

## Improving Caregiver Quality through Observation and Individualized Instructional Feedback

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### Project Description

The purpose of this study is to investigate the effects of providing early care and education (ECE) teachers with written, individualized, instructional feedback on a variety of child, teacher, and provider-level outcomes. This study exploits the random selection process for selecting teachers to receive classroom observations and written feedback as part of the Ohio Department of Education (ODE) Early Language and Literacy Classroom Observation (ELLCO) project to identify these effects using available statewide data. As policy makers and states and local ECE agencies determine how to improve quality and effectively use the available financial resources, it is important to understand the effectiveness of particular quality improvement efforts that can be implemented at scale.

### Research Questions

1. What is the impact of providing written, individualized, instructional feedback to ECE teachers on classroom quality, as measured by early language and literacy instructional practices? And, do impacts vary according to teaching experience or educational attainment?
2. What is the impact of providing written, individualized, instructional feedback to ECE teachers on ECE provider quality ratings?
3. What is the impact of providing written, individualized, instructional feedback to ECE teachers on the early language and literacy skills as well as social-emotional skills of the children they serve?

### Sample

Across eight rounds of classroom observations between 2008 and 2012, 571 stratified samples of ECE teachers across Ohio were randomly selected. Of the 571 randomization lotteries, 413 are valid for analysis because there was at least one treatment and one control teacher for that lottery. Within these

lotteries, 1,568 out of 8,088 teachers were randomly selected to receive treatment (i.e., classroom observation and written, individualized instructional feedback). There are 81,771 children (16,809 and 64,962 associated with treatment or control teachers, respectively) with one or more outcome measures in the first year after treatment. Analytic sample sizes for teachers and children vary by outcome measure.

### Methods

This study employs an experimental design in which each outcome measure will be regressed on an indicator for whether the classroom teacher was randomly assigned to receive feedback; as a result, it estimates the intent-to-treat estimates of the effects of providing the written, individualized instructional feedback. All analyses will include lottery fixed effects and ECE teacher demographic covariates (i.e., an indicator of master's degree, gender, race/ethnicity indicators, age, years of teaching experience, and an indicator of being a new teacher). Standard errors will be clustered to account for the nesting of children within teachers.

### Measures

- *Classroom Quality.* Scores from the ELLCO Toolkit, Research Edition (2002) assigned during a post-treatment round serve as the measure of classroom quality – specifically the quality of early language and literacy instructional practices. The toolkit comprises three sections: the Literacy Environment Checklist, the Classroom Observation and Teacher Interview, and the Literacy Activities Rating Scale. Standardized total and subscale sum scores from the Classroom Observation portion of the ELLCO Toolkit are used for the current study.
- *Provider Quality.* Ohio's former Step Up to Quality (SUTQ) ratings from the system

implemented between 2006 and 2013 serves as the measure of provider quality. Like other Quality Rating and Improvement Systems (QRISs), Ohio's SUTQ ratings were based on multiple indicators of quality including measures of classroom quality and measures of structural quality. Minimum thresholds and requirements for the indicators were specified at each level, and at each level, all indicators were equally weighted and required (Kirby, Boller, & Tout, 2010).

- *Children's Outcomes*. Get it! Got it! Go!, also known as myIGDIs (Individual Growth and Development Indicators), is a validated direct, standardized, formative preschool assessment (McConnell & McEvoy, 2013). The assessment includes three timed tasks: picture naming, rhyming, and alliteration.
- *The Kindergarten Readiness Assessment-Literacy (KRA-L)* is a direct, diagnostic, standardized kindergarten entry assessment designed by ODE. The KRA-L includes six activities that measure children's early literacy skills, including oral language, phonological awareness, and awareness of print. It is administered by the classroom staff to all children enrolled in Ohio public schools who are entering kindergarten for the first time. The assessment is administered no sooner than four weeks before the start of the school year and no later than October 1 of the given year.
- *The Ages and Stages Questionnaire: Social Emotional (ASQ:SE)* is a validated, indirect, developmental screening assessment that provides information about the social and emotional behavior of children ranging from 6 to 60 months (Squires & Twombly, 2002). The ASQ:SE examines the following seven behaviors: self-regulation, compliance, communication, adaptive functioning, autonomy, affect, and interaction with people. In Ohio, the ASQ:SE is typically completed by the child's preschool teacher in consultation with the child's parent at least two times. Items vary across age-specific forms.

## Findings

There were no overall effects of feedback on measures of classroom quality; however, among new teachers (teachers in their first 3 years of teaching), those assigned to treatment demonstrated higher quality

instructional practices. In addition, among children taught by new teachers, those children whose teachers were assigned to treatment scored approximately 0.06 standardized units higher on the *Get it! Got it! Go!* rhyming task than children of control-group teachers. There also were effects on children's vocabulary skills (i.e., *Get it! Got it! Go!* picture naming task) and early language and literacy school readiness (i.e., KRA-L) that approached statistical significance for new teachers only.

Early childhood providers (or agencies) with at least one teacher randomly assigned to treatment in a given round received a Step Up To Quality (SUTQ) rating 0.24 points higher in the year after treatment and 0.32 points higher two years after treatment than providers that did not have any teachers assigned to treatment in that round. There was no difference between treated and untreated providers in the year before treatment, demonstrating baseline equivalence of these groups. In addition, having a greater proportion of teachers assigned to treatment within a provider was associated with higher SUTQ ratings.

## Implications for Policy/Practice

As ECE policy makers and program staff determine how to improve ECE classroom and program quality and effectively use the available financial resources, understanding the effectiveness of particular quality improvement efforts is imperative. Evidence of the effectiveness of lower cost, light touch strategies is especially relevant for quality improvement efforts given financial constraints to implementation of statewide strategies. These findings offer one solution to improving quality that can be implemented at scale given its intensity level and the remote-based delivery mechanism of feedback.

## For More Information

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