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ABSTRACT

New York City's publicly funded day care and Head Start systems are hindered by an inability to recruit and retain qualified teachers. Data supporting this conclusion came from a randomly drawn sample of 559 teachers working with 3- to 5-year-olds in New York City's early childhood programs. Teachers were surveyed by mail, and a subset of respondents was interviewed by telephone. Data collection was designed to permit a comparison among teachers in the public schools, publicly funded day care, and Head Start on demographic characteristics. Major findings indicated that: (1) as many as 42 percent of the teacher positions in publicly funded day care, and 33 percent of teacher positions in Head Start, are either vacant or turn over each year; (2) only 50 percent of teachers in publicly funded day care and Head Start meet the desired standard of full certification; (3) when teachers rate aspects of their jobs, they are least satisfied with salary and professional prestige; (4) Head Start teachers are particularly dissatisfied with fringe benefits; (5) teachers rate improvements in status and compensation as the strategies most likely to improve the recruitment and retention of qualified staff; and (6) teachers rate themselves as more likely to shift to another classroom than to leave the profession. Policy recommendations are offered. Nearly 50 references are cited, and related materials are appended, including comparative tables on wages/benefits and credentials, as well as one version of the survey instrument. (RH)

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WHO IS TEACHING?

Early Childhood Teachers in New York City's Publicly Funded Programs

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Senior Policy Analyst

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DEDICATION

To the teachers in New York City's publicly funded early childhood programs and the children and families they serve. We hope this report will help you, and in turn, all of us.

ACKNOWLEDGEMENTS

An extraordinary number of persons played important roles in bringing this study to fruition. At the risk of omitting someone, we have attempted to alphabetically list those who helped with the study's design and conduct, and the writing of this report. Our needs were endless: funding; permission to survey; the names and addresses of potential respondents; data management and coding; technical assistance on the crafting of instruments and recommendations; and report design, editing, proof-reading, and production. Thankfully, we found supporters who were equal to the task.

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EXECUTIVE SUMMARY

New York City's publicly funded day care and Head Start systems are being strangled by an inability to recruit and retain qualified teachers. Even with *ad hoc* agreements that have considerably relaxed the standards for teachers, the publicly funded day care and Head Start systems cannot compete for staff. This problem has reached a level where it presents disastrous consequences for both the supply and quality of these programs.

Data supporting this conclusion came from a randomly drawn sample of 559 teachers working with three- to five-year-old children in New York City's early childhood programs (336 from the public schools, 134 from publicly funded day care and 89 from Head Start). The teachers were surveyed by mail and a subset of the respondents was interviewed by telephone. The data collection was primarily designed to permit a comparison among current teachers in the public schools, publicly funded day care, and Head Start on demographic characteristics such as training and experience, job aspirations and plans, job satisfaction, and their opinions of potential reforms.

MAJOR FINDINGS

As many as 42% of the teacher positions in publicly funded day care, and 33% of the teacher positions in Head Start, are either vacant or turn over each year.

Research shows that teacher stability is critical to the positive development of young children. This study found a teacher turnover rate of 20 - 25% in publicly funded day care and Head Start in New York City. Along with teacher-vacancy figures recently released by Human Resources Commissioner, William J. Grinker, this turnover rate documents a crisis in program quality. As of December, 1987, 27% of the Group Teacher positions in day care were vacant as were 13% of these positions in Head Start. Taken together, turnover and vacancy figures imply that as many as 42% of the teacher positions in day care, and 33% in Head Start, are unstable during a year.

Only 56% of the teachers in publicly funded day care and Head Start meet the desired standard -- full certification.

The city's Health Code permits hiring less than fully certified teachers as a way of addressing short-term spot shortages (these persons are called Option 1 teachers). Responding to a pervasive shortage in 1984, an *ad hoc* agreement between the city's Agency for Child Development and Department of Health lowered requirements for these "Option" teachers even further, allowing the hire of persons with less training and experience (Option 2 and 3 teachers). Now, 44% of the teachers in publicly funded day care and Head Start are less than fully certified. Significantly, 13.5% of the teachers in day care and 10.5% of those in Head Start meet the least rigorous precertification standards, Options 2 and 3.

When rating several aspects of their jobs, teachers are least satisfied with salary and professional prestige.

Head Start and publicly funded day care teachers are more dissatisfied with their extrinsic rewards than those in the public schools. The difference is understandable since we have estimated current average salaries for fully certified early childhood teachers in the Board of Education to be \$33,303, while average teacher salaries for fully certified teachers are \$19,365 in day care and \$19,108 in Head Start. Only a small amount of the difference between the Board of Education salaries and those in the other systems is due to differences in the amount of training and experience in those workforces. *The main difference results from disparities in the salary schedules.* We estimated that the average salaries for fully certified teachers in day care and Head Start, *if they were paid on the public school salary schedule*, would be \$31,112 and \$27,422 respectively.

Beyond their preeminent concern about salaries, Head Start teachers are particularly dissatisfied with fringe benefits.

Compared to day care and public school teachers, Head Start teachers lack some important benefits. Notably, *Head Start teachers have no pension or other retirement benefits and receive no financial support for taking coursework required for certification.*

Teachers rate improvements in status and compensation as the strategies most likely to improve the recruitment and retention of qualified staff.

While the majority of teachers felt all the recommendations they rated could improve the recruitment and retention of teachers, they gave their highest ratings to salary enhancement and the promotion of respect for teachers.

Teachers rate themselves more likely to shift to another classroom than to leave the profession entirely.

This is not a group of teachers planning a wholesale exodus from the profession. Rather, data imply a very stable group in the Board of Education, and less stable groups of day care and Head Start teachers who are likely to leave one teaching job for another that has better compensation. This within-field problem is easier to confront than a mass exodus, since the solution lies in reducing the disparities among the publicly funded early childhood systems.

POLICY RECOMMENDATIONS

From a public policy perspective, the fact that high teacher turnover and vacancy rates exist in publicly funded day care and Head Start is especially troubling. These are systems expressly designed to serve the city's poorer children and families. The major policy rationales for public support of these programs are their ability to permit low income parents to work and the ability of high quality versions of these programs to erode the well-documented relationship between family income and school failure. If the public's interests are to be served, *it is precisely these programs which should be the most adequately staffed.*

Based upon the results of this study, we make three recommendations to remove staffing constraints on program supply and assure program quality.

1. *Establish salary parity between fully certified teachers employed by the New York City Board of Education and fully certified teachers employed by Agency for Child Development-administered day care and Head Start.*

2. *Extend Participation in the Cultural Institutions Retirement System to Head Start staff.*

3. *Provide tuition support to Option 1 and 2 teachers in Head Start. Assuming salary parity for fully certified teachers in publicly funded day care, restrict the current tuition reimbursement program in day care to Option 1 and 2 teachers in this system.*

These recommendations represent an investment of \$13,265,000: \$10,500,000 for salary parity; \$2,600,000 for extension of retirement benefits; and \$165,000 for tuition support. While this figure is substantial, we assume it should and will be met through a mixture of local, state and federal dollars. In an important way, the recommendations are predicated on an understanding of the benefits and cost savings that will accrue to each of these levels of government, *if* the city achieves a sufficient supply of high quality programs.

...the benefits of exemplary programs cannot be expected for...programs of low quality: *it is senseless to cite evidence from exemplary, high-quality programs and then to enact a program with low spending, low ratios, low salaries, and inadequate teacher preparations.* (Grubb, 1987, p.49, emphasis in original).

...I'm depressed, and I've spent the last couple of months being depressed knowing that I'm out there looking for something that I don't want, a job that I probably won't be happy at but a job that will put food on the table. I spent the month of August actively seeking a job. During that time, one of [the toddlers in my class] was on vacation and I didn't see her for an entire month. The day that she returned to register, she came flying into the room, jumped into my arms, and said, "Trish, Trish I missed you so much, I missed you so much. I came back," she said, "I came back to you." And all I could think of was what if I had been gone, who would she have come back to? (Testimony provided by a teacher at public hearings of the New York State Commission on Child Care. This teacher left the center in which she worked one month after the hearing -- for a full-time waitressing job. See Lamm, 1986)

INTRODUCTION

Early childhood programs are "hot." In New York and across the nation, taskforces, commissions, elected officials, and private citizens are recommending establishing new programs and expanding old ones. Studies of the long-term effects of early education consistently demonstrate that good early childhood programs are good public policy. Public dollars invested to provide high quality programs for young children from low-income families save money in the long-run - - by reducing the number of children who are kept back, require special education, or who come into contact with the justice system. These savings are projected from a reduced need for remedial services and increased public revenues from adults with higher taxable earnings (Barnett, 1988; Berrueta-Clement, Schweinhart, Epstein, & Weikart, 1984; Lazar & Darlington, 1982). High quality full-day programs also allow parents of young children to work full-time or prepare themselves for work through schooling or other job training. These studies are compelling, but there is no guarantee that programs of lesser quality will produce the same results.

When the findings about long-term effects of quality are combined with findings identifying essential components of quality in early childhood programs¹ -- teacher training

1. For this study, we define early childhood programs as those part- or full-day programs caring for six or more children who are older than 2 years and younger than 6, whether or not the care has a stated educational purpose. The service may be called a child care center, day nursery, preschool, kindergartn, or a variety of other names. Our definition paraphrases the New York City Health Code provisions governing day care services in the city. Our intent was to exclude from this discussion family day care providers and persons working with infants and 6- to 8-year-old children. Both groups would be included in a conventional definition of early childhood education.

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specifically related to child development/early childhood education, appropriate group size and staff:child ratios, and continuity of teachers -- the implications are clear. Early childhood programs must attract persons with relevant training or provide such training to persons upon hire. These persons must then be encouraged to stay on the job. All this must occur in a labor-intensive environment, dictated by necessary limits on group size and staff:child ratios.

This is a report of a study of the teachers working with three- to five-year-old children in New York City's early childhood programs. The study had three purposes:

1. to assess the need for policy changes that would influence the recruitment and retention of qualified teachers;
2. to determine how differences in the compensation and working conditions among types of early childhood programs affect teacher recruitment and retention; and
3. to recommend policy changes if they were warranted.

The next section of the report contains further rationale for the study and our particular activities. In that section we make it clear that our primary concern is for program quality. In subsequent sections we place the study in the context of related work, present and discuss our results and present our policy recommendations.

BACKGROUND AND RATIONALE

Five forces shaped the collection and analysis of data for this study: research on correlates of quality in early childhood programs, studies of employee supply and demand, provisions of the system-wide contracts for teachers in publicly funded early childhood programs in New York City, current New York City teacher vacancy rates, and surveys of teacher job satisfaction and opinions of possible reforms.

Correlates of Quality. Although there are many components of quality in early education programs, three emerge from empirical studies as particularly strong correlates (Phillips & Howes, 1987; Willer, 1987):

1. *Teacher training specifically related to child development/early childhood education.* Coursework and other training related to child development and early education are positively associated with such desirable outcomes as child achievement or "readiness" (Berk, 1985; Clarke-Stewart & Gruber, 1984; Feeney & Chun, 1985; Howes, 1983; Ruopp, Travers, Glantz, & Coelen, 1979).
2. *Group size and staff:child ratios.* There are optimum ranges for group size and staff:child ratios, which vary according to the age of children served. For example, the upper limit of the optimal group size for 4-year-olds is probably 16 to 20 children, with ratios not to exceed 1:10 (Clarke-Stewart & Gruber, 1984; Cummings & Beagles-Ross, 1983; Field, 1980; Francis & Self, 1982; Howes, 1983; Howes & Rubenstein, 1985; Ruopp, et al., 1979).
3. *Continuity/stability of teachers.* Lower rates of staff turnover (turnover resulting either from leaving a program or from being rotated within a program among different groups of children) are positively associated with positive child outcomes, particularly for younger children (Clarke-Stewart & Gruber, 1984; Cummings, 1980; Rubenstein & Howes, 1979).

Program quality will be enhanced when appropriately trained staff are recruited and retained. Failing to provide appropriate staffing will place program quality -- and, by implication, children and public resources -- in jeopardy.

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The group sizes and staff:child ratios for early childhood programs in New York City fall within the acceptable ranges implied by research. Accordingly, we gathered data on the amount of training in early childhood education, degrees held, and information on workforce stability to determine if program quality was at risk due to these remaining factors.

Teacher Supply and Demand. We adopted a commonly used conceptual framework for studies of employee supply and demand. Persons are assumed to choose an occupation and a specific job within that occupation by comparing the rewards associated with alternative possibilities (Bird, 1985; Lortie, 1975; Sykes, 1983; Zarkin, 1985). In the context of this study, persons choose to teach because they decide that teaching is more rewarding than other choices, and seek out relatively more rewarding positions within teaching.

Since the framework implies that choice is based on the rewards associated with particular occupations and jobs, we used a categorization scheme developed by Lortie (1975), to help us conceptualize rewards. He suggested three clusters:

- * extrinsic (e.g., greater compensation and greater status would be more attractive than less compensation and status);
- * ancillary (e.g., greater ease of access to a profession and more positive working conditions, such as paid vacation time, make it more attractive); and

- * psychic (e.g., the greater the intrinsic rewards, such as joy in the conduct of a particular job, the greater the attraction).

In this paper we refer to these three clusters of rewards as *compensation*, *working conditions*, and *subjective satisfaction*.

Lortie observed that these rewards interact with each other and with particular characteristics of individuals. For example, ease of access to a profession may be inversely related to the profession's status and compensation.

Provisions of the New York City Teacher Contracts. We inferred from this framework that a variation in rewards across different types of early childhood programs creates workforces with differing demographic characteristics and behaviors. The publicly funded early childhood programs in New York City are a particularly well-suited environment for testing this inference for two reasons: (1) system-wide contracts for the Board of Education (BOE), Agency For Child Development (ACD) administered day care and ACD Head Start teachers make it relatively easy to understand how the rewards vary across these publicly funded programs; and (2) similar certification requirements across these programs help to isolate the impact of differences in rewards. Since certification requirements do not keep a certified teacher from moving from one system to another, we can assume movement is due to differential rewards.

Appendix I compares the reward systems for the three publicly-funded program systems. On most dimensions, the compensation and working condition rewards are better for teachers in the Board of Education.

Appendix II compares the certification requirements across the three systems. The requirements are equivalent with two exceptions.

Appendix I compares the rewards for the three publicly funded program systems. On most dimensions, compensation and working conditions are better for teachers in the Board of Education (e.g., salary, length of work year and work day, paid planning time, and retirement benefits).

Appendix II compares the certification requirements across the three systems. The requirements are equivalent with two exceptions. First, the "precertification"² requirements for teachers in the ACD systems are less restrictive than those for the Board of Education (see note 1 for a further discussion of precertification -- especially how these standards have been modified in the past few years). Precertified teachers in the Board of Education must have baccalaureate degrees whereas precertified teachers in the ACD systems can be prebaccalaureate. However, fully certified teachers in the ACD systems must have coursework and student teaching experience directly related to prekindergarten or kindergarten children, while the Board of Education teachers possessing the N-6 certification (the most commonly held credential for elementary teachers) may have student teaching and methods courses directed toward elementary grades above kindergarten. In this sense, the full certification requirements in the ACD programs require more preparation in early childhood education than is required by the Board of Education.

2. As is common elsewhere, New York City's systems are allowed to hire persons who do not possess the education and experience required for conventional certification. This is an accommodation meant to address short-term shortages in the supply of conventionally certified individuals. Our term for the status of persons holding these interim credentials -- since they must make progress toward conventional certification as a condition of hire and employment -- is *precertification*.

Given differences in rewards among the systems, we expected differences among their teachers. However, simply determining a difference between the systems is not sufficient cause for arguing the need to change public policies. From a public policy perspective, we believe policy change is only warranted if it can be shown that (a) certain systems cannot attract sufficient teachers to staff programs -- thereby inhibiting the supply of programs for children, (b) staffing difficulties within a particular system (or systems) create problems directly related to program quality, or (c) the nature of current policy raises serious questions of equity (see note 2 on issues of equity).

Vacancy Rates. The design of this study limited our ability to directly assess the match between teacher supply and program demand. But data from another source imply that even an *ad hoc* lowering of standards has not solved the labor shortage of teachers for publicly funded day care and Head Start. Human Resources Administration Commissioner, William J. Grinker, testified that as of December, 1987, 27% of the teacher positions in day care and 13% of the teacher positions in Head Start were vacant (Grinker, January, 1988).

The vacancy rate for day care teachers in New York City's publicly funded day care programs was 21% two years ago (Early Childhood Education Commission, 1986). This means the vacancy rate has risen by 6% in two years and it is unclear who is teaching in these rooms. Each possibility is worrisome. The Education Directors in some programs are undoubtedly teaching. Although these persons are qualified to teach, it is not reasonable to assume that one person can simultaneously perform two jobs effectively. Qualified substitutes may be working in other situations, yet anecdotal evidence says they are difficult to find -- and even harder to

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retain long-term -- creating a revolving cast of adults for groups of children. Finally -- and in violation of the Health Code -- assistant teachers or other unqualified persons are quite probably fulfilling the role of group teacher.

Teacher Job Satisfaction. We gathered information regarding teacher job satisfaction and their opinions of possible reforms. In part this was done to test our conceptual framework, since differences in the reward systems should be reflected systematically in teacher satisfaction. We also wanted to ground any recommendations we might make on the judgements of current teachers. Having borrowed most of the items related to job satisfaction and reforms from national studies done of K - 12 public school teachers (Louis Harris and Associates, 1985; Louis Harris and Associates, 1986) we could assess the generalizability of our results.

RELATED WORK

This section places the current study in a context of related empirical work. We describe how rewards vary nationally across types of early childhood programs and then relate this variation to studies of the behaviors and opinions of early childhood teachers.

Differences in Rewards Among Programs. Public school teachers in early childhood programs receive higher salaries than teachers in programs outside the public schools. Feistritzer (1985) reported an average salary of \$23,092 for public school elementary teachers in the United States for 1984-1985 for a 10-month work year. Contrast this figure with the non-public school situation. Grubb (1987) and a growing body of salary and wage studies (BANANAS Resource and Referral/Child Care Employee Project, 1986; Leavitt, 1986; Modigliani, et. al., 1986; Nelson, 1986; Zinsser, 1986; Zuccalo & Sterling, 1986) estimate annual teacher salaries in early childhood programs outside the public schools to be in the \$10,000-\$15,000 range for 1984-1985.

Differences in education and experience between public school and non-public school teachers account for some -- but not all -- of this salary variance. The National Committee on Pay Equity (1987) used 1980 census data to compare actual wages by occupation to a prediction of income for each occupation -- a prediction based on earnings associated with education and experience for white males in the workforce regardless of occupation. Consider the occupational categories "child care worker except private household" and "elementary teachers." During 1979, *actual earnings* for these two groups were \$7,119 and \$15,036, respectively. Given the education and experience of these groups, the *predicted earnings* for child care workers and elementary school teachers were \$15,261 and

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\$25,427. The difference between these predicted figures documents a difference in education and experience between these groups. Beyond this, a comparison of actual with predicted incomes found that child care workers were the second most underpaid occupational group (the index being actual income divided by predicted income), while elementary teachers were the tenth most underpaid. Neither occupational group is paid what it is "worth," but when controlling for education and experience, elementary teachers have a relative advantage.

A major factor contributing to the differences between public school early childhood salaries and salaries outside the schools is the conventional "steps" or "increments" built into public school salary scales...

A major factor contributing to the differences between public school early childhood salaries and salaries outside the schools is the conventional "steps" or "increments" built into public school salary scales, whereby regular increases accrue to staff (up to a limit) for years of experience and educational credits taken beyond the minimum requirements for hire. These standardized salary scales became common with the unionization of public school teachers, and were designed to encourage retention and further training (Sedlack & Schlossman, 1986). Such increments are not common in the salaries for non-public school teachers, who are rarely unionized.

Unionization alone does not ensure the existence of such increments. For example, the United Federation of Teachers (UFT) represents teachers in the New York City public schools. Locals 205 and 95 of District Council 1707, affiliates of the American Federation of State, County and Municipal Employees (AFSCME), represent the teachers in New York City's publicly funded day care and Head Start, respectively. Beginning salaries for fully certified teachers with no experience were similar across the three agreements in effect during the 1986/87 school year -- \$20,000 for the schools, \$18,500 for Head Start and day care. However, the public

school contract had more substantive and regular salary "steps" for continued relevant training and years of experience. For example, under the three systems, a fully certified teacher with a masters degree and credit for 10 years' experience earned \$34,682 in the public schools, \$19,800 in Head Start, and \$19,301 in day care.

Experience, education, and the structure of salary schedules are part of the reason for differences in actual salaries. Another major culprit is funding source. Mitchell (1988) surveyed all United States public school districts operating any program for children younger than kindergarten entry age during the 1985/86 school year. She compared the salaries in public school affiliated Head Start and child care programs with those in Chapter 1, special education and state- or locally funded prekindergarten programs. Regardless of certification status, teachers in the Head Start/child care group were paid significantly less. This difference was partly due to source of funding. Salaries were highest in programs receiving their largest proportion of funding from the local school district or state. Salaries in federally funded programs were next, followed by salaries in programs supported by parent fees.

Disparities in wages are dramatic but there are also substantial differences in fringe benefits, favoring those working in the public schools in both number and quality. This compounds the effect of the differences in salaries. For example, individual health coverage paid by the employer, sick and holiday pay, and subsidized participation in a retirement plan are conventional benefits for teachers in public schools. Salary and wage studies show considerable variation in these benefits in programs outside of schools. Aggregating information across salary and wage studies, health coverage is not available to some 25% of non-public school early

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Disparities in wages are dramatic but there are also substantial differences in fringe benefits, favoring those working in the public schools in both number and quality. This compounds the effect of the differences in salaries.

childhood teachers. Approximately 65% of the teachers in non-public school positions who receive health coverage pay all or a portion of the cost. Finally, retirement benefits are almost non-existent.

Less is known about differences beyond wages and fringe benefits. Salary and wage studies (cf. Modigliani, et al., 1986) have documented poor working conditions in non-public school programs, such as the absence of paid time for lunch or program planning. Such paid time is common in the public schools. On the other hand, anecdotal evidence suggests that day care and Head Start programs may have an advantage on less tangible elements, such as staff autonomy and closer ties to the community. Although we are not sure, we have evidence that day care and Head Start teachers are dissatisfied with trading such intangible advantages for those that are more concrete.

Finally, when public school teachers and teachers in child care are asked the degree to which teaching is intrinsically satisfying, both groups report similar levels of subjective satisfaction -- 85% to 95% rating satisfaction positively. Since these levels are comparable to persons in other salaried occupations (Center for Public Interest Polling, 1986; Louis Harris & Associates, 1986; Modigliani, 1987), when looking for the impact of the reward system on early childhood teachers, it is most productive to focus on compensation and working conditions.

In summary, the rewards confronting early childhood teachers vary by program auspices. Public school teachers have higher salaries and more comprehensive and substantive fringe benefits than teachers in non-public school programs. More needs to be known about the level and variations in other rewards. Do the documented differences create

When looking for the impact of the reward system on early childhood teachers, it is most productive to focus on compensation and working condition rewards.

predictable distinctions in the workforces? The answer is a tentative "yes," as described in the next section.

The Relationships among Teacher Attitudes, Behavior and Rewards. Too little is known about the characteristics of early childhood teachers on a national level, and even less about how they differ by program type (see note 3). On the other hand, data that are available about the behavior and attitudes of this workforce are consistent with our findings. For example, the turnover rate for teachers in non-public school programs is approximately four times greater than the rate for teachers within the schools. During 1983/84, the attrition rate among public school elementary teachers was 9.2% (U.S. Department of Labor, 1986). During the same year, an estimated 35.9% of child care workers left the field (U.S. Department of Labor, 1986).

When they leave, teachers outside the public schools are harder to replace than their public school counterparts. In Zinsler's (1986) survey of the directors of child care programs in New York, she found a 40% turnover rate at the lead teacher position in programs outside New York City. In addition, 60% of the directors in these programs reported "some" or "much" difficulty in finding replacements for these teachers. During the same year, Hooper (1987) found a balance in the Northeast and nationally between the supply of and demand for primary grade public school teachers.

The impact of reward variation also surfaces in ratings of teacher satisfaction. The assessment of teacher job satisfaction has a long tradition. Different theoretical models exist for describing the relationships among the characteristics of an occupation, those of a particular job, worker satisfaction, and worker behavior (see Jorde-Bloom, 1986, for a review). Most models include such elements as compensation, working

conditions, relationships with co-workers, and intrinsic rewards derived from a job as predictors of satisfaction. These elements have been incorporated into recent large scale surveys of elementary and secondary public school teachers (Center for Public Interest Polling, 1986; Louis Harris & Associates, 1986) and at least one survey of early childhood teachers in non-public school publicly and privately funded programs (Modigliani et al., 1986). A predictable pattern emerges from these surveys, given that public school teachers have higher salaries and benefits than those outside. While public school teachers have widely supported the need for salary enhancement, they have sometimes expressed relatively greater dissatisfaction with working conditions such as paper-work or lack of decision-making power (Center for Public Interest Polling, 1986). In contrast, Modigliani et al., (1986) found that teachers in non-public school programs expressed their greatest dissatisfaction with salary level, fringe benefits, and the opportunity for salary advancement.

Beyond these few documented differences, little work on a national level has been done that helps us understand how the reward system for early childhood teachers shapes that workforce. Given the lack of information, the most basic questions are impossible to answer: What level of training do teachers hold? Why do persons enter and leave the workforce? What staff movement occurs between and across types of early childhood programs? How is all this related to the reward system? This study was designed to shed light on each of the above questions by collecting relevant data for New York City, assuming that suggested policy alternatives must be based on such information.

METHOD

Sample Selection. Using lists provided by various public agencies, unions and a not-for-profit resource and referral organization, we drew a random sample of teachers from the four systems of early childhood programs in New York City: the Board of Education (BOE); Agency For Child Development Day Care (ACD-DC); Agency For Child Development Head Start (ACD-HS); and private licensed programs. We controlled for the age level of children being taught by sampling prekindergarten and kindergarten teachers in the BOE and teachers of three- to five-year-old children in the other three systems. This was the age range of children shared by all four systems and we chose it to maximize comparability.

Procedures and Instruments. Each selected teacher was sent a packet which contained: (a) a letter that described the study and assured confidentiality; (b) a survey instrument; and (c) a self-addressed, stamped return envelope. The nine-page, fixed-response survey contained questions in four areas: (a) *program information*, to enable us to identify the respondent's current teaching assignment; (b) *individual background*, designed to profile the respondent's education, teaching experience, and personal characteristics; (c) *professional satisfaction*, to assess reasons for entering the field, level of satisfaction with that occupational choice, and likelihood of staying in the field; and (d) *recommendations to improve the teaching profession*, to elicit opinions of commonly discussed reforms. This last category drew heavily on the surveys of current (1986) and former (1985) teachers in America, done by Louis Harris and Associates.

We controlled for the age level of children being taught, by sampling prekindergarten and kindergarten teachers in the Board of Education and teachers of three- to five-year-old children in the other three systems.

We used three versions of this instrument. Each instrument was parallel in content, with specific language and items reflecting differences between the BOE, ACD, and private program systems. For example, the question about program funding sources had response options on each survey instrument relevant to each of the three systems (see Appendix III for an example of the BOE version of the survey). On the last page of the survey, we asked respondents if they would consent to a follow-up interview of about 15 minutes. For those willing to be interviewed, we asked for contact information and preferred days and times for the interview. Approximately two weeks after the initial mailing, we sent a follow-up letter to all persons sampled. Since the survey was anonymous, the second letter thanked those who had responded and encouraged those who had not responded to do so.

Upon return receipt, one of two research assistants reviewed each survey to ensure legibility and resolve inconsistencies (see note 4). In addition to reviewing all surveys for usability, the research assistants estimated each teacher's current annual salary from the three salary scales in effect during 1986-87. This was done by approximating a teacher's position on existing salary schedules using survey information on number of years of teaching experience (overall and within the current system), educational background, and level of certification or verification (i.e. verified qualifications to teach at the precertification level). In addition, a BOE equivalent salary was estimated for all *fully* certified respondents from ACD-DC and ACD-HS. This was done by creating a salary for each ACD-DC and ACD-HS teacher on the *BOE* salary scale, using the ACD teacher's experience and level of education. Following review by the two research assistants, all surveys were reviewed by a senior research

assistant to ensure consistency of judgement between the junior assistants and as a final check on accuracy of coding.

Response Rates. Board of Education and unionized ACD Day Care teachers were sent surveys at their school or center address. All ACD Head Start teachers and the small number of non-unionized ACD Day Care teachers were sent surveys via the Center Director or Sponsoring Board Chair, due to a lack of teacher addresses for this group. When calculating response rates, we made two very conservative assumptions. First, we assumed that all the packets sent to employers were actually given to the teachers we had identified. We also assumed that no persons had left their positions during the two months between when our list of names was generated and materials were distributed. Anticipating that these assumptions would depress our calculated response rates from Private Licensed Program, ACD Day Care, and ACD Head Start respondents, we sampled them at higher than the 20% rate used for the BOE. The figures below show the number of usable teacher surveys returned, our best estimate of the percentage of the total number of head teachers of preschool-aged children represented by our respondents at the time of the study, and the calculated response rates.

- o Board of Education 336 respondents represents 9.9% of all BOE prekindergarten and kindergarten teachers and a response rate of 47.9%
- o ACD Day Care 134 respondents represents 10.1% of all group teachers of preschool-aged children in this system and a response rate of 29.6%
- o ACD Head Start 89 teachers represents 24.3% of all Head Start group teachers and a response rate of 29.9%

When calculating response rates, we made two very conservative assumptions.

- o Private Licensed 59 respondents represents 5.8% of all group teachers of preschool-aged children in this system and a response rate of 26.7%

While one never knows for certain, managers involved with the three publicly funded systems (BOE, ACD-DC, ACD-HS) confirm that our samples from these systems appear representative of the demographics of these workforces. We could not get similar confirmation for the representativeness of our sample of private licensed programs. The private licensed programs are an independent and heterogeneous group and no comprehensive data base is maintained on their characteristics. For this reason, and because public policy can most directly affect publicly funded programs, our analyses focus on the publicly funded groups. In addition, teacher interviews did not yield information which substantively illuminated the survey data, so information from the interviews is not included in this report.

RESULTS AND DISCUSSION

We believe that any change in policies should be based upon an assessment of the early childhood workforce. Our analysis considered three areas: (a) two key areas correlated with quality (i.e., level of training and workforce stability), (b) teacher attitudes (i.e., teacher ratings of job satisfaction, recommendations to improve the teaching profession, and frequently proposed reforms), and (c) the relationship between teacher attitudes and stability.

Level of Training

We collected three measures of the training held by the teachers: level of certification, degrees held and credits in early childhood education/child development.

In New York City, public school teachers are much more likely to be fully certified than teachers in publicly funded day care or Head Start. More than 9 in 10 public school teachers are fully certified, versus about 5 in 10 in Head Start and day care. Table 1 contains the information on teacher certification status by system.

Most of these precertified Head Start and day care teachers hold Option 1 credentials. Option 1 credentials indicate these teachers are at least within 30 credits of a baccalaureate degree and plan to finish that degree and become certified. About one in four precertified Head Start and day care teachers are Option 2 teachers. Option 2 teachers are further away from the baccalaureate (needing up to 60 credits) but also have a study plan indicating they will finish both the degree and other requirements for full certification. (See Appendix II for a more complete description of the categories of certification.)

Public school teachers are much more likely to be fully certified than teachers in Head Start or publicly funded day care. More than 9 in 10 public school teachers are fully certified, versus about 5 in 10 in Head Start and day care.

Table 1**Teacher Certification Status by System**

Certification Status	Board of Education (N=336)	ACD Head Start (N=89)	ACD Day Care (N=134)	Private Programs (N=56)
Fully Certified	317 (94.3%)	50 (56.2%)	76 (56.7%)	51 (91.1%)
TPD	19 (5.7%)	not applicable	not applicable	not applicable
Option 1	not applicable	27 (30.3%)	44 (32.8%)	5 (8.9%)
Option 2	not applicable	11 (12.4%)	12 (9.0%)	not applicable
Option 3	not applicable	1 (1.1%)	2 (1.5%)	not applicable

We investigated the degree status of these precertified teachers, since degree status indicates how far they need to go to achieve full certification. All the precertified teachers in the public schools have baccalaureate degrees. In Head Start, 28.2% of the precertified group were prebaccalaureate (12.4% of the total group of Head Start teachers). In day care, 31% of the precertified teachers were prebaccalaureate (13.4% of all day care teachers).

While there are clear differences in the percentages of fully certified teachers in the public schools, Head Start and publicly funded day care, it is not appropriate to make too much of this difference. Certification is only one indicator of preparation, since research has shown that job-relevant training is more related to child outcomes than degree status alone. Accordingly, we considered certification in the context of relevant coursework and degrees held. Table 2 contains the data on highest degree held and credits in early childhood education/child development.

Seventy-five percent of the Board of Education teachers have advanced degrees, more than twice the rate found in Head Start and day care. But they have fewer early childhood credits than teachers in the ACD systems. Neither result is surprising. The Board of Education salary schedule substantially rewards teachers for attaining advanced degrees, while this is much less true in Head Start and day care (see Appendix I). Currently, licensing standards for full certification in Head Start and day care require more coursework specific to early childhood than the Board of Education licensing standards -- hence Head Start and day care teachers have more credits.

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Seventy-five percent of the Board of Education teachers have advanced degrees... But they have fewer early childhood credits than teachers in the ACD systems.

Table 2

Comparison of Teachers by System on Selected Measures of Training

Educational Experience	Board of Education (N=336)	ACD Head Start (N=89)	ACD Day Care (N=134)	Significant Differences*
Highest Degree Held				
% less than BA	--	12.3%	13.4%	
% BA +	25%	61.9%	50.8%	
% MA +	75%	25.8%	35.8%	BOE > HS, DC
Credits in Early childhood Education				
Mean (standard deviation)	31.51 (23.19)	41.98 (26.83)	42.72 (30.46)	BOE < HS, DC

* All tests of significance were conducted with $p < .01$. Procedures were one-way ANOVA or Chi-square as appropriate. Overall findings of significance were further analyzed using post-hoc Scheffe or Chi-square procedures, again as appropriate.

Given the high proportion of precertified teachers in the ACD-DC and ACD-HS systems, we compared the level of training between them and their fully certified colleagues, to see if any significant patterns would emerge. Table 3 contains this analysis. While the fully certified group has more advanced degrees, there is no difference on credits in early childhood education/child development.

With the level of training of the fully certified teachers as the referent, the precertified teachers seem quite qualified. Yet it would be an inappropriate conclusion (and a misrepresentation of these data) to argue that full certification is an unnecessarily high standard. The precertified teachers must take coursework as part of their study plans to maintain their precertification status. They also get a raise of approximately \$2,000 when they earn full certification. Both of these factors are likely causes of the level of early childhood coursework in the precertified group and the willingness of the group to continue teaching. It is unreasonable to assume the precertified group would appear as competent as it does if the progress toward certification did not continue to be required -- and rewarded to some extent.

Viewed together, the various differences in training do *not* imply a need for policy change. While coursework in early childhood education has been empirically related to positive child outcomes, the relationship is not linear. "More is better" may hold for a certain accumulation of credits, but it is not plausible that 40 credits on average is much better than 30 credits -- these being the approximate differences between the day care/Head Start teachers and those in the Board of Education. By any standard, teachers with an average of 30 credits in early childhood education have considerable training in the field.

...the precertified teachers seem quite qualified. Yet it would be an inappropriate conclusion (and a misrepresentation of these data) to argue that full certification is an unnecessarily high standard.

Table 3

Comparison of the Fully Certified and Precertified Teachers Within ACD Head Start and Day Care on Selected Measures of Training

Educational Experience	ACD DAY CARE		ACD HEAD START		SIGNIFICANT DIFFERENCES*		
	Full Certification (N=76)	Pre-Certification (N=58)	Full Certification (N=50)	Pre-Certification (N=39)	Certification	Program	2-way interaction
Highest Degree Held							
% Less than BA	--	31	--	28.2			
% BA +	44.6	58.6	60	64.1			
% MA +	55.4	10.4	40	7.7	Yes	No	N/A
Credits in Early Childhood Education							
Mean (standard deviation)	46.4 (32.06)	38.5 (28.22)	45.9 (28.92)	37.9 (24.14)	No	No	No

* The analysis procedure was two-way ANOVA for the variable "credits in early childhood education" with the factors being Certification (full versus precertification) and Program (day care versus Head Start). This 2x2 design permitted the testing of the main effects of Certification and Program and the interaction between the two. All tests of significance were conducted with $p < .05$. A significant difference noted for Program implies a difference between day care and Head Start teachers. A significant difference for the certification factor implies a difference between the precertified and fully certified teachers. The analysis procedure for "Highest Degree Held" was Chi-square, again with $p < .05$.

The relative differences in early childhood training and degrees held between the fully certified and precertified staff in Head Start and day care are likewise not troubling. While there is a difference between these groups on highest degree held, there is not a difference on credits in early childhood education.

Workforce Stability

We measured workforce stability in three ways -- experience in the teaching field, teacher movement within the field, and teacher likelihood of making a job or career change in the next two years. We then considered these data in conjunction with current vacancy rates within these programs.

Experience in the Teaching Field. Table 4 presents information on teacher experience in the field. Although some differences exist, all the groups are highly experienced. Teachers in the Board of Education have nearly 15 years experience teaching young children, followed by 12 years for those in publicly funded day care and eight years within Head Start. This pattern holds for the average number of years teachers have been in their current site, since experience teaching young children is highly related to total teaching experience.

Table 5 contains an analysis of teachers' experience by level of certification. Fully certified staff are more experienced, but the difference does not imply a need for a change in policies. The least experienced group -- precertified Head Start teachers -- still has an average of nearly 7 years of experience.

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Table 4

Comparison of Teachers by System on Selected Measures of Stability

Teaching Experience	Board of Education (N=336)	ACD Head Start (N=89)	ACD Day Care (N=134)	Significant Differences*
Total Years Taught				
Mean	14.88	7.89	11.64	BOE > DC > HS
(standard deviation)	(8.11)	(7.09)	(8.54)	
% less than one year	1.5%	8.2%	3.1%	
Years at Current Site				
Mean	9.02	4.43	6.8	BOE > DC > HS
(standard deviation)	(8.9)	(4.42)	(6.3)	
% less than one year	8.1%	22.7%	21.5%	
Years in Current System				
Mean	13.4	5.36	8.25	BOE > DC > HS
(standard deviation)	(11.3)	(5.19)	(6.46)	
% less than one year	5.1%	18.2%	12.3%	

* All tests of significance were conducted with $p < .01$. Procedures were one-way ANOVA. Overall findings of significance were further analyzed using post-hoc Scheffe procedures.

Table 5

Comparison of the Fully Certified and Precertified Teachers Within ACD Head Start and Day Care on Selected Measures of Stability

Teaching Experience	DAY CARE		ACD HEAD START		SIGNIFICANT DIFFERENCES *		
	Full Certification (N=76)	Pre-Certification (N=58)	Full Certification (N=50)	Pre-Certification (N=39)	Certification	Program	2-way interaction
Total years taught							
Mean	12.63	10.38	9.12	6.72			
(standard deviation)	(7.65)	(9.48)	(9.84)	(5.6)			
% Less than one year	2.8	5.4	6.1	11.1	Yes	Yes	No
Years at Current Site							
Mean	7.65	5.68	4.27	4.64			
(standard deviation)	(6.47)	(6.0)	(4.18)	(4.76)			
% less than one year	17.6	26.8	24.5	20.5	No	Yes	No
Years in Current System							
Mean	9.24	6.93	6.02	4.54			
(standard deviation)	(6.32)	(6.58)	(5.77)	(4.27)			
% Less than one year	6.8	19.6	20.4	15.4	Yes	Yes	No

* Analysis procedures were two-way ANOVA, with the factors being Certification (full versus precertification) and Program (day care versus Head Start). This 2x2 design permitted the testing of the main effects of Certification and Program and the interaction between the two. All tests of significance were conducted with $p < .05$. A significant difference noted for Program implies a difference between day care and Head Start teachers. A significant difference for the certification factor implies a difference between the precertified and fully certified teachers.

More important for policy purposes are the percentages of teachers with less than one year teaching experience at their current site. Turnover rates can be defined as the percentage of teachers at a current site for less than one year minus those teachers in this situation due to program expansion. Using this definition, the turnover rates in this study are 8.1% for the Board of Education, 22.7% for Head Start and 21.5% for Day Care. The magnitude of the difference between the Board of Education and the other systems is startling. We explore the importance of these figures more fully in the section where we link turnover rates to vacancy rates.

The turnover rates in this study are 8.1% for The Board of Education, 22.7% for Head Start and 21.5% for day care.

Teacher Movement within the Field and Likelihood of Making a Job or Career Change in the Next Two Years. Table 6 contains information on workforce mobility. Teachers estimated the likelihood of change in the next two years from their current classroom job. This limited period was chosen so that responses would reflect actual plans versus more vaguely felt possibilities. We asked whether teachers were likely to stay in the classroom but shift to a new school/center, to shift to a non-classroom job in the education field or to leave the education profession to go into a new occupation. We also asked all teachers to estimate the number of additional years they would be likely to teach.

Head Start teachers rated themselves as significantly more likely to move to a new classroom job than teachers in either the Board of Education or publicly funded day care. They rated themselves "likely" to make this shift.

As indicated in the table, Head Start teachers rated themselves as significantly more likely to move to a new classroom job than teachers in either the Board of Education or publicly funded day care. They rated themselves "likely" to make this shift. Board of Education teachers rated themselves as less likely than those in either ACD-HS or ACD-DC to move to a *non*-classroom job. This difference is only a matter of degree, with no group anticipating a non-classroom position with great confidence. Board of Education teachers were also

Table 6

Comparison of Teachers by System on Likelihood of Change

Likelihood of Job Change	Board of Education (N=336)	ACD Head Start (N=89)	ACD Day Care (N=134)	Significant Differences*
<i>Likelihood of new classroom job at different center in next two years:</i>				
Mean (standard deviation)	2.67** (1.15)	1.83 (1.06)	2.37 (1.24)	BOE, DC > HS
<i>Likelihood of shifting to non-classroom job in education in next two years:</i>				
Mean (standard deviation)	3.21** (0.93)	2.59 (1.10)	2.49 (1.14)	BOE > HS, DC
<i>Likelihood of leaving profession in next two years to go to a new occupation:</i>				
Mean (standard deviation)	3.35** (0.94)	3.04 (1.05)	2.88 (1.07)	BOE > DC
<i>Estimate of additional years of teaching:</i>				
Mean (standard deviation)	9.34 (6.73)	9.89 (8.86)	9.22 (7.42)	No

* All tests of significance were conducted with $p < .01$. Procedures were one-way ANOVA. Overall findings of significance were further analyzed using post-hoc scheffe.

** Variables could take on values ranging from 1-4 (1 = very likely; 2 = likely; 3 = unlikely; 4 = very unlikely). Therefore, lower values indicate a greater likelihood of change.

less likely than day care teachers to feel they would soon be leaving the profession. Again the difference is relative, since all the groups rated themselves as "unlikely" to leave. Finally, there was no difference among the systems on estimates of additional years of teaching. On average, these groups plan to teach nearly another ten years.

Table 7 is a companion to Table 6, comparing the fully certified and precertified Head Start and day care teachers on their likelihood to change positions. Fully certified teachers rated themselves as less likely to change classrooms in the next two years than those with precertification. The difference is relative, however, since both fully certified and precertified teachers rated themselves "likely" or "very likely" to make such a shift. On the other hand, there is no significant difference between teachers by certification or by program with regard to likelihood of shifting to a non-classroom job in education or leaving the profession. These teachers do not believe they will move to a non-classroom job in education, and believe it is "unlikely" they will leave the profession.

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When teachers are turning over at the rates we found, program quality is in jeopardy. When the turnover rates are considered along with the vacancy rates, jeopardy becomes too weak a word to describe a bad situation.

The information on workforce stability is a double-edged sword. Teachers have considerable experience and indicate that they will stay in teaching. However, they also think it is likely they will change positions *within* the field. From our estimate of turnover rates, this shifting around will be a particularly severe problem for Head Start and day care.

Vacancy Rates and Teacher Turnover. When teachers are turning over at the rates we found, program quality is in jeopardy. When the turnover rates are considered along with the vacancy rates, jeopardy becomes too weak a word to describe a bad situation. For example, there are approximately

Table 7

Comparison of the Fully Certified and Precertified Teachers Within ACD Head Start and Day Care on Likelihood of Change

Likelihood of Job Change	ACD DAY CARE		ACD HEAD START		SIGNIFICANT DIFFERENCES*		
	Full Certification (N=76)	Pre-Certification (N=58)	Full Certification (N=50)	Pre-Certification (N=39)	Certification	Program	2-way interaction
<i>Likelihood of new classroom job at different center in next two years:</i>							
Mean (standard deviation)	2.73** (1.23)	1.92 (1.13)	1.97 (1.13)	1.65 (0.93)	Yes	Yes	No
<i>Likelihood of shifting to a non-classroom job in education in next two years:</i>							
Mean (standard deviation)	2.37** (1.17)	2.64 (1.09)	2.54 (1.07)	2.65 (1.16)	No	No	No
<i>Likelihood of leaving profession in next two years to go to a new occupation:</i>							
Mean (standard deviation)	2.84** (1.16)	2.94 (0.95)	3.10 (1.04)	2.97 (1.08)	No	No	No
<i>Estimate of additional years of teaching:</i>							
Mean (standard deviation)	8.63 (7.32)	9.94 (7.64)	10.55 (9.60)	9.15 (8.02)	No	No	No

* Analysis procedures were two-way ANOVA with the factors being Certification (full versus precertification) and Program (day care versus Head Start). This 2x2 design permitted the testing of the main effects of Certification and Program and the interaction between the two. All tests of significance were conducted with $p < .05$. A significant difference for the Certification factor implies a difference between the precertified and fully certified teachers. A significant difference for the Program factor implies a difference between day care and Head Start teachers.

** Variable could take on values ranging from 1-4 (1 = very likely; 2 = likely; 3 = unlikely; 4 = very unlikely). Therefore, lower values indicate a greater likelihood of change.

Vacancy and turnover rates taken together suggest that 565 positions (358 + 207) are unstable during the year. This represents 42.6% of all day care positions. Using the same logic for Head Start, as many as 33% of Head Start positions may be unstable.

1325 early childhood group teacher positions in publicly funded day care in New York City. Commissioner Grinker's figures indicate that during the 1987-88 program year, 358 of these are vacant at one time. Of the 967 positions which are filled, our estimates imply that 21.5% or an additional 207 positions might turn over during a year. While some vacancies in the Commissioner's figures are a feature of turnover, vacancy and turnover rates taken together suggest that 565 positions (358 + 207) are unstable during the year. This represents 42.6% of all day care positions. Using the same logic for Head Start, as many as 33% of Head Start positions may be unstable. Since the vacancy and turnover rates are not independent, the actual number of unstable positions in day care is between 358 and 565 of its 1325 positions. In Head Start the range is between 83 and 121 of Head Start's 366 positions. In each case, the lower number implies more than jeopardized quality -- it says there is a serious problem. The higher number implies a crisis.

From a public policy perspective, the fact that the high teacher turnover and vacancy rates exist in the Head Start and publicly funded day care systems is especially troubling. These are systems expressly designed to serve the city's poorer children and families. The major policy rationales for public support of these programs are their ability to permit low-income parents to work and the ability of high quality versions of these programs to erode the well-documented relationship between family income and school failure. If the public's interests are to be served, it is precisely these programs which should be the most adequately staffed.

National estimates of public school teacher turnover are typically about 6-8% while turnover rates in day care are commonly found to be approximately 40% (U.S. Department of Labor, 1986; Zinsser, 1986). The estimate of turnover found in this study for the Board of Education is very close to the national estimate, and the estimates for day care and Head Start are actually considerably better than elsewhere. The reason for this latter finding is not clear. Perhaps the difference occurs because the certification standard for teaching in these programs in New York City is higher than typically found. This means that the teachers in New York City must make a greater commitment, in the form of having secured teacher certification or maintaining progress toward that goal, that is demanded in other localities. This reasoning is consistent with the teacher ratings of the likelihood of change. These data do not illustrate a highly disaffected workforce that plans to leave the profession. Rather, they imply a very stable group in the Board of Education and less stable groups of Head Start and precertified day care staff that are likely to leave one classroom position for another. In an important sense, this is a problem within the field that is easier to confront than a wholesale exodus from the profession.

Policy Implications. Our purpose in investigating workforce stability and level of training was to determine if there were differences among the teachers in New York City's early childhood programs that implied the need for changes in public policies that influence teacher recruitment and retention. There *are* such differences.

At this time, New York City's non-public school early childhood programs cannot attract sufficient teachers to fill vacancies in a timely manner, and turnover rates among the teachers preclude the belief that the programs are sufficiently

From a public policy perspective, the fact that high teacher turnover and vacancy rates exist in the Head Start and publicly funded day care systems is especially troubling. These are systems expressly designed to serve the City's poorer children and families... It is precisely these programs which should be the most adequately staffed.

At this time New York City's early childhood programs cannot attract sufficient teachers to fill vacancies in a timely manner, and turnover rates among teachers preclude the belief that the programs are sufficiently stable for young children. Ignoring the teacher vacancy and turnover rates in those programs will have the consequence of consigning the City's poorest children to programs of tenuous quality.

From what teachers say about their future plans, it appears public policy should focus on the disparities among the early childhood systems, rather than between early childhood positions and positions outside the field.

stable for young children. The inescapable conclusion is that something must change to assure program quality in New York City's publicly funded day care and Head Start classrooms. Ignoring the teacher vacancy and turnover rates in these programs will have the consequence of consigning the city's poorest children to programs of tenuous quality.

From what teachers say about their future plans, it appears that public policy should focus on the disparities among the early childhood systems, rather than between early childhood positions and positions outside the field. This makes it easier to characterize the problem and solutions, since we are dealing with a finite number of systems and disparities. We turn to teacher judgements about their jobs and possible reforms, as a way to more fully understand what should be done.

Teacher Ratings of Job Satisfaction

Teachers rated their jobs in ways that reflect differences in the rewards between systems. Table 8 contains the data on job satisfaction. These ratings are presented in three categories: subjective satisfaction, compensation and working conditions.

Subjective Satisfaction. Teachers do not differ when rating subjective satisfaction. Regardless of system, teachers are highly satisfied with such elements as working with children, intellectual challenge and opportunities for creativity.

Compensation. Predictably, differences emerge when teachers rate components of compensation. About 40% of the Head Start and publicly funded day care teachers are very dissatisfied with salary. While all teachers are less satisfied with compensation than with elements of subjective satisfaction, Board of Education teachers are more satisfied

Table 8

Comparison of Teachers by System on Elements of Satisfaction

Job Characteristics	Board of Education (N=336)	ACD Day Care (N=134)	ACD Head Start (N=89)	Significant Differences***
SUBJECTIVE SATISFACTION *				
<i>Working with Children</i>				
Mean (standard deviation)	3.77 (0.47)*	3.74 (0.55)	3.82 (0.42)	No
<i>Personal satisfaction</i>				
Mean (standard deviation)	3.23 (0.83)	3.17 (0.83)	3.17 (0.84)	No
<i>Intellectual Challenge</i>				
Mean (standard deviation)	2.90 (0.89)	3.05 (0.87)	3.08 (0.83)	No
<i>Opportunity for Creativity</i>				
Mean (standard deviation)	3.16 (0.92)	3.26 (0.84)	3.43 (0.81)	No
COMPENSATION *				
<i>Professional Prestige</i>				
Mean (standard deviation)	2.16 (0.97)	2.53 (0.99)	2.72 (1.00)	BOE < DC, HS
% satisfied or very satisfied	38.6%	56.1%	64.9%	
<i>Salary</i>				
Mean (standard deviation)	2.35 (0.90)	1.98 (0.89)	2.00 (0.94)	BOE > DC, HS
% satisfied or very satisfied	45.3%	26.4%	34.1%	
<i>Benefits</i>				
Mean (standard deviation)	2.95 (0.83)	2.94 (0.97)	2.00 (1.04)	BOE, DC > HS
% satisfied or very satisfied	74.8%	72.6%	31.7%	

(Table 8 continued on next page)

Table 8 (continued)

Job Characteristics	Board of Education (N=336)	ACD Day Care (N=134)	ACD Head Start (N=89)	Significant Differences***
WORKING CONDITIONS *				
<i>Paid Preparation Periods</i>				
Mean (standard deviation)	2.73 (1.06)	2.36 (0.99)	2.49 (1.09)	BOE > DC, HS
% satisfied or very satisfied	63%	50%	58%	
<i>Paid Breaks</i>				
Mean (standard deviation)	2.74 (1.09)	2.83 (0.98)	2.36 (1.10)	BOE, DC > HS
% satisfied or very satisfied	63.4%	68.3%	49.3%	
<i>Caliber of Colleagues</i>				
Mean (standard deviation)	2.79 (0.92)	2.54 (0.95)	2.78 (0.94)	No
<i>Opportunities for Professional Growth</i>				
Mean (standard deviation)	2.42 (0.98)	2.71 (0.96)	2.88 (1.02)	BOE < HS
% satisfied or very satisfied	50.3%	63.8%	70.6%	
<i>Non-Teaching Duties</i>				
Mean (standard deviation)	2.22 (1.05)	2.42 (0.93)	2.53 (0.93)	No
<i>Vacation Schedule</i>				
Mean (standard deviation)	3.71 (0.52)	2.85 (0.94)	2.10 (1.10)	BOE > DC > HS
% satisfied or very satisfied	97%	69.4%	36.2%	
<i>Length of Day</i>				
Mean (standard deviation)	3.56 (0.68)	2.70 (1.10)	2.96 (1.03)	BOE > DC, HS
% satisfied or very satisfied	94.62%	63.4%	72.6%	
<i>Administrative Support</i>				
Mean (standard deviation)	2.56 (1.08)	2.45 (1.11)	2.66 (1.00)	No

* The dimensions of job satisfaction are categorized into the three groups of rewards identified by Lortie (1975).

** Each variable could take on values ranging from 1 - 4 (1 = very dissatisfied, 2 = dissatisfied, 3 = satisfied, 4 = very satisfied). Therefore, higher values indicate greater satisfaction.

*** All tests of significance were conducted with $p < .05$. Procedures were one-way ANOVA. Overall findings of significance were further analyzed using post-hoc Scheffe procedures.

with salary than the other groups. The difference is understandable. We estimated current average salaries for fully certified teachers to be \$33,303 in the Board of Education, \$19,365 in ACD day care and \$19,018 in Head Start. Only a small amount of the difference between the BOE salaries and those in the other systems is due to differences in the amount of training and experience in those workforces, *the main difference results from disparities in the salary schedules.* Knowing their levels of education and experience, we estimated that the average salaries for the certified teachers in day care and Head Start, *if they were paid on the same salary scale as those in the Board of Education,* would be \$31,112 and \$27,422 respectively.

Head Start teachers are extremely dissatisfied with fringe benefits. Since there is variety in these ratings (and the ratings of all other variables), the average response does not imply that all teachers are satisfied with fringe benefits in the Board of Education or day care. In fact, 25% of the teachers in these other systems are dissatisfied with their benefits. However, this percentage is dwarfed by the 68% of Head Start teachers who are dissatisfied.

The prime cause for the dissatisfaction expressed by Head Start teachers probably reflects their lack of participation in a pension plan or welfare fund, since these are the primary differences between the publicly funded day care and Head Start fringe benefits (see Appendix I).

Finally, Board of Education teachers are less satisfied with their level of professional prestige than the day care and Head Start teachers. This study does not clarify the reason for this difference. Dissatisfaction with the status of teaching is a common finding in studies of teacher attitudes. If anything, the

Board of Education teachers are more satisfied with salary than other groups. The difference is understandable. We estimated current average salaries for fully certified teachers to be \$33,303 in the Board of Education, \$19,365 in ACD day care and \$19,018 in Head Start.

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surprising result is that a majority of day care and Head Start teachers are satisfied with their professional prestige.

Working Conditions. Taken as a cluster, teacher ratings of their working conditions fall between positive ratings of subjective satisfaction and less positive ratings of compensation. Features of the various contracts, listed in Appendix I, predict the differences in ratings. For example, teachers in the Board of Education work a shorter year and day than the other teachers and have paid time for preparation. Day care teachers get more vacation than Head Start teachers (but less than the Board of Education) and receive a daily paid break. Head Start teachers have no such break. The ratings of each of these elements conform exactly to the differences among the systems.

Ratings of opportunities for professional growth varied across systems. On average, Board of Education teachers were less satisfied than the Head Start teachers. We explored this further by grouping Head Start teachers into those who are fully certified and those holding some form of precertification. Comparing the Board of Education teachers to the Head Start groups makes it clear that the overall difference between the Board of Education and Head Start is due to a difference between the public school teachers and the precertified Head Start teachers. It is reasonable that persons allowed to teach while completing certification requirements would feel more positively about opportunities for professional growth than their fully certified colleagues.

On working condition variables not differentially structured by the contracts, such as administrative support and caliber of colleagues, no differences exist among the systems. This is expected since the results uniformly show a strong relationship between teacher ratings and the features of their

contracts. This congruence is reassuring from a policy perspective because it suggests the situation is controllable. If a change is needed, the teachers' contracts provide a ready and powerful vehicle.

Teacher Ratings of Recommendations to Improve the Teaching Profession

Teachers rated the power of eleven items to *improve working conditions for teachers and encourage good teachers to remain in teaching instead of leaving the profession*. Most items were taken from two questions used in an interview of public school teachers by Louis Harris and Associates (1985). We also used the same response scale as Louis Harris (1 = Would not help at all; 2 = Would help a little; 3 = Would help a lot; 0 = Not sure) in part to see if the pattern of their results could be replicated. It was. Table 9 contains the summary of these ratings. Although the items were not presented in this order on the survey, we report the ratings in three categories to assist our analysis. We discuss our results in two ways, ratings of individual items and clusters of related items.

Individual Items. The gestalt of these ratings is noteworthy. The majority of every group of teachers rated every recommendation to improve the teaching profession as "would help a lot." While the items related to salary enhancement, the need for more supplies, help with special needs students, and respect are almost universally acclaimed, no item lags very far behind.

The uniformity of these responses is broken slightly when the Board of Education teacher responses diverge from Head Start or day care teacher responses on two variables. First, Board of Education teachers are more convinced about the need to reduce class size than teachers in day care and Head Start. Since class size is much larger in Board of

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Education kindergarten than prekindergarten programs, we first thought the difference might be due to the kindergarten teacher ratings -- but this was not the case. All the kindergarten teachers felt that class size reduction would help a lot (average score 3.0), however, almost all prekindergarten teachers felt the same (average score 2.9). Perhaps the difference between the public school teachers and the others reflects the fact that many public school teachers have taught large kindergarten classes, even if they are now working in smaller prekindergartens. Second, public school teachers were slightly less convinced than Head Start teachers about the need for peer staff development systems like teacher centers. We do not read much into these findings since the differences are relative and small. As with other items, the majority of teachers within each system support these changes.

Ratings by cluster. While struck by the uniformity of the ratings across systems, we investigated the possibility that teachers felt more positively about certain categories of change than others. To test this, we put the eleven items teachers had rated into three discrete clusters: *extrinsic rewards, instructional support and teacher empowerment*. (These clusters are used in the presentation in Table 9.)

Table 9

Comparison of Teacher Ratings of Recommendations to Improve the Teaching Profession.

Recommendations	Board of Education (N=336)	ACD Day Care (N=134)	ACD Head Start (N=89)	Significant Differences*
EXTRINSIC REWARDS				
<i>Provide a decent salary</i>				
Mean (standard deviation)	2.93 (0.27)**	2.98 (0.15)	2.97 (0.18)	No
% help a little / a lot	6.7% / 93%	2.3% / 97.7%	3.4% / 96.6%	
<i>Promote more respect for teachers</i>				
Mean (standard deviation)	2.93 (0.24)	2.90 (0.30)	2.92 (0.28)	No
% help a little / a lot	2.9% / 96.4%	9.9% / 90.1%	8.1% / 91.9%	
INSTRUCTIONAL SUPPORT				
<i>Provide more support for dealing with special needs children</i>				
Mean (standard deviation)	2.93 (0.28)	2.91 (0.28)	2.90 (0.30)	No
% help a little / a lot	5.8% / 93.6%	19.1% / 80.9%	10.2% / 89.8%	
<i>Provide the necessary supplies and equipment teachers need</i>				
Mean (standard deviation)	2.96 (0.21)	2.90 (0.33)	2.90 (0.30)	No
% help a little / a lot	2.9% / 96.4%	8.6% / 90.6%	10.1% / 89.9%	
<i>Reduce teacher load for administrative tasks</i>				
Mean (standard deviation)	2.79 (0.43)	2.66 (0.56)	2.82 (0.49)	No
% help a little / a lot	18.3% / 80.5%	25.2% / 70.6%	13.5% / 84.1%	
<i>Smaller class sizes</i>				
Mean (standard deviation)	2.97 (0.20)	2.84 (0.39)	2.80 (0.45)	BOE > DC, HS
% help a little / a lot	1.8% / 97.6%	14.5% / 84.7%	15.1% / 82.6%	
<i>Promote more parent-teacher communication</i>				
Mean (standard deviation)	2.68 (0.55)	2.82 (0.40)	2.70 (0.46)	No
% help a little / a lot	23.2% / 72.5%	16.3% / 82.9%	29.9% / 70.1%	

(Table 9 continued on next page)

Table 9 (continued)

Recommendations	Board of Education (N=336)	ACD Day Care (N=134)	ACD Head Start (N=89)	Significant Differences*
TEACHER EMPOWERMENT				
<i>More structured time to talk with colleagues about professional matters</i>				
Mean (standard deviation)	2.54 (0.58)	2.59 (0.57)	2.51 (0.57)	No
% help a little / a lot	37.3% / 58.2%	33.3% / 62.6%	41.6% / 54.8%	
<i>Encourage peer observation and feedback</i>				
Mean (standard deviation)	2.45 (0.66)	2.52 (0.66)	2.49 (0.59)	No
% help a little / a lot	36.6% / 54%	28.5% / 62.6%	41.8% / 53.5%	
<i>Have a formal system - like teacher centers - where teachers can get help from other teachers and administrators</i>				
Mean (standard deviation)	2.68 (0.55)	2.80 (0.42)	2.84 (0.40)	BOE < HS
% help a little / a lot	24% / 72%	18.3% / 80.9%	13.9% / 84.9%	
<i>Provide more independence to organize classrooms the way teachers think they should be</i>				
Mean (standard deviation)	2.77 (0.51)	2.70 (0.54)	2.66 (0.52)	No
% help a little / a lot	15.3% / 80.7%	21.6% / 74.4%	28.9% / 68.7%	
<i>Provide teachers more choice in assignment</i>				
Mean (standard deviation)	2.76 (0.47)	2.70 (0.51)	2.76 (0.48)	No
% help a little / a lot	19.2% / 78.6%	25% / 72.5%	19.3% / 78.3%	

* All tests of significance were conducted with $p < .05$. Procedures were one-way ANOVA. Overall findings of significance were further analyzed using post-hoc Scheffe procedures.

** Each variable could take on values ranging from 1 - 3 (1 = would not help at all; 2 = would help a little; 3 = would help a lot). Therefore, higher values indicate a greater belief that a change would improve working conditions for teachers and encourage good teachers to remain in teaching instead of leaving the profession.

For each teacher we created three scores. These were the averages of the responses to the items in each cluster. For example, we created an *extrinsic rewards* score for each teacher which was the average of their responses to the two items categorized under compensation -- one concerned with salary and the other with status. Similarly, we compiled an average *instructional support* score and an average *teacher empowerment* score.

To assess our impression that scores possibly varied by cluster rather than program system, we compared the scores of teachers within each system and across all three systems (BOE, ACD-HS, and ACD-DC) (see note 5). First, teachers in the Board of Education, ACD day care and ACD Head Start did not differ in their ratings. However, as a group they felt that changing extrinsic rewards would be the most powerful step that could be taken, followed in turn by improving instructional supports and improving teacher empowerment. These significant differences are a matter of degree, since the average ratings were 2.94 for the extrinsic rewards, 2.85 for the items categorized as instructional supports and 2.65 for the teacher empowerment items. Teachers seem to be saying that all categories are important, but the priorities for change are: first, improved compensation and status; second, changes directly related to teaching; and third, issues of empowerment or autonomy.

These results are remarkably similar to those of Louis Harris and Associates (1985). Harris and Associates conducted telephone interviews with a nationally drawn sample of 1846 K-12 teachers, 56% of whom taught K-6. As with our results, a majority of the teachers in the Harris survey predicted that each item presented "would help a lot" in "keeping good people teaching." Although Louis Harris and Associates did not

Teachers seem to be saying that...the priorities for change are: first, improved compensation and status; second, changes directly related to teaching; and third, issues of empowerment or autonomy.

empirically test differences among the items, they rank ordered the items by the percentage of teachers who said they "would help a lot." *Compensation and status were at the top of the ranking, followed in turn by items related to class size, supplies, independence in organizing classrooms and parent involvement. We found the same ordering, which supports the generalizability of our results.*

Teacher Ratings of Reforms

Although idiosyncratic suggestions have been made about how to improve public education, certain possible reforms appear on many lists. Harris and Associates (1985, 1986) had teachers rate some of these commonly offered suggestions and we did the same. The five reforms involved salary enhancement, merit pay, differentiated staffing with mentor teachers, year-round employment with extra pay, and the loosening of current certification requirements to attract persons from other fields. Table 10 contains the summary of these ratings of *recommendations to improve the teaching profession*. Two things are striking about these data. First, the only reform rated as "would help a lot" by a majority of all respondents was "provide compensation for beginning teachers comparable to other professions that require similar training." Second, in every instance the public school teachers differed from one or both of the other groups. Public school teachers usually had less faith in the strengths of these reforms than did the day care and Head Start teachers. Inexplicably, this pattern was reversed on the ratings of compensation for beginning teachers. Public school teachers rated that item more positively than Head Start teachers.

The only reform rated as "Would help a lot" by a majority of all respondents was "provide compensation for beginning teachers comparable to other professions that require similar training."

Table 10

Comparison of Teacher Ratings of the Ability of Reforms to Attract Good People into Teaching

Reforms	Board of Education (N=336)	ACD Day Care (N=134)	ACT Head Start (N=89)	Significant Differences*
<i>Provide compensation for beginning teachers comparable to other professions that require similar training</i>				
Mean (standard deviation)	2.82 (0.41)**	2.70 (0.53)	2.64 (0.51)	BOE > HS
% help a little / a lot	15.9% / 83.1%	23.7% / 73%	33.7% / 65.1%	
<i>Pay teachers partly according to their performance on evaluation or tests, sometimes called merit pay</i>				
Mean (standard deviation)	1.76 (0.81)	2.32 (0.76)	2.36 (0.76)	BOE < DC, HS
% help a little / a lot	29.5% / 70.5%	31.1% / 68.9%	29.9% / 70.1%	
<i>Pay teachers partly according to the specific jobs they hold such as apprentice teacher or master teacher</i>				
Mean (standard deviation)	2.06 (0.84)	2.59 (0.62)	2.66(0.60)	BOE < DC, HS
% help a little / a lot	28.8% / 71.2%	26.8% / 73.2%	21.5% / 78.5%	
<i>Offer all teachers a 12 month contract with pay and duties for the full year</i>				
Mean (standard deviation)	1.56 (0.77)	2.35 (0.79)	2.50 (0.83)	BOE < DC, HS
% no help / a little	61.2% / 38.8%	19.2% / 80.8%	23.3% / 76.7%	
/ a lot	/ 17.1%	/ 53.8%	/ 36.8%	
<i>Allow programs to hire talented people who are not certified teachers</i>				
Mean (standard deviation)	1.69 (0.77)	2.27 (0.80)	2.05 (0.83)	BOE < DC, HS
% no help / a little	50% / 50%	22.2% / 77.8%	31.6% / 68.4%	
/ a lot	/ 18.9%	/ 49.1%	36.8%	

* All tests of significance were conducted with $p < .05$. Procedures were one-way ANOVA. Overall findings of significance were further analyzed using post-hoc Scheffe procedures.

** Each variable could take on values ranging from 1-3 (1 = Would not help at all; 2 = Would help a little; 3 = Would help a lot). Therefore, higher values indicate a greater belief that the change would help attract good people into teaching.

Once again, these findings replicate the 1985 Harris survey. As with our results, Harris found that "compensation for beginning teachers comparable to other professions demanding similar training" was felt to "help a lot" (79% of the Harris survey teachers and 83% of the public school teachers in this study). In both the Harris survey and this study, this is the only item where the majority of teachers felt it would help a lot.

We are not sure why public school teachers respond more negatively to these reforms than Head Start and day care teachers. While the support shown by the other groups is not overwhelming, we found that Head Start and day care teachers were relatively more positive. Louis Harris and Associates (1986) found such groups as school principals, state education officials and deans of schools of education to view these items more positively than public school teachers. Perhaps instructively, Louis Harris and Associates found that one group rated the reforms very similarly to teachers -- union officials. The United Federation of Teachers, the affiliate of the American Federation of Teachers representing New York City's public school teachers, has been cautious (albeit more supportive than the National Education Association) about these particular reforms. The conservative ratings we found may reflect widely understood UFT positions on merit pay, mentor teachers and the possibility of increased flexibility in the hiring of non-certified teachers. In contrast, District Council 1707, an affiliate of the American Federation of State, County and Municipal Employees, represents the city's teachers in publicly funded day care and Head Start. DC 1707 has not taken a position on these reforms.

The Relationship Between Ratings and Workforce Stability

Given our conclusion that public policies must change -- due to an inability to fill vacant positions in day care and Head Start, coupled with a high turnover rate among teachers who are hired -- we conducted a final analysis. We investigated the relationship between teacher ratings and their likelihood to leave the profession, searching for clues to appropriate retention strategies. For each teacher we computed three new scores. These scores were the averages of a teacher's rating of the job satisfaction, improvement and reform items (i.e., the items in tables 8, 9, and 10 respectively). We then assessed what variables best predicted the likelihood of teachers' leaving. The predictors considered were the three scores we created and several demographic factors (race [anglo/minority]; educational level; certification status [full/precertified]; program [BOE/other]; years of experience; likelihood of leaving the classroom but staying in education; and the percentage of household income represented by the teacher's salary) (see note 6).

The single variable most highly related to leaving was the teacher's average rating of the satisfaction items. The likelihood of teachers leaving the profession can be reasonably predicted from their levels of satisfaction, their opinions of possible improvements and their likelihood of leaving the classroom but staying in education. These items are more predictive of leaving than other items such as a teacher's educational level, race, experience or ratings of possible reforms.

The message from these teachers is clear. When considering change, focus first on compensation and next on changes directly tied to instruction. Realize in doing this that teacher satisfaction will be predictable from the relative terms

The message from these teachers is clear. When considering change, focus first on compensation and next on changes directly tied to instruction. Realize in doing this that teacher satisfaction will be predictable from the relative terms of the contracts governing their employment.

of the contracts governing their employment. Furthermore, as the problems of supply and turnover are confronted, the teacher ratings of satisfaction and instructional improvements are important guideposts.

POLICY RECOMMENDATIONS

This section contains recommendations for change. Each recommendation is followed by a rationale and an analysis of its cost.

We are making three recommendations:

1: *Establish salary parity between fully certified teachers employed by the New York City Board of Education and fully certified teachers employed by Agency for Child Development administered day care and Head Start.*

2: *Extend participation in the Cultural Institutions Retirement System (CIRS) to staff in Head Start.*

3: *Provide tuition support to Option 1 and 2 teachers in Head Start. Assuming salary parity for fully certified teachers in publicly funded day care, restrict the current tuition reimbursement program to Option 1 and 2 teachers in this system.*

Salary parity for fully certified teachers is the key recommendation. Even if our recommendations are implemented, many disparities such as length of work day, work year, and size of hourly wage, will continue to exist between teachers in the Board of Education and teachers in publicly funded day care and Head Start. However, we feel that salary parity will serve as a sufficient magnet to attract and retain fully certified staff to the non-public school systems despite these disparities. In addition, salary parity for these staff will improve the retention of precertified teachers and will draw teachers from these ranks into full certification. This will free slots for the hire of new precertified staff as the systems correct themselves. At the present time, many programs cannot hire these persons because they have hired the

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maximum allowable under an agreement between ACD and the Department of Health restricting the ratio of fully certified to precertified staff (see note 1).

Extending the CIRS to Head Start staff will serve as a magnet similar in kind but not in magnitude to salary.

Extending the CIRS to Head Start staff will also serve as a force, similar in kind but not in magnitude to salary parity, for the recruitment and retention of employees. As we discuss when we fully describe this recommendation, retirement benefits are increasingly important to these workforces, given the increasing average age of teachers in all three systems. Their importance will be magnified as salary parity reduces turnover.

Parity for fully certified staff will also justify the restriction of tuition reimbursement supports to precertified teachers because, at parity, fully certified staff will be earning higher salaries and will be substantially rewarded for increased coursework through the structure of the salary scale. Savings from this restriction in day care, where tuition reimbursement now exists for all teachers through the union-administered benefits fund will help fund the increased number of precertified staff seeking reimbursement. (The increased number resulting from the incentive of parity and the inclusion of the Head Start precertified teachers in the pool of eligible recipients.)

The total cost of implementing these recommendations is approximately \$13,265,000. While this figure is substantial, we do not assume it is a figure that will or should be borne by New York City alone.

The total cost of implementing these recommendations is approximately \$13,265,000: \$10,500,000 for salary parity; \$165,000 for tuition support; and \$2,600,000 for extension of pension benefits. While this figure is substantial, we do not assume it is a figure that will or should be borne by New York City alone. Publicly funded day care and Head Start are programs funded by a mix of local, state and federal dollars, recognizing the benefits that accrue to all three levels from the establishment of these programs for poor children and

families. These recommendations are predicated on an understanding of their benefits, and their cost must be considered in light of the potential savings that will accrue if the publicly funded early childhood programs are of high quality.

The cost/benefit analysis widely reported from the data of the Perry Preschool Project, \$4.75 in return for \$1.00 of expense (Berrueta-Clement, et al., 1984), is impressive and suggests the program was justified in economic terms by the savings in special education services alone. But we remind readers of the point we made at the outset. Programs of less quality will not yield the same results.

Recommendation #1. *Establish salary parity between fully certified teachers employed by the New York City Board of Education and fully certified teachers in New York City employed by Agency for Child Development administered day care and Head Start.*

Rationale

High quality early childhood programs require a trained and stable workforce of teachers. The turnover and vacancy rates for teachers in New York City's publicly funded day care and Head Start programs have reached a level where program quality is in crisis.

While many disparities exist between the rewards for public school and non-public school teachers, the most important is salary. This conclusion is based upon our analysis of the current compensation and working conditions in these systems, ratings made by current teachers of their job satisfaction and possible reforms, and the relationship of these ratings to a teacher's likelihood to leave the profession.

High quality early childhood programs require a trained and stable workforce of teachers. The turnover and vacancy rates for teachers in New York City's publicly funded day care and Head Start programs have reached a level where program quality is in crisis.

Licensing regulations in New York City are designed to hold all programs to the same standard for teacher qualifications -- full New York State teacher certification. This has been done to set a uniform and high level of training and experience. Other policies should support this intent. For this reason and due to reasons of equity, parity should be tied to full certification.

Cost Implications

Different assumptions related to the impact of salary parity in the certification mix, training and experience of the ACD teachers result in estimated additional costs of \$10 million, \$20 million and \$25 million for three scenarios. Think of these three scenarios as short-term (immediate), middle (probably 3-5 years), and long-range (10-15 years). All estimates are in 1986/87 dollars and are based on contracts in effect during 1986/87. For example, given the new public school teachers' contract in effect for 1987/88, these estimates should be increased by approximately 6% if parity was tied to the 1987/88 BOE contract.

To develop the above estimates, we first used the teaching experience and education reported by each respondent to estimate the teacher's annual salary from the three salary scales in effect during 1986/87. In addition, a BOE equivalent salary was estimated for all fully certified respondents from ACD-DC and ACD-HS. This was done by creating a salary for each ACD-DC and ACD-HS teacher on the BOE salary scale, using for this purpose the ACD teacher's experience and level of education. All calculations assume 1325 teacher positions in ACD-DC, 366 teacher positions in ACD-HS and *no vacancies* in these positions. This conservative approach to vacancies maximizes the estimation of the cost of an increase, since it treats every slot as being paid

for and filled. However, our estimate of the number of day care positions does not consider the approximately 200 full-time equivalent teacher positions in programs for school-age children. We think our estimates are sufficiently buffered by our approach to vacancies to be accurate, even if the fully certified teachers working with school-age children were also paid at parity.

Of the 134 ACD-DC respondents to our survey, 56.7% were fully-certified and 43.3% held precertification as an Option 1, 2 or 3 teacher. Of the 89 ACD-HS respondents, 56.2% were fully-certified and 43.8% held precertification. Table 11 contains salary estimates by system.

Table 11

Estimated Average Teacher Salaries by System*

System	Current Salary	BOE Equivalent
Board of Education	\$ 33,303	not applicable
ACD-DC Fully Certified	19,365	\$31,112
ACD-DC Precertified	17,195	n/a
ACD-HS Fully Certified	19,018	27,422
ACD-HS Precertified	16,385	n/a

* All estimates are based upon the salary scales in effect for 1986/87.

Scenario # 1. Assuming that parity would result in no immediate change in certification mix, the cost of parity was first calculated using the fully certified and precertified percentages found in the current ACD workforce.

Table 12

Cost of Parity With No Change in Certification Mix

Costs	ACD-DC	ACD-HS
Estimated Current Annual Salary Expenditures	\$24,413,045	\$6,539,308
Estimated Cost at Parity	33,235,042	8,270,532
Increase	8,821,997	1,731,224 *

* The total cost increase would be \$10,553,221.

Scenario # 2. This scenario yields a higher cost of parity than the scenario #1 estimate, since it is assumed that with parity in effect, fully certified teachers would be encouraged to retain employment in ACD and precertified teachers would be encouraged to gain full certification. Accordingly, scenario # 2 is a calculation of parity assuming *all* teachers are fully certified.

Table 13

Cost of Parity With 100% ACD Teachers being Fully Certified

Cost	ACD-DC	ACD-HS
Estimated Current Annual Salary Expenditures	\$24,413,045	\$6,539,308
Estimated Cost at Parity	41,223,400	10,036,452
Increase	16,810,355	3,497,144 *

* The total cost increase would be \$20,307,499.

Scenario #3. This approach assumes that over time, the ACD workforce would have the same average education and experience as the BOE workforce if both workforces were on the same pay scale and these were the two dimensions which continued to be used in salary calculations.

Table 14

Cost of Parity Assuming No Difference between BOE and ACD Workforces on Average Experience and Education

Cost	ACD-DC	ACD-HS
Estimated Current Annual Salary Expenditures	\$24,413,045	\$6,539,308
Estimated Cost at Parity	44,126,475	12,188,898
Increase	19,713,430	5,649,590 *

* The total cost increase would be \$25,363,020.

Recommendation # 2. *Extend participation in the Cultural Institutions Retirement System (CIRS) to staff in Head Start (see note 7).*

Rationale

There are several labor pools to consider when trying to attract and retain qualified teachers. Subsidized pension benefits are likely to have only a small effect on the occupational decisions of preservice young adults. However, the presence of pension benefits are important to three other significant groups: persons changing careers or considering joining the labor force at an older age, former teachers who left teaching temporarily for various personal reasons and current teachers considering leaving.

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The average age of early childhood teachers in New York City's public schools, publicly funded day care and Head Start are 41.5, 37.5 and 32.75 years, respectively. Given their average ages, a significant percentage of the teachers in each system are anticipating their financial situations later in life.

Teacher ratings of satisfaction with benefits showed Head Start teachers to be very dissatisfied. These teachers are the one group of the three with no pension plan and their ratings of benefits were much more negative than the ratings by teachers in day care or the public schools.

Private, non-profit day care centers, including those funded through the ACD system, can currently participate in the Cultural Institutions Retirement System (CIRS). The CIRS was established in 1962 to serve cultural institutions such as zoos, museums, and botanical gardens that were receiving operating and capital funds from the City of New York. Day care centers have been participating since 1964. As with the pension for public school teachers, the CIRS offering is primarily a "defined benefit plan" designed to replace a certain amount of each retiree's final salary, based upon years of service.

The pension is entirely employer paid, with employees required to contribute *pre-tax* dollars (2% minimum, up to 15% of salary) directly to their own savings plan to supplement the CIRS pension and social security. This savings plan portion, modeled on a 401(K) cash or deferred arrangement, is similar to the "defined contribution plans" common in higher education, where the amount of the ultimate benefit is tied to investment performance (e.g. TIAA-CREF). However, the

CIRS version is a retirement savings plan with no in-service withdrawals, loans, or hardship withdrawals permitted.

The basic CIRS pension plan provides a retirement benefit for service after July 1, 1986 of 2% of final average salary per year of creditable service. That salary figure is determined by computing a person's average annual salary for the highest paid five consecutive years during the last 10 years of service.

Employees who are active members of the savings and pension plans are also covered under a group life insurance plan sponsored by CIRS. Benefits vary according to salary and service. One hundred percent of an employee's salary up to 10 years of service and 200% of salary after 10 years are the levels of coverage. The plan is employer-paid.

Coupled with social security benefits and supplemented by an annuity purchased from the accumulation in the savings plan, the CIRS projects a full replacement value of the net income from final annual salary at about 20 years of service. In short, this is a plan with features equal to the plan available for public school teachers, especially considering that new hires in the Board of Education must contribute 3% of *after-tax* dollars to their pension system.

Somewhat surprisingly, not all day care centers eligible to participate in the CIRS do so. There are many possible reasons for this but the most salient have to do with the low salaries and high turnover in day care, the feature that participation requires 100% agreement among all staff in a center to join, and the requirement that the employer must join the Day Care Council of New York. (The Day Care Council is a non-profit federation of the Sponsoring Boards of day care programs.)

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While the features of the CIRS system are favorable, the value of the benefit is restricted by low salaries.

While the features of the CIRS system are favorable, the value of the benefit is restricted by low salaries. That is, 2% per year of service at low salary rates obviously provides a much more modest income than 2% per year of service at higher rates. In addition, with turnover high, it is probably difficult to get 100% participation, since many employees plan to leave the field at ages where retirement planning is not a strong consideration.

Since we assume that salary parity will correct the problem of low salaries and high turnover, and we know many centers participate despite these limitations, we recommend extending the possibility for participation to Head Start. We have identified one minor administrative problem with this recommendation. Head Start programs do not have their own "Day Care Council" for programs to join and then enroll in CIRS. The Head Start Sponsoring Boards may want to consider a similar approach or simply advocate universal participation and link it to a collectively bargained agreement. We believe the importance of the pension -- particularly under parity -- will outweigh possible Head Start agency concerns.

Cost Implications

Presently, employer costs for participation in the pension program are 8.34% of payroll. This figure has been dropping in the past three years from 10.24% in 1985/86 to 9.60% in 1986/87 to the current rate. The cost varies by a number of factors such as performance of the pension portfolio, anticipated turnover and retirement rates, and the trajectory of payroll costs. The figure also includes provisions for funding previously performed creditable service when new groups join the CIRS system, so that each employee's benefit reflects service (s)he rendered from the date of employment up to effective date of coverage. For this analysis, we have

assumed an employer contribution rate of 10%, taking into account dropping turnover rates as a function of salary parity (see note 8).

The salary base for all Head Start staff who qualify for benefits is approximately \$23,330,000 this year (A. Robinson, personal communication, April 14, 1988). Of this, we estimate teacher costs to be approximately \$6,500,000. At parity, this cost for teacher salaries would rise to \$8,300,000, given the current mix of fully certified and precertified teachers. Finally, we assumed a 5% increase this year for non-teacher salaries. Using this set of assumptions, the cost of extending the CIRS to Head Start would be calculated as follows:

(1)	Current salary base (less) teacher salaries	\$23,330,000 <u>(6,500,000)</u>
(2)	Salary base for non-teaching staff	\$16,830,000
(3)	Salary base for non-teaching staff assuming a 5% raise	\$17,671,500
(4)	Salary base for teachers at parity for fully certified teachers	\$8,300,000
(5)	Total salary base	\$25,971,500

$$\text{Cost of pensions: } (.10)(25,971,500) = \$2,597,150$$

Recommendation #3. *Provide tuition support to Option 1 and 2 teachers in Head Start. Assuming salary parity for fully certified teachers in publicly funded day care and Head Start, restrict the current tuition reimbursement plan to Option 1 and 2 teachers in publicly funded day care.*

Rationale

Presently, nearly half the teachers in publicly funded day care and Head Start are not fully certified. The Option 1 and 2 teachers have study plans they must complete to become fully certified. (This recommendation excludes Option 3 teachers hired on an emergency basis without study plans.) Through a union-administered benefits fund, day care teachers may get reimbursed for this coursework after paying for the course, completing it successfully, and then submitting the required documentation for reimbursement. Head Start teachers, with no benefits fund, are not able to get such reimbursement.

The City has recognized tuition reimbursement as an important support for helping precertified day care teachers get their required coursework. Given our estimates of their annual salaries and household incomes, it is clear why such support is required.

The City has recognized tuition reimbursement as an important support for helping precertified day care teachers get their required coursework. Given our estimates of their annual salaries and household incomes, it is clear why such support is required. For example, we estimated the annual salaries for precertified publicly funded day care teachers and precertified Head Start teachers to be \$17,195 and \$16,385, respectively. Since these day care teachers report these earnings represent an average of 68.1% of household income (62.24% for the Head Start precertified teachers), precertified day care and Head Start teachers have average household incomes, in turn, of \$25,250 and \$25,111. By any standard, these are modest and such persons need help paying for coursework.

The current system permits reimbursement for up to 12 credits per year, at the per credit rates charged by the City University of New York (CUNY) system. This means that precertified prebaccalaureate staff can get reimbursed at \$48/credit for undergraduate work. Fully certified staff are reimbursed for graduate credits leading to permanent

certification and the Masters degree at the CUNY rate of \$82/graduate credit. Teachers can take coursework outside the CUNY system, but they can only get reimbursed at the CUNY rate. We do not see this restriction to the CUNY rate as problematic since CUNY has been the system of choice for teachers, both before and after the inception of the reimbursement program three years ago. In our sample, 63.4% of the public school teachers had their most advanced degrees from CUNY or SUNY institutions, as did 59.5% of the day care teachers and 61.6% of Head Start teachers.

Our investigation of the current reimbursement system indicates that it works fairly well. District Council 1707's administration of the program seems efficient and teachers get reimbursed rapidly after submission of documentation. This is important since rapid reimbursement allows teachers use the reimbursement for one semester's work to pay for the next semester in advance. This means the cost to a teacher is really the opportunity cost -- the cost of not being able to use the money for other purposes -- of one semester's worth of coursework. This is a modest amount since a load of 6 credits of undergraduate work costs \$288. If a teacher needs to borrow this amount, they can do so from the union-operated credit union at a cost of approximately \$52/year (18%).

However, relatively few teachers use the system. As of Fall, 1988, approximately 500 requests for reimbursement had been submitted in three years (M. Sintron, personal communication, March 10, 1988). It is unknown how many individuals this represents since in three years one individual could have submitted six reimbursement requests -- one for each semester.

We believe the low rate of participation in the current plan occurs because increased coursework and certification are minimally rewarded in the current salary scales for day care and Head Start. This is a far more substantive concern than the after-the-fact reimbursement feature or possible problems with teacher release time for attendance. Therefore, implementing our first recommendation regarding salary parity is key to creating incentives for individuals to take coursework.

Our focus on precertified teachers in this recommendation assumes that parity for fully certified teachers will provide enough income and incentive to remove the need to extend this benefit to fully certified teachers. Savings from this shift can be used to fund the increased participation by precertified staff we would expect if parity was in place.

Our main recommendation is to extend the system to cover precertified Head Start teachers. All the reasons why the system is important for day care apply to Head Start. Since Head Start teachers do not have a benefits fund, some arrangement must be struck to administer the extension of the current system to these employees. We recommend that funding pass through DC 1707, as does the current funding for day care. In this way, additional administrative cost can be minimized since a system is already established for managing the funds and providing reimbursements.

Cost Implications

The cost of implementing this recommendation is not significant -- either in dollars or administrative burden. As noted, passing the money through the current system will minimize the administrative cost due to economies of scale (the same system can handle more claims). We assume that no cost increase will occur in day care since cost increases due to

more precertified teachers applying for reimbursement will be offset by the savings from not extending the benefits to fully certified day care staff.

In Head Start, there are approximately 366 teacher positions. Of these, we estimated that 43.8% were filled by teachers with precertification. This implies that 160 staff would be eligible for this benefit. In this precertified group, only 28.2% were prebaccalaureate, implying that of the 160 precertified staff system-wide, 45 would be prebaccalaureate and 115 would have undergraduate degrees. This is important because persons with bachelor degrees need fewer credits to attain full certification. Conservatively assuming that 115 Head Start staff would claim reimbursement for 12 graduate credits, and 45 staff would eventually claim reimbursement for 24 undergraduate credits, the total cost of this recommendation is \$165,000, calculated as follows:

115 staff x 12 credits x \$82/credit	\$113,160
45 staff x 24 credits x \$48/credit	<u>\$51,840</u>
	\$165,000

Since the maximum reimbursement per year is restricted to 12 credits, the maximum first year would be \$138,450 [$\$113,160 + (45 \text{ staff} \times 12 \text{ credits} \times \$48/\text{credit} = \$25,290) = \$138,450$].

This maximum undoubtedly overstates the cost, since all staff would not take 12 credits per year. We feel that \$165,000 is close to the total cost, even assuming that some of the precertified staff would leave to be replaced by other precertified staff. This is because under parity the workforce would eventually become nearly 100% fully certified. At that time, this program's cost would diminish to a negligible expense.

NOTES

1. As with most teacher certification or licensing standards in this country, there has long existed in New York City a form of "precertification" designed to allow systems to staff classrooms during periods of teacher shortage. Prior to July, 1984, these forms of precertification were fairly equivalent between the Board of Education and the ACD programs. (Before 1984, the Temporary Per Diem option existed within the Board of Education and the Study Plan option existed for ACD and licensed private programs -- see Appendix II.)

In September, 1983, the New York City public schools shifted from double-session, half-day kindergartens to a full-day program. This doubled their need for kindergarten teachers, and many were hired from the ACD system. To alleviate the shortage this created, an "option plan" was worked out between ACD and the New York City Department of Health. The requirements for the precertified "Study Plan" teachers became known as Option 1, and less restrictive categories Option 2 and Option 3 were added (see Appendix II). Recognizing the potential problems that would be created if programs became heavily staffed by these Option teachers, the use of Option 3 teachers was officially restricted to ACD day care programs and those persons could be employed as teachers for a maximum of six months. The following was also agreed to for programs with Option 1 and Option 2 teachers.

Number of Groups (classrooms)	Permissible number Option 1 and Option 2
2 or 3	1
4, 5 or 6	2
7, 8 or more	3

2. This study did not include an analysis of equity-based concerns related to New York City policies for its early childhood teacher workforce. This omission does not imply that it is inappropriate to raise such concerns.

The principal of equal pay for equal work has been affirmed in federal law since the 1963 Equal Pay Act and Title VII of the 1964 Civil Rights Act, which called for an end to sex and race discrimination in the workplace (Whitebook & Ginsburg, 1985). Equal pay for equal work is a principle which insures that the same wages are paid to all who perform the *same job* for an employer, regardless of the sex or race of the worker (Whitebook & Ginsburg, 1985). While a positive force for addressing gender and racial discrimination, equal pay for equal work does not address the most important cause of the wage gap between sexes: the concentration of women in a narrow range of low-paying, sex-segregated occupations. This widespread occupational segregation has created an approach that goes further in addressing gender and racial discrimination in the workplace -- comparable worth (also known as pay equity or pay parity; see National Committee on Pay Equity, 1987). Comparable worth goes beyond equal pay for equal work by requiring that across *different* jobs employers should pay staff based on skill, effort, and responsibility associated with a job. Simply put, comparable worth demands equal pay for *equivalent* work.

As a strategy to battle wage discrimination, comparable worth is controversial and has been endorsed or rejected to varying degrees by various courts. Most clearly, both equal pay for equal work and comparable worth apply to *individual employers* rather than across employers, and have little legal support when applied across different employers such as the Board of Education and the myriad of community agencies that make up the publicly funded day care or Head Start system in New York City and elsewhere.

Clearly it is legal for an employer to pay employees performing a job (e.g., teaching) differently than another employer pays similar employees for a similar job. However, it is still possible to raise the concept of equity *in principle* and apply that concept to the disparities facing teachers in New York City's publicly funded early childhood programs. These programs attempt to hold the standard for teacher certification constant across the systems. Programs such as Head Start, the various BOE prekindergarten programs, and Project Giant Step present very similar tasks to teachers. In particular, Project Giant Step is implemented simultaneously within the three systems under a uniform set of program guidelines. Given equivalent certification and job requirements and the fact that New

York City tax levy dollars support each of these programs in varying degree, it seems reasonable to question current policies that lead to cross-system disparities, regardless of whether such policies are legal.

3. It is impossible at this time to routinely determine the characteristics of the early childhood teaching workforce. Most databases on the public school teaching workforce do not delineate early childhood teachers as a subset, nor do they contain information on early childhood teachers outside the public schools. At best, it is possible to document information on public school elementary teachers, of which early childhood teachers are a subgroup. Examples of these databases include those maintained by the National Education Association (NEA) and the National Center for Educational Statistics (NCES) (cf. Feistritzer, 1985; Sedlack & Schlossman, 1986).

What little is known about early childhood teachers outside the public schools comes from three different sources: the Census Bureau, the Bureau of Labor Statistics (BLS), and the supply study portion of the National Day Care Study (NDCS) (Coelen, Glantz, & Calore, 1979). The census and BLS databases suffer a limitation similar to the NCES and NEA sources -- it is difficult to tease out the early childhood teachers (Whitebook & Phillips, 1986). The Census Bureau categorizes early childhood teachers into two occupational groups: "child care workers except private households," and "teachers, prekindergarten and kindergarten." The first grouping contains, in addition to teachers in child care programs, such persons as foster parents and school bus attendants. The second category does not delimit teachers by type of employer. The BLS database also includes early childhood teachers in two groups: "child care workers" and "teacher, preschool and kindergarten." Child care workers in the BLS system "provide *care* in centers, nursery schools, worksites," with the category also including babysitters (Whitebook & Phillips, 1986, p. 18). Persons in the second category provide *educational services* in group settings defined as a school, again with no differentiation between public and non-public schools (emphasis added in both cases).

It is unfortunate that these national databases are so restricted because they are comprehensive and have been accumulating for a long time. Our limited ability to understand the early childhood workforce from these databases is partially offset by the aforementioned supply study of the National Day Care Study. This survey of a representative sample of day care centers was conducted in 1977 and is the most

comprehensive documentation of the characteristics of the staff in child care centers. However, the data are now over ten years old, the report did not differentiate between teachers and teacher aides in most of its analyses, and staff from part-day programs were not sampled.

4. For example, common questions across all surveys called for respondents to list total years of teaching and that portion which involved teaching preschool-aged and kindergarten-aged children. Respondents were instructed to "round off" total years of teaching, rounding to 0 if less than six months, and to 2 if *more than a year and a half* (emphasis added). This ambiguous wording caused some respondents to list total years of teaching as 2, when they had in fact worked many more than two years. In these instances, if we could accurately determine "total number of years teaching" from answers to the questions concerning "total number of years teaching a given age group", "total number of years teaching within a given system," and/or "how many systems worked in," the 2 was replaced with the newly calculated value. This problem appeared regularly throughout the surveys but was generally resolved in the manner described above. Logical inconsistencies unable to be resolved were addressed by deleting the inconsistent responses prior to data entry, treating such cases as missing values.

5. The analytic technique used was multivariate analysis of variance with the between-subjects factor being system (Board of Education, ACD day care and Head Start) and the within-subjects factor being the three scores. Neither the main effect for system or the system by score interaction were significant. However, there was a significant within-subjects effect (multivariate $F = 139.37, p < .01$).

6. The relationship between these variables and a teacher's likelihood of leaving was explored using stepwise regression procedures. Among these variables, the single variable most highly related to leaving was the teacher's average rating of the satisfaction items ($R = .3146, p < .01$). The linear combination of variables formed using stepwise procedures, in order of inclusion in the prediction equation, was: average satisfaction score; likelihood of leaving the classroom for a non-teaching position; likelihood of leaving for a new classroom; and the average rating of possible reforms ($R = .45$). Adding all other variables in as predictors beyond these four increases R to .48, a non-significant improvement ($p > .05$)

7. We considered restricting this recommendation by making CIRS participation only available to fully certified teachers in Head Start. This would target the benefit where we know there is a great need -- with teachers -- and would reduce its cost. However, we are concerned that such a restriction would be judged discriminatory on legal grounds. Assuming cost will be a consideration, the appropriateness of such a restriction should still be investigated.

8. If the CIRS system is extended to Head Start, a policy decision must be made about the crediting of prior service for employees. This is service that would have been creditable if the plan had been in effect. If all prior service was credited at 2% per year, the cost to employers might be higher than 10% of payroll. It is always possible for Head Start to reward past service at a lower rate of 1.0% or 1.25% etc., and future service at the 2.0% rate, to arrive at a reasonable balance between equity for long term employees and cost.

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(Available from the Amherst Child Care Resource and Referral Office, Jones
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APPENDIX I

**WAGES, BENEFITS AND WORKING CONDITIONS OF NEW YORK CITY
TEACHERS IN PUBLICLY FUNDED EARLY CHILDHOOD PROGRAMS,
1986-1987**

Dates of relevant contract:	9/9/84 - 9/9/87	7/1/84 - 6/30/87	2/1/86 - 1/31/88
	Board of Education	Day Care	Head Start
Wages			
Entry Level	\$20,000 (effective 9/9/86)	\$18,500(3) (effective 7/1/86)	\$18,500(3) (effective 9/9/86)
Steps	2 steps per year(2)	None	In contract, but not used
Longevity Pay	10 yrs \$1,955(1) 13 yrs \$2,950 (cum) (1, 15 yrs \$5,081 (:)	5 yrs \$200 10 yrs \$400 (cum) 15 yrs \$600 (cum) (effective 7/1/86)	5 yrs \$200 10 yrs \$400 (cum) (effective 2/1/87)
Educational Differential	EA + 30 \$782 MA \$2,893 (cum) MA + 30 \$5,785 (cum)	Student teaching \$401 MA education \$403 Both \$804	MA education \$900
Hourly Wage (illustrative example using average salary)	\$27.99/hour	\$11.74/hour	\$11.81/hour
Salary with MA Degree and Ten Years Experience (illustrative example)	\$34,682	\$19,301	\$19,800

- (1) Regularly appointed teachers only (not substitutes).
- (2) Regularly appointed teachers and substitute teachers serving in a full time assignment on an annual basis.
- (3) Fully certified teachers only (not Option 1, Option 2, or Option 3 teachers).

	Board of Education	Day Care	Head Start
Benefits			
Welfare Fund (Note 1)	\$795 + \$25(one-time)	\$565 + \$25(one-time)	None
Health Insurance	11 options. Plans fully subsidized include HIP/HMO or GHI-C/Blue Cross	Choice of HIP/HMO or GHI-C/Blue Cross (subsidized)	Blue Cross/Blue Shield (subsidized)
Pension	Yes(1)	Yes(3)	None
Social Security	Yes	Yes	Yes
Supplemental Annuity Fund (Note 2)	\$400 at maximum step(1) (contributions are made to the Teachers' Retirement System)	None	None
Work days			
Student Days	186	250	218
Vacation	Summer	30 days	20 days; 23 after 7 yrs (if hired past 2/1/80); 23 days if 5 yrs service by 2/1/80; 23 days after 5 yrs service if hired by 2/1/80.
Holidays	25 days *	11 days *	11 days *

* May vary from year to year, depending on date-specific holidays (e.g., Christmas).

- (1) Regularly appointed teachers only (not substitutes).
- (2) Regularly appointed teachers and substitute teachers serving in a full time assignment on an annual basis.
- (3) Fully certified teachers only (not Option 1, Option 2, or Option 3 teachers).

	Board of Education	Day Care	Head Start
Work days (continued)			
Days of Work	188 **	220 **	227 - 230 **
Length of Work Day	6 hours 20 minutes	7 hours 30 minutes	7 hours
Sick Leave	10 days per year; accumulate up to 200 days	12 days per year; unlimited accumulation	12 days per year; accumulate up to 180 days
Maternity/Paternity Leave	Maternity leave without pay up to six weeks after birth of child. Entitled to return to the same position. Child care leave up to September following child's fourth birthday. Entitled to return to same school if not exceeded. If exceeded, entitled to return to comparable position. (1)	Maternity or paternity leave without pay for up to 18 months. Entitled to return to his/her old job. (3)	Maternity leave without pay up to 12 months. Entitled to return to a comparable position. (3)
Sabbatical Leave	One year at 70% of salary after 14 years of service. Based on regularly appointed service except that a first year-long sabbatical may include 2 years of substitute service for the 14 years of service necessary. Each school also has a 5% quota ceiling for each year.	Leave without pay after 5 years of service.	Non.

** May vary from year to year, depending on holidays.

- (1) Regularly appointed teachers only (not substitutes).
- (2) Regularly appointed teachers and substitute teachers serving in a full time assignment on an annual basis.
- (3) Fully certified teachers only (not Option 1, Option 2, or Option 3 teachers).

Board of Education**Day Care****Head Start****Working Conditions**

Class Size	16 - 20 in pre-kindergarten programs. Experimental Pre-K mandates para-professional as well. Kindergarten up to 25.	Up to 12 four-year-olds; or up to 20 children with an assistant teacher.	Up to 12 four-year-olds; or up to 20 children with an assistant teacher
Paid Preparation Period	Two forty-minute periods per week	None	None
Paid Release Time From Instruction of Children	One period per week; for administrative responsibilities	15 min./day	None
Parent Conferences	Two per year; required	Not covered by contract	Not covered by contract
Choice in Teaching Assignments	Priority based upon seniority among qualified applicants who apply	Not covered by contract	Not covered by contract

- (1) Regularly appointed teachers only (not substitutes).
- (2) Regularly appointed teachers and substitute teachers serving in a full time assignment on an annual basis.
- (3) Fully certified teachers only (not Option 1, Option 2 or Option 3 teachers).

Notes to Appendix

1. The Welfare Fund is a union administered benefits fund, subsidized by the employer on an annual basis, per employee, at the levels indicated. The unions use these resources to provide health and other benefits to members beyond the basic health plan for the Board of Education and Day Care employees.
2. This supplemental annuity for Board of Education teachers amounts to an increase in pension benefits paid each year once the employee achieves the maximum step on the salary scale.

APPENDIX II

COMPARISON OF REQUIRED CREDENTIALS FOR TEACHERS
IN NEW YORK STATE PUBLICLY FUNDED EARLY CHILDHOOD
PROGRAMS, 1986-1987

	BOARD OF EDUCATION	ACD - DAY CARE AND HEAD START
<u>Precertification (Minimum License)</u>	<u>Temporary Per Diem</u>	<u>Precertification</u>
All minimum licenses are special licenses designed to permit systems to hire individuals on a temporary basis when certified teachers are not available.	<ul style="list-style-type: none"> o Bachelor's degree o Agreement to take 12 credits in education in the next two years, six of which must be in reading o NYC Board of Examiners TPD exam <p>This temporary license is not renewable.</p>	<p><u>Option 3.</u> Under a special agreement with the Department of Health, ACD-administered day care programs (not Head Start) can hire Option 3 group teachers on an emergency basis for up to six months. These persons need no special qualifications such as experience or training.</p> <p>Option 3 is for use with centers that cannot find candidates for group teacher positions to meet the licensing requirements under either Option 1 or Option 2 or any centers with administrative circumstances which are perceived as a barrier to a program being granted a license (i.e., several vacancies, no candidate at all, change of board, etc.)</p> <p>In order for the ACD to consider Option 3, the normal licensing package must be submitted for licensing along with the following:</p> <ul style="list-style-type: none"> o A plan for teacher recruitment including dates of scheduled interviews and projected start dates of staff. o A monitoring plan incorporating the efforts of the program and the educational consultant to insure the quality of the program and the health and safety of the children in the program.

**BOARD OF
EDUCATION**

**ACD - DAY CARE
AND HEAD START**

Precertification
(Minimum License)

Temporary Per Diem

Precertification

Option 3 (continued)

- o A statement from the educational consultant which will be viewed as an evaluation of staff currently in the program's capability to function with current and interim program staff.
- o A professional opinion from the educational consultant justifying why it is believed that this program can maintain a quality program for an interim period without an Option 1 or Option 2 staff person filling the vacant position.

A maximum of six months is allowed for a program to operate with an Option 3 license. After the six month period, if a program has not fulfilled the requirement to identify an Option 1 teacher, or at a minimum an Option 2 teacher, ACD requires the reduction of a classroom in order to ensure qualified staff for all children.

Option 2. Option 2 teachers are persons with at least 60 college credits who possess:

- o AA in early childhood/child development; and
- o one year of appropriate classroom experience with children under 6 (typically as an aide or assistant.
- o In lieu of the AA degree, 60 - 65 college credits in liberal arts, education and home economics is also permissible.
- o An approved study plan to attain at least 90 credits, within two years, with a priority for that coursework on professional education courses specified in the Health code.
- o During their employment they must be supervised by a qualified educational director (that director must submit a supervision/in-service plan to the "Exemption" committee of the NYC Bureau of Day Care (Department of Health))

Option 1. (Option 1 teachers are commonly referred to as "Study Plan" teachers, although Option 2 teachers also must have a study plan). These persons have:

- o A minimum of 90 undergraduate credits; and
- o either student teaching or one year supervised paid classroom experience with children under 6.
- o In addition, these individuals need an approved study plan leading to their full, provisional certification. (Note: the study plan will lead to a Bachelor's degree if the Option 1 teacher is pre-baccalaureate).

**BOARD OF
EDUCATION**

Provisional
Certification

Provisionally certified teachers are considered fully certified, however they must take additional course-work and gain experience to be permanently certified. This must be done within five years.

Provisional
Certification

Version A. Possess NYS certification which requires a:

- o Bachelor's degree
- o 24 credits in education, six of which must be in reading
- o Supervised field work
- o The NTE Core Battery
- o NYC Board of Examiners exam

or

Version B:

- o Bachelor's degree
- o 12 credits in education, six of which must be in reading
- o NYC Board of Examiners exam

**ACD - DAY CARE
AND HEAD START**

Provisional Certification

Version A. Licensed by the NYC Board of Education in early childhood (see versions A and/or B under the Board of Education). Note that this person needs to have taken the Board of Examiners *early childhood* exam (not community branches N-6) and this person must have at least 150 clock hours of observation and supervised student teaching in prekindergarten or kindergarten.

or

Version B. Certified by State Education Department as an early childhood teacher according to regulations in effect prior to 1966 (these requirements are similar to version A under the Board of Education with the exclusion of the NTE and the Board of Examiners exam and the caveat that the student teaching had to be in N-3).

or

Version C. Eligible for State Education (N-6) except for the citizenship requirement if professional study included:

- o 300 clock hours of observation and supervised student teaching of which at least 150 hours were in prekindergarten or kindergarten (the state certified person's experience could all be in grades above K up to grade 6)
- o Thirty semester hours which includes at least one course in foundations of education, two courses in educational development psychology (at least one in child development), three courses in methods and materials (with one focused on PreK or K), and one course in parent education or community relations (the state certified N-6 person needs 24 hours total, with at least 6 hours in reading methods)

BOARD OF EDUCATION

Permanent Certification

Provisionally certified teachers must become permanently certified within five years.

Permanent Certification

Version A. All the same requirements for the Version A provisional plus:

- o Masters degree in functionally related education field*
- o Two years of paid teaching experience as a head or co-teacher*
- o in addition (unless included in the Master's program), 6 hours in characteristics and methods regarding special education children and 2 hours in human relations.*

The last two requirements may be taken through approved inservice work if done as a supplement to the masters.

Version B. This is the track for persons who gained their provisional certification under Version B. Compared to the Version A provisionals, these Version B provisionals lacked 12 semester hours plus student teaching plus NTE Battery. Therefore, in order to get permanent certification, these individuals need all these items plus what is listed for Version A certification above.

ACD - DAY CARE AND HEAD START

Permanent Certification

Permanent certification in day care demands the maintenance of either NYC certification through the Board of Education in early childhood education, NYS certification in early childhood prior to 1966 or NYS certification in N-6 with the particular caveats about the early childhood focus to coursework and student teaching noted for Version C day care provisionals. De facto, this means that permanent certification requirements for day care teachers demand a Master's degree and two years of paid teaching experience *plus* this more restrictive early childhood focus described under the provisional day care section above.

APPENDIX III

Survey Instrument -- Board of Education Version

Bank Street College
 PREKINDERGARTEN POLICY STUDY
 TEACHER SURVEY -- BOARD OF EDUCATION

Thank you for taking the time to complete this survey. All responses are voluntary. All information you share with us will be kept in absolute confidence. Your participation is important to ensure a representative sampling of teachers, providing the broadest base of information possible. We appreciate your cooperation.

I. PROGRAM INFORMATION

FOR OFFICE
 USE ONLY
 _____ [1-4]

1. What level do you teach?
- | | | |
|--|---------------------|-------|
| | Kindergarten () | 1 [5] |
| | Prekindergarten () | 2 |
2. How long is your teaching day?
- | | | |
|--|---------------------------|-------|
| | Half-day/morning () | 1 [6] |
| | Half-day/afternoon () | 2 |
| | Two half-day sessions () | 3 |
| | One all-day session () | 4 |
3. How is your program funded? (Prekindergarten only)
- | | | |
|--|---------------------------|-------|
| | NYS Umbrella () | 1 [7] |
| | NYS Experimental () | 2 |
| | NYS Legislative grant () | 3 |
| | Chapter 1 () | 4 |
| | Tax levy () | 5 |
| | Project Giant Step () | 6 |
| | Don't Know () | 0 |
| | | 7 |

II. INDIVIDUAL BACKGROUND

A. Educational Background

1. Please check the highest educational level you have completed.
- | | | |
|--|-----------------------------|---------|
| | High School Equivalency () | 1 [8-9] |
| | High School () | 2 |
| | Some College () | 3 |
| | Associate Degree () | 4 |
| | B.A. or B.S. Degree () | 5 |
| | B.A. + 30 credits () | 6 |
| | B.A. + 60 credits () | 7 |
| | Master's Degree () | 8 |
| | M.A. + 30 credits () | 9 |
| | Other (describe) _____ () | 10 |
2. If you have a college degree (Associate or Bachelor's), did you major in:
- | | | |
|--|--------------------------------|--------|
| | Early Childhood Education () | 1 [10] |
| | Elementary Education () | 2 |
| | Special Education () | 3 |
| | Another Field of Education () | 4 |
| | Another Field () | 5 |
| | No College Degree () | 0 |

3. If you have a college degree (Associate or Bachelor's), from what institution was it issued?

- A college within the City University of New York () 1 [11]
- A college or university within the SUNY system () 2
- Other institution in NYC or NYS () 3
- Out-of-state institution () 4
- No college degree () 0

4. If you have a graduate degree, is it in:

- Early Childhood Education () 1 [12]
- Elementary Education () 2
- Another Field of Education () 3
- Another Field () 4
- No Graduate Degree () 0

B. Teaching Experience

1. Check all the grades or age levels you have taught throughout your entire teaching career:

- Infants and toddlers (Younger than age 3) () 1 [13]
- Prekindergarten (3 - 4-year-olds) () 1 [14]
- Kindergarten (5-year-olds) () 1 [15]
- First Grade (6-year-olds) () 1 [16]
- Second Grade (7-year-olds) () 1 [17]
- Third to Sixth Grade (8 - 11-year-olds) () 1 [18]
- Junior High School (12 - 14-year-olds) () 1 [19]
- High School or college (15-year-olds or older) () 1 [20]

2. Indicate the total number of years you have taught. (Round off to the closest number. For example, if less than six months, put 0. If more than 1 1/2 years, put 2.) _____ [21]

3. Indicate the total number of years you have taught prekindergarten-age children (3 - 4-year-olds). (Round off as above.) _____ [22]

4. Indicate the total number of years you have taught kindergarten-age children (5-year-olds). (Round off as above.) _____ [23]

5. Please check all systems where you have taught prekindergarten (3 - 4 year-olds) or kindergarten (5-year-olds):

- NYC Public schools () 1 [27]
- Public schools outside of NYC () 1 [28]
- ACD Day Care () 1 [29]
- ACD Head Start () 1 [30]
- Publicly-funded day care or Head Start outside of NYC () 1 [31]
- Private day care or nursery school () 1 [32]
- Parochial school () 1 [33]
- Summer camp/day camp/sunday school/play group () 1 [34]
- Other (describe) _____ () 1 [35]

5a. Estimate the number of college credits you have in early childhood education _____ [36]

_____ [37]

a. If you transferred from a non-Board of Education program to the New York City public schools, why did you leave the other program? Check all that apply.

- Inadequate, low wage () 1 [38]
- Inadequate benefits package () 1 [39]
- Long hours () 1 [40]
- Physical environment () 1 [41]
- Work load () 1 [42]
- Lack of supplies, materials () 1 [43]
- Lack of administrative support () 1 [44]
- Lack of support from parents () 1 [45]
- Low status () 1 [46]
- Lack of respect () 1 [47]
- Burnout/Stress () 1 [48]
- Frustration () 1 [49]
- Personal reasons not related to job () 1 [50]
- Other(s) _____ ()
- _____ () 1 [51]
- Not applicable () 1 [52]

b. Of the reasons cited above, which, if any of them, was the single most important determinant for leaving the system? _____

1 [53]

c. If you checked salary, what kind of salary enhancement would have enticed you to stay?

- Raise of _____% () 1 [54]
- Salaries comparable with public school salaries () 2
- Other (describe) _____ () 3
- Don't Know () 0
- _____ [55]
- _____ [56]

6. How many years have you worked in the school in which you are now teaching? (Round off as above.) _____

_____ [57]

7. How many years have you taught in the NYC public schools? (Round off as above.) _____

_____ [58]

8. Check the type of teaching license(s) you currently have.

- Early Childhood () 1 [61]
- Common Branch/Elementary () 1 [62]
- Bilingual/ESL () 1 [63]
- Special Education () 1 [64]
- Junior High School (all types) () 1 [65]
- High School (all types) () 1 [66]
- Temporary Per Diem certificate () 1 [67]
- No teaching license/Does not apply () 1 [68]
- Other (describe) _____ ()
- _____ () 1 [69]

C. Other Work

1. Do you presently do any other work for pay over and above your normal teaching hours? Yes () 1 [70]
 No () 0
- a. If yes, is this work done:
- During the summer only () 1 [71]
 During the school year only () 2
 During both periods () 3
 Do no other work for pay () 0
- b. Is this other work related to the field of education? Yes () 1 [72]
 No () 0
 Not applicable () 8
- c. During the school year, how many hours per week do you spend doing other work for pay? _____ [73]
 _____ [74]

D. Personal Background

(Remember that all responses are voluntary and will be kept confidential. But please remember too that your cooperation is extremely important.)

1. Are you: Female () 1 [75]
 Male () 2
2. Are you: White () 1 [76]
 Black () 2
 Hispanic () 3
 Asian/Pacific Islander () 4
 American Indian/Alaskan Native () 5
 Other (specify) _____ () 6
3. Please check any of the following language(s) in which you are fluent:
- Spanish () 1 [77]
 Chinese () 1 [78]
 Haitian-Creole/French () 1 [79]
 Other (specify) _____ () 1 [80]
4. How old are you? 18 - 20 years old () 1 [81-82]
 21 - 24 () 2
 25 - 29 () 3
 30 - 34 () 4
 35 - 39 () 5
 40 - 44 () 6
 45 - 49 () 7
 50 - 54 () 8
 55 - 59 () 9
 60 or older () 10
6. Approximately what % of your household's total income is your teaching salary? _____ % [83]
 _____ [84]
 _____ [85]

III. PROFESSIONAL SATISFACTION

1. Why did you choose teaching as a profession? (Check all that apply.)

- Wanted to work with children () 1 [86]
- Always wanted to be a teacher () 1 [87]
- Role model was a teacher () 1 [88]
- Hours are compatible with raising a family () 1 [89]
- Teaching is a stable career () 1 [90]
- Teaching demands creativity () 1 [91]
- Teaching is a respected profession () 1 [92]
- Working with young children is physically active () 1 [93]
- Pays well () 1 [94]
- Teaching offers intellectual challenge () 1 [95]
- You have control over your work () 1 [96]
- Fosters personal growth () 1 [97]
- Other _____ () 1 [98]
- _____ () 1 [99]

2. Why did you choose to work in the public schools?
(Check all that apply.)

- Job security () 1 [100]
- Commitment to public education () 1 [101]
- Higher status than non-public school teaching () 1 [102]
- Better salary than non-public school teaching positions () 1 [103]
- Better working conditions than non-public schools () 1 [104]
- Better benefits than in non-public school teaching () 1 [105]
- Hours are compatible with raising a family () 1 [106]
- Offers opportunities to work with multiple age levels of children () 1 [107]
- Others (describe) _____ () 1 [108]
- _____ () 1 [109]

3. How satisfied are you with the following aspects of being a teacher?
(Circle one number for each -- from 1 [Very Dissatisfied] to 4 [Very Satisfied]. If you have no opinion about a particular item, then circle 0.)

	Very Dissatisfied		Very Satisfied	No Opinion		
Working with young children	1	2	3	4	0	1 [110]
Professional prestige	1	2	3	4	0	1 [111]
Salary	1	2	3	4	0	1 [112]
Benefits	1	2	3	4	0	1 [113]
Paid preparation period	1	2	3	4	0	1 [114]
Paid break	1	2	3	4	0	1 [115]
Personal satisfaction	1	2	3	4	0	1 [116]
Intellectual challenge	1	2	3	4	0	1 [117]
Work load	1	2	3	4	0	1 [118]
Caliber of colleagues	1	2	3	4	0	1 [119]
Opportunities for professional growth	1	2	3	4	0	1 [120]
Non-teaching duties	1	2	3	4	0	1 [121]
Vacation schedule	1	2	3	4	0	1 [122]
Length of school day	1	2	3	4	0	1 [123]
Administrative support	1	2	3	4	0	1 [124]
Opportunity for creativity	1	2	3	4	0	1 [125]

4. All things considered, how satisfied are you with your decision to be a teacher?

Very satisfied	()	1	[126]
Somewhat satisfied	()	2	
Somewhat dissatisfied	()	3	
Very dissatisfied	()	4	
Not sure	()	0	

5. Within the next two years, how likely is it that you will continue classroom teaching but leave your current assignment?

Very likely	()	1	[127]
Fairly likely	()	2	
Not too likely	()	3	
Not at all likely	()	4	
Not sure	()	0	

6. Within the next two years, how likely is it that you will continue in the teaching profession but in a non-classroom position (e.g. teacher trainer, Project Giant Step specialist, Assistant Principal)?

Very likely	()	1	[128]
Fairly likely	()	2	
Not too likely	()	3	
Not at all likely	()	4	
Not sure	()	0	

7. Within the next two years, how likely is it that you will leave the teaching profession to go into some different occupation?

Very likely	()	1	[129]
Fairly likely	()	2	
Not too likely	()	3	
Not at all likely	()	4	
Not sure	()	0	

8. Estimate how many more years you will continue teaching. _____

— [130]
— [131]

IV. RECOMMENDATIONS TO IMPROVE THE TEACHING PROFESSION

1. How helpful do you believe the items below would be in improving working conditions for teachers and encouraging good teachers to remain in teaching instead of leaving the profession? (Circle one number for each.)

	Would not help at all	Would help a little	Would help a lot	Not sure	
a. Having more structured and organized time to talk with colleagues about professional matters.	1	2	3	0	[132]

b. Encouraging teachers to observe each other in the classroom and provide feedback to each other.	1	2	3	0	[133]
--	---	---	---	---	-------

	Would not help at all	Would help a little	Would help a lot	Not sure	
c. Having a formal system, such as "teacher centers," where teachers can get help and ideas from other teachers and administrators.	1	2	3	0	[134]
d. Receiving more support in dealing with the special needs of students.	1	2	3	0	[135]
e. Providing a decent salary.	1	2	3	0	[136]
f. Providing more independence to organize classes the way teachers think they should be.	1	2	3	0	[137]
g. Providing the necessary equipment and supplies teachers need to do their job.	1	2	3	0	[138]
h. Promoting more respect for teachers in today's society.	1	2	3	0	[139]
i. Reducing the load on teachers for administrative tasks.	1	2	3	0	[140]
j. Providing teachers more choice in teacher assignment.	1	2	3	0	[141]
k. Providing smaller class size.	1	2	3	0	[142]
l. Promoting more parent-teacher communication.	1	2	3	0	[143]

2. If adopted, how helpful do you believe the reforms listed below would be in attracting more good people into teaching? (Circle one number for each.)

	Would not help at all	Would help a little	Would help a lot	Not sure	
a. Providing compensation to beginning teachers comparable to other professions that require similar training.	1	2	3	0	[144]
b. Paying teachers partly according to their performance, sometimes called "merit" pay.	1	2	3	0	[145]
c. Paying teachers partly according to the specific jobs they hold, such as apprentice teacher or master teacher.	1	2	3	0	[146]
d. Offering teachers a 12-month contract with extra pay and duties for the full year.	1	2	3	0	[147]
e. Allowing school districts to hire talented people who are not certified teachers.	1	2	3	0	[148]

We would appreciate the opportunity to talk to you in more detail. Would you be willing to be called at home (or during a break at work) and asked some additional questions?

Yes	()	1 [149]
No	()	0

If yes, when would be convenient times for you to be contacted?
(We will need only 15 minutes of your time.)

Lunch time	___:___ to ___:___ ()	1 [150]
At the end of the day before going home	___:___ to ___:___ ()	1 [151]
At home, early evening	___:___ to ___:___ ()	1 [152]
At home, weekend	___:___ to ___:___ ()	1 [153]
Other _____ (please specify)	___:___ to ___:___ ()	1 [154]

Please fill in your name and appropriate phone number(s):

Name _____

[155-159]

Work phone: (____) ____ - _____

[160-161]

Home phone: (____) ____ - _____

Note: You do not need to fill in your name and phone number(s) if you do not want to be contacted.

Thank you for taking the time to share your thoughts on what is a very important issue.

5/28/87