

Impact of Professional Development on Preschool Teachers' Use of Embedded Instruction Practices

Patricia Snyder
University of Florida

Mary Louise Hemmeter
Vanderbilt University

Susan Sandall
U Washington

Mary McLean
UWM-Milwaukee

INTRODUCTION

Professional development (PD) for those who educate young children has emerged as a key national priority.

Several recent RFAs have highlighted a pressing need to study what features and levels of PD are effective and feasible for increasing early childhood educators' use of evidence-based practices, particularly practices associated with improved learning outcomes for young children with disabilities (IES, 2007; 2008).

The presenters were awarded a Goal 2 development study in August 2007 to (1) develop a PD intervention (*Tools for Teachers*) focused on embedded instruction for early learning, (2) use iterative processes to validate the PD intervention, and (3) evaluate whether exposure to the PD intervention is positively related to embedded instruction implementation fidelity and also to child engagement and learning outcomes (Figure 1).

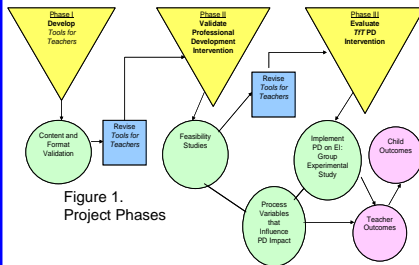


Figure 1.
Project Phases

This poster describes select Phase I, Year 1 project activities associated with the development and validation of the professional development materials included as part of *Tools for Teachers*.

COMPONENTS OF TTT

PD Workshops

- Overview module defining embedded instruction and complete learning trials
- Three modules focused on planning for, implementing, and evaluating embedded instruction
- Emphasis on increasing numbers of complete learning trials (A-B-C) across and within preschool classroom activities, routines, and transitions to promote child engagement, independence, and social relationships

Coaching with Web Support

- Expert coaching
- Goal setting and performance feedback based on validated protocol (e.g., Snyder, 2007; Hemmeter, Snyder, Artman, & Kinder, 2008)
- Web supports
 - *Embedded Instruction for Early Learning* web site (www.embeddedinstruction.net)

Web-Supported Self-Monitoring

- Password-protected section of web site
- Materials and supports for self-monitoring
- Includes automated graphing program for complete learning trials

Primary Dependent Measures: Teachers

- IEP Quality Rating Scale
 - functional, generative, integrated goals
 - Embedded Instruction Observation System Planned and Unplanned Trials (EIOS-PUT)
 - Embedded Instruction Learning Trials System (EILTS; VanDerHeyden, Snyder, et al., 2005)
 - Adapted Intervention Rating Profile (Martens, Witt, Elliott, & Darveau, 1985)
- (Distal child-level dependent measures for targeted children in each class)

VALIDATION PROCESSES

Purpose

- To use systematic and iterative processes to validate *TTT* materials and processes

Procedures

- Convened 11-member validation panel composed of key stakeholders and chaired by Dr. Mark Wolery to review (a) competencies associated with implementing embedded instruction with fidelity (accurately and fluently)
- Provided panel members with materials and processes related to planning, implementing, and evaluating embedded instruction
- Solicited quantitative and qualitative feedback on key variables and associated dimensions (Figure 2)
- Revised competencies, materials, and processes based on feedback

Variables	Associated Dimensions	
>Content	•Accurate •Complete	•Current •Evidence-informed
>Design	•Motivation •Organization •Examples	•Media Navigation •Interaction
>Congruence	•Meets needs of organization •Meets needs of teachers •Meets needs of children	
>Complexity	•Knowledge •Comprehension •Application	•Analysis •Synthesis •Evaluation
>Feasibility	•Within end-user technical capacity •Content feasible to implement •Feasible for teachers to use •Barriers anticipated during use	
>Acceptability	•Relevance •Value	•What's in it for me?
>Sustainability	•Likelihood of use after project ends •Ability to continue implementing embedded instruction	

Figure 2

Results

- 31 of 34 competencies associated with *TTT* validated by 11 panelists as *related* or *strongly related* to planning, implementing, and evaluating embedded instruction
- Majority (> 50%) of panelists reported 22 competencies were only *occasionally* or *never* observed in practice (validating need for PD on embedded instruction)
- In-depth feedback on key variables and associated dimensions – initial validation

NEXT STEPS

- Further validation of *Tools for Teachers* materials and processes
- Continued development of the web site and self-monitoring web site, including an automated graphing program
- Single-subject experimental feasibility studies with 12 teachers (3 replications of a multiple-probe across teachers design) beginning August 2008 to evaluate relationships between implementation of the PD intervention and teachers accurate and frequent use of embedded instruction practices
- A randomized controlled evaluation beginning August 2009 of the PD intervention with 36 teachers (12 with PD and coaching, 12 with PD and self-monitoring, 12 control)

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FOR FURTHER INFORMATION

Please contact:

- patriciasnyder@coe.ufl.edu
- ml.hemmeter@vanderbilt.edu
- www.embeddedinstruction.net

