

Defining High-Quality Early Education: Teacher Education and Training

This policy brief examines the strong positive link between teachers’ education, training and compensation levels and high-quality early education. Research has shown that high-quality early education improves children’s health and well-being and raises academic achievement, leading to gains in language ability and math skills.¹ However, without a sustained commitment to high standards, meaningful learning activities and a well trained and compensated workforce these benefits will not be realized. Therefore, the Early Education for All (EEA) Campaign, a coalition of leaders from business, early childhood, labor, religion, health care, education and philanthropy, supports five high-quality criteria for early education programs:

1. A bachelor’s degree and specialized training in early education for at least one teacher per classroom or family child care setting;
2. A bachelor’s degree and specialized training in early education for at least one leader per program;
3. Adherence to the Massachusetts Department of Education’s *Early Childhood Program Standards for Three- and Four-Year-Olds*, and the *Guidelines for Preschool Learning Experiences*;
4. Accreditation by the National Association for the Education of Young Children (NAEYC) or an equivalent; and
5. The use of a developmentally appropriate assessment tool to measure children’s progress over time.

The Importance of Teacher Education

In Massachusetts, as in most states, there is a need to invest in teacher quality in early education settings. It is estimated that only 30% of center-based teachers and 18% of family child care providers in the Commonwealth hold a bachelor’s degree (BA) or higher.² A large body of research indicates that teacher education and specialized training in early childhood education has a significant effect on children’s early learning and healthy development. For example, an analysis of 32 studies of pre-k programs in classroom-based settings found a significant relationship between teachers who hold a BA and improved student learning.³ Similarly, a study focusing exclusively on family child care in Massachusetts concluded that teachers’ prior years of education were strongly associated with program quality.⁴

Table 1: Quality Components Associated with a BA and Specialized Training in ECE⁵

Source	Description	Findings – Impact of a BA
Whitebook (2003)	<i>Analysis of “Cost, Quality and Child Outcomes” studies examining BA holders</i>	<ul style="list-style-type: none"> • Greater teacher sensitivity • Higher-quality learning environments
Howes, et al. (2003)	<i>Examined impact of a BA, or mentoring and community engagement, on quality</i>	<ul style="list-style-type: none"> • More responsive teacher involvement • Greater engagement in child language development
Early, et al. (2006)	<i>Compared BA holders to teachers with an AA and teachers with no post-secondary education</i>	<ul style="list-style-type: none"> • Greater gains in children’s math scores during the pre-k year
Pianta, et al. (2005)	<i>Examined impact of BA and specialized training in early childhood education</i>	<ul style="list-style-type: none"> • Greater child access to learning materials • More positive classroom emotional climate
Kelley & Camilli (2006)	<i>Meta-analysis of studies comparing teachers with BAs to teachers with AAs</i>	<ul style="list-style-type: none"> • More positive teacher-child interactions • More effective instructional activities
Whitebook (2003)	<i>Compared teachers with BAs or higher in Head Start centers to those with less formal education</i>	<ul style="list-style-type: none"> • More knowledge about early childhood education • Greater vocabulary and knowledge of story and print concepts among children
Clarke-Stewart, et al. (2002)	<i>Examined impact of education level and specialized training in family child care settings</i>	<ul style="list-style-type: none"> • Greater child cognition and language development • Richer home learning environment • Warmer and more sensitive caregiving
Marshall, et al. (2003)	<i>Examined the impact of education level in family child care settings in Massachusetts</i>	<ul style="list-style-type: none"> • More learning activities in the home setting • Greater use of language with children • Warmer interactions, more sensitive to child needs

Teacher Quality Standards

Policymakers and accrediting organizations have established clear standards for early educators. The National Association for the Education of Young Children (NAEYC) recognizes teachers' formal education, work experience and relevant training and credentials as essential components of a career lattice for determining teacher quality. Programs accredited by NAEYC will be required to fulfill specific BA requirements by 2020. Similarly, the federal law reauthorizing Head Start will require 50% of teachers and all education coordinators in Head Start centers to hold a BA plus specialized training by 2013. In Massachusetts, Early Childhood Program Standards require newly hired preschool teachers to hold a BA that includes 18 credits in early childhood education and a practicum in early childhood education by 2017.

Support for Early Educators in Massachusetts

Establishing benchmarks for teacher quality that include a BA and specialized training in early childhood education not only supports program quality, but also benefits early educators by professionalizing the field and potentially increasing compensation and retention rates.^{6,7} Achieving quality standards requires substantial support from state and local policymakers and institutes of higher education. Early educators working full- or part-time face difficulties returning to school including high-tuition costs, course prerequisites, daytime scheduling and language barriers. The Department of Early Education and Care (EEC) administers a number of workforce development programs to support early educators.

- **The Early Childhood Educators Scholarship program** provides financial assistance to early childhood educators working with children from birth through school-age after one year of paid employment. The program has received \$15.2 million cumulatively since its creation in FY06. More than 3,300 scholarships have been awarded to early educators pursuing associate and bachelor's degrees.
- **Building Careers** funds college courses and academic and career advising in early education and care. The program is designed to help non-traditional students succeed academically and professionally by using a cohort model and scheduling courses at times that are convenient for working adults. More than 700 early educators are enrolled in Building Careers cohorts at 21 Massachusetts public and private colleges and universities.
- **The Universal Pre-Kindergarten (UPK) grant program** provides funding to early education programs serving preschool-age children (two years and nine months to school entry) to achieve and maintain high-quality standards. Approximately half of all grant funds (48% in 2008) are spent on staff compensation and professional development activities. This makes UPK unique as a key program-level resource for workforce development; program directors are able to assess the needs of their staff and use UPK funds to address those needs. Overall, \$30.67 million has been allocated for UPK since its creation, resulting in 293 UPK Classroom Quality grants serving 6,600 children in nearly 100 cities and towns across the commonwealth.
- EEC in collaboration with child care resources and referral agencies (CCR&Rs), community partnerships for children (CPCs) and other organizations administers **professional development programs** to help early educators working with infants, toddlers, preschoolers and school-age children pursue higher levels of training, education and credentialing. In addition, EEC has endeavored to build infrastructure necessary for sustaining these activities, including a web-based professional development calendar.

**Cumulative funding levels account for FY06 through FY10 state budget allocations; program data reflects FY09 grant reporting. The Early Childhood Educators Scholarship program is jointly administered by EEC and the Department of Higher Education.*

¹ Barnett, W. S. (2006). *NIEER Working Paper – A Review of the Reason Foundation's Report of Preschool and Kindergarten*. Retrieved November 5, 2008, from <http://nieer.org/docs/?DocID=150>; Witte, J. F. (2007). A proposal for state, income-target, preschool vouchers. *The Peabody Journal of Education*, 82(4): 617-644.

² Marshall, N. L., Dennehy, J., Johnson-Staub, C., & Wagner Robeson, W. (2005). *Massachusetts Capacity Study: Characteristics of the Current Early Education and Care Workforce Serving 3-5 Year-olds*. Center for Research on Women, Wellesley College; Massachusetts Child Care Resource & Referral Network, Inc. (January, 2009) Data Report 2008.

³ This study examined various child and classroom outcomes including cognitive development, social/emotional development, instructional activities, and global classroom quality. The estimated effect size of the BA on these outcomes was 0.16 standard deviations ($p < .05$). Kelley, P. & Camilli, G. (2007). The impact of teacher education on outcomes in center-based education programs: A meta-analysis. *NIEER Working Papers*.

⁴ Marshall, N. L., Creps, C. L., Burstein, N. R., Cahill, K. E., Robeson, W. W., Wang, S. Y., Schimmenti, J., & Glantz, F. B. (2003). *Family Child Care Today: A Report of the Findings of the Massachusetts Cost/Quality Study: Family Child Care Homes*. Wellesley Centers for Women and Abt Associates, Inc.

⁵ Whitebook, M. (2003). Early Education Quality: Higher Teacher Qualifications for Better Learning Environments: A Review of the Literature. Center for the Study of Child Care Employment, University of California, Berkeley.; Howes, C., James, J., & Ritchie, S. (2003). Pathways to effective teaching. *Early Childhood Research Quarterly*, 18, 104-120.; Early, D. M., Bryant, D. M., Pianta, R. C., Clifford, R. M., Burchinal, M. R., Ritchie, S., Howes, C., Barbarin, O. (2006). Are teachers' education, major, and credentials related to classroom quality and children's academic gains in pre-kindergarten? *Early Childhood Research Quarterly*, 21, 174-195.; Pianta, R., Howes, C., Burchinal, M., Bryant, D., Clifford, R., Early, D., & Barbarin, O. (2005). Features of pre-kindergarten programs, classrooms, and teachers: Do they predict observed classroom quality and child-teacher interactions? *Applied Developmental Science*, 9, 3, 144-159.; Kelley, P. & Camilli, G. (2007). The impact of teacher education on outcomes in center-based education programs: A meta-analysis. *NIEER Working Papers*; Clarke-Stewart, K. A., Vandell, D. L., Burchinal, M. R., O'Brien, M., & McCartney, K. (2002). Do regulable features of child care homes affect children's development? *Early Childhood Research Quarterly*, 17, 52-86.; Marshall, N.L., Creps, C.L., Burstein, N.R., Cahill, K. E., Robeson, W. W., Wang, S. Y., Schimmenti, J., & Glantz, F. B. (2003). *Family Child Care Today: A Report of the Findings of the Massachusetts Cost/Quality Study: Family Child Care Homes*. Wellesley Centers for Women and Abt Associates, Inc.

⁶ Early, D. M., Maxwell, K. L., Clifford, R. M., Pianta, R. C., Ritchie, S., Howes, C., Bryant, D. M., Burchinal, M., & Barbarin, O. (2008) Teacher Education and Child Outcomes: A Reply to the Commentary. *Early Childhood Research Quarterly*, 23, 1, pp. 7-9.

⁷ Whitebook, M., Sakai, L., Gerber, E., & Howes, C. (2001). Then and Now: Changes in Child Care Staffing (1994-2000), Technical Report. *Center for the Child Care Workforce*. [Updated: March, 2010]