



EXECUTIVE SUMMARY

# Making Preschool More Productive

HOW CLASSROOM MANAGEMENT TRAINING CAN HELP TEACHERS

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## **Executive Summary**

**The Foundations of Learning Demonstration**

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**How Classroom Management Training Can Help Teachers**

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# Overview

Educators and researchers increasingly recognize that high-quality early childhood programs are an important way to prepare disadvantaged children for later school success. One critical (and often overlooked) aspect of quality is addressing children’s ability to engage positively with peers and teachers and to focus their attention and behavior during classroom activities. Evidence suggests that improving young children’s emotional and behavioral adjustment is both an important outcome in its own right and can be a pathway to improved academic achievement for low- and high-risk children alike. In addition, challenging behavior may divert teachers’ attention from instructional time for all children in the classroom. This is not a peripheral problem in preschool classrooms, where a sizable minority of children have behavioral challenges. Preschool teachers often discuss the need for additional training in how to address these issues.

This report presents results from the Newark, New Jersey, site of the Foundations of Learning (FOL) Demonstration — an intervention and random assignment evaluation of a program aimed at equipping teachers with the skills and strategies they need to help guide children’s behavior and emotional development. The FOL intervention was tested in two cities — Newark and Chicago — and it combined teacher training in effective classroom management with weekly classroom consultation. In the Newark site, 51 preschool classrooms (one per center) serving primarily 4-year-old children were selected to participate in the study; 26 classrooms were randomly assigned to implement the FOL intervention, and 25 were assigned to conduct preschool as usual. Differences between the two groups were analyzed at the end of the intervention year and the following year to assess the added value of FOL over and above standard practice in preschool classrooms.

## Key Findings

The evidence emerging from the Newark site shows that investments in teachers’ professional development improve children’s preschool experiences, although the long-term effects on children remain uncertain.

- FOL improved teachers’ ability to address children’s behavior and to provide a positive emotional climate in the classroom. It also improved teachers’ management of classroom time, their use of engaging teaching methods, and the amount of instructional time that children experienced in their classrooms.
- Based on ratings by independent trained observers, FOL reduced children’s conflicts with teachers and peers and increased their levels of engagement in the learning tasks of preschool, but it did not otherwise change the quality of teacher-child or peer interactions.
- Based on limited data for the year following the intervention, very few of the intervention’s effects on children were sustained as they entered kindergarten classrooms. However, teachers who were trained in the intervention appear to continue to engage in the positive practices they learned.

Additional publications on this intervention will be released in the coming years. This will complement information emerging on other promising social-emotional interventions currently being tested in preschool classrooms, providing extensive information to policymakers and practitioners about where to put their attention in efforts to improve preschool quality.



## Preface

The Foundations of Learning (FOL) project comes at a particularly important time in the field of early education and child care. Public support for preschool programming is high and, in its wake, has brought a marked increase in the number of children served by early childhood programs. With these programs comes the promise of solving one of the nation's most persistent social problems: the growing achievement gap between poor children and their more affluent peers. Yet, without good information about how to boost the quality of preschool programs, delivering on that promise is a challenge.

FOL is also important because of its explicit focus on children's social-emotional development as a primary target of the intervention model. Driven in part by the passage of the No Child Left Behind Act of 2001, program administrators' attention has been increasingly focused on building children's academic readiness before their entry into formal education. At the same time, teachers repeatedly express a need for effective strategies to address children's emotional and behavioral problems, which they feel ill equipped to address. Such findings suggest that strategies to improve children's behavioral adjustment are a necessary complement to the ongoing work on strategies to improve children's literacy.

This report shares impact results of MDRC's Foundations of Learning Demonstration in Newark, New Jersey. The program model that was tested in this site provides intensive training in classroom management skills for lead and assistant teachers, supported by weekly in-class support from a master's-level clinician to reinforce the lessons from the training and to provide direct services to children. The goal of the FOL evaluation is to test the effectiveness of this model of professional development and clinical consultation in order to provide the underpinning for high-quality preschool education and child care.

The positive but still short-lived results presented here are part of a larger body of work to help understand ways to maintain and improve a quality preschool experience for children. In coming years, MDRC will publish further work on the Chicago site of the FOL demonstration, including a benefit-cost analysis. In addition, MDRC is conducting a large-scale trial of three different social-emotional enhancements in the context of Head Start programs nationally, as part of the Head Start CARES project conducted by the Administration for Children and Families. These studies, along with similar evaluations by other researchers, will continue to build the body of evidence on the most effective ways that preschool programs can support children's social-emotional development as part of an effort to improve their school readiness.

Gordon Berlin  
President





## Acknowledgments

This report on the Newark, New Jersey, site of the Foundations of Learning (FOL) demonstration benefited from a collaboration among many organizations and individuals. From the outset, the support of the Newark Public Schools has been instrumental in planning and conducting the project. We particularly thank Dr. Gayle Griffin, Assistant Superintendent; Nancy Rivera, Director of Early Childhood Education; Shirley Grundy, Director of Guidance at the time the study was conducted (now retired); Dr. Marbella Barerra, Institutional Review Board Director; and Kathleen Tague and Patricia DeMarco, supervisors in the Office of Early Childhood; as well as the Preschool Intervention and Referral Team members and resource teachers. Babu Yalamanchili, Marisol Peña, Laurie Newell, John Duggan, and Carol Little were all helpful in providing data.

Carrying out a research demonstration of this type is possible only with the commitment and cooperation of the participating programs. We thank all the teachers and administrators at the schools, Head Start centers, and community-based programs that were part of the demonstration. Clark Thompson and Ernestine Simpson of the Newark Preschool Council were especially helpful during both the pilot phase and the full demonstration period.

At Family Connections — the subcontractor responsible for implementing the classroom consultation component of the FOL program — we thank Paula Sabreen, Executive Director; Sheila Berard, Associate Director; Dorothy Jordan, Clinical Classroom Consultant Coordinator; and each of the Clinical Classroom Consultants who worked so diligently to implement a high-quality program.

Greg O'Donnell, Darlene Jones-Lewis, Kimya Barden, and Dorothy Jordan conducted the teacher training sessions. The University of Virginia's Center for Advanced Study of Teaching and Learning and Megan Siebert trained coders for classroom observations; a team of dedicated coders visited Newark classrooms throughout the demonstration.

Survey Research Management, led by Linda Kuhn, fielded surveys throughout the demonstration and located students for follow-up data collection.

A number of foundation funders provided indispensable support for the evaluation. They are gratefully acknowledged at the front of the report.

The FOL research effort has been a true partnership. At MDRC, we thank the following key members of the team: Mike Bangser, Francesca Longo, Ximena Portilla, Vivian Mateo, and Farrah Parkes. Shirley James and her team were responsible for keying and verifying the data. Glee Holton and Shelley Rappaport helped recruit preschool programs for the demonstration.

Helen Gorden provided administrative support. Karen Paget answered our Institutional Review Board questions regarding data collection. Gordon Berlin, Howard Bloom, Robert Ivry, Ginger Knox, and John Hutchins provided valuable comments during the drafting process. Robert Weber edited the report, and Vivian Mateo and David Sobel prepared it for publication.

Outside MDRC, Christine Li-Grining of Loyola University and Fuhua Zhai of New York University provided valuable guidance and input by drawing on their experiences with CSRP (formerly the Chicago School Readiness Project).<sup>1</sup> Karen McFadden, a doctoral fellow from New York University, helped to compile and analyze data.

Most of all, we thank the children in the FOL program and their parents. We hope that the lessons from this and future reports will help strengthen the quality of preschool programs in Newark and elsewhere.

The Authors

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<sup>1</sup>CSRP is not associated with The Chicago School®, which is a trademark of The Chicago School of Professional Psychology.

## Executive Summary

Even as policymakers embrace greater investments in early childhood programs, questions remain about how to ensure that preschools are of high enough quality to promote children’s development. One critical (and often overlooked) aspect of quality is the capacity to address children’s emotional and behavioral adjustment — that is, their ability to engage positively with peers and teachers and to focus their attention and behavior during classroom activities.

Evidence suggests that improving young children’s emotional and behavioral adjustment is both an important outcome in its own right and can be a pathway to improved academic achievement for low- and high-risk children alike. Not only are preschoolers who have behavioral challenges more likely to face long-term difficulties throughout their school careers, but their behavior may divert teachers’ attention from instructional time for all children in the classroom. Studies have shown that as many as 3 to 4 children in every preschool class of 15 to 20 present behavioral challenges. Unfortunately, preschool teachers generally receive very little training about how to address these issues.

This report presents results from the Newark, New Jersey, site of the Foundations of Learning (FOL) Demonstration, an intervention and random assignment evaluation of a curriculum designed to target children’s behavior and emotional adjustment through the training of preschool teachers. The demonstration adopted the model used by CSR<sup>1</sup> (formerly the Chicago School Readiness Project) and adapted it slightly to fit a new policy context.<sup>1</sup> The remainder of this report refers to the model as “FOL.” The FOL intervention was tested in two cities — Newark and Chicago — and it combined teacher training in effective classroom management with weekly classroom consultation. Consultants coached and mentored the teachers in the new strategies learned in the training workshops, and they provided individualized support to the highest-risk children in each FOL classroom. MDRC evaluated the results of this intervention. The findings for the preschool year indicate that FOL had promising effects on classroom quality, teachers’ productive use of classroom time, and some outcomes for children. Yet these effects were not sustained, particularly for high-risk children, as they transitioned to kindergarten.

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## The Foundations of Learning Model

The FOL intervention addresses children's challenging behavior by training preschool teachers to proactively support children's positive behavior while more effectively limiting and redirecting their aggressive and disruptive behavior.<sup>2</sup> The model was initially developed in the context of an earlier trial led by Dr. Cybele Raver,<sup>3</sup> who is now a member of the FOL research team.

The intervention includes four components delivered across the school year:

- **Teacher training.** Lead and assistant teachers are invited to attend five Saturday training sessions. The workshops are an adapted version of *The Incredible Years* curriculum developed by Dr. Carolyn Webster-Stratton.<sup>4</sup> The workshops provide instruction on how to develop positive relationships with children; present classroom strategies that teachers can use, such as setting clear rules; and provide teachers with techniques to develop children's social skills, anger management, and problem-solving ability.
- **Classroom-level consultation.** To complement the training, teachers are assigned a master's-level Clinical Classroom Consultant (CCC) to work with them in the classroom one day per week throughout the school year. The CCCs model and reinforce the content of the training sessions.
- **Stress management.** In winter, teachers participate in a 90-minute stress management workshop at their program site. CCCs also help support the teachers' use of stress management skills and techniques.
- **Individualized child-centered consultations.** Beginning in the spring, the CCCs provide one-on-one clinical services for a small number of children who have not responded sufficiently to teachers' improved classroom management. By design, the individualized clinical consultation is delivered only *after* children have had ample time to react to the new teaching strategies.

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<sup>2</sup>Barrera et al. (2002); Brotman et al. (2005); Dumas, Prinz, Smith, and Laughlin (1999); Gorman-Smith et al. (2006); Webster-Stratton, Reid, and Hammond (2001).

<sup>3</sup>Raver et al. (2008); Raver et al. (2009a); Raver et al. (2009b).

<sup>4</sup>For more information, see the Web site: <http://www.incredibleyears.com>.

## **The Design of Foundations of Learning and the Implementation Context**

The findings discussed in this report focus on the Newark FOL site, which included 51 preschools serving primarily 4-year-old children. FOL operated in each of the three primary preschool venues in Newark — Head Start centers, community-based child care centers, and public schools — and was conducted in collaboration with the Newark Public Schools, Newark Preschool Council, and Family Connections (a community-based counseling and family services agency). In each preschool, one classroom was selected for participation in the study. Of the 51 preschools, 26 were randomly assigned to receive the FOL intervention (the “program” group), and 25 were assigned to the control group, where they experienced their school year as any other preschool classroom in Newark. This experimental design represents the gold standard of evaluation research. In short, with this design, the study reliably assesses the added value of FOL over and above standard practice in preschool classrooms.

FOL was implemented in the context of preschool classrooms that were subject to the requirements of a series of New Jersey Supreme Court decisions in the *Abbott v. Burke* class action case, which required the state to increase education funding for disadvantaged districts. *Abbott* mandates include smaller class sizes (limited to 15 students), lower teacher-student ratios (two teachers per classroom), higher teacher salaries, and stricter teacher credentialing, among other features. In this context, it is important to note that the “bar” in Newark was set relatively high for improvements in center quality, compared with more typical urban districts.

As described in detail in a 2009 implementation report, the FOL intervention was implemented with fidelity and quality in the FOL preschools.<sup>5</sup> Most teachers received the training in the new strategies, reported that this training was of high quality, and received consultation to support implementation, generally as the model intended — suggesting that the demonstration is a fair test of FOL.

## **Impacts of Foundations of Learning on Classroom Context**

Did the components of the FOL intervention lead to measurable improvements in teachers’ behavior in their classrooms? To address this question, observers were sent to observe classrooms (blind to whether they were in the program group or control group classroom), where they used a standardized observational tool. Findings are summarized in Table ES.1, which compares these observer ratings across the two groups of classrooms. Each measure in the table is reported on a scale from 1 to 7, with 1 and 2 indicating low levels, 3 to 5 indicating moderate levels, and 6 and 7 indicating high levels. Stars (asterisks) indicate the differences that

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<sup>5</sup>Lloyd and Bangser (2009).

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Table ES.1

Program Impacts on Observed Ratings of Teacher Behavior in the Classroom,  
Preschool Year

Variable	Program Group Mean	Control Group Mean	Difference (Impact)	Standard Error	Effect Size
<b><u>Positive classroom management</u></b>					
Composite <sup>a</sup>	5.8	5.2	0.6 **	0.3	0.75
Positive climate	5.6	5.0	0.6	0.4	0.60
Negative climate	1.1	1.8	-0.6 ***	0.2	-0.90
Teacher sensitivity	5.2	4.8	0.4	0.3	0.46
Behavior management	5.4	4.7	0.8 **	0.4	0.72
<b><u>Use of classroom time</u></b>					
Management of classroom time	5.4	4.9	0.5 *	0.3	0.63
Amount of instructional time (minutes)	35.6	25.1	10.6 **	4.4	0.96
<b><u>Quality of language instruction</u></b>					
Composite	4.3	3.8	0.5	0.3	0.56
Regard for student perspectives	5.1	4.9	0.2	0.3	0.28
Use of engaging teaching methods	4.2	3.5	0.6 *	0.3	0.61
Promoting understanding through conversation	3.5	3.0	0.4	0.4	0.44
Encouragement of students' language use	4.3	3.6	0.7	0.5	0.54
Sample size	26	25			

SOURCES: MDRC calculations using classroom observations in September-October 2007 and April-May 2008.

NOTES: Statistical significance levels are indicated as: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

The table presents adjusted means that control for random assignment blocks and baseline (fall) CLASS dimension scores. For each dimension, observers rated classrooms on a scale from 1 to 7, with 1 representing "low" and 7 representing "high."

The effect size equals the impact divided by the standard deviation of the outcome measure for the control group.

<sup>a</sup>"Negative climate" is reverse-coded for the composite score.

are statistically significant and, therefore, are unlikely to be due to chance. The effect size (shown as a percentage of a change in standard deviation) allows a comparison of impacts for measures that are assessed on different scales.

- **The FOL intervention improved teachers' ability to address children's behavior and to provide a positive emotional climate in the classroom.** Program group teachers used more positive affect (positive climate), displayed less sarcasm and anger (negative climate), and showed a greater ability to comfort children (teacher sensitivity) and prevent misbehavior (behavior management) by setting clear expectations and using effective praise

than did their counterparts in the control group. Therefore, the first hurdle for the intervention was cleared — showing benefits in those aspects of classroom management that teachers were trained in during the FOL training sessions.

- **The FOL intervention also improved the management of classroom time, the use of engaging teaching methods, and the amount of instructional time.** In particular, instructional time was significantly higher in the FOL classrooms than in the control classrooms, by an average of 10 minutes out of a 120-minute observation period. This would translate to 50 minutes more instruction a week, or an entire week’s more instruction over a school year. These improvements are consistent with the governing hypothesis behind the demonstration: that addressing teachers’ classroom management skills may reduce nonproductive time in preschool classrooms.
- **While FOL improved the management of classroom time, it did not affect the quality of language instruction that children received.** Although not a primary outcome of the intervention model, the study sought to determine whether FOL enabled teachers to engage in higher-quality language interactions with children during instructional activities or whether, on the other hand, focusing on emotional and behavioral adjustment interfered with instructional support for children (which would result in reductions in the quality of instruction in FOL classrooms). Neither appears to be true, as there are no consistent statistically significant differences between FOL and control classrooms on measures of the quality of language used in the classroom.

## Impacts of Foundations of Learning on Children

A second observation team rated a subset of children on their conflict and positive interactions with teachers and peers as well as on the extent to which the children were engaged in classroom activities, using the same 1-to-7 scale that was used for the classroom observations. In addition, teachers completed surveys on all children to rate their perceptions of children’s problem behavior and positive social behavior.

The findings on both these sets of data are presented in Table ES.2.

- **FOL led to reductions in conflicts with teachers and peers, but the intervention did not otherwise change the quality of teacher-child or peer interactions.** Children in FOL classrooms were observed to have statistically lower levels of conflict, on average, than were children in control classrooms.

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Table ES.2

Program Impacts on Observed and Teacher Ratings of Child Outcomes, Preschool Year

Outcome	Program Group Mean	Control Group Mean	Difference (Impact)	Standard Error	Effect Size
<b><u>Observations</u></b>					
Problem behavior					
Teacher conflict	1.2	1.5	-0.2 ***	0.1	-0.40
Peer conflict	1.4	1.6	-0.2 *	0.1	-0.27
Positive social behavior					
Teacher communication	2.2	2.4	-0.2	0.1	-0.20
Teacher positive engagement	3.2	3.4	-0.2	0.2	-0.27
Peer communication	2.5	2.6	-0.1	0.2	-0.14
Peer sociability	3.4	3.5	-0.1	0.1	-0.11
Peer assertiveness	2.1	2.3	-0.2	0.2	-0.21
Approach to learning					
Task engagement	4.9	4.6	0.2 *	0.1	0.31
Task self-reliance	3.1	3.1	-0.1	0.2	-0.07
Task behavior control	5.4	5.1	0.3 *	0.2	0.34
Overall classroom student engagement	5.7	5.2	0.6 *	0.3	0.60
<b><u>Teacher reports</u></b>					
Problem behavior					
Internalizing problems	2.7	2.3	0.4	0.6	0.11
Externalizing problems	4.1	3.7	0.4	0.7	0.08
Teacher-student conflict	12.4	12.3	0.1	0.9	0.02
Positive social behavior					
Social competence	4.0	4.0	0.0	0.1	0.06
Teacher-student closeness	34.5	35.8	-1.3	0.9	-0.24
Approach to learning					
Work-related skills	4.8	4.8	0.1	0.1	0.08
Preacademic skills					
Language and literacy skills	35.1	32.6	2.5	1.7	0.27
Math knowledge	25.8	25.4	0.4	1.7	0.05
Sample size - observations of students	130	121			
Sample size - teacher reports on students	283	248			
Sample size - classrooms	26	25			

(continued)



### Table ES.2 (continued)

SOURCES: Based on MDRC calculations of classroom observations and a teacher survey.

NOTES: Statistical significance levels are indicated as: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent.

Regression-adjusted means control for random assignment status and blocking, baseline Classroom Assessment Scoring System (CLASS) measures, and baseline child characteristics.

The observed outcomes "Problem behavior," "Positive social behavior," and "Approach to learning" come from the inCLASS observations. "Overall classroom student engagement" comes from the CLASS. For each dimension, observers rated children and classrooms on a scale from 1 to 7, with 1 representing "low" and 7 representing "high."

The effect size equals the impact divided by the standard deviation of the outcome measure for the control group.

Teacher-reported outcomes control for the child's baseline score on a given measure, when available. These include baseline measures for the Cooper-Farran Behavioral Rating Scales, the Behavior Problems Index (BPI), and the Positive Behavior Scale.

These effects were most pronounced for children who entered preschool with the highest levels of behavior problems. However, there were no effects on positive aspects of teacher-child and peer interactions — a disappointing finding, given that an aim of the intervention was not only to reduce conflict but also to improve children's relationships.

- **Children in the program group demonstrated greater levels of engagement in the classroom than did children in the control group.** Children in FOL classrooms were also rated higher on their ability to regulate behavior during tasks than were children in control classrooms. If children are able to spend more time on task, they may be able to take greater advantage of the formal and informal learning opportunities in the preschool classroom.
- **Surprisingly, teachers did not report differences in children's behavior between the program and control groups.** As shown in the bottom panel of Table ES.2, even though the independent research team saw FOL children as having fewer behavior problems and being more engaged, there are no statistically significant differences between the two groups of children in teacher ratings of children's problem behavior, positive social behavior, and approach to learning. Researchers found no differences among those at low and high levels of behavior problems at preschool entry. The findings for the teacher-reported outcomes are somewhat surprising; one hypothesis is that the training that teachers received primed them to see challenging behaviors, even as it increased their capacity to effectively manage these behaviors when they occurred.

## The Year *Following* Foundations of Learning

Limited information is available about the year following the delivery of the FOL intervention in preschool classrooms. The children were dispersed to a large number of schools (about 100) for their kindergarten year, and FOL and control children were together in a large number of the kindergarten classrooms. Conclusions are based solely on kindergarten teacher reports, which presents some advantages and disadvantages. On the one hand, kindergarten teachers were largely blind to children’s FOL program-group status, which makes them less biased reporters. On the other hand, teachers’ reports are somewhat less reliable than information that would be collected from trained observers.

The effects of FOL on kindergarten teachers’ ratings of child outcomes are presented in Table ES.3. Unlike the preceding tables, this one presents only the control group level and the impact of FOL for each of the measures collected. These are shown for the full sample and for two groups of children defined by their level of behavior problems (low or high) when they entered preschool.

- **Based on kindergarten teacher reports, overall FOL had very few sustained effects on children the year after they received the intervention.** Surprisingly, the only significant effects were observed in the negative direction: Teachers reported higher levels of behavior problems among children from the FOL classrooms than among children from the control classrooms. It is possible that sustained effects might require kindergarten teachers who employ similar skills and strategies to redirect behavior.
- **Impacts in kindergarten differed somewhat, depending on children’s initial level of behavior problems.** For children with the lowest levels of behavior problems, FOL had no ongoing effects on problem behavior or positive social behavior. However, significant *positive* effects were found on these children’s learning-related skills (a measure of student engagement) and on their language and literacy skills — showing sustained effects for these lowest-risk children. For children with elevated behavior problem scores in the fall of preschool, the kindergarten follow-up found evidence of *increased* withdrawn and sad behavior. No other statistically significant differences were found among children who received FOL in preschool and those who did not.

Did the intensive investment in preschool teachers’ professional development — substantial training plus one day per week of in-person consulting — result in changes in their *ongoing* practice in the following school year, when they were no longer receiving that support? Findings are presented in Figure ES.1.

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Table ES.3

Program Impacts on Teacher Ratings of Child Outcomes, by Full Sample and Level of Behavior Problems, Kindergarten

Outcome	Full Sample			Child's Level of Behavior Problems						H-Stars
	Control Group Mean	Difference (Impact)	Effect Size	Low			High			
				Control Group Mean	Difference (Impact)	Effect Size	Control Group Mean	Difference (Impact)	Effect Size	
<b><u>Problem behavior</u></b>										
Internalizing problems	2.4	0.8 *	0.24	1.8	0.0	0.00	3.5	1.2 *	0.34	
Externalizing problems	3.8	1.0 *	0.16	3.0	-0.3	-0.05	5.3	1.5	0.22	
Teacher-student conflict	11.5	0.8	0.11	10.5	-0.1	-0.02	13.6	0.2	0.02	
<b><u>Positive social behavior</u></b>										
Social competence	4.0	0.0	0.03	4.1	0.1	0.10	3.7	0.0	0.04	
Teacher-student closeness	33.9	-0.8	-0.14	33.6	0.8	0.13	33.7	-1.2	-0.21	
<b><u>Approach to learning</u></b>										
Work-related skills	4.9	0.0	-0.04	5.0	0.4 *	0.33	4.6	-0.3	-0.22	**
<b><u>Academic skills</u></b>										
Language and literacy skills	33.5	0.3	0.03	33.9	2.5 *	0.26	32.6	-1.7	-0.19	**
Math knowledge	26.5	0.0	0.00	26.9	1.2	0.16	26.1	-1.0	-0.15	
Sample size	230			105			99			

SOURCE: Based on MDRC calculations from responses to teacher survey.

NOTES: Statistical significance levels are indicated as: \*\*\* = 1 percent; \*\* = 5 percent; \* = 10 percent. The final column lists the H-stars, which show the statistical significance of the difference between the subgroup impacts.

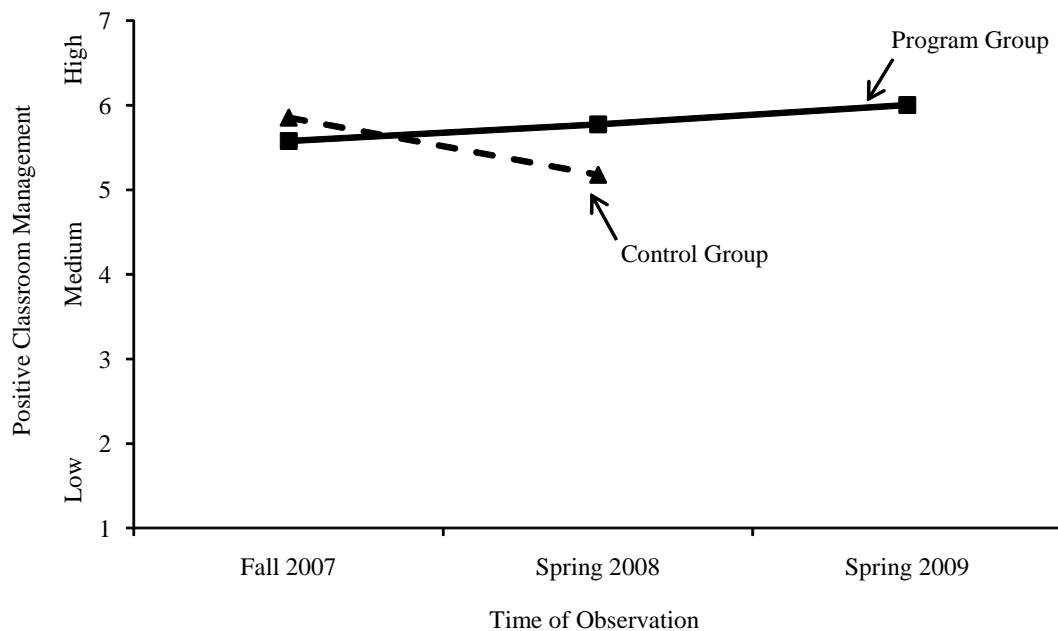
Regression-adjusted means control for random assignment status and blocking, baseline Classroom Assessment Scoring System (CLASS) measures, and baseline child characteristics. Outcome controls for the child's baseline score on a given measure, when available. These include baseline measures for the Cooper-Farran Behavioral Rating Scales, the Behavior Problems Index (BPI), and the Positive Behavior Scale.

The effect size equals the impact divided by the standard deviation of the outcome measure for the control group.

## The Foundations of Learning Demonstration

Figure ES.1

### Observed Ratings of Teachers' Positive Classroom Management During Intervention and Following Year



SOURCES: MDRC calculations using Classroom Assessment Scoring System (CLASS) observations in September-October 2007, April-May 2008, and April-May 2009.

NOTES: Scores represent adjusted means that control for random assignment block. Spring 2008 and spring 2009 control for baseline fall CLASS dimensions as well.

Spring 2008 scores for the program group and the control group are statistically different (p-value = less than 5 percent).

- **When observed in the year following the FOL intervention, teachers who were assigned to the intervention appeared to have continued to engage in the positive practices that they had learned.** When comparing the teachers' scores on positive classroom management from the spring of the intervention year and from the following spring, scores were largely maintained. Concern that teachers might not continue to use the skills and strategies they had learned in the prior year without the direct support of the intervention was unfounded.

## **Conclusion**

The evidence emerging from the Newark site of the FOL demonstration is encouraging on some measures, showing that investments in teachers' professional development can make a difference in children's experience in preschool. In short, the intervention changed not only the primary outcome that was targeted — teachers' positive classroom management — but also the productive use of classroom time. Benefits to children were observed during preschool on some but not all aspects of their behavior in the classroom. Yet those benefits were not sustained as the children moved to their kindergarten classrooms. Understanding how to sustain effects beyond preschool is critical to addressing the long-term needs of low-income children, especially those at highest risk of emotional and behavioral challenges.

If training in classroom management can have benefits for the provision of preschool instruction, the next question is how are preschool teachers using that increased productive time — that is, do teachers use the time to teach the kinds of skills that preschool children need to transition successfully into kindergarten? The fact that these early investments in teachers' professional development are sustained beyond the one year of intensive intervention efforts suggests that pairing this intervention with a cognitively focused curriculum in a second year might be a promising approach for enhancing the school readiness of preschool children.

Additional findings on this intervention are forthcoming, including from the Chicago site of the FOL demonstration. The FOL study will add to the research emerging on other promising social-emotional interventions in preschool classrooms, including the Head Start Classroom-based Approaches and Resources for Emotion and Social skill promotion (CARES) project, sponsored by the Administration for Children and Families in the U.S. Department of Health and Human Services, which is testing several different social-emotional curriculum enhancements across Head Start centers as part of a national demonstration.

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*Promoting Preschool Quality Through Effective Classroom Management: Implementation Lessons from the Foundations of Learning Demonstration.*

2009. Chrishana M. Lloyd and Michael Bangser with Farrah Parkes.

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