

## Variations in Implementation of Quality Interventions (VIQI): Examining the Quality-Child Outcomes Relationship in Child Care and Early Education

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The Variations in Implementation of Quality Interventions (VIQI): Examining the Quality-Child Outcomes Relationship in Child Care and Early Education project is a large-scale, rigorous study with several important aims and implications for current child care and early education (CCEE) policy and practices, including:

- Determining the effectiveness of interventions for strengthening classroom quality and improving a range of children's learning and developmental outcomes;
- Identifying dimensions of quality within CCEE settings that are key levers for promoting children's learning and development;
- Identifying levels in dimensions of quality that are necessary to support children's developmental gains;
- Identifying drivers that facilitate or inhibit successful implementation of interventions aimed at strengthening quality; and,
- Understanding how these relations vary across different CCEE settings, staff, and children.

### Background and Rationale

Prompted by converging evidence about the importance of early childhood for creating a foundation for lifelong success and concern that children from low-income and racially and ethnically diverse families tend to face greater risk for poorer outcomes than their higher-income peers, public support and government investments in CCEE are at an all-time high. The CCEE field agrees that classroom quality matters for promoting child outcomes. Yet, there is considerable variation in the overall quality of CCEE services, with instructional quality – a key driver of children's gains – often being low across CCEE programs nationally despite a focus on quality improvement at national, state and local levels. Indeed, there are still many open questions about how best to design and target investments to ensure that children, particularly low-income children, receive and benefit from high-quality, CCEE programming on a large scale.

There is a growing, but imperfect, knowledge base about which dimensions of quality are most important to strengthen, and what levels of quality need to be achieved to consistently promote child outcomes across CCEE settings. The CCEE literature has identified several basic dimensions of classroom quality – such as structural, process and instructional quality – that are hypothesized to promote child outcomes. Nonexperimental evidence portrays an intriguing pattern of correlational findings suggesting that quality may need to reach certain levels before effects on child outcomes become evident and that different dimensions of quality may interact with each other in synergistic ways to affect child outcomes. But, existing evidence has not pinpointed the exact levels that are consistently linked with child outcomes. Further, there is a relatively little causal evidence showing that efforts to strengthen CCEE quality will yield improvements in child outcomes. Without such rigorous evidence, it is difficult to draw policy and practice implications. What the field needs is a stronger,

causal evidence base that provides a better understanding of the quality-child outcome relationship, the dimensions of quality that are most related to child outcomes, and the program and classroom factors that aid delivery of quality teaching and caregiving in CCEE settings.

### **Guiding Research Questions**

In line with this literature, VIQI aims to tackle these issues by unpacking the “black box” of quality and its drivers in CCEE settings by addressing the following research questions:

- Do *different dimensions* of quality yield differential effects on child outcomes?
- Do *critical levels* in quality need to be met to promote gains in child outcomes?
- Do the effects of quality – different dimensions or levels – on child outcomes differ, depending on child, staff and center characteristics?
- Do initial levels of readiness/quality in centers require varying levels of support to benefit from quality improvement efforts?

### **Proposed Approach and Timeline**

To address these questions, the VIQI team will test how different levels and features of classroom quality relate with children’s developmental outcomes and will look at the relationship of initial classroom quality to changes in observed quality and children’s outcomes through a rigorous experimental design. The VIQI project will also include an in-depth implementation study to understand the conditions necessary to plan, install, and implement an evidence-based intervention that will produce changes in the content of instruction; quality of teacher practice, instruction and interactions with children; and child outcomes. In sum, the VIQI project will be poised to provide new and rigorous evidence for the CCEE field on both the determinants and the benefits of high-quality programming across various settings.

VIQI is a 5-year project (2016-2021). It is currently in the design phase where decisions regarding the age of children, CCEE setting types, intervention(s) to be tested, and other aspects of the design will be finalized. Classrooms will likely include Head Start and child care programs serving children ages two through four, not yet in kindergarten. The design phase will be followed by a small, year-long pilot study to inform implementation feasibility and refine the study design before the year-long, full-scale study. The projected sample for the full-scale study is 150 programs and 2,000 children across multiple localities. Multiple measures of classroom quality and child outcomes will be collected.

### **Additional Information**

The VIQI project is sponsored by the Office of Planning, Research and Evaluation (OPRE) in the Administration for Children and Families, U.S. Department of Health and Human Services. VIQI is being conducted by MDRC and its partners, Abt Associates/Abt SRBI, Frank Porter Graham Child Development Institute, and MEF Associates. For more information, please contact the principal investigator, JoAnn Hsueh, at [joann.hsueh@mdrc.org](mailto:joann.hsueh@mdrc.org) or the program officer, Ivelisse Martinez-Beck, at [ivelisse.martinezbeck@acf.hhs.gov](mailto:ivelisse.martinezbeck@acf.hhs.gov).