

Boston Quality Inventory 2013: Community Early Care and Education Programs

Executive Summary



Report Prepared for Boston EQUIP
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Preface

The Boston Quality Inventory 2013 was conducted by a team of researchers, led by Dr. Wendy Wagner Robeson, of the Work, Families and Children Research Group at the Wellesley Centers for Women. We wish to thank the program directors, providers, teachers and staff who welcomed us into their programs and classrooms, and the many families who participated in this study. We also wish to thank our research staff and colleagues who brought their skills and experience in early education and care programs to the Boston Quality Inventory 2013. The research team worked in collaboration with Boston EQUIP in the conduct of this study.¹ The study was funded by the Barr Foundation and Thrive in 5. However, the findings of this report and the views and opinions expressed herein do not necessarily reflect those of Associated Early Care and Education, Boston EQUIP, the Barr Foundation or Thrive in 5. Any errors are the sole responsibility of the authors.

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¹ For more information about The Boston Early Education Quality Improvement Project (Boston EQUIP), a project of Associated Early Care and Education, please visit their website: <http://www.bostonequip.org/>. For more information about Thrive in 5, please visit their website: <http://thrivein5boston.org/>

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Foreword

Dear friends and colleagues,

Boston Equip (Early Education Quality Improvement Project), a project of Associated Early Care and Education, was established to systematically evaluate, set goals for, and improve upon the quality of early care and education programs in Boston, working in collaboration with members of the Boston early childhood community. Over the years, Boston EQUIP has surveyed the field of early care and education providers and programs to document the capacity and quality of Boston's programs. Since 1994, this work has helped to support Boston's early care and education community with its planning and quality improvements, as well as to advocate for policy improvements and increased resources. Our Community Profiles provide a broad snapshot of almost every Boston community-based early care and education program's quality indicators every 2-3 years, while the *Boston Quality Inventory* (BQI) provides a picture of the quality of Boston's community and family-based early care and education programs, with a random and representative sample of classrooms across Boston. Since 2006, Boston EQUIP has partnered with a team of researchers, the Work, Families & Children Research Group at WCW, to do this critical work.

Together, these data have driven the conversation and planning around quality improvements in early care and education in Boston, supporting the implementation of the city-wide school readiness initiative, Thrive in 5 Ready Educators' strategies, advocacy and policymaking as well as resource development efforts. BQI findings have been featured in the Boston Globe and driven multiple community discussions and forums regarding the state of Early Care and Education in Boston.

Research evidence clearly establishes the importance of high quality early care and education programs to young children's brain development and school achievement. As the Nobel Prize winner James Heckman says, investment in early learning programs is the single best investment we can make in our future. This raises a compelling **call to action in Boston**. The **2013 Boston Quality Inventory (BQI)** is very clear: **substantial and targeted investments in high-quality early educators' higher education and high-quality professional development are urgently needed to close achievement gaps and to support early literacy and reading proficiency.**

The release of the 2013 BQI, along with the Ready Educators ad hoc committee work and the leadership and commitment from the city's education funders, offers a unique opportunity to **rise to the call to action and to meet our goals related to literacy and school readiness outcomes**. Policy makers and funders are challenged to make new investments in the quality of young children's early care and education programming so they can enter kindergarten well prepared to succeed in school and beyond.

Wayne Ysaguirre, President & CEO
Associated Early Care and Education
January 20, 2014



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The research evidence is clear – the early years are essential to children’s school readiness. The existing research from multiple disciplines clearly indicates that early childhood is a critical time for children to develop the foundations that they need, so that all children enter formal schooling ready to learn.¹ While families play the most important role, early care and education programs have a significant effect on children’s growth and development. High quality early childhood programs are related to children’s cognitive and school outcomes, especially for children from low-income families.^{2,3,4} High-quality early childhood education has been found to produce lasting gains on achievement tests, and reduced rates of grade retention or placement in special education services.⁵

The early years are also crucial years for the development of social skills – the ability to make friends, to get along well with others, to cooperate in group activities, to understand others’ perspectives – skills that are necessary to the development of self-esteem and social relationships, and to later school success. Research has found that higher quality early care and education is associated with young children’s social and emotional development.⁶

The No Child Left Behind Act (NCLB) brought national attention to the achievement gap that exists for children from economically disadvantaged families, different race and ethnic groups and linguistic minority families. The National Governors Association Program for Best Practices recommended that education policies address early childhood education as one way to close the achievement gap.⁷

Early care and education programs also provide important support to working families. Formal early childhood programs both keep children safe while parents are at work and provide the developmental supports that young children need to learn and grow. High quality early care and education programs have the potential to facilitate parents’ employment and prepare all children for formal schooling, by supporting their cognitive and social development.

Massachusetts has long been recognized as a leader in policy and practice to promote quality early care and education programs for working families. In 2008, the Massachusetts Department of Early Education and Care (EEC) began the process of developing its own Quality Rating and Improvement System (QRIS), which was described, in April 2013, as “a set of standards and criteria that Massachusetts stakeholders judged most pertinent to their interests. The QRIS system is relatively new and is still establishing the reliability of its rating processes and the utility of its standards.”⁸ The QRIS does not replace accreditation, which EEC describes as “the ‘gold standard’ for quality in early care and education,” but provides a state-specific set of standards, with state-funding for technical assistance and professional development.⁹

Boston’s Early Care and Education System. Boston currently has a mixed delivery system of early education and care, including center-based programs and family child care homes in the community, as well as Boston Public Schools (BPS) Early Childhood programs. While BPS offers prekindergarten (K1) classrooms, early care and education centers still provide services for three-quarters of preschool-age children in Boston who are in prekindergarten or center-based early care and education.² Given the importance of preschool

² As of 2011, Boston Public Schools had prekindergarten classrooms available for 2,300 children (<http://www.bostonpublicschools.org/early-childhood-education>). As of September 2012, EEC-licensed

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preparation to children's school readiness, the quality of community center-based programs is a key component of Boston's early care and education.

Nationally, more than half of all infants are in homes where either both parents work, or there is only one parent, and that parent is employed.¹⁰ Among children of working families, 16% of infants, and 26% of toddlers, are in center-based care; 10% of infants and 7% of toddlers are in family child care homes.¹¹ Infants and toddlers are in non-parental care for an average of 25 hours per week, with 39% of infants/toddlers in care full-time.¹² For infants and toddlers of working parents, high quality early care and education programs, in centers and family child care homes, keep children safe while parents are at work and provide the developmental supports that young children need to learn and grow.

Launched in 2008 as a public-private partnership led by the City of Boston and United Way, *Thrive in 5* is the city's early childhood initiative, responsible for bringing partners together across sectors and neighborhoods towards the goal of universal school readiness. Thrive in 5's School Readiness Roadmap outlines several strategies to focus on the important issues of quality and access, including universal accreditation for all licensed programs/providers, professional development for early educators, and increased family engagement in programs. In 2012, given the State's focus on increasing quality in early education through the Quality Rating and Improvement System (QRIS), Thrive in 5 also shifted to a model of quality improvement that supports programs and providers moving up and into the QRIS, using data about the developmental needs of children and the specific strengths and areas for development of programs to provide the technical assistance focused on improving quality and child-level outcomes.

The Boston Quality Inventory 2013. The Boston Quality Inventory (BQI) compliments these city-wide and state-wide initiatives, providing a data-driven picture of the current quality of early care and education programs in Boston. This report is the third in a series of Boston Quality Inventories; previous reports are available from the BQI 2007 and BQI 2010. Each of the inventories has provided a picture of the quality of Boston's center-based programs and family child care homes at one point in time. Collectively, they provide a picture of areas of progress, as well as areas of continuing or new concern. In the BQI 2013 results, we include comparisons to the previous inventories. The BQI 2013 findings in this report will inform the work of Thrive in 5 and others as they strive to ensure that all Boston children arrive at school ready to succeed.

Conducting the BQI 2013. The Boston Quality Inventory 2013 (BQI 2013) provides an assessment of Boston's early education and care programs, with data collected from random samples of licensed programs (45 center-based programs serving infants and toddlers, 45 center-based programs serving preschoolers, and 45 family child care homes). The BQI 2013 included 45 preschool classrooms in centers with an average preschool capacity of 51 children, ranging from a capacity of 16 preschoolers to 269 preschoolers. The capacity of centers in the BQI 2013 is comparable to the capacity of all centers in Boston that serve preschoolers. Among the 45 preschool classrooms we observed, the average group size on the day we visited was 14.0 children, ranging from 6 children present, to 22 children present. The average ratio of children to educators was 5.84 children per educator, ranging from 1.94 children per educator to

center-based programs had the capacity to serve 7,659 children (EEC lists of licensed programs), or 77% of the total capacity for preschool-age children in Boston.

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11 children per educator during the observation.

The BQI 2013 included 45 infant or toddler classrooms in centers with an average combined infant and toddler capacity of 30 children, ranging from a capacity of 4 to 124 children. The capacity of centers serving infants and toddlers in the BQI 2013 is comparable to the capacity of all centers in Boston that serve infants and toddlers. Among the 45 infant and toddler classrooms we observed, the average group size on the day we visited was 6.7 children, ranging from 3 children present, to 10 children present. The average ratio of children to educators was 2.92 children per educator, ranging from 1.5 children per educator to 4.5 children per educator during the observation.

The BQI 2013 included a random sample of 45 family child care providers. Providers have been caring for children in their home child care business from one to 38 years, with an average of 12.7 years. Providers offered child care year-round, for an average of 50.6 weeks, and a minimum of 44 weeks a year. Almost one-quarter (24%) of providers were licensed for Regular Family Child Care (up to 6 children); 18% were licensed as Family Child Care Plus (6 children under age 7, and 2 children over age 7), and 58% were licensed as Large Family Child Care (up to 10 children, with an EEC-approved Assistant). Three-quarters of all participating providers reported that they belonged to a family child care system.

The Boston Quality Inventory 2013 used a set of program assessment tools developed specifically for use in early care and education settings – the Early Childhood Environment Rating Scale-Revised (ECERS-R) for center-based preschool classrooms; the Infant-Toddler Environment Rating Scale-Revised (ITERS-R),¹³ developed specifically for use in infant and toddler classrooms; and the Family Child Care Environment Rating Scale–Revised Edition (FCCERS–R), developed for family child care homes. The ECERS-R, ITERS-R and FCCERS-R provide benchmarks for different levels of quality, labeled Inadequate, Adequate, Good and Excellent. These measures are also incorporated into Massachusetts QRIS measures. However, because the QRIS is still establishing reliability and validity for its rating processes, the current BQI does not specifically align findings with the QRIS. Instead, the BQI 2013 reports detailed results using many of the same measures used in the QRIS. Programs that meet or exceed the Good benchmark are generally consistent with the National Association for the Education of Young Children (NAEYC) *Early Childhood Program Standards* and the National Association for Family Child Care (NAFCC) *Quality Standards*. Assessments of preschool classrooms were supplemented with the *Classroom Assessment Scoring System (CLASS)* and the *Early Language and Literacy Classroom Observation (ELLCO)*. Assessments of infant/toddler classrooms and family child care homes were supplemented with the *Global Caregiving Rating Scale*.¹⁴ All measures are described in detail in the Appendix. In addition, the Boston Quality Inventory included surveys completed by family child care providers, and surveys completed by families with children in the selected programs.



Findings and Recommendations

The Boston Quality Inventory 2013 is the third in a series of Boston Quality Inventories; previous inventories were conducted in 2007 and 2010. We place the findings for 2013 in the context of these earlier assessments. Collectively, they provide a picture of areas of progress, as well as areas of continuing or new concern.

Findings

- **Boston’s community preschool classrooms have continued to maintain the improvements in quality seen in BQI 2010 over BQI 2007 on general curriculum practices and emotional and social support.** More than two-thirds of preschool classrooms met the Good benchmark on the ECERS Curriculum Index (69%) and 60% met the Good benchmark on the CLASS Emotional & Social Support Index.
- **The proportion of Boston’s community preschool classrooms with a teacher with a BA or more rose significantly from only 37% in 2010 to 62% of classrooms in 2013.** Among preschool classrooms with a teacher with a BA or more, 29% of classrooms met the Good benchmark on the CLASS Instructional Supports, a rate of achievement comparable to that of BPS K1 classrooms in the most recent assessment (33% of BPS K1 classrooms met the Good benchmark on the CLASS Instructional Supports in 2010¹⁵).
- **Boston’s community preschool classrooms showed significant improvements over the BQI 2007 on literacy,** rising from 11% of classrooms that met the Good benchmark on the SELA Literacy Index in 2007 to 29% of classrooms that met the Good benchmark on the ELLCO Literacy Index in 2013. However, there is still considerable room for improvement.
- Boston’s community early care and education programs provide important care for infants and toddlers while their parents are at work or in school. **Boston’s community infant and toddler classrooms improved significantly over BQI 2010 in the proportion of infant and toddler classrooms that meet the Good benchmark on the Caregiving Index,** a measure of the teacher-child relationship, increasing to 87% of classrooms, compared to only 44% in 2010.
- Nationally, infant and toddler classrooms are less likely to meet the Good benchmarks than are preschool classrooms;¹⁶ the same is true in Boston, where **only 38% of infant and toddler classrooms met the Good benchmark on the ITERS Curriculum Index,** and health practices, particularly handwashing to reduce the spread of germs, while showing significant improvement over 2010, are still an area of concern.
- Boston’s family child care homes provide early care and education for smaller groups of children and offer working families an important option for their children. **Boston’s family child care homes showed significant improvement in curriculum quality; 49% of family child care homes met the Good benchmark on the FCCERS Curriculum Index, compared to 16% in the BQI 2010.**
- **Caregiving continues to be of high quality in family child care homes, with 87% of**



family child care homes meeting the Good benchmark on the Caregiving Index. While the BQI 2013 found improvements in some health practices, the FCCERS Health and Safety Index remains low, with only 13% of family child care homes meeting the Adequate benchmark. The national picture for family child care homes is even poorer, with studies reporting that fewer than 10% of family child care homes meet the Good benchmarks on some measures of quality.¹⁷

- **Family surveys with 394 families with children enrolled in these programs echoed these findings.** More than three-quarters of families rated their child's educator as always warm and affectionate, and happy to see their child, and rated the program as interesting, with many materials and activities for their child, and as a place where their child feels safe and secure. Families were less likely to rate infant and toddler classrooms as always having a lot of creative activities going on (compared to preschool classrooms and family child care homes), and more likely to report that family child care homes had too many children or needed more help with the children (compared to families of children in centers).

Recommendations

Based on the results of the BQI 2013, we make the following recommendations:

1. Increase the proportion of early childhood educators with BAs. The professional development of educators is key to the quality of early care and education programs.¹⁸ In the BQI 2013, we found that having an educator with a bachelors' degree or more was significantly associated with the quality of BQI 2013 infant, toddler and preschool classrooms. Among family child care homes, providers with a CDA (Child Development Associate certificate) or some college education provided higher quality early care and education than did providers with only a high school diploma or equivalent.

- NAEYC Standards require that, by 2020, at least 75% of classrooms in an early childhood program have a teacher with a minimum of a baccalaureate degree in early childhood education or a related field (this requirement is being phased in between 2006 and 2020).³
- In the BQI 2013, almost two-thirds (62%) of the primary educators in observed center preschool classrooms had a bachelor's degree or more, a significant increase over BQI 2010. However, only 40% of the primary educators in observed center infant and toddler classrooms had a bachelor's degree or more, indicating a need for greater support for professional development for infant and toddler educators.
- However, we found a significant decline in the proportion of family child care providers with some college or CDA, from 78% in BQI 2007 and 71% in BQI 2010, to only 54% in BQI 2013. Given the link between some college or CDA and the quality of family child care

³ NAEYC requires that 75% of teachers in larger programs – those with 4 or more classrooms - have a BA or higher by 2020; NAEYC defines a teacher as the adult with the primary responsibility for the classroom. Therefore, in the Massachusetts context, the NAEYC requirement for teacher education can best be understood as 75% of classrooms in larger programs must have at least one primary teacher with a BA or higher by 2020.



homes, this decline is cause for concern.

2. Provide additional training and coaching for Boston early childhood educators. The BQI 2013 found specific areas where educators would benefit from additional training or coaching. Some of this training may be available through formal education, but even when educators have a BA degree, additional training has been found to be associated with higher quality.¹⁹

Specific areas of needed training or coaching include:

Preschool Classrooms

- Strategies to promote children’s concept development and reasoning skills through effective instructional formats, including a variety of modalities and materials.
- Strategies to facilitate language and literacy development in the classroom, including the integration of writing into daily classroom experiences, individualized instruction in writing, and the development of phonological awareness

Infant and Toddler Classrooms

- Strategies to promote language development in infants and toddlers, through responses to children’s attempts to communicate, talking to children frequently throughout the day, and reading books to interested children.
- The provision of materials and activities that are age-appropriate for infants and toddlers, particularly fine motor materials and activities, musical materials and activities, nature and science materials and activities, and, for toddlers, blocks.

Family Child Care Homes

- The provision of a variety of materials and activities, particularly for active physical play both indoors and outdoors, sand and water play, and art materials and activities.
- Age-appropriate use of TV and other media, including monitoring the content of media, providing alternative activities when the TV is on, and setting limits on the amount of media exposure.

3. Improve health and safety practices in centers and family child care homes. Basic standards of health and safety are important to children’s learning environments. Because young children are still developing their own health and safety behaviors, early childhood classrooms face additional requirements when protecting the health and safety of young children. While educators in centers and family child care homes followed many of the recommended health and safety practices at meal times, nap/rest times and throughout the day, there were problems in key areas.

Hand washing. The NAEYC and NAFCC standards require routine cleaning and sanitizing of tables and food preparation areas, clean bedding for each child for naps, and hand-washing by children and adults after toileting, before meals or snacks, and after eating finger foods. Hand washing at meal time was inconsistent, with many adults failing to wash their hands while preparing meals or bottles and inconsistently ensuring that children washed their hands at meal times. In infant and toddler classrooms, and in family child care homes, hand washing after diaper changing was done either inconsistently or at inappropriate times to reduce the spread of contamination. These problems can be addressed through training and coaching.

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Safety hazards. One-third of family child care homes had four or more indoor safety hazards. The most common indoor hazards were infants sleeping on adult beds, cleaning supplies within reach, tripping hazards or unsafe stairs, and choking hazards from small toys or toys hung over cribs within reach of young children. All of these problems can be addressed through training and coaching.

Outdoor play areas. NAEYC Standards require specific safety practices outdoors, including fencing or natural barriers for outdoor space to prevent access to streets and to avoid other dangers. One-in-five preschool classrooms, more than half of infant and toddler classrooms, and most family child care homes, lacked easy access to safe, age-appropriate outdoor space and equipment that was used daily. Many of these programs did not have their own outdoor space and relied instead on public playgrounds, which often lacked adequate fencing or well-maintained equipment, or required young children to walk along busy city streets to reach them. Improving public playgrounds, and providing on-site outdoor space for programs not located near improved playgrounds, would improve the health and safety of these programs.

4. Increase accreditation of programs by professional associations. Accreditation is an important component of quality improvement. The process of preparing for accreditation supports increased knowledge of child development and of appropriate educational strategies with young children; accreditation is also associated with children's greater school readiness.²⁰

About half (52%) of Boston's early care and education centers are accredited by NAEYC, the National Association for the Education of Young Children; in the BQI 2013, about half (53.3%) of centers in the preschool random sample were accredited. Accreditation rates for family child care providers in the BQI 2013 are low; 15% were currently accredited by NAFCC, the National Association for Family Child Care.

In the BQI 2013, centers that were accredited had significantly higher scores on the Literacy Index than did centers that were not accredited, although there were no differences on the other quality measures. As in BQI 2010, we found that programs that were not accredited were as likely as accredited programs to have teachers with BAs; given the importance of teachers' education to the quality of the program, it is not surprising that NAEYC accreditation did not add to the quality of the programs on most indices. However, the research is clear that NAEYC accreditation is important because it supports quality improvement efforts within programs, and is associated with school readiness; therefore, we argue that it should continue to be a part of a comprehensive strategy to improve program quality for all children.

Conclusion

Boston's community early care and education programs provide important services to children and families. Massachusetts' longstanding commitment to young children's care and education has meant standards for group sizes and ratios of children to educators that support children's development and school readiness. The recent investment in raising the proportion of educators with higher education has contributed to improved quality in Boston. Continued investment in higher education, for educators in both centers and family child care homes, is necessary to meet children's needs, as well as working families' needs. In addition, Boston community programs need resources for training and coaching of educators, as well as improvements in facilities.



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