



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

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 incorporated 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.

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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

- Dunst, C. J., & Trivette, C. M. (2009). Let's be PALS: An evidence-based approach to professional development. *Infants & Young Children, 22*(3), 164–176.
- Dunst, C. J., & Trivette, C. M. (2012). Moderators of the effectiveness of adult learning method practices. *Journal of Social Sciences, 8*(2), 143.
- Fixsen, D. L., Naoom, S. F., Blase, K. A., Friedman, R. M., & Wallace, F. (2005). *Implementation research: A synthesis of the literature*. Florida: University of South Florida, Louis de la Parte Florida Mental Health Institute, The National Implementation Research Network (FMHI Publication #231).
- Guskey, T. R. (2000). *Evaluating professional development*. Thousand Oaks, CA: Corwin Press, Inc.
- Joyce, B., & Showers, B. (2002). *Student achievement through staff development* (3rd ed.). Alexandria, VA: Association for Supervision and Curriculum Development.
- Joyce, B., Showers, B., & Rolheiser-Bennett, C. (1987). Staff development and student learning: A synthesis of research on models of teaching. *Educational Leadership, 45*(1), 11–23.
- 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.
- Trivette, C. M., Dunst, C. J., Hamby, D. W., & O'Herin, C. E. (2009). Characteristics and consequences of adult learning methods and strategies. *Winterberry Research Syntheses, 2*(2), 1–33.