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**LOSING GROUND  
IN EARLY CHILDHOOD EDUCATION**  
**Declining Workforce Qualifications  
in an Expanding Industry, 1979-2004**

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**SUMMARY**



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## **Acknowledgments**

The authors thank the Foundation for Child Development (FCD) for the financial support that made this national study possible. The William Penn Foundation and Heinz Endowments provided additional support for the Pennsylvania briefing paper.

We owe a special thanks to Fasaha Traylor of FCD for her commitment to the project, for invaluable feedback, for help in identifying reviewers, and for organizing prepublication briefings before 60 U.S. early childhood experts. Ruby Takaneshi and Harold Leibovitz also provided valuable feedback and guidance.

The authors are further grateful for multiple rounds of good-natured feedback from Michael Ettlinger of EPI and for extensive review and suggestions from Lee Price of EPI and Howard Wial, formerly with KRC. In addition, we appreciate very much the efforts of the entire EPI publications, graphics, and communications team, including Joe Procopio and Ellen Levy.

For reviewing the national report and/or individual state reports, the authors thank Dan Bellm, Joan Benso, Margaret Blood, Ronnie Bloom, Harriet Dichter, Denise Dowell, Walter Gilliam, Amy Kershaw, Nancy Kolben, David Lawrence, Anne Mitchell, Sara Nicholas, Marge Petruska, Cynthia Rice, Mildred Warner, Sharon Ward, and Howard Wial.

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## *Summary in brief*

“Parents can’t afford to pay, teachers can’t afford to stay, there’s got to be a better way” goes the lament of professionals in the field of early childhood education (ECE). This booklet summarizes a new report that provides the hard numbers that ECE can no longer consistently attract and hold onto well-educated teachers. The report sounds the alarm on the pressing need for state and national policy to reverse the fall in the qualifications of ECE staff.

The qualifications of early childhood educators matter because high-quality ECE improves long-term academic outcomes for children and delivers benefits to the community that far outweigh the costs, including lower costs for subsequent education, increased taxes paid once children mature and enter the workforce, and reduced social costs (Lynch 2004). Research also demonstrates that high-quality ECE programs *require* educated and experienced teachers (Bowman, Donovan, and Burns 2000).

In the past, lack of data has hindered analysis of the ECE workforce (see, for example, Burton, Whitebook, Young, et al. 2002). The new report fills the data vacuum using the 1979-2004 Current Population Survey (CPS). The study focuses on teachers and administrators (i.e., directors) in center-based ECE programs, over 95% of whom are women. The report finds that the education levels of ECE teachers reached a cyclical peak in the early 1980s recession. Since 1983, there has been a fall in educational attainment that only stopped in 2001, when slow job growth made more educated workers available to ECE. More specific notable results of the study include:

- *A lower share of center-based teachers and administrators have a college degree.* The share of U.S. center-based teachers and administrators with at least a four-year college degree averaged 43% from 1983-85, but only 30% from 2002-04.

- *A higher share have a high school education or less.* The share of center-based teachers and administrators with a high school education or less climbed from less than 25% in 1983 and 1984 to around 30% in recent years.
- *Education levels are even lower in home-based early childhood education.* Since 2000, only about one in nine home-based early childhood educators has a college degree. Less than half of home-based early childhood educators have any education beyond high school.
- *Low wages and benefits help explain education trends in center-based ECE.*
  - In 2004, ECE teachers and administrators earned only \$10 per hour, compared to \$19.23 for female college graduates. Even college-educated teachers and administrators earned only \$13.35 per hour in 2004, less than \$28,000 annually for a person working full-time and year round.
  - Only a third of center-based teachers and administrators get health care through their job, and only a fifth participate in any kind of pension plan.
  - A quarter of center-based teachers and administrators have incomes below 200% of the poverty line, roughly the minimum necessary to pay for basic necessities without public assistance.

The story that emerges from the data is that the position of ECE in the labor market has changed for the worse since the early 1980s. Center-based early childhood education began as a small industry with a highly selective workforce. Its rapid growth took place during a period when female college graduates had expanding career opportunities in other fields and, in some families, greater economic needs. In this new environment, center directors often find that they must hire individuals with low education levels and no specialized training in early childhood development.

More daunting still, ECE today confronts the retirement of its most educated age cohort, now in its late 50s. As more educated teachers retire, maintaining a qualified early childhood workforce will grow yet more difficult.

## THE DATA USED IN THIS REPORT

The Current Population Survey (CPS) is a monthly survey of 60,000 U.S. households. By aggregating the 12 monthly CPS surveys each year, a 22-year data set was created from 1983 to 2004. In these pooled annual samples, the number of observations for teachers and administrators in center-based ECE ranges from 1,389 in 1983 to 1,897 or higher in every year since 1990. Furthermore, throughout this period, the CPS contains a single industry classification that closely matches the center-based industry, a single occupational classification that includes teachers, and a single occupational classification that includes administrators.<sup>1</sup> As we define it using the CPS, center-based ECE includes private and public, for-profit and not-for-profit child-care centers, Head Start programs, and stand-alone preschools and nursery schools. It does not include school-based pre-kindergarten programs.

If the United States wants children to receive high-quality early childhood education that provides a foundation for success in school and life, it needs policies that will produce the teachers essential to high quality.

The rest of this booklet presents these key findings in more detail. For additional detail, see the full report on the Web sites of the Economic Policy Institute ([www.epi.org](http://www.epi.org)) and Keystone Research Center ([www.earlychildhoodworkforce.com](http://www.earlychildhoodworkforce.com)). Companion reports to the national analysis are also available on seven states (California, Florida, Massachusetts, New Jersey, New York, Pennsylvania, and Wisconsin). Statistics and rankings on workforce trends in early childhood education are available 39 states.

### ***A lower share of ECE teachers and administrators has a college degree***

The share of center-based teachers and administrators with a college degree fell from 43% in 1983-85 to 30% in the last three years. Most of the decline took place from 1983 to 1985 and during the long economic expansion in the 1990s.

**TABLE 1 Educational attainment of teachers and administrators in center-based ECE, 1983-2004**

Year	Less than high school	12th grade	Some college	Four-year plus
1983	3%	18%	33%	47%
1984	5	19	32	44
1985	4	24	33	39
1986	3	24	35	38
1987	5	23	34	38
1988	5	22	36	38
1989	3	23	34	40
1990	3	26	32	38
1991	3	25	34	38
1992	3	23	36	38
1993	5	21	37	37
1994	2	22	42	34
1995	3	22	40	35
1996	3	25	41	31
1997	3	26	38	32
1998	4	24	39	33
1999	5	25	40	31
2000	6	26	39	29
2001	4	26	42	28
2002	5	26	42	27
2003	4	24	38	33
2004	4	26	41	30

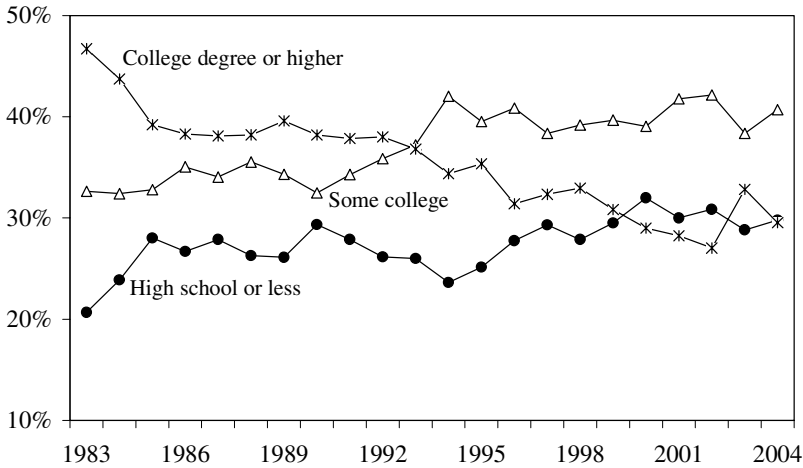
Source: KRC analysis of the CPS Basic Monthly Survey.

***A higher share have a high school education or less***

**Table 1** and **Figure A** display the rise in the share of center-based teachers and administrators with a high school diploma or less over time—from 24% in 1983-85 to 30% in 2002-04. This share rises in periods of fast job growth, such as 1983 to 1985 and 1994 to 2000, and falls off in periods of slower growth, including 2000 to 2004.

***A higher share have some college***

The shift away from those with four-year degrees has also been to those with “some college” education—i.e., more than a high school degree but less than a four-year degree. Among those with some college edu-

**FIGURE A Educational attainment of teachers and administrators in center-based ECE, 1983-2004**

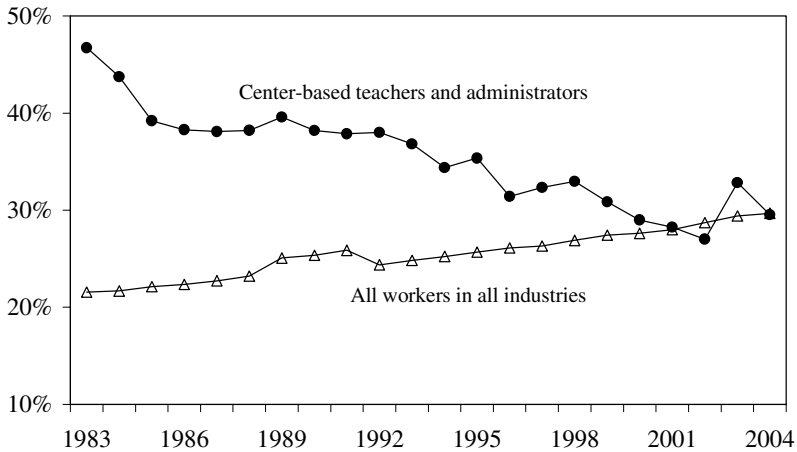
Source: KRC analysis of the CPS Basic Monthly Survey.

ation, the subjects and number of courses cannot be determined from the CPS. But in recent years, information is available on the share with some college that have completed an associate's degree. Among ECE teachers and administrators this share is only about a third from 2000-04—14% of 41%. Adding those with an associate's degree and those with a four-year college degree, the share of center-based teachers and administrators with a two-year degree or more has not exceeded 47% in any recent year.

### ***Relative education levels decline even more***

Educational attainment among ECE teachers and administrators declined at a time of rapid increases in education levels among the workforce as a whole. As a result, educational attainment of ECE staff relative to other workers has dropped even further than absolute educational attainment of ECE staff.

- While in the 1983-85 period, center-based teachers and administrators had a 21 percentage-point advantage over other

**FIGURE B Share of workers with a college degree, 1983-2004**

Source: KRC analysis of the CPS Basic Monthly Survey.

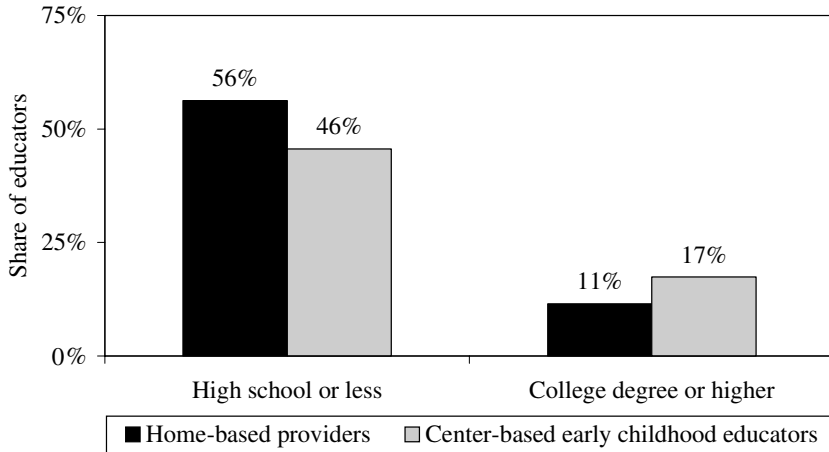
workers in their college-degree share, by 2002-04 that gap had vanished (**Figure B**).

- From 1983 to 1985, the share of teachers and administrators with a high school degree or less was 30 percentage points less than the workforce as a whole. By the last three years, this gap was only 12 percentage points less.

### ***Education levels even lower in home-based early childhood education***

Education levels are even lower in home-based ECE than in center-based. **Figure C** compares home-based providers with *all* center-based early childhood educators, a group which includes assistant teachers and teacher aides as well as teachers and administrators.<sup>2</sup> It shows that 56% of home-based early childhood educators had a high school degree or less in 2000-04 compared to 46% of all center-based early childhood educators. Only 11% of home-based providers had a college-degree or more compared to 17% of center-based ECE staff.

Even the low levels in Figure C may overestimate the average education of home-based providers: industry experts believe that the CPS

**FIGURE C Education levels in home-based ECE, 2000-04**

Source: KRC analysis of the CPS Basic Monthly Survey.

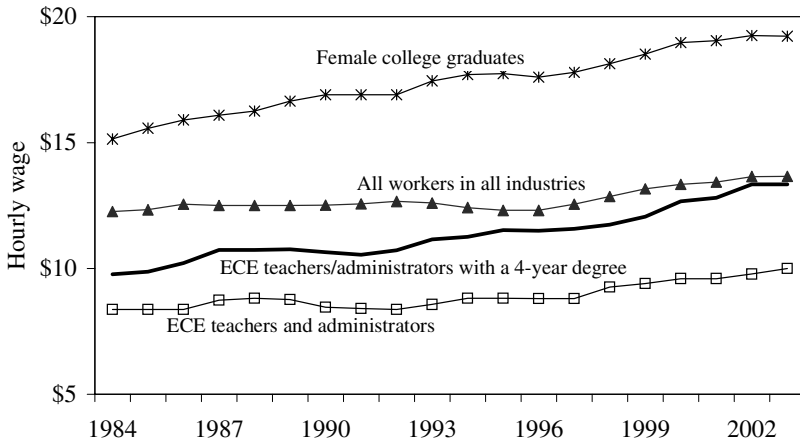
does not fully capture the most unregulated and least educated part of home-based ECE.

### *Low wages and benefits help explain educational attainment in ECE*

Educational attainment in center-based ECE has fallen because wage and benefits are low and remained stagnant during the first 15 years of the 1983 to 2004 period (**Figure D**). From 1983-85 to 1996-98, a period in which most of the drop in ECE education levels occurred, the wages of center-based teachers and administrators increased only from \$8.37 to \$8.80 per hour.<sup>3</sup> Over the same period, the wages of all female college graduates climbed from \$15.14 to \$17.79.

The wages of the shrinking fraction of center-based ECE teachers and administrators with a college degree have risen, slowly beginning in the early 1990s and then more rapidly since the late 1990s. Between 1996-98 and 2001-03, this group's wages climbed from \$11.57 to \$13.35 per hour. This increase has been too little too late, able only to limit the further erosion of educational attainment.

Low benefits reinforce the impact of low wages on the difficulty centers have attracting and retaining qualified staff:

**FIGURE D Low wages are part of the problem**

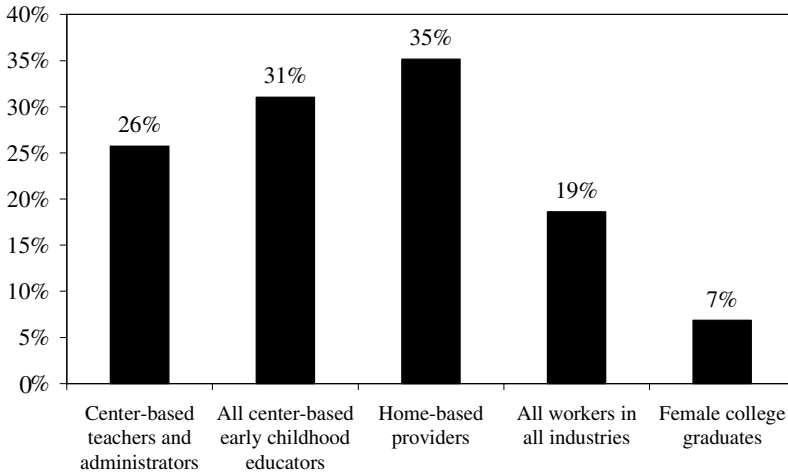
Note: Inflation-adjusted median wages were calculated based on the CPI-U-RS, 2004 dollars. Figures are three-year averages; e.g., figures for 2002 were produced after pooling observations from 2001, 2002, and 2003.

Source: KRC analysis of the CPS Merged Outgoing Rotations.

- center-based teachers and administrators are only half as likely to get health care through their job as other workers (33% versus 66% percent), and they are more than twice as likely to lack health insurance altogether (17% versus 7%);
- only 21% of center-based early childhood educators participate in any kind of pension plan, versus 46% for all workers and 61% for female college graduates.

Income provides another indication of the economic status of ECE staff. **Figure E** shows the share of center-based ECE staff with incomes below 200% of the poverty line and the same share for all workers and female college graduates. Two hundred percent of the poverty line is generally regarded as a rough approximation of a minimally adequate income, high enough for a family to cover the costs of basic necessities without public assistance.

Over a quarter of center-based teachers and administrators have incomes below 200% of the poverty line. This level is above the share for

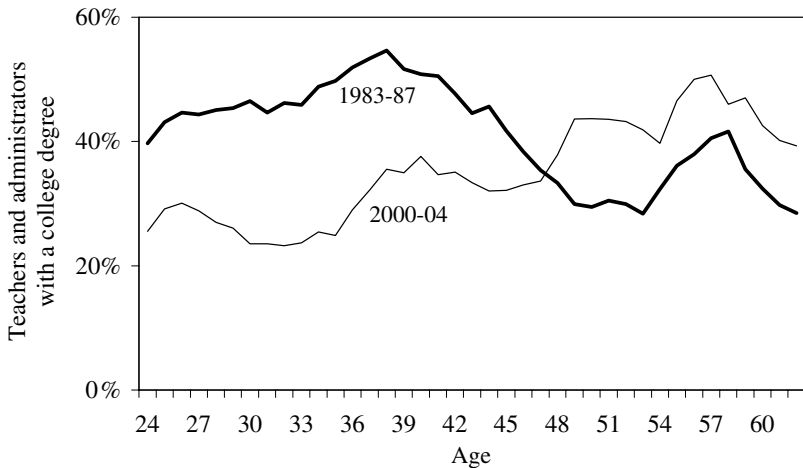
**FIGURE E ECE workers below 200% of the poverty line**

Source: KRC analysis of CPS March data.

all workers and nearly four times the share for female college graduates. The share of all center-based early childhood educators and of home-based early childhood educators below 200% of a poverty income is higher still—about one-third.

### *The most-educated ECE teachers, administrators are now in their 50s*

**Figure F** shows the share of ECE teachers and administrators with a college degree, by age, in the mid-1980s and in the last few years.<sup>4</sup> In 1983-87, the most-educated teachers were in their late 30s. By 2000-04, this same age cohort was in its mid-to-late 50s and remained the most-educated group in ECE. Some 47% of center-based teachers and administrators aged 50 and over today have a college degree compared to only a quarter of those aged 24 to 36. It appears that by staying with the field for a career, many older, college-educated teachers and administrators have carried the ECE industry on their backs, staving off more severe consequences from the low proportion of educated young workers entering the field.<sup>5</sup>

**FIGURE F ECE workers with a college degree, by age**

Note: Figure shows college-degree share for five-year time spans —i.e., 24 refers to the 22-26-year-old age group.

Source: KRC analysis of the CPS Basic Monthly Survey.

## *Conclusion*

As the most-educated generation of ECE teachers retires in the next 15 years, the difficulty of maintaining an adequately qualified ECE workforce will grow even more severe. Industry demographics make it imperative that national and state 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 mandate higher standards as well as include phase-in periods and research and evaluation that deepens our understanding of the long-term benefits of different approaches to teacher education and professional development.

Longitudinal research designs should evaluate the impact on education and social outcomes of having ECE teachers with various levels of formal education (e.g., generic bachelor's degree, bachelor's degrees in early childhood education, associate's degrees in early childhood edu-

cation) and of their receiving mentoring and work-based peer learning that is deeply integrated with classroom education.

One particular model to explore is “differentiated staffing” that combines a lead teacher who has a bachelor’s degree in ECE with assistant teachers who have lower-level credentials. This mix might make it possible to attract some exceptional young teachers to the field as well as enable incumbent workers to meet higher standards by upgrading their skills and education levels.

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. This report groups teachers with administrators to increase sample size and because education trends within the two categories are similar.
2. This broader group of center-based educators included more than 900,000 people in 2004, up from 300,000 in 1983. Home-based data from before 2000 are not reported because of questions about its comparability with the most recent data.
3. For wages, the report shows three-year averages because they are collected from only one-third of the full CPS sample and multiple years are needed for an adequate sample size. All wage figures are median wages expressed in 2004 dollars and adjusted for inflation using the CPI-U-RS.
4. The report pools five years of data because breaking down the sample by age leads to small sample sizes. Also to increase sample sizes, it shows the college-degree share for five-year age spans—e.g., 30 in the figure refers to the education level of teachers and administrators 28 to 32.
5. The report says “appears” because the data do not permit us to track whether individual teachers actually stay in the field. Anecdotal evidence, however, indicates that a substantial number of older teachers and administrators have been in the field for a career.

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*This report was made possible by generous support from the Foundation for Child Development. The Foundation for Child Development (FCD) is a national private philanthropy in New York City dedicated to promoting a new beginning for public education from pre-kindergarten through third grade. The Foundation promotes the well-being of children, and believes that families, schools, nonprofit organizations, businesses, and government at all levels share complementary responsibilities in the critical task of raising new generations. To learn more about FCD and its programs, please visit its web site at [www.fcd-us.org](http://www.fcd-us.org).*