



# Strategies for Improving the Early Education and Care Workforce in Massachusetts

## EXECUTIVE SUMMARY

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## Executive Summary

There is strong evidence and widespread consensus that high-quality early education improves children's development and increases their academic achievement. Low-income children in model pre-kindergarten programs, research has shown, were 30% more likely to complete high school and twice as likely to attend college. In addition, they lived healthier lives, on average, and became more productive members of the workforce.<sup>1</sup> Such gains in human capital are necessary for reducing public sector costs and sustaining economic growth. As a result, Nobel laureate James Heckman and other leading economists estimate that high-quality early education and care yields a 10-16% return on investment.<sup>2</sup>

Acting on this evidence, a broad coalition led by Strategies for Children (SFC) and its signature Early Education for All (EEA) Campaign successfully pressed the state to begin building a system of high-quality early education for all children. In 2005, Massachusetts consolidated its early education and child care bureaucracies to form the nation's first Department of Early Education and Care (EEC). The Department, among other things, was required to establish a comprehensive workforce development system to improve the education, training and compensation of early educators, a mandate that was codified into law in 2008 with the enactment of "An Act Relative to Early Education and Care."

Increasing the supply of high-quality early educators is, perhaps, the most critical step to ensuring all children have access to high-quality early learning experiences. Well-trained teachers are more effective at guiding individualized child learning, planning appropriate curricula and recognizing children's needs. Teachers' educational levels have also been linked to greater gains in children's early writing skills, language and math skills, relationships with peers and later academic success.<sup>3</sup> Scholars in the field of early childhood education conclude that the most effective early educators have a bachelor's degree with specialized training in early childhood education or child development.<sup>4</sup>

Today, 20 states require lead teachers to possess a bachelor's degree with training or certification in early childhood education to work in state funded pre-kindergarten programs.<sup>5</sup> Both the National Association for the Education of Young Children (NAEYC), whose accreditation is a widely accepted proxy for quality, and Head Start are phasing in bachelor's degree requirements. In Massachusetts, Early Childhood Program Standards require that by 2017 all newly hired preschool teachers hold a bachelor's degree that includes 18 credits in early childhood and a practicum in early education.

This report synthesizes lessons from previous research, existing state policies, and ongoing regional efforts among early education and care providers, colleges and universities, and business and community leaders to increase the supply of high-quality early educators in local communities. More specifically, our work is informed by original research on innovative programs in Worcester and Springfield—programs funded by Workforce Competitive Trust Fund (WCTF) grants administered by the Commonwealth Corporation, explained below. Concrete recommendations are provided for building a comprehensive workforce development system that increases the education, training and compensation of all early educators.

## Describing the early education and care workforce

Improving the education and training of the early education and care workforce presents a daunting challenge. Research commissioned by SFC indicates that approximately 70% of preschool-aged children in Massachusetts are enrolled in formal early education and care settings (e.g. Head Start, community-based centers, family child care, public preschool, etc.), but few of these children benefit from teachers who hold bachelor's degrees and have specialized training in early childhood education.<sup>6</sup> An analysis of Census data shows that 32% of kindergarten and preschool teachers in Massachusetts possess a bachelor's degree compared to 50% nationwide. Only 16% of child care workers have graduated from a four year school (see Table 1).<sup>7</sup>

**Table 1. Educational attainment of workers by service category, 2004-2005<sup>8</sup>**

Educational Attainment	Child care		Preschool and kindergarten		Elementary and middle school	
	Mass.	U.S.	Mass.	U.S.	Mass.	U.S.
Less than 12 years	19%	20%	0%	2%	0%	0%
HS diploma/GED	33%	36%	18%	17%	3%	2%
13 – 15 years, including associate degree	32%	33%	50%	31%	3%	5%
bachelor's degree or higher	16%	10%	32%	50%	95%	93%

Source: Fogg, N., Harrington, P., & McCabe, K. (2006). Labor Supply Issues in the Organization and Delivery of a High Quality Early Childhood Education Program. Northeastern University, Center for Labor Market Studies. Prepared for Strategies For Children.

Enacting new quality standards to raise educational attainment places new burdens on early education and care providers, as well as early educators themselves. This observation is particularly true for community-based and family child care providers that have traditionally received less public funding, and been held accountable to different teacher quality standards, than public school programs. Examining educational attainment by provider type reveals that only 30% of early educators in center-based programs and only 18% of family child care providers have earned bachelor's degrees.<sup>9</sup> Early educators in these settings tend to be paid less than those in public programs, leading to turnover rates of approximately 30%, or roughly three times the rate in the broader educational services sector.<sup>10</sup> A recent report by the national advocacy organization Pre-K Now stated that key to professionalizing the early education and care field and improving program quality is achieving parity in supports and compensation across all settings.<sup>11</sup>

## State investments in early educators

Massachusetts administers several programs to improve the quality of the early childhood workforce and increase opportunities within the higher education system, including:

- **The Early Childhood Educators Scholarship Program** provides financial assistance to currently employed early educators to pursue post-secondary degrees.
- **Building Careers** funds college courses and academic advising for early and out-of-school time educators seeking degrees in early childhood education or a related field.
- **The Universal Pre-Kindergarten (UPK) grant program** provides resources to early education and care programs serving children ages two years and nine months to school entry that meet high standards. In 2008, 48% of total grant funds were spent on staff compensation and professional development.
- **The Child Development Associate (CDA) Scholarship** helps cover the costs of applying for a CDA. State funding for this scholarship is currently unavailable.
- EEC-administered **professional development programs** help early childhood and out-of-school time educators pursue higher levels of training and credentialing.

However, despite significant investments in the education and training of early educators, the state has yet to establish a comprehensive workforce development system that addresses the realities of many early education and care providers as non-profit organizations and/or small businesses. Employers need a steady supply of high-quality early educators to meet impending Head Start standards, achieve NAEYC accreditation, and satisfy consumer demand—and children's needs—for quality. As a result, local and regional leaders have pursued other resources to support early educators.

## Regional investment in workforce development

In 2008, the Commonwealth Corporation awarded WCTF grants to early educator initiatives in Springfield and Worcester totaling \$500,000 and \$343,905, respectively. In doing so, the corporation recognized that investing in early educators provides short-term economic benefits to employers and families, while supporting a proven long-term economic strategy for preparing the future workforce. The grants' purpose is to develop comprehensive career pathways for early educators, provide them with resources to pursue their associate or bachelor's degrees, and explore strategies to improve compensation.

Springfield and Worcester mirror other Bay State communities with high concentrations of low-income children. In Springfield, 39% of children under the age of six live in families with incomes below the federal poverty line, triple the state's rate of 12%. In Worcester, 26% of children under six are poor.<sup>12</sup> In both cities, almost two-thirds of third graders are not yet proficient readers, according to the latest results of the Massachusetts Comprehensive Assessment System or MCAS.<sup>13</sup>

In recent years, both cities have taken important steps to align key stakeholders around a vision of high-quality early education and care to improve school and life outcomes for all children. Springfield created a plan for high-quality universal pre-kindergarten after a year-long process convened by the Irene E. and George A. Davis Foundation. In Worcester, Edward Street Child Services convened a community planning process that led to the formation of the Coalition for Early Education Careers. The formation of these effective partnerships was essential to securing WCTF grants to invest in early educators as part of broader efforts to improve children's earliest learning experiences.

In Springfield, 136 early educators received financial support in the first year of the WCTF grant-funded Developing Early Childhood Educators (DECE) initiative, and 95% completed the college courses or training programs in which they were enrolled. The program provided enrollment and financial aid assistance, bilingual and fast track programs for CDA certification, a comprehensive lead teacher certificate program, and career counseling. In Worcester, 115 early educators entered the Central Massachusetts Early Education and Care Professional Advancement Program and 73 completed a total of 182 college and basic education courses. Career specialists helped participants register for courses, complete financial aid forms, connect with tuition aid available through EEC, and obtain academic advising. Strong partnerships with local employers led to wage enhancements for early educators successfully completing college courses.

## Focus of study and methodology

In early 2009, SFC commissioned Dr. Mindy Fried to examine these two initiatives for lessons to inform policymaking. Research was done in collaboration with key players in both Springfield and Worcester. Researchers interviewed 29 people, including college administrators and instructors, early education providers, business and community leaders, and WCTF grant coordinators. The research team also conducted focus groups with representatives from the early education and care field. Interviews were recorded, coded and analyzed to develop recommendations for a comprehensive statewide workforce development system.

## Challenges to early educators

In interviews, early educators and program administrators in Springfield and Worcester described barriers that an effective workforce development system must address. They include:

- **Financial and indirect costs:** The average annual salary for center-based preschool teachers is approximately \$30,000, and college tuition costs in Massachusetts are among the highest in the nation. Paying for college, combined with indirect costs including time off from work, can present near-insurmountable barriers.

- **Accessing the system:** Early educators frequently come from families and/or communities with lower levels of education and fewer economic resources than typical college students. Navigating the complex higher education system and applying for admission and financial aid can be daunting.
- **Lack of college preparation:** Once students enter the system, many struggle with the foundational skills needed to succeed in college. A state assessment of college preparedness found that 37% of high school graduates entering public colleges took at least one remedial course in their first semester.<sup>14</sup>
- **Challenges for English language learners:** For a growing number of early childhood educators, English is not their first language. Most colleges require early educators to be proficient in English before they enter degree programs, leading to disparate opportunities for advancement.

## Recommendations

The experiences of Springfield and Worcester provide important lessons for building a statewide system to support all early educators in pursuing and earning post-secondary degrees. The following recommendations are based on this research and the review of promising practices for improving the educational attainment and professional development of early educators. Full explanations for each recommendation, including evidence drawn from Springfield and Worcester are provided in the main report (pages 12-22).

1. The Executive Office of Education should improve collaboration across state level agencies to better support early educators attending state colleges and universities.
2. Public and private investment should support regional and/or local entities in developing infrastructure to sustain workforce development programs.
3. Public and private investment should be directed to providing tuition assistance for early educators seeking post-secondary degrees.
4. Workforce development programs should use a “cohort model” to support early educators attending institutes of higher education.
5. Workforce development programs should take a “case management approach” to addressing the needs of early educators.
6. EEC should develop a career lattice that identifies appropriate levels of education, training, and experience for early educators and a pathway for professional success.
7. EEC in collaboration with other state agencies and private organizations should ensure that workforce development programs are linked to increased compensation.
8. Massachusetts colleges and universities should address the needs of English language learners (ELLs) through bilingual courses and other educational supports.
9. EEC and the Department of Elementary and Secondary Education (ESE) should work together to ensure early childhood programs in vocational high schools create a pipeline of highly-qualified early educators.
10. State government should ensure that state-funded workforce development programs are outcome-driven and accountable for achieving high-quality standards.

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<sup>1</sup> “Model programs” refers to three widely cited high-quality early education programs, each with rigorous gold-standard research evaluation designs: Chicago Child-Parent Centers, Abecedarian Project, and Perry Preschool. For further reading see: Reynolds, A. J., et al. (2001). Long-term effects of an early childhood intervention on educational achievement and juvenile arrest. *JAMA*, 285(18), 2339-2346; Reynolds, A.J., et al. (2002). Age 21 cost-benefit analysis of the Title I Chicago Child-Parent Centers. *Education Evaluation Policy Analysis*, 24(4), 267-303; Reynolds, A. J., et al. (2007). Effects of a school-based, early childhood intervention on adult health and well-being. *Archives of Pediatrics & Adolescent Medicine*, 161(8), 730-739; Campbell, F. A., et

- al. (2002). Early childhood education: Young adult outcomes from the Abecedarian Project. *Applied Developmental Science*, 6(1), 42-57; Masse, L. N. and Barnett, S. W. (2002). *A Benefit-Cost Analysis of the Abecedarian Early Childhood Intervention*. New Brunswick, New Jersey: National Institute for Early Education Research, The State University of New Jersey; Schweinhart, L. J. (2005). *Lifetime Effects: The High/Scope Perry Preschool Study Through Age 40*. Ypsilanti, Michigan: High/Scope Press.
- <sup>2</sup> Rolnick, A. and Grunewald, R. (2003). *Early childhood development: Economic development with a high return*. Retrieved from [http://www.minneapolisfed.org/publications\\_papers\\_studies/earlychild/abc-part2.pdf](http://www.minneapolisfed.org/publications_papers_studies/earlychild/abc-part2.pdf); The Heckman Equation. (2009). Retrieved from [www.heckmanequation.org](http://www.heckmanequation.org).
- <sup>3</sup> Howes, C., et al. (2003). Pathways to effective teaching. *Early Childhood Research Quarterly*, 18: 104-120; Early, D. M., et al. (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., et al. (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. and Camilli, G. (2007). The impact of teacher education on outcomes in center-based education programs: A meta-analysis. *NIEER Working Papers*. New Brunswick, New Jersey: National Institute for Early Education Research, The State University of New Jersey; Clarke-Stewart, K.A., et al. (2002). Do regulable features of child care homes affect children's development? *Early Childhood Research Quarterly*, 17, 52-86.; Marshall, N.L., et al. (2003). *Family Child Care Today: A Report of the Findings of the Massachusetts Cost/Quality Study: Family Child Care Homes*. Wellesley, Massachusetts: Wellesley Centers for Women and Cambridge, Massachusetts: Abt Associates, Inc.
- <sup>4</sup> Whitebook, M. (2003). *Bachelor's Degrees are Best: Higher Qualifications for Pre-Kindergarten Teachers Lead to Better Learning Environments for Children*. Washington D.C.: Trust for Early Education.
- <sup>5</sup> Bueno, M., Darling-Hammond, L., and Gonzales, D. (2010). *A Matter of Degrees: Preparing Teachers for the Pre-K Classroom*. The Pew Center on the States. Retrieved from: [http://www.preknow.org/documents/teacherquality\\_march2010.pdf](http://www.preknow.org/documents/teacherquality_march2010.pdf).
- <sup>6</sup> Opinion Dynamics Corporation. (2006). *Statewide Parent Survey*. Prepared for Strategies For Children.
- <sup>7</sup> Fogg, N., Harrington, P., and McCabe, K. (2006). *Labor Supply Issues in the Organization and Delivery of a High Quality Early Childhood Education Program*. Northeastern University, Center for Labor Market Studies. Prepared for Strategies For Children.
- <sup>8</sup> BLS defines preschool teachers as workers who "instruct children (normally up to 5 years of age) in activities designed to promote social, physical, and intellectual growth needed for primary school in preschool, day care center, or other child development facility." These individuals are typically thought of as leading organized classroom activities. Child care workers "attend to children at schools, businesses, private households, and child care institutions. Perform a variety of tasks, such as dressing, feeding, bathing, and overseeing play." The fact that these occupational categories contain obvious points of overlap highlights the difficulty in properly defining and effectively serving the early education and care workforce. For this reason, we provide data on both populations to provide a full picture of the workforce.
- <sup>9</sup> Marshall, N. L., et al. (2005). *Massachusetts Capacity Study Research Brief: Characteristics of the Current Early Education and Care Workforce Serving 3-5 Year-olds*. Wellesley, Massachusetts: Center for Research on Women; Massachusetts Child Care Resource & Referral Network, Inc. (January, 2009). *Data Report 2008*.
- <sup>10</sup> Massachusetts Child Care Resource and Referral Network. (2000). *Massachusetts Child Care Center and School-Age Program Salary and Benefits Report*.
- <sup>11</sup> Bueno, M., et al. (2010).
- <sup>12</sup> U.S. Census Bureau. (2000). *Poverty Status in 1999 by Sex by Age*. (PCT 49).
- <sup>13</sup> Massachusetts Department of Elementary and Secondary Education. (2009). *MCAS Results by District*. Retrieved from: <http://profiles.doe.mass.edu/>.
- <sup>14</sup> Massachusetts Board of Higher Education and Massachusetts Department of Education. (2008). *Massachusetts School-to-College Report High School Class of 2005*. Retrieved from <http://www.mass.edu/library/Reports/2005SchoolToCollegeStateReport.pdf>.