hamby, & O’Herin, 2009). Of these methods, active engagement during PD opportunities resulted in educator

knowledge and practice gains. Further, use of these adult learning methods were most effective in PD opportunities with less than 30 participants, and lasted more than ten hours across multiple occasions. In fact, PD that incorporated several adult learning principles over multiple occasions resulted in an increased effectiveness of PD by over 75% (Dunst & Trivette, 2009)!

A second critical piece of EBPD is the inclusion of both training and coaching to ensure that skills are taught and reinforced on multiple occasions. Educators are much more likely to use and maintain practices learned during PD if they receive coaching as they begin to apply these skills (Joyce, Showers, & Rolheiser-Bennett, 1987). Multiple studies have shown that even the best training only resulted in 5% of teachers using new skills in the classroom, whereas PD models that incorporating routine coaching in school settings resulted in 95% of teachers using new skills as part of instruction (Joyce & Showers, 2002). Simply put, “newly-learned behavior is crude compared to performance by a master practitioner” and is “fragile and needs to

be supported” (Fixsen, Naoom, Blase, Friedman, & Wallace, 2005, p. 44).

Lastly, EBPD needs to be supported with implementation science principles to ensure that efforts result in knowledge and application at the adult level, and ultimately improvements in student outcomes. In implementation science terms, EBPD plans support competency, leadership, and organizational drivers to support consistent use of new practices (Fixsen et al., 2005). Subsequently, infrastructure and delivery systems are integral for PD systems, and incorporate ongoing formative evaluation practices. Both the infrastructure and delivery are continuously monitored, data is available and used as part of PD planning, and improvements can be incorporated into future plans.

Personnel Development Infrastructure

An explicit focus on EBPD infrastructure ensures the requisite pieces are put in place to actively support and monitor implementation and outcomes. The main areas of infrastructure include district and building teaming structures, resources, systems, and strategies. Systems include both training and coaching, and also ensure administrators are prepared to support teachers. Data systems are also vital for monitoring fidelity of the PD initiative, PD infrastructure (e.g., the EBPD Rubric), and

student outcomes. In fact, data use has been shown to be one of the most important contextual features for sustained use of an innovation (McIntosh et al., 2014). This is supported with the use of a problem solving process to guide action planning based on both fidelity and student outcome data.

Personnel Development Delivery

Because of the integral nature of data use as part of on-going formative evaluation and action planning for PD, the delivery of PD should be evaluated in multiple ways to facilitate multiple types of decisions. The framework for evaluating PD delivery is based on the work of Guskey (2000) where delivery is evaluated at five levels focusing explicitly on participant reaction, learning, and use of new knowledge and skills, as well as organization factors, and student outcomes. Guskey’s (2000) levels of PD delivery evaluation are briefly described in the table below in relation to the decisions that are supported at each level. The table outlines each PD evaluation level describing what is assessed and how information will be used to support decisions.

Technical Guide: Evidence-Based PD Planning and Evaluation

Guskey's (2000) Five Levels of PD Evaluation

PD Evaluation Level	Decisions Supported
1. PD participant reaction to training and coaching experiences	<ul style="list-style-type: none">• Improve program design & delivery
2. Participant acquisition of new knowledge and skills	<ul style="list-style-type: none">• Improve program content, format, & organization
3. Influences at the organizational level that can facilitate or hinder PD success	<ul style="list-style-type: none">• Document & improve organizational support• Inform future change efforts
4. Participant use of knowledge and skills	<ul style="list-style-type: none">• Assess fidelity of implementation
5. Student behavioral and academic outcomes	<ul style="list-style-type: none">• Focus & improve all aspects of PD design, implementation, & follow-up• Demonstrate overall impact of PD (i.e., summative evaluation)

References

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- McIntosh, K., Predy, L. K., Upreti, G., Hume, A. E., Turri, M. G., & Mathews, S. (2014). Perceptions of contextual features related to the implementation and sustainability of School-Wide Positive Behavior Support. *Journal of Positive Behavior Interventions, 16*, 168–178.
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Colorado Multi-Tiered System of Supports (CO-MTSS)
Colorado Evidence-based Personnel Development (CO-EBPD) Rubric

MTSS Leadership Team (MLT): _____ Date of Completion: _____ CO-MTSS Representative: _____

Directions: The CO-EBPD rubric should be completed by the MLT with support from a state coach, evaluating implementation of evidence-based personnel development (PD). The CO-EBPD rubric is designed to be directly linked to the CO-MTSS PD Planning Tool, and associated items from the planning tool are referenced within the “Features” column in parentheses. To self-assess, the MLT should come to consensus on a score for each row. Then, a percentage score should be calculated for each section: **Infrastructure** and **Delivery**, by summing the total points within the section and dividing by the number of available points. If possible, use evidence to justify the score selected.

Features	Specifications & Guiding Questions	In place (=2)	Partially In place (=1)	Not In Place (=0)	Score
Personnel Development Infrastructure					
1. The MLT oversees and evaluates the effectiveness of PD (MLT-SA).	Team uses the CO-EBPD rubric to evaluate their PD efforts.	The MLT regularly (at least once annually) uses the CO-EBPD rubric and sets specific timelines for evaluation.	The MLT has completed the CO-EBPD rubric but does not set specific evaluation timelines.	The MLT does not evaluate PD or does not set timelines.	
2. Resources are allocated for effective and sustainable delivery of PD (PD Plan #D).	Resources are allocated for effective and sustainable PD, including resources for coaching, teaming structures, and data systems.	District resources are allocated for effective and sustainable PD, ongoing follow-up, establishment of teams to support implementation, and data systems for evaluation.	District resources are allocated for delivery of PD, but not all other activities critical for sustainable implementation.	District resources are not sufficiently allocated for delivery of PD, or resources lack multiple elements critical to implementation.	
3. Cohorts of recipients have been established to ensure implementation capacity (PD Plan #s E, F).	The MLT considers school data, readiness, current efforts, and capacity to determine recipients of PD.	Cohorts for PD are determined by the MLT based on components of contextual fit, including need, readiness, current efforts, and capacity.	Cohorts for PD are determined by the MLT, but not based on all components of fit and readiness.	Cohorts for receiving PD are not established.	
4. A training system has been established to ensure high quality delivery (PD Plan #s G, H, and other documentation).	A description of specific training responsibilities is created along with a system for responding to implementation and outcome data.	Specific FTE is dedicated to training and training oversight. This includes job descriptions, interview protocols, training for trainers, training evaluation, and use of implementation fidelity and outcome data to evaluate progress.	Specific FTE is dedicated to training, but lacks some specificity in oversight, evaluation, or use of data to modify future training.	A training system is not in place for the prioritized PD area.	
5. A coaching system has been established to ensure follow-up of PD (PD Plan #s I, J, and other documentation).	A description of specific coaching responsibilities is created along with a system for responding to implementation and outcome data.	Specific FTE is dedicated to coaching and coaching oversight. This includes job descriptions, interview protocols, training for coaches, coaching fidelity, and use of fidelity and outcome data to evaluate progress.	Specific FTE is dedicated to coaching, but lacks some specificity in oversight, evaluation of coaching fidelity, or use of data to modify coaching supports.	A coaching system is not in place for the prioritized PD area.	

Colorado Evidence-based Personnel Development (CO-EBPD) Rubric

Features	Specifications & Guiding Questions	In place (=2)	Partially In place (=1)	Not In Place (=0)	Score
6. Building Leadership Teams receive PD that uses effective problem solving to evaluate implementation (other documentation).	Schools receiving PD have representative teams that use data for decision making regarding the prioritized practice.	Each school receiving PD has established a Building Leadership Team in charge of delivery and implementation. The team uses an explicit problem solving process.	Each school receiving PD has a Building Leadership Team in place, but they do not use an explicit problem solving protocol or model.	Building Leadership Teams charged with implementation are not in place in every school receiving PD.	
7. Administrators receive PD and support implementation (other documentation).	Explicit steps are established to ensure administrators support implementation.	Administrators are trained in implementation including use of student outcome and implementation fidelity for problem solving.	Administrators receive training in prioritized practices but not in the use of student and/or fidelity data to support implementation.	PD and support are not provided to administrators.	
8. A data system is established for evaluation of implementation fidelity as well as student outcomes (PD Plan # K).	Efficient and accessible data systems are in place that assess implementation and outcomes of PD. The data systems should be easily accessible to school personnel for use in decision-making.	Data systems are in place that effectively and efficiently evaluate fidelity data and student outcome data related to PD. School personnel can access the data system easily and make decisions based on that data.	Implementation and outcome data systems are in place but not easily accessible or not used for decision making.	Implementation or outcome data systems are not in place for schools receiving PD.	
9. Problem-Solving strategies, implementation strategies, and recognition systems are established (PD Plan # L, and other documentation).	Implementation data is used to inform modifications to personnel development infrastructure and delivery. Positive recognition processes are in place for high degrees of implementation.	Student outcome data and fidelity data are used to determine modifications needed. The MLT also implements specific strategies to celebrate school progress toward goals on a regular basis.	Implementation steps are created, but data is not used frequently for modifications, or MLT does not implement specific strategies for celebrating school progress.	Implementation steps are not created, data are not used for improvements, and specific strategies for celebrating school progress are not implemented.	
10. Implementation and student outcome data is shared regularly with stakeholders at multiple levels (PD Plan #s I, J, and other documentation).	A specific schedule is established for presenting implementation and outcome data to stakeholders.	Student outcome data and implementation fidelity data is regularly monitored. That data is shared with stakeholders regularly (e.g., SEA, regional, local, community).	Implementation and outcome data is shared with some stakeholders, but not on a regular basis.	Implementation and outcome data are not shared with stakeholders.	
Personnel Development Infrastructure Score Total:					
Percentage Score Total / 20					

Colorado Evidence-based Personnel Development (CO-EBPD) Rubric

Features	Specifications & Guiding Questions	In place (=2)	Partially In place (=1)	Not In Place (=0)	Score
Personnel Development Delivery					
11. PD activities are evaluated for representation of adult learning principles (PD Plan # N).	PD should include the following adult learning principles: <i><u>Introduction and Illustration:</u></i> Participants engage with content through content acquisition (e.g., independent learning, lecture, simulation); <i><u>Practice and Evaluation:</u></i> Opportunities are provided for application through content investigation (e.g., real life task, role play, self-assessment); <i><u>Reflection and Mastery:</u></i> Participants exhibit deep understanding of content (e.g., journaling, standards-based assessment).	Tools and artifacts (e.g., presentation slides, handouts) demonstrate that delivered PD includes all of the evidence-based Adult Learning principles: <i>Introduction, Illustration, Practice, Evaluation, Reflection, and Mastery.</i>	Tools and artifacts (e.g., presentation slides, handouts) demonstrate that delivered PD includes some of the evidence-based Adult Learning principles.	Tools and artifacts (e.g., presentation slides, handouts) do not demonstrate evidence-based Adult Learning principles.	
12. PD activities are evaluated for participant reaction , and data is used to improve PD content and delivery (PD Plan # O).	<ul style="list-style-type: none"> • Was the trainer knowledgeable? • Were effective opportunities for application provided? • Did the session materials contribute to learning? • Were facilities and equipment conducive to learning? • Were the stated session objectives met? 	<p>Tool(s) are developed for evaluation of participant reaction to PD. An efficient system is also in place for evaluating those reactions and making modifications to future PD content and delivery.</p> <p>Tools can include online participation reaction survey (e.g., Google form, Survey Monkey)</p>	Tool(s) are developed for evaluation of participant reaction to PD, but no efficient system is established for using the data for improvements.	Tool(s) are not developed or implemented for participant reaction to PD.	
13. PD activities are evaluated for participant learning (PD Plan # P).	<ul style="list-style-type: none"> • Did the participants acquire the intended knowledge & skills? • Did participants' attitudes, beliefs, or dispositions change? 	<p>Tool(s) are developed for evaluation of participant learning along with a system(s) to use results to modify future PD content.</p> <p>Tools can include:</p> <ul style="list-style-type: none"> • Pre- and post-test • Self-assessments of knowledge acquisition 	Tool(s) are developed for evaluation of participant learning, but no efficient system is established for using the data to improve PD content.	Tool(s) are not developed or implemented for evaluation of participant learning.	

Colorado Evidence-based Personnel Development (CO-EBPD) Rubric

Features	Specifications & Guiding Questions	In place (=2)	Partially In place (=1)	Not In Place (=0)	Score
14. PD activities are evaluated for organizational support and change (PD Plan # Q).	<ul style="list-style-type: none"> Was implementation advocated and supported? Were sufficient implementation resources allocated? Was the organization positively impacted? 	Specific tools (e.g., BLT Self-Assessment, Short Cycle Action Plan) are used to evaluate organizational improvement. Results are used to modify the PD plan and follow-up supports.	Specific tools are in place, but no system is established for using the data for improvements to the PD plan and follow-up supports.	Specific tools are not established or implemented for ongoing support of PD implementation.	
15. PD activities are evaluated for participant use of new knowledge and skills (i.e., implementation fidelity) (PD Plan # R).	<ul style="list-style-type: none"> Do participants consistently apply the new knowledge and skills? Did participant practices change? 	Implementation Fidelity tools are used to evaluate participant use of new knowledge and skills, along with a system for analyzing outcomes to modify and refine PD plans.	Implementation Fidelity tools are used to evaluate participant use of new knowledge and skills, but no efficient system is established for using the data to modify PD and follow-up.	Implementation Fidelity tools are not used to evaluate participant use of new knowledge and skills.	
16. PD activities are evaluated for student learning outcomes (PD Plan # S).	<ul style="list-style-type: none"> What was the impact on students? How did it affect student performance or achievement? How did it influence students' physical or emotional well-being or student behavior? 	Established data systems are accessed regularly for ongoing evaluation of student outcomes in relation to PD delivery. Outcome data can include: <ul style="list-style-type: none"> Student achievement (grades, CMAS results, benchmark assessments, e.g., DIBELS) Student behavioral records (e.g., ODRs, suspensions, attendance) Student self-report surveys (e.g., health and wellness surveys) 	Established data systems exist, but are not regularly accessed or used for decision making related to PD development or delivery.	Established systems have not been linked to PD development or delivery.	
Personnel Development Delivery Score Total:					
Percentage Score Total / 12:					