Title: Fidelity and Scaling-Up in the Context of a Social-Emotional Intervention for Early Childhood Education

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MDRC
Abstract Body

Background / Context:
Head Start, the largest federally funded early childhood education program in the United States, provides comprehensive services to low-income children and their families. These services historically have a whole child approach, fostering social-emotional well-being, physical and mental health, and cognitive and language development, as well as parent involvement and family social services.

In recent years, a number of non-experimental studies have outlined the risk to social-emotional development in young children growing up in poverty. Because children in poverty are exposed to a wide range of psychological and social stressors, they have been found to be at a greater risk for developing emotional and behavioral difficulties compared with their more affluent peers. Low-income children are particularly vulnerable to behavior and emotional difficulties in preschool (Gilliam, 2007), and teachers have reported that they do not know how to address behavioral challenges (Lloyd & Bangser, 2009; La Paro & Pianta, 2000).

Head Start has responded to the pressing need for effective tools to strengthen children’s social-emotional skills and recent research has shown that well-designed professional development which includes training and coaching can enhance teachers’ skills, and strengthen children’s social and emotional outcomes (Hemmeter & Fox, 2009; Lloyd & Bangser, 2009; Morris et al, 2010; Raver et al., 2009).

Purpose / Objective / Research Question / Focus of Study:
The Head Start CARES demonstration will help to shed light on whether teacher training on social-emotional content coupled with in-classroom coaching can be scaled up to strengthen teachers skills and help them to address the aforementioned issues. Building upon previous research findings, Head Start CARES examined enhanced curriculum improvements and professional development in the context of a large-scale random assignment study. The demonstration tested the effects of three theoretically distinct social-emotional program enhancements in Head Start settings across the country in order to determine whether it was possible to effectively implement these programs in a large number of Head Start centers and if so, how. The three structured program enhancements focused on different strategies including training teachers on delivery of classroom management procedures, enhancing children’s skills to understand and respond to emotions, and a set of play-based activities designed to support self-regulation.

In addition to testing classroom-based strategies, Head Start CARES served as a test of an overall system that was meant to support large-scale implementation of program enhancements in the classroom. Enhancement implementation was supported by a professional development approach that included program-specific training and coaching. In previous efficacy trials, the developers of these three programs were the primary monitors and responders to implementation issues. As part of the scale-up process, additional supports for achieving implementation fidelity were needed. By necessity and design, trainers and in-classroom coaches played an important role in supporting Head Start teachers and assessing implementation fidelity.

This poster will focus on preliminary lessons learned from implementing social-emotional programs supported by a professional development model across the country in varied contexts; in particular the focus will be on the training and coaching of teachers in the Head Start CARES demonstration.

Setting:
The seventeen Head Start delegate agencies that were selected to participate in the Head
Start CARES demonstration were located in ten states across the nation. Grantees varied on a number of characteristics, including organizational setting, geographic location, urbanicity, size, and racial/ethnic composition. Grantees had a range of centers and classrooms participating. In total 307 classrooms and over 3,600 children participated in the study, with one-half receiving the CARES intervention. All centers had between one and six classrooms engaged in the study and on average, centers had three classrooms participating.

**Population / Participants / Subjects:**
As shown in Table 1, there were several key stakeholders that were involved in the Head Start CARES demonstration, including enhancement developers and their trainers, coaches, lead teachers and teaching assistants, site-level administrators and center-level administrators and directors, and the MDRC technical assistance team.

Grantees were drawn from four regions of the country: four grantees were from the Northeast, four from the West, six from the Midwest, and three from the South. In total, fifty-two coaches worked with teachers to implement the enhancements. The typical Head Start CARES coach was female, 46 years of age, and white. They were both full- and part-time employees, and worked with a range of classrooms (two to thirteen) based on their employment status and availability. A typical coach had a master’s degree in early childhood education, a minimum of 11 years of experience in early childhood settings, one to four years of experience in adult education, and minimal experience coaching teachers in a social-emotional enhancement. Each developer of the enhancements had a different certification process for their trainers and trainers were either certified or certified eligible.

**Intervention / Program / Practice:**
The Head Start CARES demonstration was designed to implement a systematic framework for the delivery of professional development across multiple programs on a national scale. The framework included ongoing training and coaching as well as performance feedback and technical assistance.

In order to fully support the delivery of the program models, each teacher in the intervention classrooms received training and coaching in one of the enhancements. Training workshops were delivered throughout the school year by the enhancement trainers. In the Head Start CARES model, the training component included well-developed curriculum manuals and training materials, delivery of the appropriate training sessions to teachers, teachers’ attendance and engagement in training, as well as the trainers’ support of classrooms through classroom visits.

*In-classroom coaching* was conceptualized as a mechanism to augment and reinforce training content and standardize support for teachers’ enhancement implementation. Scaling-up nationally required building a system that centralized support for enhancement implementation across coaches rather than developers. Enhancement developers often did not have the trainer capacity needed to serve in a supportive role for teachers on a weekly basis and across multiple centers. Coaching of both lead and assistant teachers was conceptualized as another support for scaling-up and supporting implementation, providing a way to address changes in classrooms like teacher turnover or long-term absences. Coaches were expected to observe classrooms once a week for an hour at a time and to meet with both lead and assistant teachers together to debrief and reflect on their observations for 30 minutes each week.

**Research Design:**
Head Start CARES is unique in that, in addition to an impact study, the demonstration included a rigorous test and study of program implementation. Research consistently
demonstrates that implementation quality and fidelity are strongly associated with the achieved effect sizes of programs (Wilson & Lipsey, 2000; Durlack & Dupre, 2008) and implementation fidelity is often difficult to achieve when programs are scaled up (Fixen et al., 2005).

As shown in Figure 1 (Randomization Design), each site had at least four centers randomly assigned to one of four groups: one of the three different social-emotional models or a “business as usual” comparison group. Four sites participated during the 2009-2010 school year (Cohort 1), and 13 sites participated during the 2010-2011 school year (Cohort 2). The intervention was conducted for one year only in each site. The mixed-methods implementation study focused on treatment centers and included an in-depth examination of intervention implementation processes throughout the school year. The study included surveys of coaches and trainers across the year on their perceptions about teachers’ responses to and implementation of the enhancements, coaching, and training. Interviews with coaches, trainers, and teachers and site visits were also conducted.

Data Collection and Analysis:

The lessons that are presented below draw from a variety of data sources including: (1) a management information system; (2) data from regularly scheduled calls and other interactions between coaches, trainers and key Head Start CARES personnel that occurred throughout the year; (3) team site visits; and (4) interviews with program administrators and staff, Head Start teachers, enhancement developers and trainers, and Head Start CARES coaches.

A large amount of information was accumulated in a management information system (MIS) that served as a repository for coaches and trainers to submit data. The system included user-friendly, online surveys and was designed to support technical assistance, management, and fidelity monitoring of the enhancements. The MIS allowed for ongoing monitoring of both the coaching process and teachers progress on classroom implementation.

In addition, a key component in the coaching process was the training and support the coaches received from the trainers, program developers and the Head Start CARES personnel. Individual supervision conference calls between trainers and coaches took place for each enhancement throughout the year. The Head Start CARES team conducted regular coach calls by program model in order to provide ongoing support to the coaches. Developers and trainers could attend these calls. This was an opportunity to facilitate conversations between the coaches, to describe their experience, and to troubleshoot issues on the ground. In addition, the Head Start CARES team arranged calls between the developers and their trainers with the implementation team in order to troubleshoot and develop action plans to address any challenges at particular sites.

Program enhancement trainers were also able to visit classrooms between two and three times a year to support enhancement implementation and the Head Start CARES research and technical assistance staff observed trainings and made visits to the sites to gain an in-depth understanding of how the training and coaching was implemented. Finally, the research team conducted close to 300 interviews with program administrators and staff, Head Start teachers, enhancement developers and trainers, and Head Start CARES coaches which complimented the quantitative implementation data by providing additional insight into implementation quality and processes.

Findings / Results:

Analysis and synthesis of data collected through the MIS, interviews, coach and developer calls and site visits suggests that there are a number of steps that might be taken to support the large-scale implementation of social-emotional programs in preschool classrooms. Below, we highlight our preliminary observations in four key areas: training, coaching,
organizational context, and technical assistance.

**Lessons Learned for Scale-Up and Replication:**

**Training:** Training and the materials need to be user-friendly, with accessible materials and real-world application. Ongoing communication between the developers, trainers, coaches and the technical assistance team appeared to be important in ensuring that site- and context-specific considerations and when applicable adaptations were being made in an appropriate manner.

**Coaching:** Developers, teachers and trainers thought it important for coaches to understand the enhancement content and the coaching model prior to the beginning of teacher implementation and regular coach supervision by developers and trainers was important to supporting and guiding the coaches’ field work.

**Organizational Context:** While this scale-up included intensive monitoring by the research team and ongoing support from program trainers, in a “real world” implementation context these supports would not be readily available. The team’s observations indicate that this was a critical component to the enhancements being implemented with fidelity and absent a research study, an entity (for example, Head Start local administrators or training coordinators) would need to oversee and manage this process.

**Technical Assistance:** In this study, technical assistance played two critical roles: 1) ensuring implementation was occurring including the provision of materials like tool kits for site liaisons and coaches and; 2) quality control. For both purposes it was helpful to have an MIS as well as regular and shared communication across all stakeholders so that adjustments could be made to improve fidelity.

**Conclusions:**

Training and coaching as a form of professional development offers the opportunity to greatly influence the quality of experiences that both teachers and children in early childhood education settings receive. Implementation of strong coaching and training, however, can be a complicated endeavor, due to the large number of people involved and the varied organizational contexts across grantees. Time should be set aside prior to beginning implementation for strategic planning and advisement by program administrators to think through and resolve multiple factors, including the training content and materials, the supervisory process, and the best way to support the implementation and sustain the model. Due to the size and scope of the Head Start CARES demonstration, as well as the need to scale up rapidly, manualization of the enhancements with clear expectations around the training and coaching components facilitated the delivery of the programs with fidelity across sites was critical. This process was helped by thorough documentation and expectations around the coaching and training components, such as grantee liaison and coach toolkits that included specific information on roles and responsibilities, implementation schedules, and coach logs.

In summary, implementation and scale-up of training, coaching, and the social-emotional enhancements required substantial effort among all of the stakeholders involved. Ongoing monitoring and data from the MIS together with consistent communication among all parties enabled the CARES team to make adjustments along the way and is an effort to support and strengthen program implementation.
Appendix A. References


**Appendix B. Tables and Figures**

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**Head Start CARES Demonstration**

**Table 1**

**Responsibilities and Supervisory Structure of Key Players in Head Start CARES**

<table>
<thead>
<tr>
<th>Title</th>
<th>Responsibilities in Head Start CARES</th>
<th>Supervisory Structure</th>
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<tbody>
<tr>
<td>Enhancement developer</td>
<td>Designed the enhancement, provided content-related support to coaches and teachers, and supervised trainers.</td>
<td>Various employment and supervision structures (e.g., universities, research centers).</td>
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<tr>
<td>Trainer</td>
<td>Delivered training sessions to coaches and teachers on enhancement content.</td>
<td>Employed and supervised by the enhancement developer.</td>
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<td></td>
<td>Visited classrooms to support coaches and teachers with enhancement implementation.</td>
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<tr>
<td></td>
<td>Provided supervision and regular feedback on coach performance.</td>
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<tr>
<td>Coach</td>
<td>Attended training sessions with teachers.</td>
<td>Employed by site-level administrators and center-level administrators and directors.</td>
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<td></td>
<td>Received ongoing content-related support from trainer and enhancement developer.</td>
<td>Supervised by the enhancement developer/trainer, site-level administrators, and center-level administrators and directors.</td>
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<td></td>
<td>Observed and met with teachers weekly to discuss enhancement implementation.</td>
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<td>MDRC technical assistance team</td>
<td>Provided ongoing technical assistance to site-level administrators, center-level administrators and directors, enhancement developers, trainers, and coaches throughout the year (e.g., monitored log completion, facilitated communication between trainer and site-level administrators).</td>
<td>Awarded a contract by the Administration for Children and Families to implement and evaluate Head Start CARES.</td>
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</table>
Head Start CARES Demonstration

Figure 1
Randomization Diagram

4 or 8 or 12 Head Start Centers Assigned Randomly

Incredible Years Group
Preschool PATHS Group
Tools of the Mind Group
Comparison Group