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LOSING GROUND IN PENNSYLVANIA EARLY CHILDHOOD EDUCATION Declining Workforce Qualifications in an Expanding Industry, 1980-2004

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Introduction

“Parents can’t afford to pay, teachers can’t afford to stay, there’s got to be a better way.” This is a common sentiment of professionals in the field of early childhood education (ECE). This report shows that the Pennsylvania ECE industry has indeed struggled to attract and hold onto a qualified workforce since the 1980s.

The qualifications of early childhood educators matter because, first, high-quality ECE improves long-term academic outcomes for children and delivers benefits to the community that far outweigh the costs;¹ and, second, high-quality ECE programs require educated and experienced teachers (Bowman, Donovan, and Burns 2000).

This issue brief report relies on new data that track center-based ECE outside public schools for a 25-year period (see **Note on the Data**). For home-based ECE, consistent data are available for 2000-04.

Main findings

Today, a lower share of center-based early childhood educators has a four-year college degree than in the early 1980s. In center-based ECE programs, the share of Pennsylvania early childhood educators (teachers, directors, assistant teachers, and teacher aides) with a four-year college degree fell from around 40% in the early 1980s to about 27% today.

NOTE ON THE DATA

The data analyzed in this issue brief come from the 1983-2004 Current Population Survey (CPS), a monthly survey of 60,000 U.S. households, and the 1980, 1990, and 2000 decennial U.S. Census. While the national companion report relies exclusively on the CPS, state reports rely more on the Census because the Census has more data for each state. The center-based industry on which this report focuses excludes school-based, pre-kindergarten programs and is over 90% private sector. It includes for-profit and not-for-profit child-care centers, Head Start programs, and stand-alone preschools and nursery schools. This report looks at trends for two different groups of center-based staff. “Early childhood educators” includes all occupations with primary responsibility for children, such as center directors (also called administrators), teachers, assistant teachers, and teacher aides. The second group includes just teachers plus administrators. (The report pools all early childhood educators to increase sample size and combines teachers with administrators for the same reason.)

A higher share of center-based educators has a high school degree or less. The share of Pennsylvania center-based educators with a high school education or less climbed from a low of 34% in the 1983-87 period to 43% in the 1998-2004 period.

By the year 2000, less than a third of center-based early childhood educators had a college degree in seven of eight Pennsylvania metropolitan areas. In Reading, Lancaster, Harrisburg, Allentown, and York less than a quarter of center-based early childhood educators had a college degree.

Education levels are even lower in home-based ECE. In Pennsylvania home-based ECE, only 14% of educators have a college degree and half have a high school degree or less.

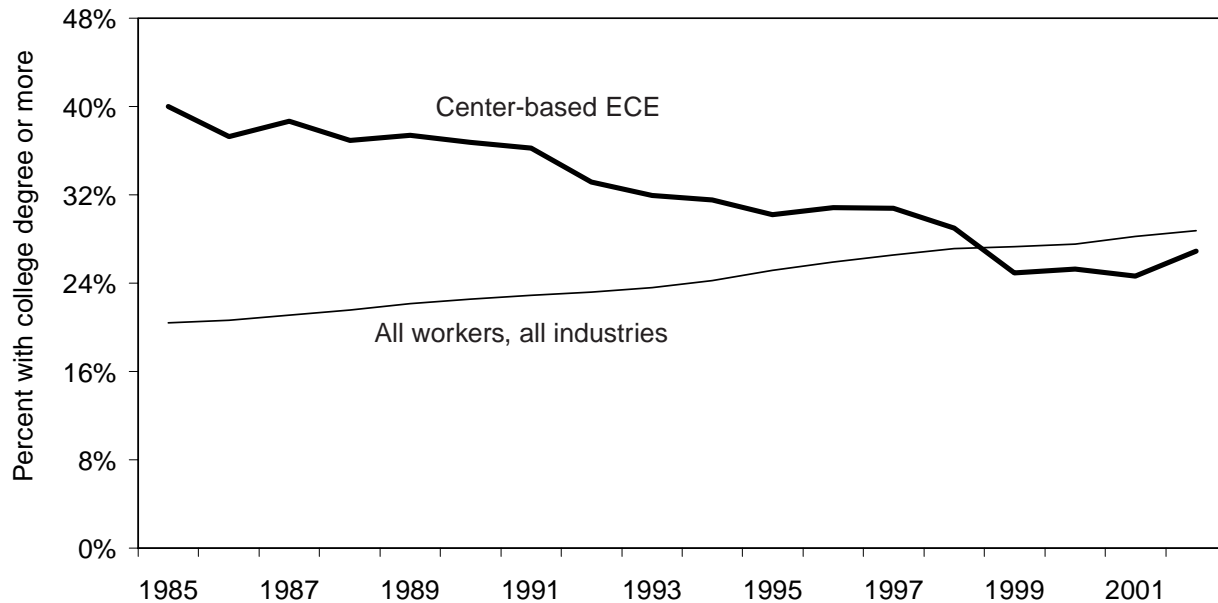
Low wages and benefits help explain ECE education levels. The fall in the education levels of center-based early childhood educators is related to median pay that remains about \$8 per hour—some \$17,000 per year for a full-time worker—and a lack of health care and pension benefits.

The story that emerges from the data is that, while Pennsylvania retains a more educated ECE workforce than most states, the position of center-based ECE in the labor market has nonetheless changed for the worse since the 1980s. As this industry has expanded from 10,000 jobs in 1980 to over 35,000 in recent years, female college graduates have enjoyed expanding career opportunities in other fields and, in some families, greater economic need (over 95% of the ECE workforce is female). As a result, center directors often find that they must hire individuals with low education levels and no specialized training in early childhood development.

Pennsylvania and the nation as a whole need a new approach to preparing early childhood educators who can help children succeed. The new approach must establish high standards for all teaching staff and increase

FIGURE A

The decline since the 1980s in the four-year college degree attainment of Pennsylvania's center-based ECE



Note: Figures are five-year averages; e.g., figures for 2002 are averages produced after pooling data for the years 2000, 2001, 2002, 2003, and 2004.

The difference between the share of center-based early childhood educators with a college degree or more in 1983-87 and 2000-04 is significant at the 10% level.

Source: KRC analysis of the CPS Basic Monthly Survey.

compensation to attract and retain teachers who can meet high standards.

This issue brief is a companion to the longer national study, *Losing Ground in Early Childhood Education*, which is available on the Web sites of the Economic Policy Institute (www.epi.org), the Foundation for Child Development (www.fcd-us.org), and the Keystone Research Center (www.keystoneresearch.org).

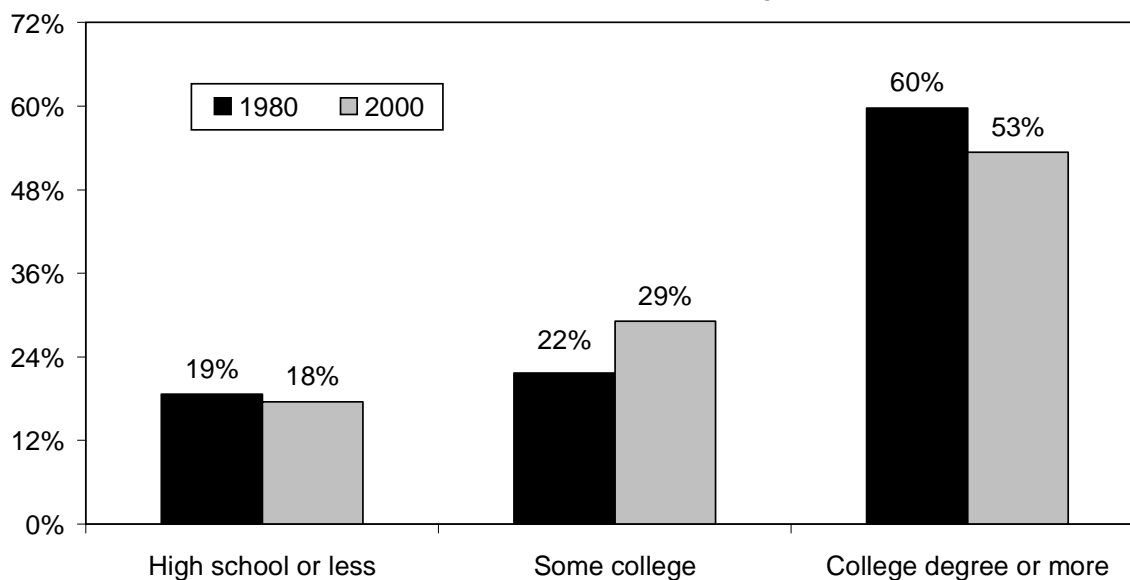
Educational levels in center-based ECE down since the 1980s

In Pennsylvania as in the rest of the United States, the educational attainment of center-based early childhood educators has declined since the 1980s.

- According to the CPS, the share of center-based Pennsylvania early childhood educators with a four-year college degree fell from 40% in the mid-1980s to 27% today (**Figure A**). This compares with a national decline from 27% to 18% in the same period.² (Figure A and other analysis for Pennsylvania using the CPS in this issue brief rely on five-year moving averages to increase sample size and the reliability of the estimates.)
- The share of Pennsylvania center-based educators with a high school education or less climbed from a low

FIGURE B

Changes in educational attainment among center-based ECE teachers and administrators in Pennsylvania



Note: The difference between 1980 and 2000 in the share of teachers and administrators with a college degree or more is significant at the 10% level. The difference over time in the share with some college is significant at the 5% level. The change in the share with high school or less between 1980 and 2000 is not statistically significant.

Source: KRC analysis of Census data.

of 34% in 1983-87 to 43% in 1998-2004. This compares with a national rise from 41% to 46%.

The educational attainment of Pennsylvania center-based early childhood educators has dropped even more relative to the education of the workforce as a whole (Figure A).

- In the mid-1980s, twice as big a share of Pennsylvania center-based educators had a bachelor's degree as did workers in all industries. Today the share of center-based educators with a college degree is slightly smaller than the same share for workers in all industries.

College degree attainment also lower among center-based teachers and administrators

Narrowing the focus from all center-based early childhood educators to just teachers and administrators, the trends in educational attainment are similar. For the analysis of just teachers and administrators the text below relies on the Census instead of the CPS (for sample-size reasons). (CPS data, which cover a slightly different time period and show a larger decline in educational attainment, are reported in the endnotes.)

- According to the Census, the share of center-based ECE teachers and administrators, with a four year college degree in Pennsylvania fell from 60% in 1980 to 53% by 2000 (**Figure B**).³ This compares with a

national level of 30% in 2000.

- At the lower end of the educational attainment spectrum, 18% of center-based Pennsylvania teachers and administrators had a high school degree or less in 2000 versus 19% in 1980.⁴ This compares with a national figure of 24% in 2000.

Unlike the nation, there has not been a substantial increase in Pennsylvania in the share of teachers and administrators with “some college” (i.e., more than a high school diploma, but less than a college degree) since 1990. This figure remains about 30%. Across the workforce as a whole, Pennsylvania has a very low share of workers, relative to other states, with “some college,” partly as a result of a community college system that is underfunded and extends to only part of the state geographically.

Education levels falling in Pennsylvania metropolitan areas

By the year 2000, according to the Census, less than a third of center-based early childhood educators had a college degree in seven of eight Pennsylvania metropolitan areas for which data exist (**Figure C**).

- In Reading, Lancaster, Harrisburg, Allentown, and York less than 25% of center-based early childhood educators had a college degree.
- In Philadelphia and Pittsburgh the same share was 27% and 29%, respectively.

Education levels even lower in home-based ECE

Education levels are lower in home-based ECE in Pennsylvania than center-based (**Figure D**). (The CPS shows home-based ECE employed 18,000 in 2000-04.⁵)

- According to the 2000 Census, only 14% of Pennsylvania home-based ECE workers have a college degree or more, only slightly more than half the share for center-based ECE.
- Over half of Pennsylvania home-based ECE workers have a high school degree or less, compared with 41% in center-based ECE.

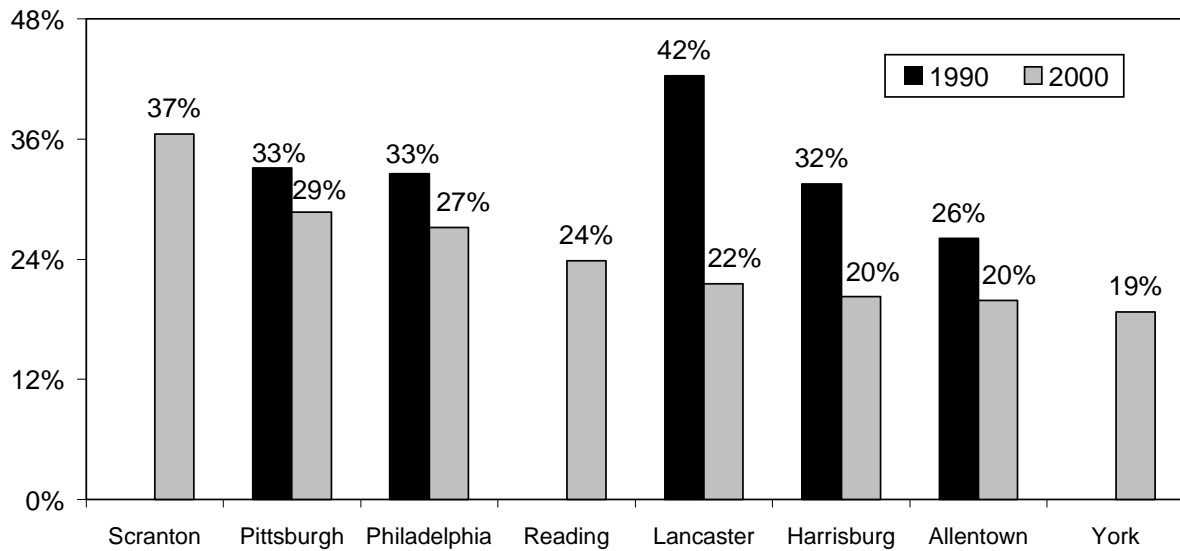
As with center-based ECE, education levels in home-based ECE in Pennsylvania are higher than most states. For example, Pennsylvania’s college degree share in home-based ECE ranks 7th out of the 39 states examined.

Low wages and benefits help explain educational attainment in ECE

Since the mid-1980s, the wages and benefits of Pennsylvania center-based based early childhood educators have remained stuck relative to those of other workers.

FIGURE C

The decline in the share of center-based early childhood educators with a four-year college degree in Pennsylvania metropolitan areas



Note: The difference between 1990 and 2000 in the share of center-based educators with a college degree or more in Pittsburgh, Philadelphia, and Allentown is not statistically significant. The differences over time in Lancaster and Harrisburg are significant at the 5% and 10% levels, respectively.

Scranton includes Scranton and Wilkes-Barre; Pittsburgh includes Pittsburgh and Beaver County; Harrisburg includes Harrisburg, Lebanon, and Carlisle; Allentown includes Allentown, Bethlehem, and Easton.

Source: KRC analysis of Census data.

Wages

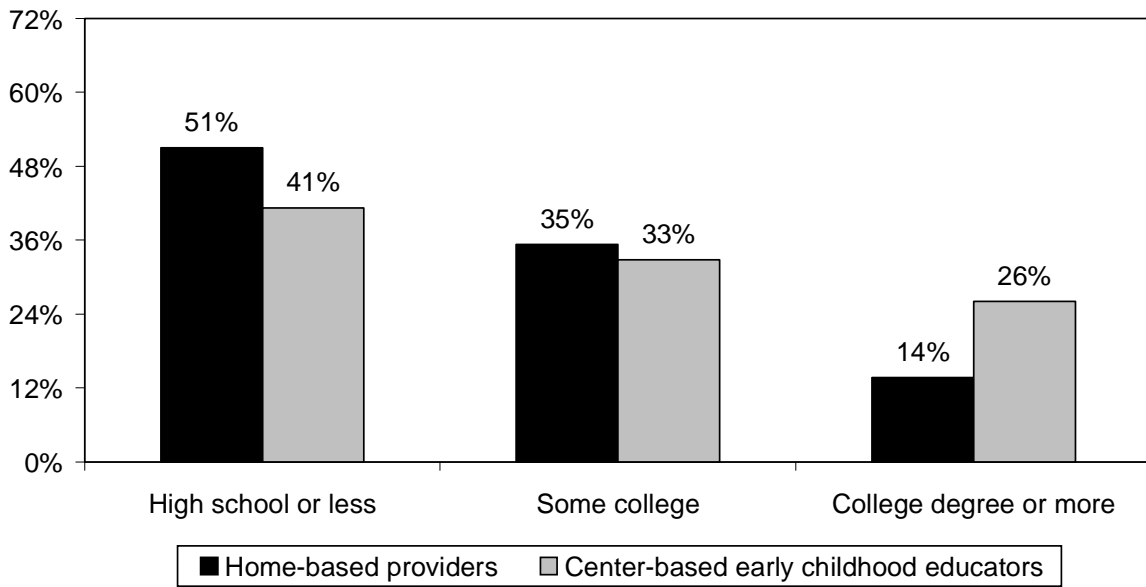
- Center-based early childhood educators have consistently earned between 57% and 62% of the wages of all Pennsylvania workers. Even in 2000-04, early childhood educators earned only \$8.40, compared to \$13.69 for all Pennsylvania workers.
- Even early childhood teachers and administrators earned a median wage of only \$10.97 in 2000-04, just 57% of the \$19.40 median wage of all female college graduates.

Health and pension benefits

- Less than a third of Pennsylvania center-based early childhood educators obtains health insurance through their job compared to 60% of all workers and about two-thirds of female college graduates (**Figure E**).
- Nearly one in five early childhood educators (14% of center-based early childhood educators and 19% of home-based providers) had no health insurance coverage versus 11% of all workers and 5% of female college graduates.

FIGURE D

Education levels even lower in home-based ECE in Pennsylvania, 2000-04

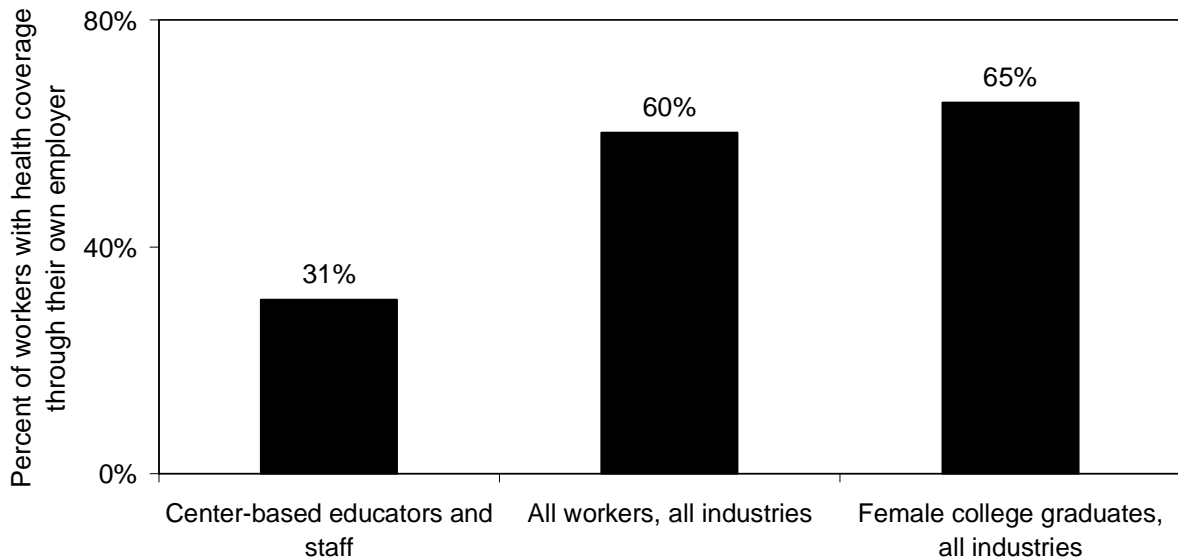


Note: The differences between the share of center-based early childhood educators and home-based providers with a high school education or less and between the share with a college degree or more are each significant at the 1% level.

Source: KRC analysis of Census data.

FIGURE E

A smaller share of Pennsylvania's center-based early childhood educators receive health insurance through their own employer, 2000-04

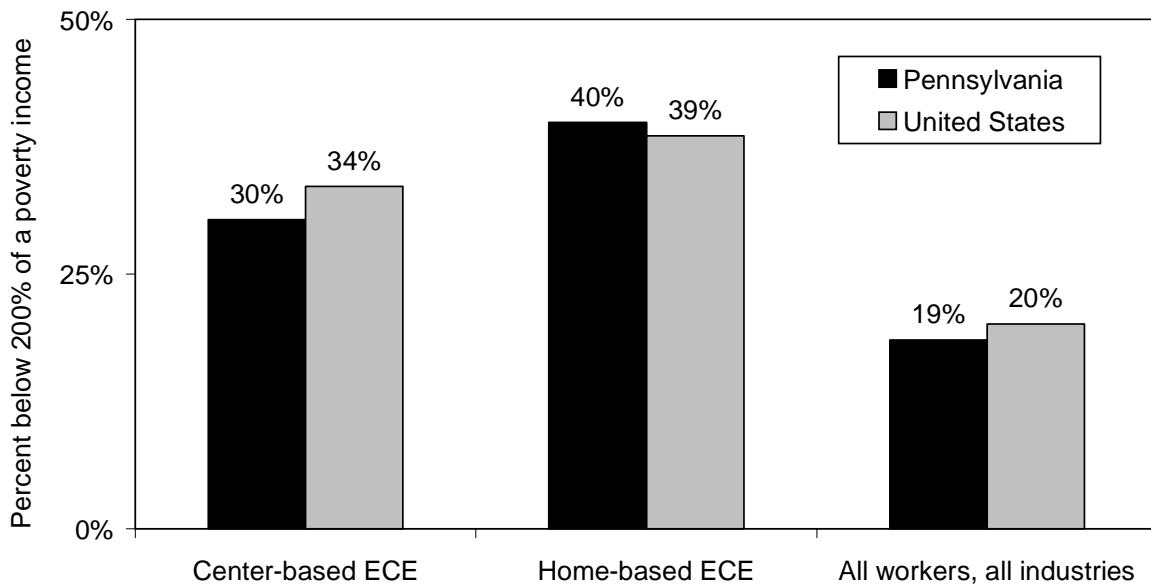


Note: The differences in the share of center-based educators and staff with health coverage through their own employer and the same share of all workers and female college graduates is significant at the 1% level.

Source: KRC analysis of the March CPS.

FIGURE F

A large share of the ECE workforce lives below the 200% poverty threshold



Source: KRC analysis of Census data.

- Only 19% of Pennsylvania center-based early childhood educators participate in any kind of pension plan at work, versus 53% for all workers and 66% for female college graduates.

Share of workers below a basic necessity income

- In 2000, 30% of Pennsylvania center-based early childhood educators were living below 200% of the poverty threshold compared to 19% of all Pennsylvania workers (**Figure F**). Two hundred percent of the poverty line is considered roughly equivalent to a minimally adequate basic income high enough to cover the cost of basic necessities without public assistance.
- For all workers employed in home-based care, the share living in poverty is 40% (Figure F).
- Center-based ECE teachers and administrators in Pennsylvania were twice as likely to live below 200% of the poverty threshold as female college graduates generally.

New policies needed

National data reveal that the most-educated age cohort in ECE today is in its 50s, having entered the industry in the 1960s and 1970s. With opportunities for educated women expanding, and more families highly dependent on

women's earnings, it has become harder to attract qualified teachers into ECE. As many of the better-educated early childhood women retire, the difficulty of maintaining an adequately qualified ECE staff will grow even more difficult. Industry demographics make it imperative that state and national policymakers act now to ensure the high teacher standards essential to long-term benefits from ECE programs.

A pragmatic and systemic approach to raising staff qualifications should not only mandate higher standards, but also include phase-in periods and research and evaluation that deepen our understanding of the long-term benefits of different approaches to teacher education and professional development.⁶ In Pennsylvania, such a pragmatic approach could build on incremental initiatives in the past several years to upgrade teacher qualifications (e.g., the TEACH program that provides scholarships for education and training as well as bonuses upon successful program complete, and the Keystone STARS program that provides incentives for improving program quality including by raising staff qualifications).

Any approach to improving staff standards in ECE will fail unless it also raises compensation to keep more qualified people in the field. The present reality will persist, with many ECE staff having low education levels, no meaningful training in early childhood development, and no opportunities to learn from experienced and qualified peers. It is well past time to recognize that society can't afford not to pay more for ECE teachers. Only with public investment can the community as a whole reap the long-term benefits of high-quality early childhood education.

Endnotes

1. These benefits include lower costs for subsequent education, increased taxes paid once children mature and enter the workforce, and reduced social costs (Lynch 2004).
2. The Census shows a similar drop from 39% in 1980, to 31% in 1990, to 26% in 2000.
3. The CPS data series has a similar initial college degree share for center-based teachers and administrators (64% in 1983-87) but a much lower end point (42%) in 2000-04.
4. The CPS shows an increase in the share of teachers and administrators with a high school degree or less from 15% in the 1980s, to 20% in most of the 1990s, to over 25% in 1998-2004.
5. Industry experts believe that both the CPS and Census undercount home-based employment because they miss some unlicensed and unregulated providers.
6. See the national companion report, *Losing Ground in Childhood Education*, for elaboration of this recommendation, available online at www.earlychildhoodworkforce.com.

References

- Bowman, Barbara T., M. Suzanne Donovan, and M. Susan Burns, eds. 2000. *Eager to Learn: Educating Our Preschoolers*. Report of the Committee on Early Childhood Pedagogy, National Research Council. Washington, D.C.: National Academies Press. pp. 161-176.
- Lynch, Robert. 2004. *Exceptional Returns: Economic, Fiscal, and Social Benefits of Investment in Early Childhood Development*. Washington, D.C.: Economic Policy Institute.