

Illinois Education Research Council

Bringing Research to Policy and Practice

Policy Research Report: IERC 2006-4

The Illinois Early Childhood Teacher Reserve Pool Study

Brenda K. Klostermann, Bradford R. White, and Jennifer B. Presley

Executive Summary

As Illinois races to staff the hundreds of early childhood classrooms that will require certified teachers under the state's bold movement toward universal pre-Kindergarten for all 3- and 4-year olds, it has one distinct advantage: the state has long awarded a certification geared specifically towards teaching children aged birth through Grade 3. As a result, there are thousands of individuals who are already qualified to teach early childhood education, and many who are not currently doing so. This potential reserve pool—its characteristics and the conditions under which they might be willing to teach in an Illinois early childhood center—is the focus of this report.¹

Using the state's Teacher Certification Information System and Teacher Service Record databases (under an agreement with the Illinois State Board of Education), we identified about 5,400 early childhood-certified individuals who were not working in Illinois public schools in 2002-03. We drew a random sample of 4,000 of these individuals to represent the potential reserve pool of qualified teachers. We used both a web survey and a paper follow-up survey, obtaining a 46% response rate, to gauge the viability of the potential reserve pool. We found no bias in response rates, so we are able

to generalize our findings to the population of the potential reserve pool and provide responses weighted to this population in all tables and figures in this report.

A large majority of certified early childhood teachers who were not retired and not already working in an Illinois early childhood center were willing to consider working in an Illinois early childhood center. After we removed those who reported they were currently working in an Illinois early childhood center (N=558) or retired (N=727) we found that 83% of those remaining, or 3,402 certified early childhood teachers, were willing to consider working in an Illinois early childhood center under the right conditions.

Our study provides compelling evidence that it is the salary, not the setting, that makes it hard to recruit certified teachers to some Illinois early childhood centers. We asked the Reserve Pool to indicate the degree to which different incentives would influence their decision to work in an Illinois early childhood center. Though many incentives were influential, when asked to choose the three most important conditions, higher salaries trumped all other strategies by a large margin. Almost half (45%) of the Reserve Pool said they required below \$40,000 to take a full-year position. Another 29% wanted \$40,000-\$49,999. Our results also suggest that the Reserve Pool will be viable employees for an extended period of time, as the majority is 40 years of age or younger, and a

¹ We focus specifically on early childhood centers because they are the most likely settings for expansion of the state's early childhood block grant program, and with the understanding that they are more difficult to staff than public school settings. Thus, it is probable that individuals willing to consider working in early childhood centers would also be willing to consider working in public schools.

third would anticipate working in an Illinois early childhood center for more than ten years.

Contrary to popular belief, we found that the Reserve Pool has not left the field of education or even the early education arena-many are teachers and some even serve preschool-aged children in their current jobs. The Reserve Pool has an abundance of relevant prior experience almost all have worked in education in the past, and nearly half have had prior experience working in an early childhood center. Meanwhile, less than 10% of the Reserve Pool was currently employed outside the field of education. Instead, the most common reason for not working in an Illinois early childhood center was opting to be a full-time parent, and over half of those who listed their current occupation as caring for family members intend to be working in education by Fall 2010.

Unexpectedly, our survey identified over 600 Reserve Pool members who were working in the Illinois public schools (having entered or returned since 2002-2003) and would consider moving to an Illinois early childhood center. We interviewed 40 of these teachers and found that the most attractive aspects of early childhood centers, especially when compared to public schools, were: their developmental (as opposed to academic) emphasis; professional community; freedom from bureaucracy; the flexibility in teaching permitted; and increased interaction with parents.

It makes most sense to recruit early childhood teachers from the universe of qualified candidates rather than attempting to target a specific group of individuals. We compared the Reserve Pool to those who were not willing to consider working in an Illinois early childhood center and found some differences between the groups—however, none of these differences could help us predict whether an individual would be interested in teaching in an Illinois early childhood center. We also found that the Reserve Pool is quite similar to respondents currently working in an Illinois early childhood center, which confirms that it would be reasonable to expect them to work in such settings under the right conditions. Interviews with fifteen early childhood center employees revealed that, contrary to anecdotal information on why certified teachers leave early childhood centers, the vast majority of interviewees were aware of what would be expected of them when they took the job, and that certified teachers and uncertified teachers in centers view one another as "part of the same team."

We conclude that there is a ready and potentially willing Reserve Pool of qualified teachers for Illinois early childhood centers. We find little evidence that the early childhood center setting itself is unappealing to certified teachers—indeed, almost half of the Reserve Pool have worked in such centers in the past, hundreds are doing so now, and thousands are willing to consider doing so in the future. The state's Teacher Certification Information System may provide a source to locate these qualified teachers. In order to tap into this Reserve Pool, however, Illinois early childhood centers will need to offer salaries that recognize these teachers' professional training and education.

Table of Contents

Introduction5
Survey Methodology5
Getting to Know the Reserve Pool8
Geographic Distribution of the Reserve Pool8
Demographic Characteristics of the Reserve Pool9
Academic Characteristics of the Reserve Pool 10
Why Are Certified Type 04 Teachers Not Working in an Illinois Early Childhood Center? 11
Reserve Pool's Work Experience in Education 12
What Incentives Would Help Attract Type 04 Certificants to
Work in an Illinois Early Childhood Center?12
Which Early Childhood Center Jobs Are of Interest? 14
Expected Length of Employment in an Early Childhood Center 16
Minimum Salary Requirements 16
Illinois Public School Employees21
Previous Education Experience of the Reserve Pool23
Future Employment Plans25
Summary of Findings About the Reserve Pool27
Comparing the Reserve Pool to Other Analysis Groups28
Comparing the Reserve Pool to the Not-Interested Group 29
Comparing the Reserve Pool to the Early Childhood Center Employees Group31
Interviews with Type 04 Certified Early Childhood Center Employees34
Comparing the Reserve Pool to Retirees35
Summary of Comparisons Between Analysis Groups 38
References
Appendix A. Response Rate Analysis41
Appendix B. A Closer Look at Incentive Strategies Using Regression Analysis42

ACKNOWLEDGEMENTS

The authors thank the many experts in the early childhood education community in Illinois who have contributed in small and big ways, known and unknown, to our knowledge about this segment of the field of education as we undertook this project. We appreciate the several opportunities we have had to present early results of our findings about the Reserve Pool, and the useful questions and feedback that we have received. Jennifer Barnhart contributed to many aspects of the project, including survey and communication design (the postcard dogs were hers), telephone interviews, and report production. Eleanor Cameron masterfully coordinated the survey while Data & Decision Analysis, Inc. managed data collection. Funding for this study was provided by the National Institute for Early Education Research (NIEER) at Rutgers University and The Pew Charitable Trusts. The final conclusions and any errors are ours alone, but we hope that the evidence we provide will add to a deeper understanding of the Illinois teacher labor market as Illinois strives to implement *Preschool For All*.

Suggested citation:

Klostermann, B. K., White, B. R., & Presley, J. B. (2006). *The Illinois early childhood teacher reserve pool study* (IERC 2006-4). Edwardsville, IL: Illinois Education Research Council.

Introduction

In March 2004, the National Institute for Early Education Research (NIEER) awarded the Illinois Education Research Council (IERC) a grant to study the adequacy of the supply of qualified teachers in preschool programs in Illinois. Unlike some other states, Illinois has had an early childhood teacher certification for many years (originally called Type 02, and since 1989 called Type 04). However, after examining existing preschool data and research reports specific to Illinois, we found that none of the studies we reviewed gave consideration to the reserve pool of Early Childhood (Type 04) certificants as a potential supply of qualified educators. Thus, we focused a component of our study on the potential reserve pool of qualified early childhood teachers who were not currently teaching in the Illinois public schools, but who might be available to teach at the preschool level in early childhood centers. We focus specifically on early childhood centers because they are the most likely settings for expansion of the state's early childhood block grant program, and with the understanding that they are more difficult to staff than public school settings. Thus, it is probable that individuals willing to consider working in early childhood centers would also be willing to consider working in public schools. Specifically, we examined the pool of qualified early childhood teachers through a survey of a random sample of Illinois Early Childhood Education certificants.

This report summarizes the results of the Illinois Education Research Council's survey of early childhood certificants. The purpose of this study was to determine if there is a viable reserve pool of qualified teachers for Illinois' expansion of early childhood education and if its members are willing to work in Illinois early childhood centers. First, we describe the methodology of the survey and how we identified the Reserve Pool. We then describe the Reserve Pool in more detail. In the final section, we compare and contrast the Reserve Pool with those who were not willing to consider teaching in an early childhood center, those who were currently teaching in an early childhood center, and those who were retired.

This Reserve Pool study is part of a larger project funded by the National Institute for Early Education Research in which we examined whether Illinois will have enough certified teachers to meet expected increases in demand under the state's planned expansion of access to early childhood educational opportunities. Results of the supply and demand analysis are provided in a companion report entitled *Pipelines and pools: Meeting the demand for early childhood teachers in Illinois* (Presley et al., 2006).

Survey Methodology

Using the Teacher Certification Information System (TCIS) and the Teacher Service Record (TSR) databases (under an agreement with the Illinois State Board of Education), we identified 5,402 individuals who received their Type 04 Illinois Early Childhood teaching certificate from 1989 through 2003 and who were not working in the Illinois public schools in the academic year 2002-2003. This group represents a potential reserve pool that is qualified and possibly available to teach in an Illinois early childhood center.

¹ Individuals who received their Type 02 early childhood certificate prior to 1989 and did not transition to a Type 04 were excluded from the study.

We drew a random sample of 4,000 (approximately 75%) individuals from this potential reserve pool. We were able to find usable addresses for more than 90% of the 4,000 people in the sample. We contacted individuals via the United States mail in early January 2005 to inform them that they had been selected to participate in the survey. The survey was administered between February 2005 and May 2005 using a website tool, followed by a mailing of the paper survey after one follow-up reminder. A second reminder was mailed two weeks after the paper survey mailing. We contracted with Data and Decision Analysis, Inc., an experienced web research organization, to create the web version of the survey and assist with survey administration and data collection. To increase response rates, eighty \$50 gift certificates to a national-chain retail store were awarded to a randomly selected group of those who returned a completed survey by the deadline date.

Usable surveys were returned from 1,664 individuals for a 46% response rate. Of these, 799 (48%) individuals responded via the web, and another 865 (52%) responded via the paper survey. We examined the survey response patterns and determined that they were similar to the population on two key characteristics, age and geographic location (see Appendix A). Thus, we can reasonably generalize the results from our sample to the population of 5,402 potential reserve pool individuals. Throughout this report, we provide results that are weighted to the population (weighting=3.25) in order to reflect the total estimated numbers of individuals in each analytic group. When drawing comparisons, we used a 95 percent level of statistical significance, which means that we can be 95 percent certain that the differences found in this report would occur if we were to examine the total population of the reserve pool. We exclude from tables cells that contained fewer than five actual (or 17 weighted) respondents.

The survey items were based on previous studies examining the early childhood workforce, plus additional items created by the IERC that were specific to our study.² We asked about the propensity of respondents to work in an Illinois early childhood center given various plausible policy scenarios, such as higher pay and better working conditions. The survey also collected information on individuals' current and past employment situations to determine whether they had ever worked in early education and which fields might be competing for this workforce. We asked about respondents' occupational plans for Fall 2005 and Fall 2010 to determine their intent to continue in or return to the early childhood field. Demographic information including race/ethnicity, birth year, marital status, salary and benefits, educational attainment and credentials, and whether the respondent has any children under six years old living with them were also obtained. We requested contact information for follow-up interviews to clarify survey responses. Follow-up telephone interviews were conducted with 40 respondents working in the Illinois public schools and another 15 respondents working in an Illinois early childhood center to further understand the advantages of working in these settings.

² Sources: Characteristics of Schools, Districts, Teacher Principals, and School Libraries in the United States: 2003–04 Schools and Staffing Survey (NCES 2006-313) (Strizek et al., 2006); Characteristics of Stayers, Movers, and Leavers: Results from the Teacher Followup Survey: 1994-95 (NCES 97-450) (Whitener et al., 1997); Standard Occupational Classification (SOC) System (United States Bureau of Labor Statistics, 2005); Who's Caring for the Kids? (Krajec et al., 2001); 1992 Educator Reserve Pool Study (State of Oregon, 2002); Teacher Supply and Demand in California (Cagampang et al., 1986).

Analysis Groups

We divided respondents into four mutually exclusive groups for analysis based on their survey responses (Figure 1).³

The first group, *Current ECC*, was those who reported that they were currently (as of Spring 2005) working in an Illinois early childhood center. This group consisted of the 558 individuals who answered "early childhood center in Illinois" to the question, "In what educational setting do you currently work?" These respondents answered questions regarding their current employment, previous employment in education, future occupational plans, and demographic characteristics. This group was not asked to respond to questions dealing with incentives that could influence their decisions to work in an Illinois early childhood center, since they were already doing so.

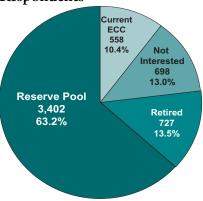
questions
to work in
doing so.
etired" to the question,
ccupation?" There were
up answered questions

The second group, *Retirees*, was those who answered "Retired" to the question, "Which of the following best describes your current main occupation?" There were 727 (13.5%) Retirees in our survey population. This group answered questions pertaining to their previous employment in education, future occupational plans, and demographic characteristics, but not our questions regarding incentives to work in an early childhood center (ECC).

After separating out retirees and individuals currently working in an Illinois early childhood center, those who remained were theoretically available to teach in an Illinois early childhood center. They were divided into two groups based on each individual's response to the question, "Would you ever consider employment in an early childhood center in Illinois working with children ages 3-5?" The third analysis group, the **Reserve Pool** consisted of individuals who indicated that they would consider employment in an Illinois early childhood center by responding they are or plan to be actively looking for a full- or part-time position in an Illinois early childhood center, or that they would consider employment in an Illinois early childhood center under the right conditions. There were 3,402 respondents in this group who are qualified and willing to consider working in Illinois early childhood centers. This represents 83% of those who are potentially available to work in an Illinois early childhood center. Similar to the other groups, these respondents answered questions pertaining to their current employment, previous employment in education, future occupational plans, and demographic characteristics. In addition, we asked the Reserve Pool to indicate the early childhood center position (e.g., teacher, director) which interested them, the level of influence various incentives (e.g., higher salary, smaller class size, opportunities for professional development) would have on their decision, the minimum annual salary they would require, and the length of time they would expect to stay employed in an Illinois early childhood center.

The remaining 698 respondents, those who were not retired, not employed in an Illinois early childhood center, and did not indicate that they would consider employment in an Illinois early childhood center, were placed into the fourth analysis group, the *Not-Interested* group. The Not-Interested group represents just 17% of the available reserve pool. These respondents answered questions regarding

Figure 1. Distribution of Respondents



83% of those available indicated a willingness to consider working in an Illinois early childhood center under certain conditions.

³ Seventeen respondents indicating "disabled" as their main occupation were excluded from the analysis due to small size of this group.

their current employment, previous employment in education, future occupational plans, and demographic characteristics.

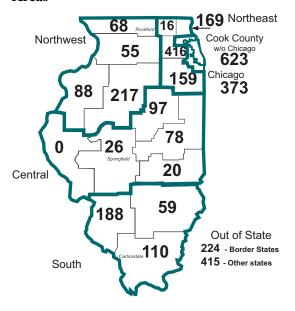
The majority of our analysis in this report focuses on the Reserve Pool, since this is the group for whom efforts to recruit into teaching in Illinois early childhood centers are more relevant. The other three groups (Retirees, Current ECC, and Not-Interested) are described and compared to the Reserve Pool on key variables in the last section of this report.

Getting to Know the Reserve Pool

In this section we discuss the survey results for the Reserve Pool. We examine the geographic distribution of the Reserve Pool and their academic characteristics. We then look at incentives that the Reserve Pool indicted would encourage them to work in an Illinois early childhood center and their anticipated length of employment in a center.

We also explore in more depth the extensive information we collected on the Reserve Pool's current and past employment and future plans. The results help to bust some myths—certificants not teaching in the Illinois public schools are still closely affiliated with the field of education, a majority of certificants had taught pre-kindergarteners, and those who were subsequently teaching in the Illinois public schools (and so were not excluded from the survey) were in fact quite interested in switching to an early childhood center. We probed two groups further through telephone interviews with 40 respondents who were teaching in the Illinois public schools and 15 respondents who were working in Illinois early childhood centers.

Figure 2. Distribution of the Reserve Pool by 17 INCCRRA Service Delivery Areas



Geographic Distribution of the Reserve Pool

Figure 2 shows where the Reserve Pool was living when they responded to the survey, mapped by the 17 Illinois Network of Child Care Resource and Referral Agencies (INCCRRA) service delivery areas (SDAs), plus the city of Chicago. The distribution of the Reserve Pool generally reflects the state's population, with high concentrations in the north-central and northeastern portions of the state and fewer individuals in the southern and west-central regions. However, since Chicago represents almost one quarter of the state's population and only 14% of the in-state reserve pool, the Reserve Pool in Chicago is proportionally small.

Though many (639) respondents reside outside of Illinois, these individuals indicated they would be willing to return to Illinois to work in an early childhood center under the right conditions. To facilitate comparison across geographic areas, we collapsed the 17 SDAs into seven regions including the City of Chicago and out-of-state. These are outlined in a darker border in Figure 2. Table 1 provides the numbers and percentages of the Reserve Pool by the seven regions.

Table 1. Geographic Distribution of Reserve Pool by Regions

Geographic Area	N	%
Chicago	373	11.0%
Cook County (minus Chicago)	623	18.3%
Northeast (minus Cook Co)	760	22.3%
Northwest	428	12.6%
Central	221	6.5%
South	357	10.5%
Out of State (Border and Other)	639	18.8%
Total	3,402	100.0%

Demographic Characteristics of the Reserve Pool

Table 2 shows the major demographic characteristics of the Reserve Pool. The majority of the Reserve Pool (60%) is 40 years of age or younger, suggesting a pool of potential employees who may be available to remain in the field for an extended period of time. Over 90% are white, which compares to 84% of all teachers in the Illinois public schools (Illinois State Board of Education, 2005). Three-fourths (75%) are married and four out of ten Reserve Pool certificants have children under the age of six.

Table 2 also provides comparisons of demographic characteristics by geographic regions. We see that Chicago Reserve Pool members differ from those in other

Chicago Reserve
Pool members
differ from those
in other regions—
they are older,
more likely to be
black, less likely
to currently be
married, and less
likely to have
children under six
years of age.

Table 2. Demographic Characteristics of the Reserve Pool

	Reserv	ve Pool	Chicago	Cook County (minus Chicago)	NE (minus Cook County)	NW	Central	South	Out of State
	N	%	%	%	%	%	%	%	%
Demographic Characteristics	3,402	100.0	11.0 (N=373)	18.3 (N=623)	22.3 (N=760)	12.6 (N=428)	6.5 (N=221)	10.5 (N=357)	18.8 (N=639)
Age									
33 yrs and younger	1,061	31.4	33.5	22.8	30.8	37.4	34.4	39.2	30.0
34-40 yrs old	980	29.0	15.0	31.3	36.3	28.2	34.4	22.7	28.4
41-54 yrs old	945	28.0	24.0	32.2	22.6	26.8	28.4	30.0	31.9
55 yrs and older	393	11.6	27.5	13.7	10.3	7.5	_	8.1	9.7
Race/Ethnicity									
White	3,045	92.5	67.0	90.8	97.8	98.4	97.0	99.1	93.2
Black	149	4.5	22.0	4.3	_	_	_	_	4.7
Latino/Hispanic	55	1.7	8.3	2.7					_
Asian/Pacific Islander	39	1.2	_	_	_	_	_	_	_
American Indian	_	_	_	_	_	_	_	_	_
Marital Status									
Married	2,499	75.0	53.3	72.6	82.3	74.8	80.6	78.5	76.7
Widowed or Divorced	312	9.4	18.7	11.1	5.6	9.1	_	8.4	10.9
Never Married	523	15.7	28.0	16.3	12.1	16.0	19.4	13.1	12.4
Children under 6 yrs old	1,412	41.9	27.0	36.8	53.9	45.5	45.6	40.9	37.8

N too small to report.

regions—they are older, more likely to be black (22%), less likely to be married (53%), and less likely to have children under six years of age (27%). No differences in age, race/ethnicity, marital status, and young children at home were found between Reserve Pool members in other Illinois regions (combined) versus those living out of state. In some locales, there will be a need for teachers with Spanish-speaking skills. We did not ask respondents whether they spoke Spanish, but it is likely that some may need opportunities to gain basic Spanish language skills and cultural awareness training to communicate with Latino/Hispanic students and families.

Academic Characteristics of the Reserve Pool

By definition, all of the Reserve Pool holds at minimum a bachelor's degree, because our survey population included only individuals with an Illinois Early

Table 3. Academic Characteristics of the Reserve Pool

	Reserve Pool			
Academic	N	%		
Characteristics	3,402	100.0		
Highest Degree				
Bachelors	2,126	62.5		
Masters	1,227	36.1		
Doctorate or Professional	49	1.4		
Major for Highest degree				
Early childhood education	2,441	71.8		
(with advanced degree)	(681)	(27.9)		
Elementary education	422	12.4		
Special education	169	5.0		
Education administration	84	2.5		
Other education	175	5.2		
Non-education	110	3.2		
Current Type 04 status				
Active	2,451	72.4		
Inactive, plan to renew	549	16.2		
Inactive, no plans to renew	217	6.4		
Don't know	169	5.0		
Hold Director Credential	49	1.4		

Childhood certificate (Type 04). In fact, over one-third of the Reserve Pool (38%) had received an advanced degree (Table 3). Nearly all (97%) of the Reserve Pool majored in an education-related field for their highest degree, with 72% specifically in early childhood education.

Of those with their highest degree in early childhood education (N=2,441), just over one-quarter (28%) had received an advanced degree in the field. Seventy-two percent of the Reserve Pool has an active early childhood certificate with another 16% planning to renew their certificate. Less than 2% held the Illinois Network of Child Care Resource and Referral Agencies (INCCRRA) Director Credential.

Academic Credentials by Region

Reserve Pool members living in Chicago, Cook County (minus Chicago), and out of state were more likely to have advanced degrees than those in other regions (Table 4)—more than half of the Chicago Reserve Pool, for example, compared to 23% in

Table 4. Selected Academic Characteristics of the Reserve Pool by Geographic Region

Selected Academic Characteristics	Chicago	Cook County (minus Chicago)	Northeast (minus Cook County)	Northwest	Central	South	Out of State	
Highest Degree	Highest Degree							
Bachelors	48.7%	52.6%	67.5%	71.2%	70.6%	77.3%	57.4%	
Masters, Doctorate or Professional	51.3%	47.4%	32.5%	28.8%	29.4%	22.7%	42.6%	
Active Type 04	84.2%	77.4%	67.0%	73.5%	79.4%	78.2%	60.7%	

the southern region. Not surprisingly, we found fewer out-of-state Reserve Pool members with an active Type 04 certificate (61%) compared to those living in Illinois. This suggests that Reserve Pool members in these areas may be more difficult to attract to Illinois early childhood center employment than those in other regions—although we remind the reader that all of the Reserve Pool indicated a willingness to consider such employment under certain conditions.

Why Are Certified Type 04 Teachers Not Working in an Illinois Early Childhood Center?

We asked respondents to identify the reason that best described why they were not currently working in an Illinois early childhood center. Reserve Pool members cited "choose to be a full-time parent" most often (27%) (Table 5). Living outside of Illinois and the need for a better salary were each identified by 11% of the Reserve Pool. Nearly one in ten (9%) believe there are no early childhood jobs available to them. Another 12% prefer another educational setting and 3% prefer a job outside of education, despite the fact that they indicated a willingness to consider employment in an Illinois early childhood center under the right conditions.

When we examined the responses by the seven regions (Table 5), the distributions were generally the same, except for respondents from Chicago and those from out of state who were less likely to cite "choose to be a full-time parent" (14% and 10%, respectively). Reserve Pool members from the other Illinois regions were most likely to identify full-time parenting as the main reason for not working in an early childhood center, ranging from 22% in the South to 44% in the Northeast. These differences may be due to the age differences of the Reserve Pool members among the regions. Another striking distinction is Chicago residents' need for a better salary (18%). It appears that recruiting certified teachers to Chicago's early childhood centers may be more challenging than in other regions. We note,

Reserve Pool members cited "choose to be a full-time parent" most often as the reason for not currently working in an Illinois early childhood center.

Table 5. Reserve Pool's Main Reason for Not Working in an Illinois Early Childhood Center

	Chicago	Cook County	NE	NW	Central	South	Out of State		tal ⁄e Pool
Main Reason for not working in an IL ECC	N=373 %	N=623 %	N=760 %	N=428 %	N=221 %	N=357 %	N=639 %	N	%
Choose to be a full-time parent	13.9	33.9	43.6	30.3	29.4	21.8	10.2	932	27.4
Prefer another educational setting	15.7	16.1	15.4	9.8	10.3	16.4	_	406	11.9
Do not live in Illinois	_		_	_	_	_	53.8	386	11.4
Need a better salary	18.3	10.4	10.3	13.6	11.9	11.8	7.1	383	11.3
No jobs available to me	11.3	6.3	6.0	12.9	16.2	17.3	4.6	308	9.1
Prefer not to answer	18.3	10.4	7.3	6.1	10.3	10.9	_	286	8.4
Prefer another position in education	7.8	9.9	7.3	9.1	8.8	8.2	_	250	7.3
Followed spouse/partner to new location	_	_	_	4.5	_	5.5	16.8	172	5.1
Prefer another age group	7.0	4.2	4.7	5.3	_	_	_	133	3.9
Prefer job outside of education	_	4.7	3.4	_	_	_	_	104	3.1
Need better benefits	_	_		_	_	_	_	23	0.7
Became full-time student				_	_	_		19	0.6
Total	100	100	100	100	100	100	100	3,402	100

⁻ N too small to report.

Increased awareness of employment opportunities in early childhood centers may bring qualified and experienced staff to existing and new sites.

Almost half (46%) of Reserve Pool members had experience in an early childhood center.

Tapping into the Reserve Pool would quickly increase the number of certified teachers working in early childhood centers.

finally, that the proportion of respondents saying that they did not know of any jobs is high enough to warrant attention—even in Chicago, 11% responded this way. Increased awareness of employment opportunities in early childhood centers may bring qualified and experienced staff to existing and new sites. Identifying and addressing the potential mismatch between where positions are currently advertised and where potential candidates search for jobs may facilitate hiring qualified teachers in early childhood centers.

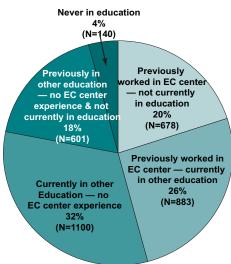
Reserve Pool's Work Experience in Education

In this section, we provide an overall picture of the Reserve Pool's work experience in education. In later sections, we provide extensive analysis of current and previous employment experiences of the Reserve Pool. We were surprised to discover that almost half (46%) of Reserve Pool members had experience working in an early childhood center since certification (Figure 3) (in addition to the estimated 558

certified teachers who reported that they were currently working in an early childhood center). Furthermore, over half (32% + 26% = 58%) of the Reserve Pool members were currently working in education-related jobs.

Of those currently working in education, 78% (N=1,532) were employed in school settings; 65% (N=1,276) were teachers; and, 31% (N=610) served preschoolers. These data demonstrate that those certified to teach early childhood education have not left the field of education or the early education arena. We also found over 600 members of the Reserve Pool working in an Illinois public school (they joined or returned after the 2002-2003 year and thus were not excluded from the survey population). Not only are these individuals qualified and experienced for these positions, they have expressed willingness to consider working in early

Figure 3. Reserve Pool Members' Experience in an Education Setting



Note: Those currently working in an early childhood center are excluded from the Reserve Pool (N=558).

childhood centers. In interviews with 40 of these teachers (see pages 21-22), they told us that the developmental emphasis, professional community, freedom and flexibility, connections with parents, and passion for working with younger children attract them to an early childhood center. Tapping into the Reserve Pool would quickly increase the number of certified teachers working in early childhood centers.

What Incentives Would Help Attract Type 04 Certificants to Work in an Illinois Early Childhood Center?

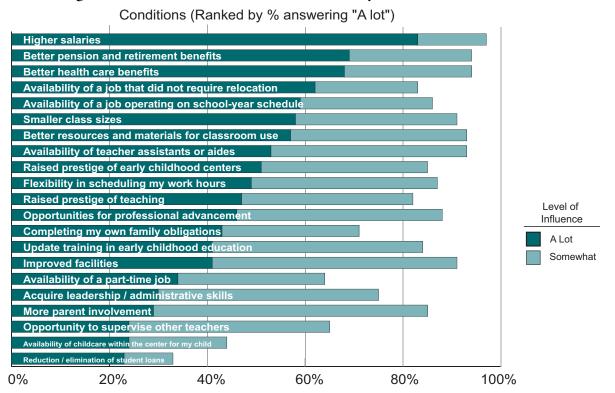
Individuals in the labor market make occupational choices based on the relative benefits and costs, including pecuniary and non-pecuniary factors, of alternative opportunities. A major section of our survey asked those who would consider employment in an Illinois early childhood center (the Reserve Pool) to indicate to what degree different conditions would influence their decisions. Respondents rated

21 different conditions on the level of influence (either no influence, somewhat, or a lot) each would have on their decision to consider working in an Illinois early childhood center with children ages 3-5.

Figure 4 shows the percentage of respondents reporting whether each condition would influence them "a lot" or "somewhat." The items are listed in decreasing order by the percent reporting the condition would influence them "a lot." As seen in the figure, many conditions would positively influence the Reserve Pool's decisions to work in an Illinois early childhood center. Items relating to compensation (i.e., salaries, pensions and retirement benefits, health care) top the list. Improving working conditions (i.e., school-year schedule, class size, classroom resources, improved facilities, and availability of assistants) would also influence the potential workforce. Not having to relocate was of high importance to over 60% of the Reserve Pool. However, nearly 20% indicated that "no relocation" would not influence them, or put another way, they would relocate. Reduction or elimination of student loans, a popular policy strategy to attract teachers, would influence only a small proportion of the Reserve Pool to work in an Illinois early childhood center.

Many conditions
would positively
influence the
Reserve Pool's
decisions to work
in an Illinois early
childhood center.
Items relating to
compensation top
the list.

Figure 4. Reserve Pool Members' Ratings of Employment Conditions Influencing Their Decision to Work in an Illinois Early Childhood Center



We investigated whether different incentive strategies for attracting individuals to work in Illinois early childhood centers are more (or less) influential for different groups of individuals. In order to do this, we constructed regression models to measure the impact that each of these demographic characteristics has on the level of influence (none, somewhat, a lot) of each incentive offered in the survey (the dependent variables). The results of this analysis are presented in Appendix B. R-squared values for the regression models are quite low—meaning that a respondent's region, age, martial status, race, educational attainment, or whether

It makes more sense for policymakers to attend to the overall level of influence for each incentive, rather than attempting to target particular incentives to individuals in specific situations.

Higher salaries trump all other incentives with 72% of the Reserve Pool choosing salary within their top three conditions. any children under the age of six live in their home do not explain much of the variability in respondents' answers. This means that it probably makes more sense for policymakers to attend to the overall level of influence for each incentive, rather than attempting to target particular incentives to individuals in specific situations.

Top Three Choices. Given limited budgets, choices must be made concerning where to target resources that would make the greatest impact on recruiting and retaining qualified teachers. So we asked respondents to choose three conditions that would have the largest influence on their decision. Table 6 presents the top vote-getters when respondents were asked to choose the three most influential prerequisites for them to consider teaching in an Illinois early childhood center. Higher salaries trump all other incentives with 72% choosing salary within their top three conditions. There is a significant drop off for the other incentives with less than 25% of respondents selecting any other condition in their top three picks. What we learn from these results is that while many incentives may influence Reserve Pool members' decisions (as seen in Figure 4), higher salaries would be the most significant incentive to attract Type 04 certified teachers to work in early childhood centers.

Table 6. Reserve Pool's Ratings of Top Three Choices

Conditions	% Placing Condition in Top Three		
Higher salaries	72%		
Availability of a job operating on school-year schedule	23%		
Better health care benefits	22%		
Flexibility in scheduling my work hours	21%		
Completing my own family obligations	20%		
Better pension and retirement benefits	19%		
Smaller class sizes	18%		
Better resources and materials for classroom use	14%		
Availability of a part-time job	11%		
All other conditions	<10%		

Which Early Childhood Center Jobs Are of Interest?

We asked the Reserve Pool members which job(s) in an Illinois early childhood center would interest them. Respondents were allowed to "check all that apply." As seen in Table 7, the vast majority (82%) of respondents would be interested in a teaching position. Education coordinator was the next most popular position with 41% choosing that option. Less than 10% of those willing to consider working in an Illinois early childhood center would be interested in a student services or clerical position, which is understandable given their qualifications.

When we looked at all of the responses in combination, we found that one-half of the respondents selected more than one position, suggesting multiple options are available to persuade early childhood certificants to work in early childhood centers. Those who chose more than one position typically selected a teaching position and one or two other types of positions. We also see that many individuals are interested in an administrative position. One out of every two Reserve Pool members expressed interest in a position as an education coordinator, director, or assistant director. Lastly, we found that over one-third (37%) were only interested in a teaching position.

Table 7. Positions of Interest to the Reserve Pool

Position(s) of Interest	N	% of re- spondents (N=3,402)
Positions (check all that apply)		
Teacher (include Special Education teacher)	2,785	81.9%
Education coordinator	1,389	40.8%
Chief administrator/ Director	786	23.1%
Assistant Administrator/Assistant director	766	22.5%
Assistant teacher (including Special Education assistant teacher)	523	15.4%
Student services	302	8.9%
Clerical	136	4.0%
Interested in Multiple Positions	1,737	51.0%
Interested in any Administrative Position (Education Coordinator, Director, or Assistant Director)	1,724	50.7%

When we examined the responses by region, we found some differences in preferences for jobs in an Illinois early childhood center (Table 8). A larger proportion of Reserve Pool members from the South region (91%) are interested in a teaching position, while smaller proportions from Chicago (75%) and Cook County (78%) were interested in the same position. A smaller proportion of Chicagoans (7%) would consider an assistant teaching position compared to individuals from the South (17%), Cook (18%), Central (19%), and Northeast (20%) regions. Lastly, a larger proportion of Reserve Pool members from outside of Illinois (53%) are interested in a position as an education coordinator compared to the Illinois regions (ranging from 37% to 41%), including Chicago (33%).

Table 8. Positions of Interest to the Reserve Pool by Region

	Chicago	Cook County	Northeast	Northwest	Central	South	Out of State
Position(s) of Interest	N=373 %	N=623 %	N=760 %	N=428 %	N=221 %	N=357 %	N=639 %
Teacher	74.8	77.6	82.9	85.6	80.9	90.9	81.7
Education Coordinator	33.0	39.1	36.8	40.9	39.7	39.1	53.3
Chief Administrator/Director	20.9	18.2	19.2	27.3	23.5	25.5	29.4
Asst. Admin/Asst. Director	22.6	21.4	21.8	25.8	14.7	21.8	25.4
Asst. Teacher	7.0	18.2	20.1	12.9	19.1	17.3	11.2
Student Services	7.8	7.8	8.1	10.6	_	10.9	10.2
Clerical		5.2	3.0	5.3	_	5.5	3.6
Total	100	100	100	100	100	100	100

⁻ N too small to report.

Most of the Reserve Pool said they would stay employed for an extended period of time.

Expected Length of Employment in an Early Childhood Center

We were also interested in how long respondents would expect to work in an Illinois early childhood center. Most of the Reserve Pool said they would stay employed for an extended time period (Table 9). Overall, nearly half (48%) are interested in staying employed four to ten years and another 34% would expect to stay more than ten years. Length of anticipated employment varies with age—those 55 years and older are more interested in working four to ten years (67%), which would probably coincide with their retirement. Among regions, those in the South are more likely to expect to stay employed for more than ten years (51%) compared to the other regions.

Table 9. Reserve Pool Expected Length of Employment by Age and Region

	Less than 1 year	1-3 years	4-10 years	More than 10 years	Total		
Overall Distribution	< 1%	18.4%	47.6%	33.8%	100%		
AGE							
33 yrs and younger	-	22.6%	39.5%	37.6%	100%		
34-40 yrs old	_	16.4%	48.1%	35.2%	100%		
41-54 yrs old	_	11.4%	49.3%	39.3%	100%		
55 yrs and older	_	25.9%	67.0%	7.1%	100%		
REGION							
Chicago	_	22.2%	51.9%	25.9%	100%		
Cook County	_	20.6%	49.4%	30.0%	100%		
Northeast	_	20.9%	48.9%	30.2%	100%		
Northwest	_	12.6%	44.9%	41.7%	100%		
Central	_	25.8%	42.4%	30.3%	100%		
South	_	12.3%	36.8%	50.9%	100%		
Out of State	_	16.1%	51.7%	32.2%	100%		

⁻ N too small to report.

Minimum Salary Requirements

Given the priority the Reserve Pool placed on higher salaries in their decisions to consider a job in an Illinois early childhood center, we examined their salary requirements by age, region, and job position of interest (see Table 10). Almost half (45%) of the Reserve Pool said they required less than \$40,000 to take a full-year position. Another 29% wanted \$40,000–\$49,999. Younger Reserve Pool members (younger than 34 years of age) expect lower salaries than the other age groups with the majority (52%) wanting \$30,000-\$39,999. Individuals from the Chicago, Cook County, Northeast and out-of-state regions require higher salaries compared to those in the Northwest, Central, and South regions. For those Reserve Pool members who said they were only interested in a teacher position, 52% required annual minimum salaries less than \$40,000. Those interested in only the education coordinator and director positions expected higher annual salaries.

Almost half (45%) of the Reserve Pool said they required less than \$40,000 to take a full-year position.

Table 10. Reserve Pool's Annual Salary (Full-Year, Full-Time) Requirements by Age Group, Region, and Position.

	\$20,000 - \$29,999	\$30,000 - \$39,999	\$40,000 - \$49,999	\$50,000 - \$59,999	\$60,000 - \$69,999	\$70,000+	N
Overall Distribution	7.2%	37.9%	29.4%	14.3%	7.4%	3.7%	3,243
Age Group							
33 yrs or younger	10.5%	52.4%	24.8%	7.9%	2.5%	1.9%	1,022
34-40 yrs old	7.9%	39.0%	27.9%	14.8%	7.2%	3.1%	942
41-54 yrs old	2.9%	27.6%	35.6%	19.3%	9.8%	4.7%	893
55+ yrs and older	7.1%	21.4%	28.6%	19.6%	15.2%	8.0%	363
Region							
Chicago	_	19.4%	38.0%	13.0%	16.7%	8.3%	351
Cook County	_	31.7%	38.9%	20.0%	5.0%	3.3%	584
Northeast	6.6%	37.0%	32.6%	14.5%	5.3%	4.0%	737
Northwest	14.2%	52.8%	21.3%	7.9%	_		412
Central	18.2%	43.9%	24.2%	12.1%	_	_	214
South	13.2%	53.8%	20.8%	_	_	_	344
Out of State	3.2%	34.6%	23.8%	20.0%	13.5%	4.9%	601
Position							
Teacher Only	8.0%	43.9%	29.6%	11.6%	5.0%	1.9%	1,175
Educ. Coor Only		17.4%	41.3%	15.2%	13.0%	_	149
Director Only	_	_	_	33.3%	18.2%	24.2%	107

⁻ N too small to report.

Comparing Required to Current Salary

We then compared the minimum salary requirements and the current salary (as of 2004) for the Reserve Pool members who are employed. We focus on those working full-time either on a school-year schedule or a full-year schedule. For those of the Reserve Pool who are currently employed (N = 2,285), the majority work a school-year schedule while just over one-third work a full-year schedule (Table 11.)

Table 11. Employment Schedule for Reserve Pool

Employment Schedule	Percent Currently Employed (N=2,285)	Percent Currently Employed in Education (N=1,983)
School-year	56.0%	63.9%
Full-year	35.5%	27.1%
Between Full- and School-Year	6.7%	7.5%
Shorter than school year	1.8%	1.5%

When we compared the 2004 salary for school-year employees to their minimum salary requirements, we see that their requirements are very similar to the total Reserve Pool (Table 12). The lower their current salary, the more likely they are to want to move up a salary bracket. Remember that the school-year employees would be moving to full-year employment schedule. Full-year 2004 employees show a similar pattern.

Table 12. Reserve Pool's Annual Salary (Full-Year, Full-Time) Requirements by 2004 Salary

	\$20,000 - \$29,999	\$30,000 - \$39,999	\$40,000 - \$49,999	\$50,000 - \$59,999	\$60,000 - \$69,999	\$70,000+	N			
Overall Distribution	7.2%	37.9%	29.4%	14.3%	7.4%	3.7%	3,243			
2004 Salary for School-year Employees										
<\$20,000	21.6%	62.2%	13.5%	_	_		120			
\$20-29,999	7.7%	56.9%	26.2%	7.7%	_		224			
\$30-39,999		45.3%	34.0%	15.1%	_		344			
\$40-49,999			45.5%	36.4%	13.6%		143			
\$50-59,999	_	_	_	56.3%	_	_	52			
\$60-69,999			_	_	81.8%		36			
\$70,000 or more	-	_	_	_	_	_	6			
Total for School-Year	5.5%	38.3%	27.2%	16.9%	7.9%	4.1%				
2004 Salary for Full-y	ear Employe	ees								
<\$20,000	38.9%	33.3%	_	_	_		58			
\$20-29,999	15.4%	63.5%	13.5%	_	_	1	169			
\$30-39,999	-	38.9%	40.7%	13.0%	_		175			
\$40-49,999	_	_	72.0%	_	_	_	81			
\$50-59,999	_	_	_	_	_	_	32			
\$60-69,999	_	_	_	_	_	_	29			
\$70,000 or more	_	_	_	_	_	60.0%	30			
Total for Full-Year	8.7%	34.2%	32.1%	9.8%	9.2%	6.0%				

⁻ N too small to report.

Current Employment (Spring 2005)

Only 9% of the Reserve Pool was currently employed outside the field of education, typically working at a private company in training or administration. We asked respondents to tell us whether they were currently employed and some things about their working conditions. In particular, we wanted to know what alternatives were potential competitors for attracting Reserve Pool members.

We found that two thirds (67%) of the 3,402 individuals in the Reserve Pool were working, and 58% were currently employed in the field of education full- or part-time (Figure 5). Nearly one-third (29%) of the Reserve Pool reported caring for family members as their current main occupation. In contrast to common perception, only 9% of the Reserve Pool was currently employed outside the field of education, typically working at a private company in training or administration.

Caring for Family 29%

Non-education Part-Time 3%

Non-education Full-Time 13%

Non-education Full-Time 13%

Figure 5. Main Occupation of Reserve Pool

Current Education Employment

We have shown that many Reserve Pool Members (58%) are currently working in an education field. In order to gain a fuller understanding of their employment, we looked at their current employment setting and the years of experience in their current position for these individuals (remember that we have already excluded from the Reserve Pool those who were currently working in an Illinois early childhood center—10% of the potential pool). Most of the Reserve Pool who were working in education were employed in a school setting, with more than half (59%) in Illinois schools (Table 13). Those in Illinois public schools had the shortest tenure, with about half having been in their current position two years or less. This may be one reason that this group of school employees is willing to consider working in an Illinois early childhood center setting. We interviewed 40 of the Reserve Pool members who were working in Illinois public schools, and their responses

Table 13. Current Work Setting and Years of Experience for Reserve Pool Members Employed in Education

		Years working in current position				
Work Setting in Education	% (N=1,983)	% <1 year	% 1-2 years	% 3-5 years	% 6-10 years	% 11 or more years
Illinois public school	32.7%	29.1	30.7	16.6	13.6	10.1
Illinois private school	25.9%	12.8	10.3	35.3	23.7	17.9
Out-of-state public school	16.1%	16.7	10.4	36.5	25.0	11.5
Out-of-state private school	3.2%	35.0		35.0	30.0	
Post-secondary college or university	6.3%	26	6.4	18.4	42.1	_
Non-profit agency	5.1%	29	9.0	38.7	32	2.2
Early childhood center outside IL	3.1%	42.2		36.8	21	.0
Home-based day care	3.1%	36	6.8	31.6	31	.6
Government agency	2.5%			40.0	40.0	
Business or industry	1.7%			50.0		
Residential facility for children	_	_	_	_	_	_
Total	100.0	19.5	18.2	28.7	20.4	13.2

⁻ N too small to report.

Cells are combined when cells individually were too small to report.

Early childhood centers could look to a wide array of educational settings from which to attract potential qualified employees if they are able to meet key incentive conditions. are shown in the box on pages 21-22. We can also see from Table 13 that others working in the field of education are employed in a wide variety of work settings including post-secondary education, non-profit or government agencies, and business. This finding suggests that early childhood centers could look to a wide array of educational settings from which to attract potential qualified employees if they are able to meet some of the incentive conditions described earlier.

Table 14 shows the type of job held by those working in education. Nearly two-thirds (65%) are teachers and another 7% are assistant teachers. A somewhat larger proportion (17%) of those working in Illinois public schools are assistant teachers.

Table 14. Current Job of Reserve Pool Members Employed in Education

Current Job in Education	All Educa- tionSettings (N=1,983)	Illinois public schools (N=649)
Teacher	64.6%	63.1%
Assistant teacher	7.4%	17.0%
Teacher educator	5.1%	_
Chief or Asst. administrator	2.8%	_
Student services	3.0%	
Education coordinator	2.8%	_
Family child care provider	2.6%	_
Adult education, trainer, or consultant	2.0%	_
Other	9.4%	12.5%
Total	100.0%	100%

N too small to report.

Table 15 shows the age of the students served by the Reserve Pool members working in the field of education. Importantly, 41% work with young children (five years of age or younger), and another 44% work with kindergarten through third-grade students or entire elementary grades. Data for those in Illinois public schools are very similar. Many Reserve Pool members are currently working with young children.

continued on page 23

Table 15. Age of Students Served by Reserve

Age of Students Served	All Education Settings (N=1,983)	Illinois public schools (N=649)
0-2 years	4.9%	
3-5 years	30.9%	36.1%
Entire early childhood (0-5)	4.8%	
K- grade 3	35.9%	35.5%
Grades 4-5	3.1%	4.5%
Entire elementary	7.6%	13.0%
Grades 6-8	2.6%	3.5%
Grades 9-12	1.5%	_
College/University	5.3%	_
Other adults	1.2%	_
Do not directly serve students	2.3%	_
Total	100.0%	100%

N too small to report.

Many Reserve Pool members are currently working with young children.

Illinois Public School Employees

working in Illinois public school employees among our respondents? We excluded from our study Type 04 certificants who were working in Illinois public schools in the 2002-2003 school year (the most recent year for which we had data). Nonetheless, some IPS employees were in the sample because they had joined Illinois public schools subsequently, or returned after a period away. We were therefore delighted to gain information from them, since their willingness to consider working in an early childhood center contradicted one of our own working assumptions—that centers could not compete with Illinois public schools for qualified teachers.

by would Illinois public school employees consider switching from a public school to an Illinois early childhood center? To further explore this unexpected finding, we conducted follow-up phone calls to find out more about what attracts Illinois public school employees to early childhood settings. We randomly selected 40 early childhood-certified individuals from across the state who, at the time of our survey (Spring 2005), indicated that they were working in an Illinois public school but would consider working in an early childhood center and who gave us permission to contact them for further information. At the time of the interviews (Spring 2006), 37 of the 40 (93%) were still teaching in Illinois public schools. Twenty-two (55%) participants said they had been previously employed in early childhood centers, while an additional six (15%) indicated they had some other experience (such as volunteering, collaborating, or children who attended) with early childhood centers. The remaining twelve subjects (30%) had no experiences with early childhood centers.

We asked participants a series of interview questions dealing with the attractiveness and advantages of working in early childhood centers, and whether they would rather

work in a public school or early childhood center setting and why. The vast majority of responses to these questions revolved around six distinct topics: developmental emphasis, professional community, freedom and flexibility, connections with parents, student age, and pay and benefits. Many respondents felt that the developmental emphasis of early childhood centers, as opposed to the academic focus of public schools, was an attractive feature of the job. These respondents indicated that early childhood centers were the best atmosphere for preschoolers to experience more "developmentally appropriate" (i.e., nonacademic) activities and settings, such as smaller class sizes and children closer to their own age. With regard to professional community, some respondents felt that early childhood centers were a better place to find like-minded colleagues who shared similar training and philosophies, and were more willing to collaborate. Many respondents also felt that early childhood centers offered more freedom and flexibility for teachers than public schools, making them less stressful places to work. Respondents in this category indicated that teachers in early childhood centers had less paperwork and bureaucracy to deal with, and more leeway to be creative in their teaching. Another attractive element of early childhood centers, according to these respondents, is increased interaction with the community and, especially, with parents—who often choose and pay for the centers, and visit daily to drop-off and pick-up their children. Some respondents found early childhood centers appealing simply because they are passionate about working with younger children and prefer working in an atmosphere without older age groups. A few respondents mentioned pay and benefits as an advantage of working in an early childhood center, noting that some early childhood centers offered pay and benefits on par with public schools, as well as more flexible scheduling.

continued on next page

Illinois Public School Employees (continued)

Tiven the choice between working in a public school or an early childhood center, fifteen individuals (38%) stated they would chose public schools, eight (20%) chose early childhood centers, and the remaining seventeen (43%) were undecided. Most of the reasons provided for choosing early childhood centers were similar to the advantages described above,. For those who selected public schools, the most cited reasons were pay and benefits, and a work schedule that allowed shorter days, summer vacation, and the same schedule as their school-aged children. Those who were undecided generally felt that there were strengths and weaknesses to each setting, with several mentioning that they would work in an early childhood center if all things were equal while acknowledging that all things were not equal due to higher salaries in public schools.

Additional comments from these interviewees treaching in public schools revealed some strong beliefs that Pre-Kindergarteners belong in early childhood centers that "work with the whole child" and "provide time for exploration," rather than public schools where they are "forced to learn." Others noted that early childhood education, in general, is very important and needs to be better funded.

While this follow-up study included only 10% of the Illinois public school respondents, it does shed some light on their perceptions of early childhood centers. If we had included all Type 04 certified individuals who were Illinois public school employees in 2002-2003 (9,837), we may have discovered a second "reserve pool" of qualified teachers for the expansion of access to state-supported Pre-Kindergarten.

Where are previous IPS employees now?

About half of the Reserve Pool had previous IPS experience. We were able to look at their current occupation and found that over one-third (36%) had left to care for their family. While one in five (22%) were again employed in an IPS, 28% have moved to other educational settings. Interestingly, 8% have migrated out of Illinois to another public school setting. Only one in ten has left the education field for other employment. These data contradict the common belief that teachers are leaving the field of education in large numbers.

Current Occupational Status of Reserve Pool Members with Previous Illinois Public School Experience

Current Occupational Status	N	%
Caring for Family	626	36.2
Employed in Illinois Public School	377	21.8
Employed in Out-of-State Public School	140	8.0
Employed in Other Education Setting	192	11.1
Employed in Private School	153	8.9
Employed Outside Education	166	9.6
Student	I	_
Unemployed	65	3.8
Total with Previous Illinois Public School Experience	1,727	100.0

⁻ N too small to report.

Previous Education Experience of the Reserve Pool

In the last section we described the employment status (as of Spring 2005) of Reserve Pool members. We now add information about their previous employment in the field of education to get a fuller picture of their work history (Table 16). Respondents were allowed to choose all previous employment categories that applied to them, so the data in Table 16 represent multiple responses. Nearly half (46%) of Reserve Pool members have had past experience working in an early childhood center. (Remember that we excluded current early childhood center employees from inclusion in the Reserve Pool.) In addition, half (51%) had worked in an Illinois public school (prior to their current position), and 42% had other school-setting experience.

Nearly half (46%) of Reserve Pool members have had past experience working in an early childhood center.

Table 16. Reserve Pool Members' Previous Employment by Current Occupation

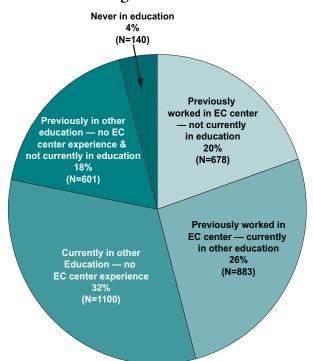
			Previous Employment (Multiple responses possible)								
Current Occupational		Child	rly lhood nter		Public nool	of-State	or Out- Public nool	Ho Day	me care		lential care
Status	N	N	%	N	%	N	%	N	%	N	%
Caring for Family	974	490	50.3	626	64.3	422	43.3	94	9.7	23	2.3
Employed in Illinois Public School	649	263	40.5	377	58.0	224	34.5	42	6.5	_	_
Employed in out-of- State Public School	312	162	52.1	140	44.8	159	51.0	_	_	_	_
Employed in Other Education Setting	445	227	51.1	192	43.1	175	39.4	42	9.5		_
Employed in Private School	571	227	39.8	153	26.7	308	54.0	19	3.4	ı	_
Employed Outside Education	312	130	41.7	166	53.1	97	31.3	ı	1	1	_
Student	36	23	63.6	_	-	_		l	ı	l	_
Unemployed	104	39	37.5	65	62.5	45	43.8	_			_
Total	3,402	1,561	45.9	1,727	50.8	1,441	42.4	240	7.1	78	2.3

The rows in Table 16 show Reserve Pool members' current occupational setting. For the 29% of Reserve Pool members currently staying home to care for family, many have previous experience in educational settings (50% in an early childhood center, 64% in IPS, and 43% in a private or out-of-state public school). Even for the small proportion of Reserve Pool members currently working outside of education (9%), 42% had early-childhood-center experience, and 53% had worked in Illinois public schools. Together, these data provide evidence that most certified teachers move into, out of, and back into the field of education, in contrast to the common belief that they never enter, or leave permanently. Similar to other professions, moving to different settings but staying within the same field is not uncommon.

Similar to other professions, moving to different settings but staying within the same field is not uncommon.

The Reserve Pool holds a large collection of qualified and experienced individuals for early education instruction. This bodes well for recruitment efforts for the planned expansion of early childhood programs. Table 16 showed the multiple education settings in which Reserve Pool members had worked. In Figure 6, we show a mutually exclusive summary categorization of Reserve Pool members' current and past work experience in early childhood centers. We see that nearly half (20% + 26% = 46%) of the Reserve Pool has had direct experience in an early childhood center and nearly all (96%) have had experience in some type of education setting since certification. The Reserve Pool holds a large collection of qualified and experienced individuals for early education instruction. This bodes well for recruitment efforts for the planned expansion of Illinois early childhood programs.

Figure 6. Reserve Pool Experience in an Education Setting



Note: Those currently working in an early childhood center are excluded from the Reserve Pool.

Previous Experience in Early Education

We have just shown that most of the Reserve Pool has previous employment experience in schools and/or early childhood centers. Because we are particularly interested in experience with 3–5 year olds, we looked more specifically at the experiences with the children in this age group (Table 17). We found that two out of three (66%) Reserve Pool members had previous experience working in an early childhood center or with Pre-K aged children in school settings. Most of them had been teachers (82%) while smaller proportions have held administrative positions.

Table 17. Previous positions Reserve Pool Members held in Early Education

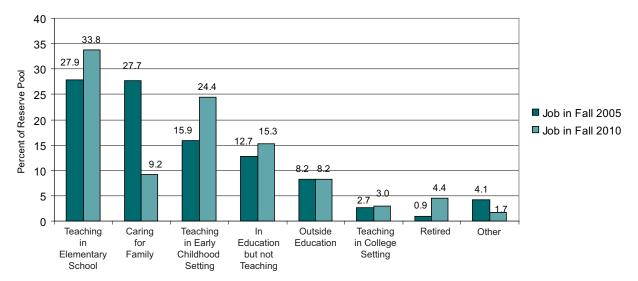
Positions Held (Multiple	Reserve Pool Members with Previous Early Education Experience			
responses possible)	N	%		
Teacher	1,847	81.9%		
Substitute Teacher	396	17.6%		
Assistant Teacher	438	19.4%		
Director	179	7.9%		
Assistant Director	162	7.2%		
Education Coordinator	208	9.2%		
School Administrator	117	5.2%		
Other	221	9.8%		
Total unduplicated headcount	2,256	66% of Reserve Pool		

Future Employment Plans

We explored the future employment plans of the Illinois early childhood certificants (without additional incentives that might be provided to encourage them to choose work in an early childhood setting). Survey respondents were asked to indicate what they expected their main occupational activity would be in Fall 2005 and five years later, Fall 2010 (Figure 7). By 2010, a third (34%) of the Reserve Pool expects to be teaching at the elementary level, and one quarter (24%) expects to be teaching in an early childhood setting. Clearly, additional incentives will be needed to draw a larger portion of the Reserve Pool into early childhood education if needed.

We next look at the Reserve Pool's future employment plans based on their current occupational status (Table 18). We see that many of those who are currently (as of Spring 2005) caring for family members intend to re-enter the teaching field by Fall 2010, with 28% planning to teach in an early childhood setting—this is without the incentives described earlier—and 29% plan to teach at the elementary level.

Figure 7. Employment Plans of the Reserve Pool



Only 24% expect they will still be caring for family members. These data support the notion that a large proportion of those who "stop out" of the labor market to care for family intend to return to teaching.

We also see that those employed in school settings plan to continue in education, with many intending to continue teaching. In addition, over one-third (35%) of those currently employed outside of education plan to be in an education-related field in 2010. Thus, we see that for these Type 04 certificants, many are staying within the education field, rather than the common belief that they are abandoning the field.

A large proportion of those who "stop out" of the labor market to care for family intend to return to teaching.

Table 18. Reserve Pool Employment Plans in 2010 by Current Occupational Status

Current Occupation	Planned Job in 2010	Top Four Plans
	Teaching Elementary	28.5%
Caring for Family	Teaching Early Childhood	28.2%
(N = 626)	Caring for Family	23.5%
	In Education, but not teaching	11.4%
	Teaching Elementary	42.9%
Employed in Illinois Public School	Teaching Early Childhood	27.0%
(N = 377)	In Education, but not teaching	15.3%
	Retired	6.6%
	Teaching Elementary	55.8%
Employed in Out-of-State Public School*	Teaching Early Childhood	18.9%
(N = 140)	In Education, but not teaching	15.8%
	In Education, but not teaching	31.9%
Employed in Other Education Setting	Teaching Early Childhood	26.7%
(N = 192)	Teaching College	14.8%
	Teaching Elementary	13.3%
	Teaching Elementary	47.4%
Employed in Private School	Teaching Early Childhood	26.0%
(N = 153)	In Education, but not teaching	10.4%
	Retired	8.1%
	Outside Education	53.2%
Employed Outside Education	Teaching Elementary	12.8%
(N = 166)	In Education, but not teaching	12.8%
	Teaching Early Childhood	9.6%
Unemployed*	Teaching Elementary	40.6%
(N = 65)	Teaching Early Childhood	21.9%
	Teaching Elementary	33.8%
	Teaching Early Childhood	24.4%
Total, all categories	Other Education, not teaching	15.3%
	•	

^{*} N too small to report top four.

Summary of Findings About the Reserve Pool

We estimate that there are about 3,400 individuals certified to teach early childhood who would be willing to work in an Illinois early childhood center under certain conditions. This Reserve Pool represents 83% of available early childhood certificants (i.e., those not retired or already working in an Illinois early childhood center). Half of the Reserve Pool expressed interest in multiple positions in an early childhood center, typically a teacher and one or two other positions, suggesting multiple options to attract them to work in this setting. Half of the Reserve Pool also expressed interest in an administrative position (i.e., education coordinator, director, or assistant director), which supports a possible model of hiring certified early childhood staff to supervise paraprofessionals currently employed in early childhood centers. Most of the Reserve Pool, especially younger members and those from the southern region of the state, would anticipate working in an Illinois early childhood center for an extended period (more than ten years).

The majority (81%) of the Reserve Pool is located across Illinois; however, some live in bordering states or other states. Most of the Reserve Pool is white and nearly three-fourths are married. In general, members of the Reserve Pool are similar in terms of demographic and academic characteristics, except for those living in the city of Chicago. Chicagoans in the Reserve Pool are older, more likely to be black, less likely to be currently married, less likely to have children under the age of six at home, and more likely to have an advanced degree. Those in Cook County are also more likely to hold an advanced degree.

Many conditions would positively influence the Reserve Pool's decisions to work in an Illinois early childhood center. Higher salaries trump all other incentives with 72% of the Reserve Pool choosing higher salaries within their top three conditions. Almost half (45%) of the Reserve Pool said they required less than \$40,000 to take a full-year position. Another 29% wanted \$40,000–\$49,999.

The Reserve Pool provides an abundance of experienced individuals. Nearly half of the Reserve Pool has direct experience in an early childhood center and most have experience in some type of education setting, typically as a teacher, with many serving preschool children. Results from our survey demonstrate that Illinois certificants in early childhood education have not left the field of education or the early education arena.

Unexpectedly, our survey identified over 600 members of the Reserve Pool working in Illinois public schools. When we asked 40 of these IPS teachers what attracts them to an early childhood center, many respondents felt the developmental emphasis (as opposed to the academic focus), more freedom from bureaucracy, more flexibility in their teaching, and increased interaction with parents were attractive features of this setting.

The Reserve Pool is a viable option as a source of supply for the anticipated need for qualified early childhood teachers in Illinois early childhood center settings. Recruiting from the Reserve Pool is a feasible strategy to immediately strengthen the number of certified teachers working in Illinois early childhood centers.

Comparing the Reserve Pool to Other Analysis Groups

In this section, we compare the Reserve Pool to the remaining analysis groups on key variables. As explained in the survey methodology section of this report, we divided our respondents into four mutually exclusive groups:

- the "Current ECC" group (N=558) who reported that they were currently working in an early childhood center;
- the "Retired" group (N=727) who stated that they were currently retired;
- the "Not-Interested" group (N=698) who were neither currently working in an Illinois early childhood center nor retired, but were not interested in working in an Illinois early childhood center under any conditions;
- and the "Reserve Pool" (N=3,402) who were neither currently working in an Illinois early childhood center nor retired, and were willing to work in an Illinois early childhood center under the right conditions.

It is important to remember that the three comparison groups are much smaller than the Reserve Pool—almost two-thirds of our sample fell into the Reserve Pool, while the remainder were split between the other three analysis groups (Figure 8). This alone is telling in terms of the potential appeal of Illinois early childhood center jobs under the right conditions. Keep in mind that individuals in these groups, as with all respondents to this survey, possessed Type 04 Illinois Early Childhood Teaching certificates and were not working in Illinois public schools in 2002-2003, according to the Illinois State Board of Education's Teacher Service Record database. Full data on all analysis groups for all survey items are available in a separate technical appendix available, or on our website, http://ierc.siue. edu/iercpublication.asp.

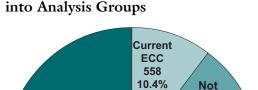
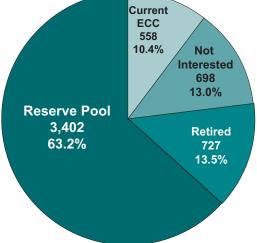


Figure 8. Distribution of Respondents



Comparing the Reserve Pool to the Not-Interested Group

The most substantial difference between the Reserve Pool and the Not-Interested group is, of course, that the former indicated they would be willing to consider employment in an Illinois early childhood center, while the latter did not indicate such an interest. But how else do these two groups differ, and are there any systematic differences between these groups that might help explain why one group is willing to consider working in an Illinois early childhood center while the other is not? To answer these questions, we compared the Reserve Pool with the Not-Interested group on key selected variables (Table 19).

Table 19. Comparison of the Reserve Pool and the Not-Interested Group

Selected Comparisons	Not- Interested	Reserve Pool	Significant Difference? *
Currently Employed in Education	85.3%	86.7%	No
Previously Employed in Education	84.6%	85.7%	No
Previously Employed in an Early Childhood Center	53.0%	54.7%	No
Previously Employed in Illinois Public School	55.4%	60.4%	No
Previously Employed in an Out-of-State or Private School	50.9%	50.5%	No
Current Main Occupation		-	
Any Employment	82.3%	67.2%	Yes
Caring for Family	14.4%	28.6%	Yes
2004 Income for Those Employed			
Under \$30,000	37.8%	49.0%	Yes
Over \$50,000	20.4%	10.6%	Yes
Length of Time in Current Job		-	
2 or Fewer Years	25.0%	37.5%	Yes
6 or More Years	51.2%	34.1%	Yes
Type 04 Certification Active or Plan to Renew	74.6%	88.6%	Yes
Plan to Teach Early Childhood in Fall 2005	14.6%	15.9%	No
Plan to Teach Early Childhood in Fall 2010	14.7%	24.4%	Yes
Age		-	-
33 or Younger	22.5%	31.4%	Yes
55 or Older	22.5%	11.6%	Yes
Have Children Under Six Years Old Living in Home	22.9%	41.9%	Yes
Current Residence			
Chicago	10.7%	11.0%	No
Outside Illinois	33.0%	18.8%	Yes

^{*} Statistically significant difference between groups at the .01 level as measured with the chi-square goodness-of-fit test.

There are no significant differences—statistically or policy-wise—between the Not-Interested and Reserve Pool in terms of current and previous education employment. The Not-Interested group and the Reserve Pool are virtually identical in terms of whether they currently work in education (85% and 87%, respectively) and whether they previously worked in education (85% and 86%), public schools (55% and 60%), private or out-of-state schools (both 51%), or early childhood centers (53% and 55%). It is worth noting that, even though they are not currently interested in doing so, over half of the Not-Interested group has worked in early childhood centers in the past, as have over half of the Reserve Pool.

There are some other aspects in which these groups differ widely, however. First, the Not-Interested group is more likely to be currently employed (82% are employed either inside or outside of education, full-time or part-time, compared to 67% of the Reserve Pool) and less likely to be currently staying at home to take care of their family (14% for the Not-Interested group versus 29% for the Reserve Pool). This occupational perspective portrays the Reserve Pool, with their lower proportion of full-time employees and higher proportion of stay-at-home caregivers, as a group who may have stopped out of employment temporarily and/or who may soon be looking to return to the workforce. Not-Interested group members, on average, earned higher salaries from their jobs in 2004 than the Reserve Pool (only 38% earned less than \$30,000 compared to 49% of the Reserve Pool, while 20% earned over \$50,000 compared to 11% of the Reserve Pool), and they have been employed in their current jobs longer than the Reserve Pool (only 25% have held their current job for two or fewer years compared to 38% of the Reserve Pool, while 51% have held their current job for six or more years, compared to 34% of the Reserve Pool). These salary and longevity measures may indicate that the Not-Interested group may be more satisfied with, and less likely to leave, their current jobs. Furthermore, the Not-Interested group is less likely to plan to renew their Type 04 certificates (75% versus 89% for the Reserve Pool). The Not-Interested group is also less likely to plan to teach early childhood in 2010 (15% versus 24% for the Reserve Pool).

Salary and longevity may indicate that the Not-Interested group may be more satisfied, with and less likely to leave, their current jobs.

There are also some significant demographic differences between these two groups. The Not-Interested group is older than the Reserve Pool (only 23% are 33 or younger while 23% are 55 and older, compared to 31% and 12%, respectively, for the Reserve Pool) and less likely to have children under six years old living in their home (23% compared to 42% for the Reserve Pool), indicating the two groups may be at somewhat different life stages. Additionally, a large portion of the Not-Interested group lives out of state (33%, compared to 19% of the Reserve Pool), and it would make sense if they viewed this as a barrier to employment in Illinois. These demographic differences coupled with the occupation differences described in the previous paragraph point to two groups that, though similar in terms of potential availability to work in early childhood centers, are actually quite different.

The differences between the Reserve Pool and the Not-Interested group are highlighted when we look at each group's responses to the survey item querying why they were not currently employed in an Illinois early childhood center (Figure 9). Here, we can see that 24% of the Not-Interested group stated they did not take such a job because they do not live in Illinois, compared to 11% of the Reserve Pool. Meanwhile, only 8% of the Not-Interested group did not take an Illinois early childhood center job because they chose to parent full-time—compared to 27% of the Reserve Pool who chose to do so.

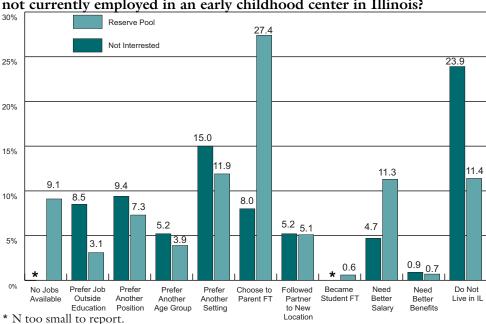


Figure 9. Which of the following reasons BEST describes why you are not currently employed in an early childhood center in Illinois?

In order to help us statistically tease out whether there were any survey items that would predict whether an individual would fall into the Reserve Pool group or the Not-Interested group (i.e., answer that they were willing to consider working in an Illinois early childhood center under the right circumstances), we attempted to fit several discriminant functions to the data. We were unable to find any models that predicted group membership at a rate greater than we could accomplish by simply assuming that all respondents were members of the Reserve Pool. This finding means that, rather than attempting to identify particular sub-populations who may be more apt to respond to policy incentives based on some demographic or other characteristics, it would make more sense to target the universe of qualified candidates in hopes of finding additional early childhood teachers.

Comparing the Reserve Pool to the Early Childhood Center Employees Group

In contrast to the Not-Interested group, the group of Current Early Childhood Center (ECC) employees is actually quite similar demographically to the Reserve Pool (see Table 20). There are only slight, non-meaningful differences between the groups in terms of age (34% of this group is 33 or younger and 12% are 55 or older, compared to 31% and 12%, respectively, for the Reserve Pool), children under six years old in the home (37% for the Current ECC group, compared to 42% of the Reserve Pool), current Type 04 certification status (92% are active or plan to renew, versus 87% of the Reserve Pool), highest degree (38% of both groups have a master's degree or higher), and, perhaps most importantly, 2004 income (56% earned under \$30,000 and 7% earned over \$50,000, compared to 49% and 11% for the Reserve Pool). In terms of current employment, of course, the groups differ by definition—all in the Current ECC group are currently employed at an Illinois early childhood center while none in the Reserve Pool currently hold such jobs. However, with regards to previous employment, both groups are equally

Rather than attempting to identify particular sub-populations who may be more apt to respond to policy incentives, it would make more sense to target the universe of qualified candidates in hopes of finding additional early childhood teachers.

likely to have held a previous job in Illinois public schools (55% for the Current ECC group compared to 60% for the Reserve Pool). This lack of significant group differences is encouraging because it indicates that the Reserve Pool is quite similar to our sample of current Type 04-certified early childhood center employees and confirms that it would be reasonable to expect the Reserve Pool to work in Illinois early childhood centers under the right conditions. (To learn more about the employment decisions of the Current ECC group and what attracts them to this setting, see pages 34-35.)

Table 20. Comparison of the Reserve Pool and the Current ECC Group

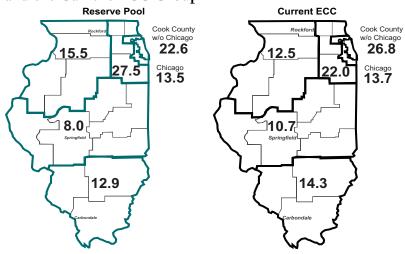
Selected Comparisons	Current ECC	Reserve Pool	Significant Difference?
Age			
33 or Younger	33.5%	31.4%	No
55 or Older	11.8%	11.6%	No
Have Children Under Six Years Old Living in Home	36.8%	41.9%	No
Type 04 Certification Active or Plan to Renew	92.4%	88.6%	Yes
Has Masters Degree or Higher	37.8%	37.5%	No
2004 Income for the Employed			
Under \$30,000	55.8%	49.0%	No
Over \$50,000	7.3%	10.6%	No
Previously Employed in Education	67.4%	85.7%	Yes
Previously Employed in an Early Childhood Center	72.7%	54.7%	Yes
Previously Employed in Illinois Public School	54.5%	60.4%	No
Previously Employed in an Out-of-State or Private School	34.2%	50.5%	Yes
Plan to Teach Early Childhood in Fall 2005	67.3%	15.9%	Yes
Plan to Teach Early Childhood in Fall 2010	37.4%	24.4%	Yes
Current Residence			
Chicago	13.4%	11.0%	No
Outside Illinois		18.8%	Yes

N too small to report.

Statistically significant difference between groups at the .01 level as measured with the chi-square goodness-of-fit test.

The in-state geographic distribution of the Current ECC group is also very similar to that of the Reserve Pool (Figure 10). Of those living in Illinois, about a quarter of each group lives in Cook County outside of Chicago (27% of the Current ECC group and 23% of the Reserve Pool) and another quarter lives in the Northeast region outside of Cook County (22% of the Current ECC group and 28% of the Reserve Pool), with the remaining half of each group distributed relatively equally between the other regions of the state. About 14% of each group resides in Chicago even though this city represents almost a quarter of the state's total population, indicating that both Type 04-certified early childhood center workers and Reserve Pool members are under-represented in this area.

Figure 10. In-State Percent Distribution of Reserve Pool and the Current ECC Group



This group profile is also informative because it helps us understand the characteristics of qualified (Type 04 certified) early childhood employees in more depth, including some valuable information on these individuals' future plans. The survey items addressing future plans revealed that two-thirds (67%) of the Current Early Childhood Center group planned to be teaching at an early childhood setting in the subsequent fall,⁴ with another quarter (25%) planning to work, but not teach, in education (which could include an early childhood center). However, by Fall 2010, only 37% of this group plans to be teaching early childhood education, while the proportion planning to teach elementary grades increases from 3% to 15%. Only about 5% of the Current Early Childhood Center group planned to retire in the next five years. Incentives for recruitment may also be important for retention of qualified teachers already in the early childhood centers.

Incentives for recruitment may also be important for retention of qualified teachers already in the early childhood centers.

continued on page 35

⁴ While 100% of this group was employed at an early childhood center at the time of the survey, only 59.9% held teaching positions, so the two-thirds figure is actually an increase.

Interviews with Type 04 Certified Early Childhood Center Employees

To help us better understand the employment decisions of those currently working in an Illinois early childhood center and what attracts them to this setting, we interviewed fifteen individuals from this group from across the state who at the time of our survey (Spring 2005), indicated that they were working in early childhood centers. Twelve (80%) of these individuals were still working in early childhood centers at the time of the interviews (Spring 2006), with eight (53%) still teaching in the same center and one who had changed position from teacher to education coordinator. The median amount of experience in their early childhood centers was four years, and many interviewees had held multiple positions in their centers, such as acting or assistant director, director, or reading specialist. Only one interviewee planned to leave their center next year, while the majority said they planned to stay at least three to five more years or had no plans to leave. When asked where they would go if they were to leave their current job, half of the interviewees chose the public schools, with the remainder opting for another early childhood center, graduate school, or spending time with their family. Two interviewees left early childhood centers to take jobs in the public schools, and one was on maternity leave.

Those who switched jobs or centers mentioned **L** that the reasons for these changes included better pay, benefits, hours, and annual schedule, and opportunities to mentor other teachers. All but one (92%) of the interviewees held a Type 04 teaching certificate when they began working at their early childhood center. The most common reasons given for choosing to teach at an early childhood center were that there were no public school teaching jobs available, pay and benefits, and flexibility (i.e., availability of a part-time job or shorter hours). Other reasons provided by multiple respondents included preferences for the organizations with which they were affiliated (e.g., a church or college), a desire to work with younger children, and an aversion to the size and bureaucracy associated with public schools.

Then asked what they liked best about teaching at an early childhood center, the most popular answer was that they enjoyed working with children in this age group. Many respondents also liked the freedom and flexibility in teaching, close connection with parents, and more family-like atmosphere among co-workers that they felt early childhood centers offered, especially compared to public schools. Pay and benefits and the lack of respect and support were the aspects of teaching at an early childhood center that the respondents disliked the most. However, it is worth noting that an equal number of respondents could not come up with anything particular that they disliked about teaching at an early childhood center. Other aspects of teaching at an early childhood center that were disliked by multiple respondents included long hours and side tasks such as cleaning and paperwork.

The then asked these individuals to describe V their main and secondary responsibilities as teachers at early childhood centers. We also asked whether these responsibilities differed from their expectations. Planning and executing lessons for their class was the most common answer, along with keeping children safe and helping to meet their emotional and other needs. Several respondents were also responsible for significant leadership activities at their centers, such as helping train, hire, and supervise other teachers. Working with parents, custodial work (such as cleaning and changing diapers), and paperwork (such as DCFS re-licensing and immunizations) were also mentioned by multiple respondents. The vast majority of respondents stated that they were aware of what would be expected of them when they took the job, with only a few feeling that their responsibilities differed from their expectations.

Next, we asked whether certified teachers had the same responsibilities as uncertified teachers, and how the certified and uncertified teachers at their center viewed one another. It appears to be a site decision as to whether

certified and uncertified teachers have the same responsibilities, as responses to this question were approximately evenly divided. In some centers, certified teachers had more responsibilities, such as assisting the director, additional reports and paperwork, and mentoring, while other centers made no distinctions between the responsibilities or expectations of certified and uncertified teachers. According to our interviews, certified teachers view uncertified teachers in their centers as equals and "part of the same team" in most centers, and vice-versa. A couple of Type 04 certified teachers reported that uncertified

teachers in their center look to them for assistance, while only one noted that uncertified teachers viewed certified teachers as a threat. Many respondents mentioned that their fellow teaches held elementary (Type 03) teaching certificates or BA degrees in related fields, and still others were currently in the process of earning certification. Several of our respondents were also quick to mention that the teaching experience, dedication, and common in-service training of their uncertified peers helped them make up for what they lacked in pre-service education.

Comparing the Reserve Pool to Retirees

The Reserve Pool and the Retired group are clearly two distinctly different groups (see Table 21). One inherent difference is that, by definition, none of the Retirees are currently employed—they are all retired. However, 44% of the Retired group reported that they were previously employed in an early childhood center, which provides further evidence that Type 04 certificants are willing to take such jobs.

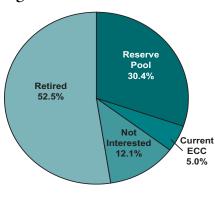
Table 21. Comparison of the Reserve Pool and Retirees

Selected Comparisons	Retired	Reserve Pool	Significant Difference?
Previously Employed in Education	92.8%	85.7%	Yes
Previously Employed in an Early Childhood Center	44.2%	54.7%	Yes
Previously Employed in Illinois Public School	90.6%	60.4%	Yes
Previously Employed in an Out-of-State or Private School	21.3%	50.5%	Yes
Age			
55 or Older	96.8%	11.6%	Yes
Race/Ethnicity = Black	27%	5%	Yes
Plan to Teach Early Childhood in Fall 2005	1.4%	15.9%	Yes
Plan to Teach Early Childhood in Fall 2010	2.3%	24.4%	Yes
Type 04 Certification Active or Plan to Renew	67.8%	88.6%	Yes
Current Residence			
Chicago	31.3%	11.0%	Yes
Outside Illinois	12.5%	18.8%	Yes
Have Children Under Six Years Old Living in Home	1.8%	41.9%	Yes

N too small to report.

Statistically significant difference between groups at the .01 level as measured with the chi-square goodness-of-fit test.

Figure 11. Current Main Occupation of Respondents Aged 55 and Older



Another obvious difference between the Retirees and all other groups of respondents is their age—97% are fifty-five years old or older. However, it is also important to note that only 52% of all respondents aged 55 and older were retired (see Figure 11), while 30% fell into the Reserve Pool and 5% were currently working in an early childhood center. The Retirees are also more racially diverse than the other groups. Over a quarter (27%) of the Retired group is black, compared to 5% of the Reserve Pool (and compared to 8% of the current ECC group and 5% of the Not-Interested group). However, the proportion of Latinos, Asians, Native Americans, and multi-racial individuals is quite similar, and quite small, across all groups.

Though we did not anticipate that Retirees might be interested in returning to work in an Illinois early childhood center (and thus did not ask them questions regarding the conditions that would be required for them to do so), we have some evidence that this could be the case.

Multiple Certification

In this section, we combine our survey results with data on participants' teaching certifications from the Illinois state Teacher Certification Information System in order to learn more about the range of educator jobs for which they are qualified. This analysis also provides insight into the attractiveness of Illinois early childhood teaching positions to early childhood certificants. For example, this information can provide insight into whether individuals working in Illinois early childhood centers have different qualifications than those working in Illinois public schools and whether individuals who are qualified for other positions are less willing to work in Illinois early childhood centers.

We began this examination by determining the percentage of respondents who held only an Illinois early childhood teaching certificate. Table 22 displays these results by analysis group, and also for all respondents who are currently employed in Illinois public schools (a subset of both the reserve pool and the not-interested group). For those with multiple certifications, we used the Teacher Certification Information System to determine which additional certificates they possessed and whether these certification patterns differed by analysis group and current employment.

Table 22. Active Teaching Certificates in Illinois

		Analysis Group					
Certificates	Current ECC	Not Interested	Retired	Reserve Pool	Employed in IPS		
Only Type 04	69.8%	61.4%	33.5%	62.2%	61.6%		
Multiple Certificates	30.2%	38.6%	66.5%	37.8%	38.4%		
Elementary	23.9%	33.8%	55.3%	32.8%	32.9%		
Secondary	_	8.3%	15.4%	6.3%	6.4%		
Special Education	_	4.4%	17.2%	3.5%	2.8%		
Bilingual	_	_	_	0.5%	_		
90-Day Substitute	_	_	_	2.2%	2.5%		
School Service Personnel	_	_	5.2%		_		
Administrator	_	2.6%	10.6%	3.1%	2.9%		
Average Number of Certificates	1.4	1.5	2.1	1.5	1.5		

⁻ N too small to report.

As previously mentioned, all study participants possessed at least a Type 04 (early childhood) teaching certificate, according to the most recent data available at the time the sample was drawn. Excluding the Retirees, about one-third of each group holds multiple active certificates, and these groups each averaged around one and a half active certificates per individual. Meanwhile, about two-thirds of the Retired group held multiple certificates and the average retiree held two active certificates.

Among survey respondents, the most commonly held certificate other than the Type 04 Early Childhood teaching certificate, was the Type 03 Elementary teaching certificate. Approximately one-third of the Not-Interested group, the Reserve Pool and over half of the Retired group hold an Elementary teaching certificate. A smaller proportion, about one quarter, of Current Early Childhood Center employees hold this type of certification, but it remains the most common additional certification. More than 10% of Retirees held secondary teaching, special education, and administrator certificates, and no other certification was held by more than 10% of respondents from any group.

Taken together, these results indicate that whether an individual possesses multiple certifications has little impact on whether they are willing to or currently do work in an Illinois early childhood center, or whether they are currently employed in an Illinois public school. Instead, the data suggest that multiple certifications may be more a product of longevity in the profession than anything else.

continued on page 38

Whether an individual possesses multiple certifications has little impact on whether they are willing to or currently do work in an Illinois early childhood center.

Summary of Comparisons Between Analysis Groups

When we compare the Reserve Pool and the Not-Interested group, we find the two groups similar in terms of current and past education employment. Both groups have many members (about 85%) currently working in education. Both groups have approximately 55% of their members with previous experience in Illinois public schools, private or out-of-state schools, or Illinois early childhood centers. On the other hand, the Not-Interested group is more likely to be currently employed while the Reserve Pool is more likely to be currently staying at home to care for family. Also, the Non-Interested group, on average, earned higher salaries from their jobs in 2004 and have been employed in their current jobs longer than the Reserve Pool. The Not-Interested group is older, less likely to have children under six years old living at home, and more likely to live out of state. Although occupation and demographic differences were found, we could not identify (through discriminant function analysis) any factors that predicted if someone would be in the Reserve Pool or Not-Interested group based on these characteristics. Because the Reserve Pool makes up 83% (see page 7) of available early childhood certificants and no factors distinguish the two groups, it makes more sense to target the universe of qualified candidates in hopes of finding additional early childhood teachers, rather than attempting to identify particular sub-populations based on some demographic or other characteristic.

Comparing the Reserve Pool to those currently working in an Illinois early childhood center (Current ECC), we find the groups to be similar in terms of age, children under six years old in the home, current Type 04 certification status, highest degree, field of study, and 2004 income. Additionally, both groups are equally

likely to have held a previous job in Illinois public schools. This lack of significant group differences is encouraging because it indicates that the Reserve Pool is quite similar to our sample of current Type 04 certified Illinois early childhood center employees and confirms that it would be reasonable to expect the Reserve Pool to work in Illinois early childhood centers under the right conditions. Responses from telephone interviews with fifteen Type 04 certificants working in an Illinois early childhood center at the time of our survey provide positive reasons for working in this setting that could be used to recruit potential candidates. These include opportunity to work with children in this age group, the freedom and flexibility in teaching, close connection with parents, and more familylike atmosphere among co-workers that they felt early childhood centers offered, especially compared to public schools.

The Reserve Pool and the Retired group are two distinctly different groups. One inherent difference is that, by definition, none of the retirees are currently employed—they are all retired. Not unexpected, the Retirees are older than all other groups of respondents. The Retirees are also more likely to be black. It is important to note that 44% of the Retired group reported that they were previously employed in an early childhood center, which provides further evidence that Type 04 certificants are willing to take such jobs.

Lastly, when we look at multiple certifications held by the analysis groups and those currently employed in Illinois public schools, we find little difference, except for the Retired group. These results indicate that whether an individual possesses multiple certifications has little impact on whether they are willing to or currently do work in an Illinois early childhood center, or whether they are currently employed in an Illinois public school.

References

- Cagampang, H.H., Grams, W.I., Greenspan, T., J., & Guthrie, J.W. (1986). Teacher supply and demand in California: Is the reserve pool a realistic source of supply? Berkeley, CA: University of California.
- Golin, S. C., Mitchell, A. W., & Wallen, M. (2003). The cost of universal access to quality preschools in Illinois: A report to Governor George H. Ryan's task force on universal access to preschool. Washington, DC: Institute for Women's Policy Research.
- Illinois State Board of Education. (2005). Illinois state report card, 2004-2005. Springfield, IL: Author. Retrieved from http://webprod1.isbe.net/ereportcard/publicsite/getSearchCriteria.aspx
- Krajec, V. D., Bloom, P. J., Talan, T., & Clark, D. (2001). Who's caring for the kids? The status of the early childhood workforce in Illinois. Wheeling, IL: The Center for Early Childhood Leadership, National-Louis University.
- 1992 educator reserve pool study. (2002). State of Oregon: The Joint Education Boards Board of Education and Board of Higher Education. (ERIC Document Reproduction Service No. ED 353256).
- Presley, J. B., Klostermann, B. K., & White, B. R. (2006). *Pipelines and pools: Meeting the demand for early childhood teachers in Illinois* (IERC 2006-3). Edwardsville, IL: Illinois Education Research Council.
- Strizek, G.A., Pittsonberger, J.L., Riordan, K.E., Lyter, D.M., and Orlofsky, G.F. (2006). *Characteristics of schools, districts, teachers, principals, and school libraries in the United States: 2003-04 schools and staffing survey* (NCES 2006-313). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.
- U.S. Bureau of Labor Statistics. Bureau of Labor Statistics. (2005). Standard occupational classification (SOC) system. Washington, DC: Author. Retrieved from http://www.bls.gov/soc/soc_majo.htm
- Whitener, S. D., Gruber, K. J., Lynch, H., Tingos, K., Perona, M., & Fondelier, S. (1997). *Characteristics of stayers, movers, and leavers: Results from the teacher followup survey: 1994–95* (NCES 97-450). U.S. Department of Education, National Center for Education Statistics. Washington, DC: National Center for Education Statistics.

This page is intentionally left blank.

Appendix A. Response Rate Analysis

Age Group

Decade Born	Potential Reserve Pool	Sample	Respondents
	%	%	%
1920	1.5	1.5	1.8
1930	6.3	6.3	6.6
1940	8.9	9.0	10.7
1950	12.3	12.1	13.5
1960	18.9	18.9	17.7
1970	27.7	28.0	25.8
1980	1.7	1.6	1.4
Missing	22.6	22.6	22.4
N	5,402	4,000	1,698*

^{* 34} people did not provide usable survey responses.

Location

Service Delivery Area	Potential Reserve Pool	Sample	Respondents
	%	%	%
Chicago	16.1	16.0	14.0
I - Rockford	1.4	1.3	1.6
II - DeKalb	1.1	1.2	1.4
IIIE - Waukegan	4.9	5.2	5.1
IIIW - Harvard	1.0	1.0	0.5
IV - Glen Ellyn	10.0	10.1	10.8
V - Joliet	3.3	3.7	4.3
VI - DCACI	17.8	19.0	20.0
VII - Davenport	2.4	2.1	2.5
VIII - East Peoria	4.9	5.0	5.8
IX - Bloomington	1.6	2.2	2.7
X - Urbana	1.8	1.8	2.1
XI - Charleston	0.5	0.6	0.5
XII - Quincy	0.0	0.1	0.0
XIII - Springfield	0.7	0.5	0.7
XIV - Granite City	4.5	4.8	5.9
XV - Mt. Vernon	1.1	1.1	1.2
XVI - Carterville	2.3	2.4	2.8
Border States	4.7	6.8	6.0
Far States	7.8	13.6	12.0
Unknown	12.0	1.4	0.0
N	5,402	4,000	1,698*

^{* 34} people did not provide usable survey responses.

Appendix B. A Closer Look at Incentive Strategies Using Regression Analysis

In this section, we investigate whether different incentive strategies for attracting individuals to work in Illinois early childhood centers are more (or less) influential for different groups of individuals. Specifically, we were interested to learn whether an individual's location, age, marital status, race, educational attainment, or family situation were related to which incentives they found most appealing. For example, are younger respondents attracted by different incentives than older respondents, or are individuals in Chicago attracted by different incentives than those who live elsewhere in the state? In order to do this, we constructed regression models1 to measure the impact that each of these demographic characteristics (the independent variables-region, age, marital status, race, educational attainment, and whether any children under the age of six live in the home) has on the level of influence (none, somewhat, a lot) of each incentive offered in the survey (the dependent variables). The results of this analysis are presented in Table B.1.

Each row in Table B.1 represents a separate regression model to measure the impact of the independent variables on the degree of influence (none, somewhat, or a lot) each incentive would have on an individual's decision to work in an early childhood center in Illinois. The R-squared value (the amount of variance in the dependent variable explained by the independent variables) is shown for each regression model, along with each predictor's standardized beta value. The referent group for region is Chicago, and the referent group for age is thirty-three years old and younger. The cells shown in bold are statistically significant at the .05-level, and those that are associated with higher levels of influence for the given incentive are highlighted in gray, while those that are associated with lower influence are highlighted in teal. For example, all other things being equal, the childcare incentive will have a greater influence on an individual's decision to work in an Illinois early childhood center if that

First, it is important to note that most of the R-squared values for the regression models are quite low—meaning that a respondent's region, age, martial status, race, educational attainment, or whether any children under the age of six live in their home do not explain much of the variability in respondents' answers. This means that it probably makes more sense for policymakers to attend to the overall level of influence for each incentive, rather than attempting to target specific incentives to individuals in specific situations.

This said, some incentive strategies do appear to be more (or less) attractive based on individual circumstance. Most of the variation in the influence of incentives is in line with common sense. For instance, those with children under age six are more likely to be influenced by incentives that give them opportunities to be with their children (childcare, flexible schedule, part-time job, schoolyear schedule, no relocation)—incentives that are also strikingly more attractive to married individuals generally. (Regression analysis separates out the independent effects of these variables, regardless of whether they have young children or not.) On the other hand, those who are 55 or older are less influenced by higher salaries, benefits, and availability of childcare, or completing family obligations. It appears that higher salaries are more important to those living in Cook County and the southern region, everything else being equal. Cook County residents also seek more training and center prestige. Finally, and logically, those holding Master's degrees are somewhat more likely to want supervisory roles and opportunities to improve their leadership skills.

individual has children under six years old living in their home. Similarly, the childcare incentive will also be more influential for individuals who are 33 years old or younger, since this is the referent group for age and the childcare incentive has less impact for all age groups 34 years old and older.

¹ Linear and logistic regression produced similar results. Results provided here are from the linear regression models.

Higher level of influence > .10

Lower level of influence < .10

Table B.1. Regression Analysis of Incentives to Work in an Illinois Early Childhood Center

					Stand	Standardized Beta for Demographic Characteristics	Seta for D	emogra	hic Cha	racteristi	SS			
Incentives by %	₽2			Reç	Region				Age					Children
Responding "a lot"⊺		Out of State	Cook	North East	Northwest	Central	South	34-40	41-54	55+	Married	White	MA+	under 6
Higher Salary	.030	.074	.122	680	.072	.047	.132	049	087	107	050	.045	.044	075
Better Pension Benefits	.032	:003	.065	.059	.053	.024	080.	067	030	117	003	900.	.081	097
Better Health Care	.037	890:	.113	.075	.073	.049	.106	062	063	134	080	016	690.	083
No Relocation	.122	197	.056	.063	620.	.052	.027	.001	.049	.081	.162	.047	041	.103
School-Year Schedule	.080	037	.002	900:	003	.012	.004	008	048	055	.134	026	063	.150
Smaller Class Size	.004	028	015	018	044	011	060	.004	053	900'-	.050	016	.022	002
Better Materials	.015	015	.062	004	900'-	900'-	000.	800°	087	039	.005	050	.037	004
Teacher Aides	.019	083	.038	053	047	.003	037	.010	046	.029	.015	019	.035	001
Raised Prestige of Centers	.025	.024	.115	860.	.022	.049	.092	002	084	048	021	960'-	.024	062
Flexible Schedule	.103	105	950.	.047	000.	.030	019	.031	013	026	.145	043	300.	.168
Raised Prestige of Teaching	.022	900:-	.084	.074	015	900.	.054	017	091	047	800.	075	.035	070
Opportunities For Advancement	.034	.034	.082	.019	.010	034	.026	044	103	134	070	070	.029	031
Complete Family Obligations	.286	.001	.106	890.	.062	.051	.015	.039	051	114	.146	046	035	.363
Update Training	.055	.025	.136	660	.032	800.	.052	.030	073	-0.97	073	098	073	.065
Improved Facilities	.017	049	.073	021	055	033	.011	.028	011	.004	010	015	.024	.003
Part-Time Job	.191	074	930.	.025	025	023	091	020	.016	.125	.245	037	700.	.260
Leadership Skills	.033	032	027	085	036	053	041	.018	069	067	033	052	.130	600.
Parent Involvement	.020	100.	.028	018	.020	.085	001	016	076	015	017	061	.033	051
Supervisory Role	.044	011	.023	021	022	021	018	004	028	023	019	049	.184	007
Childcare within Center	.319	025	.012	041	068	013	032	165	305	250	.040	022	044	.360
Student Loan Reduction	.123	019	033	078	.001	046	044	171	301	268	088	087	032	112
Cells in bold are significant at .05 level														

Cells in bold are significant at .05 level.

¹ The referent group for region is Chicago, and the referent group for age is thirty-three years old and younger.

ILLINOIS EDUCATION RESEARCH COUNCIL 2006 ADVISORY BOARD

INSTITUTIONAL MEMBERS

CHICAGO PUBLIC SCHOOLS Daniel Bugler

CONSORTIUM ON CHICAGO SCHOOL RESEARCH Elaine Allensworth

Illinois Association Of Institutional Research Marilyn Marshall

ILLINOIS BOARD OF HIGHER EDUCATION Gary Alexander Judy Erwin Deborah Meisner-Bertauski

ILLINOIS COMMUNITY COLLEGE BOARD Elaine Johnson Scott Parke

Illinois State Board Of Education Randy Dunn

ILLINOIS STUDENT ASSISTANCE COMMISSION Susan Kleemann

Office Of The Governor Elliot Regenstein

PUBLIC EDUCATION DEANS Charles Rohn

INDIVIDUAL MEMBERS

Brian Ali Kankakee School District

Charles Evans University of Illinois

John Haller Southern Illinois University

Mary McDonald Grant Middle School, Springfield

Cordelia Meyer Civic Committee of the Commercial Club of Chicago

James Pellegrino University of Illinois at Chicago

William Trent University of Illinois at Urbana-Champaign Contact the IERC toll-free at 1-866-799-IERC (4372) or by email at ierc@siue.edu.

http://ierc.siue.edu

ABOUT THE ILLINOIS EDUCATION RESEARCH COUNCIL



The Illinois Education Research Council was established in 2000 at Southern Illinois University to provide Illinois with education research to support P-16 education policy making and program development. The IERC undertakes independent research and policy analysis, often in collaboration with other researchers, that informs and strengthens Illinois' commitment to providing a seamless system of educational opportunities for its citizens. Through publications, presentations, participation on committees and an annual research symposium, the IERC brings objective and reliable evidence to the work of state policy makers and practitioners.