A meta synthesis of key features and core features for in-service professional development training was prepared for ECPC through a formal contract with the Orlena Hawks Puckett Institute, to inform In-Service professional development practices. 15 research reviews of in-service professional development to improve or change teacher content knowledge and practice and student/child knowledge and behavior were described. The research reviews included 550 studies of more than 50,000 early intervention, preschool, elementary, secondary education teachers, educators, and practitioners. In-service professional development experts’ contentions about the key characteristics and core features of effective in-service training were used to code and analyze the research reviews.

The Purpose

The purpose of this brief is to share findings from a meta analysis on in-service professional development. A meta analysis is a study of the available research in which research findings are combined, statistically analyzed and then summarized. The findings illuminate key characteristics and core features in-service adult learning that can be applied to training being offered to the EI/ECSE workforce. This metasynthesis used a replication model approach to determine how results from the 15 studies collectively supported the use of key characteristics of adult learning practices.

Key Characteristics

**Introduction**
Methods used to introduce or describe the content knowledge, subject area, or practice to the learners

**Illustration**
Methods used to demonstrate or illustrate the practice or application of the content knowledge (modeling, simulations, observations, video examples)

**Authentic Learning Opportunities**
Methods used to provide the learners opportunities to use the practice or content knowledge (real-life experiences, simulations, role playing, learner-led instruction, developing lesson plans, induction, etc.)

**Learner Reflection**
Methods used to engage teachers in discussions of and reflection on their in-service learning experiences or opportunities (group meetings, collective participation, journaling, peer discussions, inquiry, self-assessments, etc.)

**Coaching or Mentoring**
Methods used to demonstrate or illustrate the practice or application of the content knowledge (modeling, simulations, observations, video examples)

**Performance Feedback and Follow Up Support**
Methods used to provide direct feedback to learners or the assessment of learner performance or mastery (visual displays of data charts, observational feedback, discussions, email correspondence, telephone conversations)
The Findings

Results showed that replication was demonstrated in all 15 research syntheses for the in-service professional development key characteristics (100%), in 13 research syntheses for extended follow up supports (87%), and in 12 research syntheses for in-service duration and intensity (80%).

- Confirm empirical support for the use of the 4 key practices and 2 core features of in-service training.
- Underline the importance of providing multiple opportunities for training with adequate time between training sessions to allow ample opportunity to reflect on and internalize knowledge and skills acquisition.
- Highlight the need for ongoing follow up professional coaching and supports to reinforce mastery over time.

Why Are These Findings Important?

These findings describe evidence-based practices that have the highest impact on adult learners. Embedding these key elements and core features into in-service personnel development trainings increases the likelihood that EI/ECSE providers will acquire the knowledge and skills they need to sustainably implement evidence-based practices across the duration of their work careers, optimizing outcomes for young children with disabilities/delays and their families.

Framework for linking in-service professional development, changes in teacher and educator knowledge, skills, and practices, and improvements in student and child learning.

Reference