NLWJC - Kagan

DPC - Box 018 - Folder 004

Education - Class Size Initiative [2]

Educ - class size

THE PRESIDENT HAS SEEN
1-26-98

copied
COS
Reed
Cohen
Kagan

THE WHITE HOUSE

WASHINGTON

January 22, 1998

MEMORANDUM FOR THE PRESIDENT

FROM: PHIL CAPLAN

SUBJECT: Class size initiative -- decision on one issue

The attached memo from Bruce Reed and Mike Cohen memo provides a good summary of the design of your class size initiative. It details the consensus recommendations reached among the VP's office, OMB and Education and I recommend that you read it. There is one issue for your decision -- whether to require basic skills testing (reading and math) for new teachers.

Skills Testing. Among the principles on which your initiative rests is that, for reductions in class size to result in improved reading performance, newly hired teachers and existing teachers must be fully qualified and have the knowledge and skill to teach reading effectively in small classes. The memo outlines several steps in the initiative -- which all of your advisors agree upon -- to address this issue (e.g., a 10% set aside for teacher testing/training, a requirement for teachers to meet state certification standards and incentives to upgrade the standards).

Your advisors, with the exception of the Education Department, believe basic skill testing should be part of your initiative, with the test selected by each state. Such testing will give parents confidence that teachers in the elementary grades have the necessary basic skills and would build upon your efforts in Arkansas. Forty states already have testing, and states would retain the ability to let teachers who fail teach with an emergency certificate. Furthermore, Rep. Paxon's education package and the Senate GOP package encourage such testing, although these proposals do not make it mandatory. Your advisors rejected a stronger proposal that would have required all prospective teachers to pass a test before they could do any teaching; they decided such a requirement would have had too great an impact on poor school districts. Education opposes including skills testing arguing that it is no assurance of teacher quality, sets the bar too low, and undermines your long-standing push for higher education standards by sending the wrong message to the public about the quality of teachers. The civil rights community is likely to raise concerns that such requirements would have a disparate impact on minorities. Bruce and Mike are meeting with Bob Chase and Sandy Feldman this afternoon. They expect the unions to be supportive of the overall initiative, but lukewarm on the basic skills testing for new teachers.

That's quite good reason. Better reason is State responsibility

The plan is for this initiative to be announced Monday just prior to the State of the Union. *Sylvia and Rahm* concur with Bruce/Mike and believe your initiative should include skills testing. *Maria* notes that there will be some protest from the civil rights community, but the criticism will be muted if the appropriate briefings can be conducted prior to the announcement.

✓ Require teacher testing in basic skills ____ No requirement ____ Discuss

Q: States w/ tests - concentrate on areas they have to verify quality

1-26-98

'98 JAN 21 PM8:

THE WHITE HOUSE

WASHINGTON

January 21, 1998

MEMORANDUM FOR THE PRESIDENT

FROM: **BRUCE REED**
MIKE COHEN

SUBJECT: Class Size Design Issues

Over the past several weeks, we have worked with the Vice President's Office, OMB, and the Education Department to develop recommendations on the design of your class size initiative. This memorandum explains our consensus recommendations and asks for a decision on the single issue on which we have not reached agreement -- whether to require basic skills testing for new teachers.

I. Background

The purpose of this initiative is to reduce class size and provide qualified teachers in the early grades, so that all 8 year olds learn to read. More specifically, this initiative will help bring down class size across the nation from an average of 22 to an average of 18 in grades 1-3. In designing the initiative, we have been guided by several considerations.

First, as you know, the best research suggests that the benefits of smaller classes accrue especially to the most disadvantaged students, and occur most powerfully when classes are no larger than 15-18 students. To be both credible and effective, the initiative must get the majority of classes into that range, especially in high-poverty schools. Second, California's recent experience demonstrates that programs to reduce class size lead to the hiring of unqualified teachers, particularly in urban areas, if safeguards are not built in. Third, efforts to reduce class size can exacerbate and be frustrated by shortages of space. Fourth, because this is a new area of federal involvement in education, the requirements placed on state and local grant recipients in order to ensure effective use of the funds must be especially well justified.

There are a number of other proposals to provide federal support to recruit or hire teachers, primarily to respond to the need to hire an estimated 2 million teachers over the next decade. Senator Kennedy proposes to help recruit 100,000 teachers per year over the next decade by forgiving up to $8,000 in loans for each person who becomes a teacher. Rep. George Miller has also advanced a proposal to provide loan forgiveness for an-as-yet unspecified number of individuals who enter teaching.

In contrast to the Kennedy and Miller proposals, your proposal provides funds to hire teachers rather than forgive loans, since the primary cost of reducing class size is salaries for additional teachers. There is little evidence that loan forgiveness is an effective tool for attracting additional people into the profession. Moreover, you have already proposed a scholarship program (not loan forgiveness) to steer people who have decided to enter the profession toward high poverty schools.

Rep. Bill Paxon has also announced a proposal to help school districts hire 100,000 teachers, by funding teacher salaries. His proposal would pay for these new teachers by eliminating Goals 2000, Americorps, the National Endowment for the Arts, and a number of other programs. While these additional teachers could be used to lower class size, Paxon does not require that funds be used for this purpose. In addition, Senate Republicans announced an education package yesterday which they claim would fund 50,000 new teachers by block granting other programs.

We believe the existence of Republican proposals for the federal government to pay teacher salaries -- a proposal that both attaches conditions (under Paxon's plan, teachers hired with these funds could not be tenured) and requires states and local school districts to share the total cost of the initiative -- provides some protection for your proposal against charges of federal intrusion. It may also form the basis of a bipartisan achievement.

II. Funding Issues

Your budget will include $12 billion over 7 years to hire 100,000 teachers, enough to reduce class size in grades 1-3 to an average of 18 nationwide. The table below shows the annual budget, number of teachers communities would hire each year, and the impact on class size.

Fiscal Year	Budget (in billions)	Number of Teachers Hired	Average Class Size in Grades 1-3
1998			21.9
1999	$1.1	35,714	20.3
2000	$1.3	42,208	20.1
2001	$1.5	48,701	19.8
2002	$1.7	55,195	19.6
2003	$1.74	56,331	19.5
5 Year Total	$7.34		
2004	$2.3	82,143	18.6
2005	$2.8	100,000	18.1
7 Year Total	$12.4		

A. Distribution of Funds to States

We would distribute funds to states on the basis of the Title 1 formula, which is based on the number of students in the state, weighted by poverty and the cost of education. We also considered distributing the funds based on the number of new teachers needed to reduce class size to the target of 18, also weighted by poverty and cost. Although this formula is somewhat more efficient in targeting funds for the program purposes, it would penalize California because of that state's own class size reduction initiative. Further, while a handful of states receive either "windfalls" or "shortfalls" under the Title 1 formula when measured against the number of teachers they need to reach the class size target, most states receive a comparable percentage of the total funds under either formula.

With this formula, we will be able to reduce average class size in grades 1-3 to 18 nationwide. Once a state has reached an average of 18 in grades 1-3, it could use these funds to reduce class size in those grades still further, or to reduce class size in other grades.

B. Targeting Funds Within States

Though this proposal is universal in scope, we want to drive the funds to school districts with the largest class sizes, and to give priority to high-poverty districts. To accomplish this objective, we would require states to guarantee high-poverty school districts at least the same share of the state's class size funds that they receive of the state's Title 1 funds. States would allocate the remaining funds on the basis of class size within the state.

This approach ensures that major urban school districts and other high-poverty areas will receive their fair share of the funds, while still leaving states with the ability to target funds to school districts with large classes, regardless of their income levels.

C. Cost-Sharing Requirements

We would require matching funds from participating school districts on a sliding scale that would average 80% federal and 20% local. High-poverty school districts would be required to provide a 10% match, while the wealthiest would be required to provide a 50% match. School districts could use other federal funds for the match, which would primarily benefit high-poverty school districts that receive substantial amounts of Title 1 funds. This approach would encourage districts to use Title 1 funds for class size reductions, rather than continuing to hire classroom aides or resource teachers who pull Title 1 students out of the classroom.

D. Duration of Program

Because we will be presenting a five year budget, many will assume that we expect this initiative to end after five years. This expectation will heighten concerns that local school districts will be stuck with higher personnel costs once the program ends. (Rep. Paxon's proposal would end federal funding after 5 years.) We believe that the best way to deal with this concern is to make clear that we see this initiative as a continuing part of federal aid to education -- not a one-time effort.

This longer approach will also be necessary in order to fund 100,000 teachers; the funding levels in the first five years will pay for approximately 56,000 teachers. Because we are paying for this initiative through tobacco legislation, we will have a revenue source that can support a long-term program.

III. Teacher Quality

For reductions in class size to result in improved reading performance, we need to ensure that both newly hired and existing teachers are fully qualified, and have the knowledge and skills to teach reading effectively in small classes. Considerable research and recent experience in California demonstrate that many existing teachers need help to alter their teaching practices to capitalize on small classes. In addition, many school districts in California, particularly in high-poverty areas, have hired teachers on emergency certificates, who lack even basic preparation for teaching. We propose a number of steps to deal with these challenges.

A. 10% Set-Aside for Teacher Testing and Training: The overall budget for this initiative is based on the average cost of newly hired teachers (assuming that 75% are beginning teachers and 25% are experienced teachers returning to the classroom or moving between districts) plus a 10% increment in the first 5 years to address teacher quality issues. This increment will give every school district funds that can be used for a number of purposes, including (1) testing new teachers before they are hired and developing improved tests for teachers; (2) training existing teachers in effective reading instruction practices and/or in effective practices in small classes; (3) providing mentors or other support for newly hired teachers; (4) providing incentives to recruit teachers to high poverty schools; and (5) providing scholarships or other aid to paraprofessionals or undergraduates and to expand the pool of qualified teachers.

We will permit districts to carry over unspent funds, which will enable them to invest in the first couple of years in recruiting and training qualified teachers, before reducing class size on a large scale. In addition, we will require districts to develop an overall strategy for improving teacher quality including a plan to use other funds, such as those from Title 1, the Eisenhower Professional Development Program, America Reads, and Goals 2000.

B. Require Teachers to Meet State Certification Standards: We would require states and school districts to ensure that individuals hired to fill these new positions must be either fully certified or making satisfactory progress toward full certification. School districts could use the teacher quality funds to provide teachers with the additional training needed to meet certification requirements.

C. Encourage States to Adopt Rigorous Professional Tests and Upgrade Teacher Certification Requirements: As part of this initiative, we would allow states to use some of the teacher quality funds to make their teacher certification requirements more rigorous and performance-based, reflecting what beginning teachers must know and be able to do. There is widespread agreement that current teacher certification requirements are not a good indicator of teacher quality and need to be upgraded. The National Commission on Teaching and America's Future, chaired by Gov. Hunt, has recommended that states toughen their licensure requirements. The Commission recommended that prospective teachers be required to pass rigorous tests of subject matter expertise and professional knowledge before they start teaching, and that beginning teachers not be fully certified until they have taught for several years and can demonstrate that they have met rigorous standards of classroom teaching, through classroom observations and other forms of performance assessment.

Twenty states have already adopted performance-based standards along these lines. Sixteen states are working together to develop common assessments for beginning teachers, and additional states are likely to join this effort over time. Permitting states to use a portion of their funds to improve their licensure systems is likely to accelerate these trends and to improve the quality and preparation of people entering the profession. In addition, performance-based certification will make it easier to promote "alternate route" programs that do not require prospective teachers to attend teacher education programs.

D. Teacher Testing:

All of your advisors agree on the three steps outlined above. There is disagreement about one additional component -- requiring new teachers to pass state basic skills tests. All of your advisors feel strongly that the above measures are not sufficient to persuade the public that new teachers would be able to measure up in the classroom. Existing teacher certification requirements are generally not viewed as an effective means of ensuring quality, and the tougher standards and testing requirements we are encouraging states to adopt will not be implemented for some time. Many of your advisors believe that this initiative also should require states to use basic skills testing for new teachers, with the particular test selected by each state.

The argument for a teacher testing report is that it will give parents the confidence that new teachers in the elementary grades have basic reading and math skills. It also

builds on your landmark efforts on teacher testing in Arkansas. A tough, clear message on teacher competency would make it difficult for Republican opponents to paint this initiative as simply a way for the Administration to help teachers' unions expand their memberships. The Paxon proposal takes a "tough on teachers" approach by prohibiting the teachers hired from gaining tenure. The Senate Republican education package announced this week encourages states to test elementary and secondary teachers, and allows them to use federal funds for teacher testing (activities already permitted under Goals 2000). The proposal, however, does not make this testing mandatory.

Under this proposal states would give prospective teachers basic skills tests at some point before they enter the classroom. Approximately 40 states already have such a requirement in place.[1] States would retain the ability to let teachers who fail the test teach with an emergency certificate. We considered and rejected a stronger proposal, which would require all prospective teachers to pass a test before they could do any teaching. We decided, however, that such a requirement, might well have too great an impact on poor districts, which already have a hard time finding qualified teachers. It could also drive states to lower the passing score on the tests.

The Education Department opposes this proposal, and recommends that we limit ourselves to encouraging states to adopt tough new state tests of subject matter and professional knowledge for beginning teachers, as part of our effort to upgrade teacher certification requirements. Education would be willing to require states to implement these new tests by 2003.

You are quite familiar with the arguments against a teacher testing requirement. The Education Department argues that a basic skills test is no assurance of teacher quality, and sets the bar too low for teachers, undermining your long-standing push for higher standards for both students and teachers. The Education Department believes such a test will send the wrong message to the public about teachers, reinforcing the notion that academically weak people go into teaching. Education also points out that states will be able to get around a testing requirement by granting emergency licenses.

Finally, you should know that many in the civil rights community are likely to raise concerns that any new testing requirements, especially without proper validation, are likely to have disparate impacts on minorities.

_____ Require Teacher Testing in Basic Skills _____ No requirement _____ Discuss Further

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[1] According to the most recent state-by-state data, the following states would have to institute basic skills testing for teachers under this proposal: Alaska, Georgia, Idaho, Iowa, Maryland, Missouri, New Jersey, New York, Utah, and Vermont.

IV. Facilities

The need to find additional classrooms to reduce class sizes will increase existing facilities needs. This impact will not be evenly distributed. Some areas, particularly cities with increasing immigrant populations (e.g., Los Angeles, South Florida) have schools that are already extremely over-crowded, while other cities, particularly in the Northeast (e.g., Baltimore, Washington, D.C.) have more capacity than the student population demands.

We propose several steps to address facilities issues, including (1) Use our $10 billion school construction initiative to provide incentives for communities to invest in local school facilities; (2) Make facilities changes needed to reducing class size an allowable use of school construction funds; (3) Phase in implementation of the class size reduction proposal to allow for enhanced state/local facilities planning; and, (4) Allow districts that have no space available for additional classes to use some of their class size reduction funds to implement proven reading instruction practices.

V. Accountability

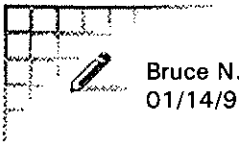
School districts receiving these funds will be held accountable both for using them to reduce class size, and for improving student performance in reading. We propose three forms of accountability.

First, a school district receiving these funds must show it is actually reducing class size, by reporting class size in grades 1-3 to parents and to the state each year. Second, as is the case with other federal education programs, we will incorporate a "maintenance of effort" provision, requiring states to keep up their overall investments in K-12 education. Third, we will use existing Title 1 accountability and reporting requirements to ensure that every school district and individual school makes measurable progress in improving reading achievement within three years. If a school fails to make adequate progress, it must develop and implement a corrective action plan. If the school fails to show improved reading achievement after implementing the corrective action plan, the state could withhold the equivalent of the school's share of the district's funds.

VI. Rollout

Over the next few days, we will begin more extensive discussions with possible allies on this initiative. So far, Congressional Democrats have been enthusiastic.

Educ-class size



Bruce N. Reed
01/14/98 04:06:48 PM

Record Type: Record

To: Tanya E. Martin/OPD/EOP

cc: Elena Kagan/OPD/EOP, Michael Cohen/OPD/EOP, William R. Kincaid/OPD/EOP
Subject: Re: Class Size Proposals

Very interesting. I have a few other scenarios:

1. How much would it cost to get to avg. 18 in 1&2 and avg 19 in grade 3?
2. Avg 18 in 1&2 and avg 20 in grade 3?

In general, don't you think it makes sense to tackle grades 1&2 first (i.e., in yrs 1-5), and just do the best you can on grade 3 in the out years?

Educ class size

Bruce N. Reed
01/14/98 04:19:12 PM

Record Type: Record

To: Tanya E. Martin/OPD/EOP

cc: Elena Kagan/OPD/EOP, Michael Cohen/OPD/EOP, William R. Kincaid/OPD/EOP
Subject: Re: Class Size Proposals

By my calculations, you need around 70,000 to get to avg 18 by year 6 in grades 1&2, right -- and maybe 5-7,000 in year 7 to keep it there.

If you're headed for 100,000, that leaves you as much as 25,000 to flood into grade 3 in year 7 -- which ought to be enough to get grade 3 to at least 20 and maybe below.

Also, if we feel pinched for money, I would be content with spending a billion dollars on quality over 7-10 years, which would amount to a 5-8% set aside rather than 10%.

Where are we on finding ways to buy new teachers for less?

Educ-class size

Tanya E. Martin
01/14/98 02:32:05 PM

Record Type: Record

To: Bruce N. Reed/OPD/EOP, Elena Kagan/OPD/EOP

cc: Michael Cohen/OPD/EOP, William R. Kincaid/OPD/EOP
Subject: Class Size Proposals


CSOPTS.W

Attached are the tables Mike discussed with you that lay out options for the class size initiative.

Table 1 -- shows our current proposal to reduce class size to an average of 18 in grades 1 and 2, funding teacher salaries plus an additional 20% for teacher quality improvement.

Table 2 -- modifies the current proposal by reducing the teacher quality component to 10%.

Table 3 - shows additional class size targets and costs .

CLASS SIZE INITIATIVE

Table 1
Current Proposal

Fiscal Year	Budget	No. of Teachers	Average Class Size Grades 1&2
98			22.3
99	$1.1 billion	31,741	20.2
00	$1.3 billion	37,512	19.9
01	$1.5 billion	43,284	19.6
02	$1.74billion	49,055	19.3
03	$1.7 billion	50,065	19.2
04	$2.2 billion	63,483	18.5
05	$2.7 billion	78,487	17.8

Table 2
Modified Current Proposal
10% Quality Component

Fiscal Year	Budget	No. of Teachers	Average Class Size Grades 1&2
98			22.3
99	$1.1 billion	34,713	20.1
00	$1.3 billion	41,025	19.7
01	$1.5 billion	47,337	19.4
02	$1.7 billion	53,648	19.1
03	$1.74 billion	54,753	19.0
04	$2.2 billion	69,427	18.2
05	$2.7 billion	85,837	17.5

Table 3
Optional Assumptions and Targets

New Target	Total Teachers	Final Yr. Cost: 20% Quality	Final Yr. Cost: 10% Quality	5 Year Mark: 20%	5 Year Mark 10%

Av. 18 Grades 1-3	129,000	$4.5 billion	$4.1 billion	50,000 teachers Class Avg. 21	55,000 teachers Class Avg. 21
Max. 18 Grades 1-2	93,000	$3.2 billion	$2.95 billion	50,000 teachers Class Avg. 19	55,000 teachers Class Avg. 19.0
Av. 19 Grades 1-3	100,000	$3.5 billion	$3.2 billion	50,000 teachers Class Avg. 21	55,000 teachers Class Avg.21

Educ - class size

Class Size Reduction
Qs & As

1. **How much of a reduction in class size are we proposing, and what does it cost?**

We are proposing a $9.9 billion, 5-year initiative to improve early reading by reducing class size in grades 1 and 2 to a maximum of 18 (the current *average* is 22.5).

2. **How many teachers would need to be hired?**

The total number of teachers required to reduce the maximum class size for first and second grade classroom to 18 students is 91,349 (46,079 for the first grade and 45,270 for the second grade).

In the first year, hiring 18,270 teachers would cost $660 million for salaries and benefits. Hiring an additional 18,270 first and second grade teachers each year over a five year period at an annual cost of $36,099 (1998-99 constant dollars) per teacher would require an expenditure of $9.9 billion over the five year period.

3. **How is the money given out, and which states would get the most money, and which the least?**

The CSR funds would be allocated by a formula that takes into account the state's class size reduction need (i.e. how many teachers need to be hired), weighted by the state per capita income (more money to poorer states) and the state average teacher salary (more money to states that have to pay higher teacher salaries).

Under this CSR formula the following states get the majority of the funds: California (22%), New York (8%), Michigan (6%), Pennsylvania (5.7%), Florida (4%), Illinois (4%), Ohio (4%) and Texas (4%).

These states would get the least amount of funding: North Dakota (.11%), Vermont (.12%), Wyoming (.12%), South Dakota (.14%), District of Columbia (.15%).

**California data were collected before the State's recent class size reductions -- percentage will decrease. Data for Puerto Rico not available.

4. How does this allocation compare with other education formula, such as Title I -- which states are the winners and losers from this point of view?

An allocation based upon Title I shares would result in a more even distribution of funds (California's share would fall from 20% to 12%). However, such a distribution would not be directly related to the class size reduction need in a particular state.

94 data

CSR Formula Winners** States with greatest % allocation according to CSR formula (need, income, salary)	**Title I Winners** States with greatest % allocation based on Title I shares	**CSR Least**** States with least % allocation based on CSR formula	**Title I -- Least** States with least % allocation based on Title I shares.
CA - 22%	CA - 12 %	ND - 0.11%	WY - 0.21%
NY - 8.3%	NY - 9%	VT - 0.12%	NH - 0.23%
MI - 6%	TX - 8.9%	WY - 0.12%	VT - 0.23%
PA - 5.8%	FL - 4.7%	SD - 0.14%	DE - 0.25%
FL - 4.4%	MI - 4.5%	DC - 0.15%	ND - 0.25%
IL - 4.1%	PA - 4.5%	MT - 0.21%	SD - 0.26%
OH - 4.1%	IL - 4.3%	NH - 0.28%	DC - 0.29%
TX - 4%	OH - 3.9%	NM - 0.30%	NV - 0.30%
NJ - 3.3%	PR - 3.4%	DE - 0.32%	ID/MT - 0 .33%

30% targeted w/i states
Need - class size + wealth
Spend 1st on highest need, lowest wealth

** California data does not include recent class size reduction, Puerto Rico data not available.

5. What about states that already have low class size?

Rt to know law - schools, districts, + states
Have to have a plan, make it publicly aware.

Several states, including California and South Carolina, have already initiated state-wide class size reductions. However, Department of Education data suggests that no state has reduced class size to a maximum of 18 students in grades 1 and 2. Those states that have made some progress in this area would be able to use their CSR funds to complete class reductions to a ceiling of 18 students in grades 1 and 2, and then use their remaining grant to fund class size reductions in other primary (grades K or 3) or other elementary grades.

6. What does the research say about the effects of reducing class size?

Education researchers have fond that elementary school students learn more when class size falls to 17 or lower and that class size reductions in middle and high schools appear to

Teacher Licensing / New Teachers - way state w/i 3 yrs 20 states have new stds, 16 assess., only 2 have tests (CT + —)
- All working on multi-state assess.
20% for teacher training + teacher testing for 1st + 2nd grade teachers.

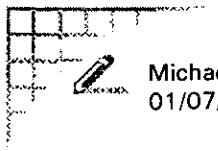
have much less effect. Project STAR, a well-known four-year Tennessee study, concluded that students in grades K-3 who were in classes of 13 to 17 significantly outscored those in classes of 22 to 25 on standardized tests. Poor inner-city children appeared to receive the greatest gains from smaller class sizes, although suburban and rural pupils also had gains that held up as the years went by. Research also shows that teacher quality is an important factor in student achievement. If class size reduction is accomplished by hiring untrained teachers, smaller classes will not result in increased student achievement.

7. **What has Pete Wilson done in California and how has it worked out?**

In the summer of 1996, Gov Wilson signed a state budget for California that included $1 billion for a voluntary class size reduction plan to cut class size in grades K-3 from as much as 30 students to 20. Districts were offered $650 per student if class sizes were reduced to 20, starting in grades 1 and 2 by February 1997. Over 850 of 895 eligible districts chose to participate, and the size of the average 1st and 2nd grade class dropped to 19 students.

The class size reduction initiative had several repercussions: shortages of classroom space and exacerbated facilities problems, increased hiring of uncredentialed and untrained teachers, and impact on local district funding -- the state is not paying the full cost of reducing class size.

Educ-class size



Michael Cohen
01/07/98 11:37:27 AM

Record Type: Record

To: Bruce N. Reed/OPD/EOP, Elena Kagan/OPD/EOP

cc: Tanya E. Martin/OPD/EOP, William R. Kincaid/OPD/EOP
Subject: Further OMB reaction to class size

Barbara Chow briefed Frank Raines on Monday's meeting, and reports the following:

1. Frank has "grudgingly" conceded to call the the class size initiative, even though he still thinks it should be a teacher initative. According to Barbara, this means that he still thinks that districts should be able to use the $ to hire teachers whether or not it is for the purpose of reducing class size. This still makes no sense to me, but rather than continue to argue and simply accepted Franks concession as good news.

2. Frank feels strongly that the funds ought to be distributed within states according to the Title 1 formula, as well as among states. They want to limit state discretion in order to prevent states from giving the $ to wealthy districts. I told Barbara that we shared that objective, but, lacking district-by-district class size data, didn't know if the Title 1 formula would in fact drive the funds to the districts that needed it most for class size reduction. That's why we came at it the way we did, though I'm not convinced that we've got the best way to deal with it yet myself. We agreed that, given our common objective, we ought to continue to find the best way to meet it.

3. OMB thinks we need more work to figure out appropriate maintainance of effort requirements. I agreed, and asked her to have Barry do some more work on that.

I'm going to keep the DPC/ ED/OVP/OMB working on these issues.

Educ - class size initiative

Michael Cohen
12/04/97 09:50:26 AM

Record Type: Record

To: Elena Kagan/OPD/EOP

cc: Bruce N. Reed/OPD/EOP
Subject: Re: Class size update

We are proposing to get to a *ceiling,* not an average, of 18, so a ceiling of 20 would be a cheaper. Unfortunately, in double checking ED's estimates this morning, I discovered that they in fact calculated the cost of reducing the *average* to 18,not the ceiling. This would have no real cost implications if we thought that part of the local implementation would involved raising the size of classes currently below 18, but that seems unlikely. They are re-running the cost estimaes now; I should have new information in about an hour, though if my mathematical understanding is right, the cost estimates should jump up considerably.

In which case, a ceiling of 20 may start to look better, though it will take some work to get the average citizen to fully grasp the significance of going from an average of 22.5 to a ceiling of 20. Perhaps the fuzzy math crowd could help us explain it.

This glitch notwithstanding Elena, we wouldn't get much economy of scale by adding an additional grade level. Since the major cost of class size reductions is hiring more teachers, adding an additional grade--to get to the same ceiling--increases the cost by about a third. And while there may be some economies of scale in expanding the teacher training, this would be more than offset in most cases by the cost of the additional space.

Educ - class size

Michael Cohen
12/11/97 01:41:41 PM

Record Type: Record

To: Bruce N. Reed/OPD/EOP, Elena Kagan/OPD/EOP

cc:
Subject: Kennedy speech Thursday

Kennedy just called for the federal government helping to hire half the techers that will need to be hired in the next decade--100,000 teachers per year, by providing loan forgiveness for those who agree to teach for 5 years. I didn't hear him mention the cost, but he said it should be paid for with "the same tax changes the R's propose to use for vouchers".

He also called for a new G.I. Bill of rights that would guarantee every academically qualified student with $3,000 per year--balanced between Pell grants and HOPE tax credits--for 4 years. He estimated the cost at $10 Billion per year, and proposed to pay for it with 1/3 of the $30 billion in wasteful corporate tax breaks identified by the Progressive Policy Institute and DLC.

He also just called for an after school program for every community in America, based on a program in Boston.

---------- Forwarded by Michael Cohen/OPD/EOP on 12/11/97 01:38 PM ----------

Terry_Dozier @ ed.gov
12/11/97 09:23:00 AM

Record Type: Record

To: Michael Cohen, William R. Kincaid, Jonathan H. Schnur @ OVP@EOP

cc:
Subject: Kennedy speech Thursday

FYI, I just spoke with Danica who called to let me know that Kennedy is doing a speech at the press club tomorrow on a wide range of topics, but there will two education platforms in it:

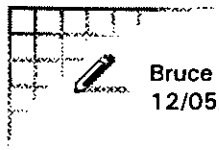
(1) On higher education, he is going to advocate adding to what we have done on Pell, HOPE and Lifelong Learning to, in effect, insure that all students (presumably up to an income limit, but Danica did not know what it would be) should receive government support totalling $3,000 to pursue their postsecondary educations.

per year

(2) On teachers, he is going to advocate using loan forgiveness to add 100,000 teachers around the nation -- this is designed to mirror what happened with cops on the street. They do NOT see this as an alternative to our Title V in any way.

each yr.

Educ - class size



Bruce N. Reed
12/05/97 05:53:28 PM

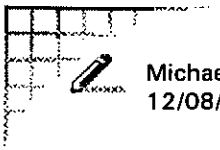
Record Type: Record

To: Michael Cohen/OPD/EOP

cc: Elena Kagan/OPD/EOP
Subject: Re: Draft 2 of class size memo

I don't disagree with your points. Just make sure we have a serious (i.e. not fake) testing proposal for new teachers.

Educ – class size initiative



Michael Cohen
12/08/97 08:20:41 PM

Record Type: Record

To: Bruce N. Reed/OPD/EOP

cc: Elena Kagan/OPD/EOP
Subject: Kennedy's speech to the press club

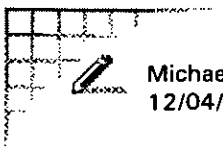
Don confirmed to me that Nick Littlefield briefed him on the speech and that Kennedy is going to call for 100,000 new teachers, apparantly either to reduce class size or to prevent it from growing. No details on how he would pay for it.

If we do anything with this, Don doesn't want Nick to figure out that he is the source of the info, since it was supposed to be a confidential heads up.

I can easily call Kennedy's folks and ask if he's going to say anything about education--but it would be helpful to figure out first how we want to respond to this.

Let me know what you think.

Educ-class size



Michael Cohen
12/04/97 11:26:11 AM

Record Type: Record

To: Bruce N. Reed/OPD/EOP

cc: Elena Kagan/OPD/EOP, Tanya E. Martin/OPD/EOP
Subject: Re: Class size update

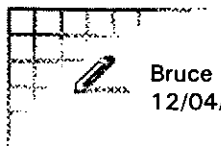
Couple of things. On the declining match, I don't know if that allievates Rileys concerns or exacerbates them. The down side to the approach you proposed is that it appears to pull the feds out after 5 years, leaving the locals with half the cost to pick up. From that perspective, a lower but continuing federal contribution might be better. I'm off to meet with Riley in a few minutes, and will see what I can find out.

Second: you laid out a five year declining match--does that mean you would prefer a five year initiative rather than a seven year--with resulting higher costs each year?

Third--as an earlier e-mail indicated, ED is revising its estimate of the number of teachers we need to hire, in order to get to an 18 kid ceiling rather than average. It looks like that will drive the number of new teachers need to about 89,000, from the 76,000 figure we used yesterday. Not a terrible increase, but costly nonetheless. We'll have new cost estimates soon.

Finally--HAS ANYBODY READ MY DRAFT MEMO FROM THIS MORNING YET?

Educ - class size



Bruce N. Reed
12/04/97 10:49:53 AM

Record Type: Record

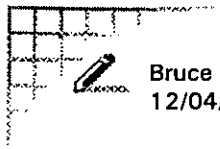
To: Michael Cohen/OPD/EOP

cc: Elena Kagan/OPD/EOP
Subject: Re: Class size update

That sounds good. Keep pushing on the quality side -- I want to be able to say we expect states to test new teachers. Otherwise the Jonathan Alter/Washington Monthly reform folks will (rightly) say that we think certification is a good thing. Ditto for the bad teachers.

On the match, I would be fine with a declining match -- 90,80,70,60,50 or 80,80,70,60,50, or whatever. It's the responsible thing to do, it might allay Riley's concerns about making this a permanent federal responsibility, and it will save us some money without costing political support.

Educ - class size



Bruce N. Reed
12/04/97 09:48:30 PM

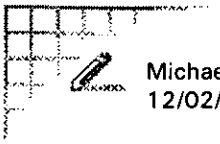
Record Type: Record

To: Michael Cohen/OPD/EOP

cc: Elena Kagan/OPD/EOP
Subject: Re: class size developments

Good work. But I'm not conceding on bad teachers until we have something real on teacher testing. It won't do us any good to make classes smaller if teachers are burnt-out or can't read. And I thought AFT and NEA were with us on bad teachers...

Educ - class size



Michael Cohen
12/02/97 06:11:05 PM

Record Type: Record

To: Bruce N. Reed/OPD/EOP

cc: Elena Kagan/OPD/EOP
Subject: Paying for Class Size Reductions

While you were busy inventing an opportunity zone story for the press, I met with Morley Winograd on the class size initiative. Based on his previous conversations with you, here is how he suggested proceeding. First, keep a fight going with OMB as to whether they really have used all the funds from cutting the next 100,000 positions. Second, according to Morely, there are still some 50,000 or so highly paid civil service management positions that have not yet been eliminated as per NPR1. Making these reduotions over time, especially if we phase in the class size initiative over a longer period of time (say 7 rather than 5 years), would save enough $ to pay for class size reducations we are talking about.

Morely is ready to start working OMB on this one, but isn't sure where to begin. My guess is Jack Lew, rather than Barry White or Barbara Chow at the PAD level. Does that seem right to you, or is there someone else he should talk to first?

UNITED STATES DEPARTMENT OF EDUCATION Educ - class size initiative

THE SECRETARY

November 25, 1997

Mr. Bruce N. Reed
Assistant to the President
for Domestic Policy
The White House
Washington, D. C. 20500

Dear Bruce:

Enclosed is a thoughtful response from three key people in my Department regarding the classroom size issue.

I wanted all of you in the White House to have this information before we break for the holidays.

I hope that you and your family have a pleasant and meaningful Thanksgiving weekend.

Yours sincerely,

Dick

Richard W. Riley

cc: Mike Cohen

UNITED STATES DEPARTMENT OF EDUCATION

OFFICE OF THE SECRETARY
November 23, 1997

MEMORANDUM

TO: Secretary Riley

FROM: Terry Dozier, Special Advisor on Teaching
Paul Schwarz, Principal in Residence
Mary Beth Blegen, Teacher in Residence

RE: Class Size Reduction Proposal

We want to express what must be key components of any proposal around class size reduction. While the idea is very appealing both to teachers and the public, it is a very difficult and complex issue. Our ideas are focused in the following areas.

- **Teacher Quality/Training**
  Reducing class size without attending to the qualifications and training of teachers will negate benefits gained through that reduction. Even a small class size with an ill-prepared teacher will result in a poor education for the students impacted. With our work on Title V and with the National Commission on Teaching and America's Future, we are trying to focus the nation on the importance of enforcing high standards for teachers. Both you and Governor Hunt spoke passionately last week at the National Press Club about our need to maintain those standards. This proposal, if done right, could strengthen support of high standards for teachers and students but, if unaddressed, would be a retreat.

- **Knowledge of Research Findings**
  All of the research findings around reducing class size tell us that it is not very effective unless the student-teacher ratio is reduced to 15-1. In addition, reducing class size alone without other improvements, including professional development for teachers and meeting the ensuing demands of more classroom space, does not necessarily lead to increased student achievement. If teachers continue to teach in the same way that they did with a class size of 30-1, few benefits will result by simply lowering the student-teacher ratio.

- **Cost**
  One reason school districts have not voluntarily proceeded with class size reductions has been the prohibitive costs involved compared with the potential benefits. Tony Alvarado, Superintendent of District 2 in New York City, recently stated at the Department that reducing class size by one student across grade six would cost $1 million. This figure does not include the necessary training needed

to help teachers learn to teach more effectively in smaller class settings. So the training of teachers to teach well in the smaller classes must be part of the proposal.

- **Space**
  Many schools do not have the space to reduce class size. In some districts in California, the class size reduction initiative has floundered because of the lack of classroom space. Those districts have been unable to take advantage of the funds. We suspect that those districts that are already overcrowded and could benefit the most from such an initiative might be the least able to find space and teachers to take advantage of such a program. So it would be important to couple a major investment in class size with a major investment in school construction.

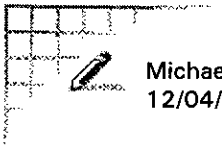
- **Unfunded Federal Mandate**
  When the federal government moves aggressively into the operational budgets of school districts and then pulls out, the result is an unfunded mandate which can have very negative consequences. So the source of funding must be permanent.

- **Targeting**
  It is unclear whether this proposal will be targeted to our most vulnerable students -- students in poor neighborhoods, learning-disabled students, limited-English-proficient students, etc. Currently some classes have an enrollment of 30 and others have only 18. We are unsure if this program will have the same effect in both situations. So targeting the reductions to the highest-need schools is extremely important.

- **Proper Role of the Federal Government**
  The current proposal identifies actions to be taken in specific grade levels. In doing so, this proposal moves decision making away from local districts and schools, preventing them from targeting those areas that they know need the most attention. For example, some states have already taken measures to reduce class size in primary grades. In addition, recently a superintendent told Department officials that he prefers to use additional money for professional development for his entire staff rather than to reduce class size. So this clearly shows the need to have a package of initiatives, e.g., school construction, teacher development, class size reduction, so that there would be flexibility to address one area more than another based on need and previous state or local action.

We are aware that this proposal has wide appeal and we support legislation that brings additional support to schools. As the three people at the Department most responsible for bringing the school perspective to policy making, we believe our views can be helpful in strengthening this initiative.

Educ - class size initiative



Michael Cohen
12/04/97 05:26:27 PM

Record Type: Record

To: Bruce N. Reed/OPD/EOP, Elena Kagan/OPD/EOP

cc:
Subject: class size developments

I'm heading home to pick up my daughter, and not returning this evening, on the assumption that Bruce correctly reported that these memo's aren't due until COB Friday.

Here is the state of play on class size:

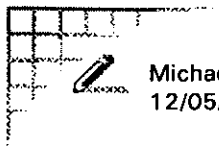
1. Morely has not been able to reach Jack Lew, and has left for the day. He left me a message indicating that he will try again to reach Jack in the morning--perhaps when he meets with Bruce.

2. Also based on Bruce's direction, my crack team of analysts is working on three options pending new information from Morley. Option 1 is class size ceiling of 18 (all options for grades 1 and 2), feds pay consistent 80%, and the cost is $9.2 billion over 5 years. Option 2 is the same, but at a lower federal contribution (we are looking at a range of options right now). Option 3 is an average class size of 18, with a ceiling of 20, and presumably an 80% federal contribution.

3. I'll work on Elena's edits tonight, and have a new draft first thing in the morning.

4. My latest conversation with Riley and ED staff--they are strongly opposed to the requirement for getting rid of bad teachers, on the grounds that it doesn't fit the overall approach, clouds the message to the public--smaller classes is an easy message to sell; why complicate it? We can deal with firing bad teachers in the urban initiative, and we can and should work with NEA and AFT to figure out how to keep the Republicans like D'Amato from making teachers unions and bad teachers villian in the public eye. As both of you know, I've never been particularly enamored with taking this issue on in this initiative. I'll try to have something constructive to suggest by the morning.

Educ-class size initiative

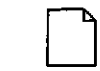


Michael Cohen
12/05/97 12:35:27 PM

Record Type: Record

To: Bruce N. Reed/OPD/EOP, Elena Kagan/OPD/EOP

cc:
Subject: Draft 2 of class size memo



CSRM2.D

Attached is the next version of the class size memo. It makes most of Elena's edits, and it includes a new section at the end showing options for reducing the cost. I fear/suspect that the way it is laid out will invite the selection of the lowest cost option. Let me know if you think I either need to change how these are presented, or include some kind of pro and con discussion of the options.

I indicated in the memo that I'm still uncomfortable with--actually, I'm opposed to--the idea of requiring districts to have a procedure for getting rid of failing teachers. Let me lay out why, and what I propose we do instead:

Why a provision on getting rid of bad teachers is a bad idea.
1. We are really stepping over a federal intrustion/micromanagement line here, especially if we try to do this well: Unless we are going to simply allow districts to check a box and promise that they have an evaulation system in place (which they already to, though most of them are terrible) that enables them to fire incompetent teachers, we are going to wind up having to approve the design of key parts of local personnel systems. This is the wrong role for the federal government, and we don't have the capacity for doing this even if we want to.

Further, coupling class size reductions with firing bad teachers puts in one proposal two components that are in fact intrusive on what are local responsibilities--the shape of the local school budget, and the nature of their personnel policies. In the main, we have spent the last 5 years making sure that federal education programs given out on a formula basis to all school districts have fewer strings and greater accountability for results. This moves in the other direction.

2. On political grounds, we complicate our lives in three ways: First, while the public at large may well like a tough stance on incompetent teachers, this is one initiative that is going to be so popular that we don't need to add anything just for the purposes of making it more attractive. The public will resonate with the idea of smaller classes whether we get tough on teachers or not.

Second, it will indeed cause problems with AFT and NEA--partly because of the tough rhetoric, and partly because of design issues. Sandy and Bob are indeed ok (though not always thrilled) with tough talk on firing bad teachers. They use that rhetoric with their members to promote *union/school board partnerships* to get rid of failing teachers, along the lines of ones in place in Toledo, NYC, Cincinnati and other places. But union involvement is key to them, and key to their ability to sell it to their members. I can't imagine us proposing a failing teachers requirement that also requires the unions to be involved--it wouldn't look tough any more in the abstract; it would

automatically cause problems in southern states where unions have a limited role, and it would start a nationwidefight between the unions and the local school boards, which can't possibly help any of us.

Third, we will invite a Republican "federal intrusion" attack; even while they might like the tough stance, we will give ammunition to those who want to claim that the feds are trying to take over local education.

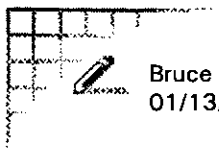
Here is what we should do instead:

1. Stick with the tough rhetoric and accountability requirements in the education zones proposal. Because this is a competitive program rather than a formula funded program, we will avoid both the design and political issues around federal intrusion. And it leaves the unions free to work with their districts on this issue--in fact, it encourges them to do this.

2. Further developthe proposal we already have in the class size memo to require states to have a performance-based way of determing if new teachers are equipped to teach reading in the early grades. This means that they will need some kind of test , serious classroom observation or a combination of the two. We need to give states a few years to get this in place, but it will enable us to say that we are requiring states to make beginning teachers prove they've got the knowledge and skills to get the job done, or they won't be allowed in the classroom.

3. Begin a serious discussion with Chase and Feldman over how we and they combat the expected Republican attacks and efforts to paint them as the protectors of low quality in the system. We should approch the political challenge here along the lines of what we are doing with the Hispanic community for the California bilingual education initiative--consult with them about a shared political challenge while retaining our options for independent action. And we should push them hard both the strengthen their own efforts to promote teacher accountability, and to support any new steps we choose to take.

Education - class size



Bruce N. Reed
01/13/98 11:46:14 AM

Record Type: Record

To: Michael Cohen/OPD/EOP, Elena Kagan/OPD/EOP, Tanya E. Martin/OPD/EOP

cc:
Subject: Globe story

He found somebody to confirm, despite my efforts to obfuscate. Good thing no one reads the Globe.

Clinton to propose school-aid plan

Would spend billions to cut class sizes

By Brian McGrory, Globe Staff, 01/13/98

ASHINGTON - President Clinton, in his State of the Union address, plans to discuss a multibillion-dollar proposal to make class sizes smaller in public schools, according to senior administration officials familiar with the plan.

The plan, which is still being shaped at the highest levels of the administration, represents one of the most significant items on Clinton's education agenda for the coming year, officials said. It also comes at a time when otherwise contrasting proposals from Republicans and Democrats call for a massive teacher recruitment effort, raising the prospect of bipartisan backing in Congress, according to officials.

"The decision has been made that the best way we can help out is through getting more teachers into the classroom and getting smaller class sizes," said one senior administration official, speaking on the condition of anonymity.

Said a second official: "We have been working on this a long time. We are delighted to see others interested."

The cost for the program will total several billion dollars, according to officials familiar with the discussions, and it will be highlighted in Clinton's nationally televised Jan. 27 speech before both houses of the Congress, those officials said.

Administration officials, hesitant to provide details, would not say if their program would more closely resemble the Democratic or the Republican plan. The $8 billion Republican proposal, announced last week by Representative Bill Paxon of New York, calls for the federal government to provide block grants for states to pay the salaries of 100,000 new teachers over the next five years.

The less ambitious $3.3 billion Democratic plan, drafted by Senator Edward M. Kennedy of Massachusetts, proposes that the federal government forgive a portion of student loans for each of 100,000 college graduates a year who enter the teaching profession.

Said one administration official, in comparing the two plans: "We are going our own way."

Officials said the program is designed to get at the sticky issue of class size in kindergarten through 12th grade, a problem that has been highlighted with increasing frequency by a wide range of groups, including the Republican Governors' Association.

Some studies have estimated that as many as 2 million new teachers will be needed in the next 10 years, as the teaching population ages and the number of students coming into the system continues to grow.

Administration officials also said the effort was intended to be linked with Clinton's push to establish national education standards.

"Every aspect of the president's education agenda will have one clear goal: to help young people meet high education standards," one official said.

Within the White House, officials remained tight-lipped on details of the program, reversing the pattern of the last week in which they have been freely highlighting the planned policy announcements in the State of the Union address. Yesterday, responding to a reporter's question, Clinton alluded to his education proposals for the first time in public, though he declined to provide any specifics.

"What I hope we will be able to do in this session of Congress is to make education a national issue," Clinton said, speaking at a White House photo opportunity. "It would please me if it could be a nonpartisan issue.

The president added: "I have some weeks ago signed off on a very ambitious agenda, only part of which has been revealed. We'll just keep working at it."

Those senior administration officials familiar with the agenda said Clinton will also revisit the issue of school reconstruction spending in his budget. Clinton will also renew his call for education opportunity zones, high poverty areas designated for specific federal grants for teacher training and after-school programs.

Educ - class size proposal

Edward M. Kennedy
Massachusetts

THE PRESIDENT HAS SEEN
1-12-98

United States Senate
WASHINGTON, DC 20510

January 6, 1998

The President
The White House
Washington, D.C.

Dear Mr. President,

Very well done on Medicare today, and many thanks for hearing me out on a few possible priorities for 1998.

I'm enclosing some brief points on raising the minimum wage, the 100,000 teachers proposal, and the tobacco settlement.

I'd be delighted to discuss any or all of these further, and I'm very grateful, as always, for your thoughtful consideration and leadership.

As ever,

Edward M. Kennedy

Gene — His way of including teachers may be more cost effective → How many teachers could we get for the cost of our 100,000 proposal?

Mike — I think we need something for The weekly comparing our approach + Kennedy's approach on teachers — and telling him why our approach is better, not worse. Alternatively, This could be part of a larger memo on the subject.
Elena

His way of including teachers may be more cost effective — how many teachers could he get for the cost of our 100,000 model?

Senator Kennedy
January 6, 1998

MINIMUM WAGE

Consider this astounding fact: To have the purchasing power it had in 1968, the minimum wage today would have to be $7.33 an hour, instead of the current level of $5.15. Working 40 hours a week, 52 weeks a year, minimum wage workers earn $10,712 a year -- $2,600 below the poverty level for a family of three. No one who works for a living should have to live in poverty.

I propose annual increases of 50 cents each year in the minimum wage over the next three years -- to bring the level to $6.65 an hour on September 1 in the year 2000. After the third year, the minimum wage should be indexed, so that it will rise automatically as the cost of living increases.

The naysayers' dire predictions of major adverse effects on employment and inflation, especially on teenagers, from the 1996 legislation proved completely false. That legislation raised the minimum wage from $4.25 to $5.15 in two steps -- 50 cents in 1996 and 40 cents in 1997 -- with obviously beneficial effects and no measurable harmful effects. As long as the economy is strong, modest increases in the minimum wage do much good and no harm.

Raising the minimum wage is a women's issue, a labor issue, a children's issue, and a civil rights issue. 58 percent of minimum wage workers are women. Nearly three-quarters of minimum wage workers are adults. 15 percent are African-American, and 14 percent are Hispanic. They serve as child care providers, teachers' aides, and in many other essential positions, and they deserve a fair share of the nation's current prosperity.

100,000 NEW TEACHERS A YEAR FOR TEN YEARS

Record high enrollments are projected in coming years in the nation's public schools. Coupled with growing retirements of current teachers, the country will need two million new teachers during the next decade.

I propose that the federal government take a leadership role in recruiting half of these new teachers -- 100,000 new teachers a year for each of the next 10 years. As an incentive, the government should forgive student loan debt for college or graduate studies that lead to appropriate state teaching credentials. The amount of debt forgiven would be up to $8,000 for each new teacher who completes five years of teaching. The loan forgiveness could be targeted on high-need geographic areas or on high-need disciplines such as science and mathematics.

The proposal would be paid for by closing a tax loophole used by some employers to take a deduction for vacation pay before the employees actually use it. Republicans are using this offset to pay for their reactionary education IRA proposal to aid private schools, which has a comparable cost.

TOBACCO

The tobacco settlement offers an excellent opportunity to discourage youth smoking and to make extraordinary investments in two key areas -- biomedical research and child development.

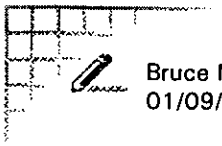
Rough estimates based on Joint Tax Committee data indicate that a $1.50 per pack price increase phased in over three years and indexed to inflation in future years -- the minimum increase that experts believe is necessary to achieve the smoking reduction targets -- could generate $20-25 billion a year -- i.e. $10-15 billion a year more than the industry's proposed settlement. I'm told that the Administration's current thinking is for a proposal that would generate substantially less revenue above the industry proposal -- a significant missed opportunity.

The Senate Democratic Caucus seems prepared to endorse an increase at the $20-25 billion level a year. Hopefully, the Administration will do so as well, and will earmark the additional proceeds for biomedical research and early childhood development.

Your leadership is essential to assure that a strong settlement is enacted and that funds raised from this historic opportunity are targeted for high priorities, rather than disbursed in numerous other areas. It would be a powerful legacy for the Clinton Presidency to be the Administration that dramatically raises NIH funds and makes the critical investments necessary to assure a brighter future for millions of children.

A tobacco settlement proposal dedicated to medical research and child development also guarantees a strong three-part supporting coalition of anti-smoking advocates, the research and university community, and children's advocates.

Educ - class size initiative



Bruce N. Reed
01/09/98 12:38:13 PM

Record Type: Record

To: Elena Kagan/OPD/EOP, Michael Cohen/OPD/EOP

cc:
Subject: 100,000 Teachers

Our first Republican co-sponsor
---------- Forwarded by Bruce N. Reed/OPD/EOP on 01/09/98 12:37 PM ----------

Jason S. Goldberg
01/09/98 12:23:34 PM

Record Type: Record

To: Bruce N. Reed/OPD/EOP, Gene B. Sperling/OPD/EOP, Rahm I. Emanuel/WHO/EOP, John L. Hilley/WHO/EOP

cc: Cathy R. Mays/OPD/EOP, Russell W. Horwitz/OPD/EOP, Michelle Crisci/WHO/EOP, Virginia N. Rustique/WHO/EOP
Subject: 100,000 Teachers

PAXON WATCH: Wants To Hire 100,000 Teachers

Rep. Bill Paxon (R-NY) 1/8 proposed hiring 100,000 public school teachers, using $7.5B rechanneled from othe federal programs. Paxon said part of the money allocated to the nation's govs. over the next five years could b non-traditional teachers." Paxon "is mentioned as a possible successor to House Speaker Newt Gingrich should Georgia Republican run for president" (Turner, Buffalo News, 1/9).

Educ - class size initiative

Michael Cohen
12/04/97 03:06:54 PM

Record Type: Record

To: Elena Kagan/OPD/EOP

cc:
Subject: Draft class size memo

---------- Forwarded by Michael Cohen/OPD/EOP on 12/04/97 03:06 PM ----------

Michael Cohen
12/04/97 08:49:59 AM

Record Type: Record

To: Bruce N. Reed/OPD/EOP, Elena Kagan/OPD/EOP

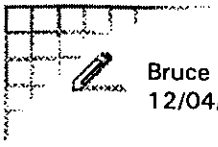
cc: Tanya E. Martin/OPD/EOP, William R. Kincaid/OPD/EOP
Subject: Draft class size memo

CSRM2.D

Attached is a first draft of the class size memo. Tanya and I are still working on a somewhat more detailed description of the proprosal, but it seemed important to get this draft done first. It may well be longer and more detailed than we ultimately want, though I thought it important to remind the President why this is important, and to give him enough meat so he can tell it is well thought through. Since he reduced class size in Arkansas to 20 in the early grades, I presume he will remember the complications involved and will want some clue as to how they would be addressed in this proposal.

Bruce, I assume we want to share a draft of this with NEC, OMB and ED before sending it in. I wanted you to have a shot at it first though. If we are going to circulate it further, a quick response from all 4 of you would be helpful.

Educati- - class size initiative



Bruce N. Reed
12/04/97 10:36:21 AM

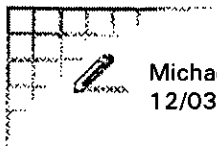
Record Type: Record

To: Michael Cohen/OPD/EOP

cc: Elena Kagan/OPD/EOP
Subject: Re: Class size update

Why wouldn't we portray this as moving from an average of 22.5 to an average of 18 (with a ceiling of 20)?

Educ - class size initiative



Michael Cohen
12/03/97 07:26:04 PM

Record Type: Record

To: Bruce N. Reed/OPD/EOP

cc: Elena Kagan/OPD/EOP
Subject: Class size update

We made significant progress on the class size initiative today. At home tonight I will draft a memo to POTUS describing what we are proposing and how it will work. I'll wnat to share a draft with ED before we finalize this. NEC is now sharing a flury of draft memo's; I imagine we may want to do the same, with NEC and OMB.

Here is a heads up on the key details:

1. We are proposing reduce class size to 18 in grades 1 and 2, from a nationwide average of 22.5. This will require 76,500 teachers.

2. In order to deal with the teacher quality issue, we are looking at adding either 10% or 20% to the per teacher cost, in order to create a "quality pool" of funds. These funds could be used for a range of activities--professional development to existing teachers, improving preservice training for new teachers, providing incentives for good teachers to teach in inner cities, etc. States and districts would get lots of flexibility on this, but they would have to spend at least 5% (I think that's the figure we agreed on.) of these funds on quality type activities, instead of on hiring more teachers.

3. We are assuming that feds pay 80% of the cost, with states and locals picking up the rest. Will probably propose doing this on a sliding scale, so that high poverty communities have a lower matching requirement, and wealthier ones a larger match.

I could easily imagine other matching arrangements -- that would either require a larger overall state/local contribution, or would increase state/local match over time. I think this is largely a political/message call, and a budget call if we need to trim the numbers. I haven't had time to think it through any more yet.

4. Under these assumptions, the total costs range from $7.1 billion over 5 years, to $9.5 billion over 7 (if we create a 10% quality pool) or from $7.5 - $10.1 if we create a 20% quality pool.

5. We've built in lots of flexibility into this, with respect to how states and districts go about phasing in class size reductions, how they deal with improving quality, and what they can do if they utterly lack the space to reduce class size futher.

6. We also have some requirements to preserve and improve teacher quality--don't increase the % of uncertified teachers as you reduce class size; by some fixed point in time, require new primary teachers to demonstrate that they have the knowledge and skills to be good reading teachers in small classed in order to be certified. We are still arm-wrestling over a get rid of incompetent teachers piece.

7. We are also building in accountability for results--after (probably) 3 years, if you can't show achievement gains as a result of these investments, forget about more money.

Education - class size initiative

EK - Bruce asked for class size articles. pm

Access No: 66952019970818 ProQuest - The New York Times (R) Ondisc
Title: Smaller Classes Aren't a Cure-All
Authors: Michael Kirst
Source: New York Times, Late Edition (East Coast)
Date: Aug 18, 1997 Sec: A Editorial Desk p: 19
Length: Medium (649 words) Type: Commentary
Memo: [Op-Ed]
Subjects: Class size; Academic achievement; Education reform; Education & Schools; Law & Legislation; States (US); Teachers & School Employees

Abstract: Michael Kirst Op-Ed questions efforts in 18 states to legislate smaller classes as way to improve public schools; says it is not clear whether cutting class sizes improves academic performance (M)

Article Text:

PALO ALTO, Calif. -- Eighteen state legislatures have passed, or are considering passing, bills dictating smaller classes as a way to improve the public schools. In New York, the Legislature authorized $142 million solely for the hiring of some 3,600 new teachers by 1999 to relieve overcrowding in New York City schools.

In many places, reducing the number of students per class is an end in itself, valued above many other educational goals. But so far the research about the effectiveness of cutting class sizes is inconclusive. It's not clear whether it improves academic performance, as measured in test scores.

Class size reduction is overwhelmingly popular with parents and teachers. In California, where legislation has recently gone into effect, teachers believe they have more time to help lagging students and to cover more material. Parents feel that decreasing the number of children in classrooms is worth doing no matter what, even though it creates many new problems. About 30 percent of the new teachers in California are uncertified and schools have given up libraries, computer labs and pre-school centers to create more classroom space.

New York City schools already don't have enough space; classes are taught in closets and hallways. That squeeze, plus the logistical nightmare of hiring 3,000 more teachers for the school year that begins shortly, prompted the state to delay carrying out the new class-reduction policy for another year.

Researchers have had difficulty finding out whether smaller classes affect students' test scores because there has never been a national evaluation. Studies have had to rely on scattered samples of class reductions in a few school districts.

But a 1989 Johns Hopkins study that did a larger analysis of 14 different studies from around the country found that even when classes were reduced to 15 students, the effects were minimal. Students in the smaller classes only gained about four points on a 100-point test.

Urban parochial schools have proved that smaller classes may not be necessary. They tend to have large classes, but their students have higher achievement scores than their counterparts at many public schools.

Despite the studies questioning the effectiveness of reducing class sizes, policy makers keep pointing to one study in Tennessee that showed about a 10-point gain in test scores when classes were shrunk from 22 to 25 students to 13 to 17 students.

Granted, the study was well-designed. It followed more than 10,000 students from 75 schools for 10 years. But this was one study in one state and may not apply to schools in urban areas. Tennessee already had ample facilities with licensed teachers, and the students were mostly white and African-American. In California, half the students are either Hispanic or Asian, many of whom speak limited English, so the schools would have difficulty finding enough bilingual teachers. Moreover, the effectiveness of teachers depends on their ability to change instruction styles when moving from a large group to small group.

Cutting class sizes is expensive. In California, it is costing an extra $800 or so per pupil per school year (not counting the cost of new classrooms). Portable classrooms cost more than $50,000 each for cities like New York City and Los Angeles. National studies report increasingly tight labor markets for teachers because of rising enrollment and a large number of retirements.

Despite these pressures, politicians are taking advantage of the national economic boom to adopt strict rules on class sizes. In so doing, they are committing their states to one of the most expensive educational reforms possible and neglecting lower cost, effective alternatives like intensive teacher training, expansion of summer school, tutoring and investing in technology.

When the good times end, states won't have the luxury to adopt sweeping, unproven reforms. And parents and politicians alike may discover that reducing class sizes was not the magic bullet they thought it would be.

Caption:

Michael Kirst is a professor at the Stanford University School of Education.

Access No: 05014819970911 ProQuest - The New York Times (R) Ondisc
Title: At Fire Island School, the Classes Are Tiny and the Test Scores High
Authors: Jacques Steinberg
Source: New York Times, Late Edition (East Coast)
Date: Sep 11, 1997 Sec: B Metropolitan Desk p: 1
Length: Long (1469 words) Type: News
Subjects: Academic achievement; Public schools; Class size; School finance; Property taxes; Education & Schools; Fire Island (NY); Finances

Abstract: Article discusses success of Woodhull School on Fire Island; elementary school, whose 54 students receive individual attention, spends nearly $30,000 a year on each student; photo (M)

Article Text:

CORNEILLE ESTATES, N.Y., Sept. 7 -- Only 40 miles east of the crowded classrooms of New York City, there is a school with just 54 children in seven grades.

That is one teacher for every eight pupils, if you remember your third-grade math, and one Macintosh computer for every two children.

It is an elementary school that spends nearly $30,000 a year on each student. One that convenes poetry-writing classes a few steps away at the beach, where young students are encouraged to seek inspiration by closing their eyes and listening to the crashing surf.

No surprise then that the Woodhull School is one of the most successful in the state. It is also one of the most remote, the only public school on Fire Island, a 32-mile sliver of sand and gnarled pine off the South Shore of Long Island that is better known for its activities after school lets out for the year.

By Labor Day weekend, most of the seasonal residents have left Fire Island to restart their real lives. But several dozen hearty residents remain -- most of them electricians, plumbers, cooks and others who serve the affluent seasonal population and live here year-round, despite its isolation.

For them, sending their children to this public school is a perk that they enjoy at the expense of other families: those whose luxurious homes they tend and whose property taxes make the school possible. Those homeowners, who effectively pay the school's bills, send their own children to classrooms on the mainland that are far more crowded, be they public or private.

As a New York public school, Woodhull is so striking that it is something of an educational mecca. After touring it this summer, three New York City public school teachers left in tears. 'They said, 'This is wonderful,' ' recalled Ken Lanier, the school principal. ' 'It's a shame that the kids I teach can't have this.' '

The 79-year-old little red-brick schoolhouse is a place where children cannot avoid intense personal attention and rigorous class participation.

In the school's only fourth-grade class one morning last week, Karen McNulty pelted her 9- and 10-year-old pupils with questions about the Judy Blume novel 'Super Fudge.'

'Go through the book and find two nouns,' Ms. McNulty instructed her charges.

'The name 'Peter,' ' answered James Ragusa.

' 'Company,' ' said Kiley Phelan.

'Good, now find two verbs,' Ms. McNulty directed, and the words 'waved' and 'go' quickly came back.

Within a minute, all seven children in the class had answered a question.

Such intimate contact has translated into high achievement, as measured by the standardized reading tests that the state gives to third and sixth graders. At the Fire Island school last year, 100 percent of the students in the third grade could understand passages written on their grade level (compared with 51 percent statewide), and 80 percent of sixth graders were able to comprehend excerpts from books like 'Moby Dick' that are written for a much older audience. (That compares with 40 percent of sixth graders elsewhere.)

But academic excellence comes at a price. During the winter months on this rugged island, all the markets are closed. Staples like eggs or dog food are sold at two restaurants that remain open. For bulk shopping, most people head to the mainland, which is reachable by a bridge on each end of the island. But getting to those bridges is challenging.

That is because only a precious few automobile permits are given out to residents. And because there are no real roads, those residents lucky enough to have a permit must pilot four-wheel-drive vehicles over miles of beach or down narrow sidewalks. (During the summer, when cars are banned, ferries are virtually the only way on or off the island.)

The students, too, pay a price for isolation. Many students at the Fire Island school say they feel detached from life on the mainland. They also notice the lack of diversity in their midst (the school is almost exclusively white). And they feel the absence of boys and girls their own age.

For Brittany Metcalf, age 11, the school can be particularly lonely: on the brink of adolescence, she finds herself to be the only girl in the sixth grade.

'The good thing is you get a lot of attention from the teacher,' Brittany said last week, after a social studies class in which she sat at the head of a short rectangular table, three boys seated on each side. 'The bad thing is, you have no one to talk to who's the same as you.'

It is for this reason that the school ends at the sixth grade. Older students are transported in yellow four-wheel-drive school buses across the dunes and over the Robert Moses Causeway to middle and high schools in the Long Island communities of Islip and Babylon.

'I can't wait to get out of here,' said Glen Roesch, a sixth grader. 'There's barely any people to know.'

Until they reach the age of 12, though, the students have little choice but to make the elementary school here the center of their lives, given that the rural island offers them few other options during the desolate winter.

'The whole community, when you have children, revolves around the school,' said James Ragusa, 40, a general contractor who moved here nine years ago and who, like many parents, was barefoot when he deposited his 9-year-old son, James, at school on Friday morning.

The school has taken steps to compensate for the isolation: frequent trips to Broadway shows and institutions like the Liberty Science Center in New Jersey. And those outings are about more than watching a musical or learning about technology.

'We know, when we go, there will be New York City districts there with a very different population than ours,' Mr. Lanier said. 'It's a very conscious extra effort here.'

The school also fields coed sports teams in basketball and softball that play against teams from other communities, and arranges swimming lessons at the YMCA in Bay Shore. In the winter months, it offers after-school clubs in drama, sewing and model-building.

The school can afford all of this largely because of the high value of Fire Island's 4,000 or so homes -- a total of $1.5 billion. But because the school's population is so small, the burden on most taxpayers is relatively light.

According to Mr. Lanier, a family living in a house worth $77,500 on Fire Island pays $594 in annual school taxes. In Bay Shore or East Islip, the annual school tax for the same home would be more than $6,000.

Although the average spent per pupil appears steep -- $29,877, compared with $9,162 in the rest of the state -- that is mostly because the salary of a teacher must be divided among 7 students here, compared with 32 in New York City, Mr. Lanier said.

What the school gets for its money is an almost familylike atmosphere, where students answer questions as freely as if they were talking at the dinner table and are often on a first-name basis with the children of their teachers -- many of whom live on the island.

A beginning reader might run eagerly into the next classroom to show off her new skills to the older children, or find a supportive listener outside at the school's maintenance shack.

Other schools might be able to reproduce that cozy atmosphere, but few can bring the natural environment into the classroom as comfortably as the Woodhull School.

For science class, Ms. McNulty sometimes arms her students with nets and brown paper bags and sends them on the short walk to the ocean, where they can comb for shrimp, sea horses and other organisms to catalogue.

And every so often, something unexpected happens. During one lunch hour four years ago, teachers told all the children to grab their meals and head for the beach to see a surprise luncheon guest.

It was a whale, lurking just off the shore.

Caption:

The Woodhull School's four-wheel-drive bus, above, maneuvers the dunes on Fire Island. The school has only 54 students, so children receive individual attention. Loretta Ferraro, left, taught a class of fifth and sixth graders last week. (Photographs by Vic DeLucia/The New York Times)(pg. B1)

'IN BRIEF: The Little School That Could'

At Fire Island's only elementary school, with 54 students, the spending per pupil is among the highest in the state. So is the achievement. Chart shows average 1996 class sizes, 1994-1995 school year spending per student and percentage of third graders reading at grade levels, for 1996, for Fire Island, New York City and New York State. (Source: New York State Department of Education)(pg. B5)

Map of Fire Island showing location of Corneille Estates: A tiny public school benefits from Fire Island's high property values. (pg. B5)

Access No: 12303019970916 ProQuest - The New York Times (R) Ondisc
Title: Special Education Class Sizes Are Linked to a Drop in Scores
Authors: Anemona Hartocollis
Source: New York Times, Late Edition (East Coast)
Date: Sep 16, 1997 Sec: B Metropolitan Desk p: 2
Length: Medium (531 words) Type: News
Subjects: Class size; Special education; Academic achievement; Educational evaluation; Education policy; Studies; Education & Schools; Special Education (Handicapped)
Names: Gottlieb, Jay; Alter, Mark; Gottlieb, Jay (Prof); Alter, Mark (Prof); New York City; New York State

Abstract: Study by New York University Profs Jay Gottlieb and Mark Alter concludes that decision by New York City and state to increase size of some special education classes has led to decline in student achievement; recommends that city reverse its decision to increase number of students to eight from five in so-called resource rooms, which pull children who are lagging behind their peers out of regular classes for increased instruction (M)

Article Text:

A decision by New York City and the state to increase the size of some special education classes has led to a decline in student achievement, according to a study by two New York University professors.

The researchers recommended that the city reverse its decision to increase the number of students to eight from five in so-called resource rooms, which pull children who are lagging behind their peers out of regular classes for increased instruction.

But state officials said the $75,000 state-financed study had been hampered by its small size and short time span, looking at only 45 schools over a period of just six months. They said that while the study raised troubling questions, more work needed to be done to determine whether class size alone was responsible for the decline in achievement or whether there were other factors, such as poor attendance, insufficient teaching time or the kind of teaching methods being used.

'I think New York City has to start to peel that onion and see what the factors are impeding reading achievement,' said Larry T. Waite, the coordinator of special education policy for the State Education Department. 'Changing one factor alone may not be the answer.'

The authors of the study, Jay Gottlieb and Mark Alter, two education professors at N.Y.U., complained that the city Board of Education had not provided them with system-wide resource room scores, as requested.

The study found a sharp decrease in sixth-grade reading scores in 1995-96, after the class sizes were increased. It found less striking decreases in the third and eighth grades, where there already was a downward trend.

From 1995 to 1996, sixth-grade reading scores dropped 13.2 percentage points, to 15.82 percent of students reading at state minimum competency levels from 29.02 percent. From 1994 to 1995, before the change in class size, scores had dropped less than one percentage point.

In the eighth grade, scores dropped 9.28 points after class size increased to 47.16 percent, the study found, but scores in eighth grade had already declined 6.65 points in 1993-94, the year before the change.

In third grade, scores declined 5.27 points after the change to 14.20

percent. But third-grade scores had declined 8.21 points the year before.

There was no significant change in math scores at any grade.

'When you increase the size, you dilute the instruction, and children appear to fall farther behind,' Dr. Gottlieb said.

But Dr. Gottlieb conceded that the pre-existing downward trend raised questions about the overall effectiveness of resource rooms. 'Is there any evidence that resource room improves children's performance?' he asked. 'In this city I don't know of any data to support that.'

The increase in class size saved $26 million by cutting the number of teachers needed in resource rooms, which serve about 40,000 children, the study found. It also found that high rates of absenteeism brought the actual number of students below eight per class. Average attendance was 5.9 students in elementary school and 4.1 students in middle and high school.

Francine Goldstein, executive director of student support services for the board, said that the study's findings were being considered as part of an overall drive to reform special education.

An education reform goes awry.

CLASS CONFLICT

By Robyn Gearey

I hadn't been in California twenty-four hours when I began to realize that the schools were experiencing a few technical difficulties implementing Governor Pete Wilson's much hyped class-size reduction initiative. "Do you wanna teach second grade?" called a voice from the teachers' lounge. "I'll pay you fifty bucks myself." Startled, I looked around, then noticed a group of teachers sitting at a long table by the door. One of them was waving, trying to catch my eye. Thinking the offer a joke, I laughed. "I'm a journalist, not a teacher," I protested. "Babysitting is the closest thing I have to teaching experience." The teacher wasn't fazed. "Do you have a college degree?" she asked. "Yes," I replied. "Well, then," she said, satisfied, "you're perfectly qualified. When can you start?"

That was the first clue. The second came a few days later when I read a *Los Angeles Times* letter to the editor written by Lori Borcover, whose daughter's school was so tight on space that it closed the library in order to use it as a classroom. Soon after, the *Times* reported that an elementary school in Costa Mesa had turned its auditorium into classrooms—eliminating school plays and other activities. The school's principal told the *Times*, "This takes away a major part of our educational programs."

Like the teacher-hiring frenzy, the classroom-space crunch was part of a manic attempt by California schools to cash in on the governor's plan, unveiled last July, which promised a $650 per child subsidy for every classroom in the first and second grades that met the twenty-students-per-teacher standard by February 16. (The program also applied to some kindergarten and third-grade classes.) Most did, in part by holding classes in gyms and teachers' lounges, and hiring unqualified teachers. And how has Wilson responded to this chaos? This year he has decided to expand the program, throwing the schools into another round of turmoil.

Class-size reduction is, at least in theory, a great idea. Dozens of studies have shown it to be one of the most effective ways to raise classroom achievement. Prior to Wilson's initiative, California's classrooms were the most crowded in the nation, averaging about thirty kids. And so when Wilson discovered that, in 1994, 56 percent of the state's fourth-graders were rated "below-basic" on a nationwide reading exam, he made class-size reduction a crusade. The response was overwhelming. "This is the most exciting time in twenty or thirty years," gushed Delaine Eastin, superintendent of public instruction in California. "I think this is the start of a renaissance," effused Clovis Unified School District Superintendent Walt Buster. A headline in the *Los Angeles Times* declared: "SMALLER CLASSES, BIG IMPROVEMENT."

But, as the saying goes, the devil is in the details. To get results quickly, Wilson set a deadline and offered a financial incentive. The schools began struggling to find space. Many were already overcrowded, with one in seven relying on a year-round academic schedule to accommodate the overflow. And that was before the governor's plan created a need for 20,000 new classrooms.

Wilson's initiative set aside $200 million for new classroom space, but that space is not easy to come by. Portable classrooms, if the school has the land, are one option, but they are expensive (they cost up to $54,000; the state is only allotting $25,000 per new classroom) and rare. California manufactures only 2,500 portable classrooms a year; the 20-1 initiative has generated orders for some 15,000. The state's department of education estimates that the backlog now runs two to three years.

Construction is another option, but it also requires more land, money and time than most schools can spare. So, in the meantime, makeshift classrooms—libraries, cafeterias and music rooms—will have to suffice. Many schools have opted to squeeze two teachers (and forty kids) in one regular-size room, a decision that even the department of education, the initiative's most enthusiastic proponent, calls "inadvisable."

And if school administrators are desperate for space, they're even more desperate for teachers. California accredits fewer than 5,000 new teachers each year; to meet the 20-1 standard, the state needs 20,000. Even before Wilson announced his initiative, California had trouble attracting enough qualified teachers—in 1994, 11 percent of its teachers were working with either a temporary or an emergency license, or no license at all, already the highest percentage of non-credentialed teachers in the country. Since the initiative passed, one-third of the teachers hired to fulfill it have lacked traditional credentials. In California today, anyone with a bachelor's degree and a passing score on a basic skills test (which many educators say is on a fifth-grade level) can teach. "We've reached so deep into the pool, we're now taking people we wouldn't have hired a year ago," said Douglas Mitchell, a professor at the University of California-Riverside.

The influx of unqualified teachers makes many people nervous. "I feel better having thirty-two students with an experienced teacher than I do with twenty and a totally inexperienced teacher," says Rebecca Ryan, president of the Pomona district governing board. In a *Los Angeles Times* op-ed, Dennis L. Evans, a professor at UC-Irvine, said, "An elementary class of 20 taught by an ill-prepared 'instant' teacher will prove far worse for the students involved than if they were in a class of 40 taught by a highly qualified and dedicated teacher." Some fear that the teacher shortage is exacerbating the inequalities between urban and suburban schools. Wealthy suburban districts can afford to lure experienced teachers from

other parts of the country, even Canada, to fill their classrooms. It is the poorer, urban schools that are forced to rely on inexperienced teachers.

And since Wilson's class-size initiative only applies to younger grades, many school officials admit they have had to shortchange older students to reduce class sizes in the lower grades. James A. Fleming, superintendent of the Capistrano Unified School District, said that his district had to take funds away from a middle-school English program to help pay for the initiative. There are long-range financial concerns as well. The state only provides a fraction of the funds for the new classes and teachers, and, while most communities successfully scrambled to meet this year's deadline, it's likely that they will begin to default in ever increasing numbers. Mike Fine, the chief financial officer of the Newport-Mesa Unified School District, told *The Los Angeles Times*, "I think at least one-third of the districts who instituted the class-size reduction won't be able to sustain it for more than three years."

So it was quite a surprise last January when Pete Wilson announced that his 1997-98 budget proposal allocated an additional $304 million to *expand* the initiative to fully include both kindergarten and the third grade. Administrators who have spent the past six months struggling to cut first- and second-grade classes were hoping the new budget might provide additional money to help them cope with the financial strain incurred in meeting this year's deadline. But instead, they face the Sisyphean prospect of acquiring another 5,000 teachers and classrooms. No wonder many educators found it hard to share Wilson's enthusiasm. As one L.A. school official put it: "We are too busy trying to recover from the governor's last great idea." •

PIGTOWN DISPATCH

BUSINESS AS USUAL

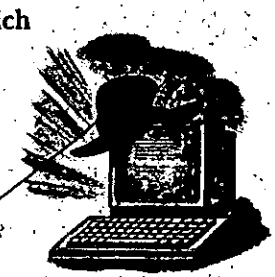
By Joe Mathews

Three years ago, the police officers who conduct prostitution sweeps in this southwest Baltimore neighborhood noticed a trend. The women they had been arresting for years along Washington Boulevard—Pigtown's main street of Formstone rowhouses and half-empty storefronts—no longer gave Pigtown addresses. "A lot of the women had moved to the suburbs," says Officer Van Watson. "They still came into the city to turn tricks, but other than that, they didn't see any hope or opportunity there. There was nothing."

Pigtown's demimondes aren't the only ones disillusioned by life in this integrated slum. Once a flourishing residential and industrial neighborhood anchored by the B&O Railroad, Pigtown has been sliding downhill for years. The majority of the 6,500 people who live here are high-school dropouts, and nearly one in six adults is unemployed. Although violent crime is low and Pigtown has a small group of new middle-class home buyers, the community consists largely of small-time criminals tethered to the drug trade and older working-class people trapped in their homes by it.

But the spring of 1995 brought the promise of change. Two new residents arrived in Pigtown. PTP Industries, Inc., a battery and computer disk packaging firm, moved into a building on Washington Boulevard. And something called the federal empowerment zone arrived from the nation's capital—part of a massive government effort to bring businesses back to inner cities.

The feds had chosen Baltimore as one of six federal urban revitalization areas. The city's share of the $3.5 billion empowerment pie (it rivals the War on Poverty in size) was $100 million in grants, concentrated in six neighborhoods or "villages," of which Pigtown was one. The zone was classic corporate welfare: it offered a $3,000 rebate on a company's (in this case PTP's) payroll tax for each zone resident hired. And, by targeting the benefits to specific areas, federal officials hoped to create controlled laboratories for economic development. To help with Pigtown's resurrection, Maryland gave PTP a sweetheart lease on 330,000 square feet in one of Pigtown's largest buildings, an old Montgomery Ward warehouse.



In Pigtown, the notion of an empowerment zone, and a company willing to take advantage of it, tapped a powerful nostalgia for the long-ago days of plentiful industrial jobs. Even Pigtown's name suggests a better era, a century ago, when hogs were driven through its streets on their way to the slaughterhouses. "A lot of us spent time talking with the PTP people about poverty and jobs," says Arnold Sherman, a former member of the neighborhood's empowerment board. "I believed PTP was going to be an answer to the unemployed, to some of the prostitution, to many problems." PTP needed to double its workforce, from 250 to 500. The new hires would be for the kind of low-skill, entry-level jobs that Pigtown's poorest residents could do.

Pigtown had the makings of an empowerment zone success story, a model for those who believe government can employ business to fight poverty. Except that it hasn't turned out that way. The fact that both sides in Pigtown—community and company—consider the experience a failure stands as a reminder of an unpleasant truth: too many inner-city residents are unable to adequately perform even the simple assembly-line work that PTP offers.

Certainly, Pigtown residents were eager for work. As the April 1995 opening of the PTP plant approached, neighborhood leaders fanned out, distributing flyers with information about the new jobs. More than 160 people attended a job fair; PTP hired 103. They found about another three dozen workers through a city job-training

America has no greater glory than its cherished tradition of immigration. This tradition should be preserved. I am not advocating an end to, or even a major long-term reduction in, immigration. Indeed, I favor increasing the number of skilled and professional immigrants. And, contrary to the crypto-racist alarmism of right-wingers who call for immigration reform, I think that the best feature of the recent wave of immigration is its wonderful non-white diversity.

Let us hope that the president will have the moral and political courage to resist the strange union of business interests, naïve libertarians and misguided left-wing urban advocates that has stymied all past attempts at meaningful immigration reform.

ORLANDO PATTERSON is John Cowles professor of sociology at Harvard and author of the forthcoming *The Ordeal of Integration.*

Size matters

If any of the president's staff flicked on the tube between stump speeches on the campaign trail, they would have noticed that education is in. Not since the days of "Room 222" and "Welcome Back, Kotter," have there been so many shows about school in prime time: "Mr. Rhodes," "Nick Freno: Licensed Teacher," "Dangerous Minds." There are lessons to be learned here—and not about licensing teachers.

The obvious one is that never, perhaps, in modern American life has education been a hotter issue. The less obvious one has to do with class size. Have you ever noticed, Mr. President, how on all these shows, the viewer gets to know only a few of the students? There's a reason for that. In a thirty-minute sitcom or an hour-long drama, a viewing audience can only get to know a handful of kids. Similarly, a typical teacher can only get to know so many students in a fifty-minute period. On "Welcome Back, Kotter," for instance, the sweathogs monopolized Mr. Kotter's time while the good kids languished in the background. And as it is for the TV audience, so it is for the typical high-school teacher. In fifty minutes she can only get to know so many kids.

In the next four years, Mr. President, you should make reducing class and school sizes, particularly in poorer, overcrowded schools, a top goal. As governor of Tennessee, Lamar Alexander financed a study of the effect of class size on learning in the state's rural, suburban and urban schools. It showed that smaller classes during the elementary school years produced dramatic boosts in student achievement—regardless of student background—and that these gains held even after students were returned to larger classes in later years. Everyone knows that smaller classes work; they're in large part what affluent parents are paying for when they send their kids to private schools.

The place to start is in the earliest grades, kindergarten through third, in order to give all children the solid educational foundation they need to succeed later. Nothing would do more to help all children to read by the third grade, as President Clinton has proposed, than to reduce all elementary school classes to 20 students or less during these years.

Most people assume that school districts would have to hire lots more teachers if they reduced class size, but they wouldn't. In too many districts across the country, teachers work outside the classroom, in administrative positions created partly to respond to the needs of teachers in overcrowded classes and schools. In New York City, for instance, the student-to-teacher ratio is approximately 16 to 1; classes remain large, however, partly because so many teachers aren't teaching and because of overcrowding.

Instead of giving money to states for special education or other "pull-out" programs, the federal government should give funds to schools exclusively to reduce class size; if every class, particularly in the earliest grades, had 20 students or less, then every child, in essence, would receive a "special" education. And just as every class should have no more than 20 students, every school should have no more than 20 teachers. Teachers get lost in big schools, just as kids do. Smaller schools and classes will create the kind of communities where teachers, parents and students can work together and know each other as individuals. If you can push for school uniforms, Mr. President, you can push for smaller classes. Call it your 20/20 vision for school reform.

SARA MOSLE is a contributing writer for *The New York Times Magazine.*

Don't ask, don't tell

Intellectuals love to imagine that the people who wield real power are just waiting to be told how to use it. This fantasy of access and influence is a kind of *déformation professionelle*, and one with a long, richly ironic history: think of Seneca and Nero, Voltaire and Frederick the Great, Michael Lerner and the First Lady.

For a politician, President Clinton seems to be pretty well-informed. Even his enemies concede that he does his policy homework, and his political instincts are legendary. I would be amazed if, at this late date, a journalist, a pundit, or even a bona fide expert in a genuine field of study could suggest to him a significant course of action he or his handlers have not already considered, focus-grouped and triangulated from here to the moon and back.

But he's not a free man, either: he has constituencies to satisfy, contributors to reward, political debts to pay and, of course, his own career to advance. These considerations matter a lot more than bright ideas, or right ideas. Many eloquent opponents of the welfare bill had the president's ear, including some of the policy experts who'd helped him formulate his own plan. Whatever one thinks of the president's decision to sign the measure into law, I don't think there's much doubt that the only arguments that counted in the end were the ones about his own immediate political fortunes. Does anyone think the president really believes that uniforms and the Internet are the keys to educational progress? Or that what battered women need more than anything else is their own emergency number?

Journalists are supposed to speak truth to power. But I've always wondered what the point of it is. If power were interested in truth, we would be living in a very different world. Why not speak truth to the powerless, who at least have something to gain from listening?

If President Clinton wants to know what I think are the problems and possibilities of contemporary American society, he can always subscribe to *The Nation*, where I've been writing for years. Or he could just call—I work at home, I'm in the book. That he hasn't requested my views on any subject, and communicates with me only indirectly, through Democratic Party junk mail addressed to "Occupant," makes me suspect he's not that curious about my views. I don't blame him a bit. If I were president, I would feel the same way.

KATHA POLLITT is a columnist for *The Nation.*

LEVEL 1 - 13 OF 201 STORIES

Time

October 6, 1997

SECTION: EDUCATION; Pg. 85

LENGTH: 577 words

HEADLINE: **CLASS-SIZE** WARFARE;
SOME NEW YORK PARENTS TRY TO HIRE AN EXTRA FOURTH-GRADE TEACHER. IS THIS UNFAIR TO PUBLIC SCHOOLING?

BYLINE: ROMESH RATNESAR, WITH REPORTING BY ELAINE RIVERA/NEW YORK

BODY:

The move seemed routine enough in a **school** system strapped for cash. In late September, New York City **school** officials laid off a fourth-grade teacher at Public **School** 41 in Greenwich Village, dispersing her students into the **school's** four other classes. That pushed the average fourth-grade **class size** from 26 to 32. It also pushed parents over the edge. Within days of hearing the news, a group of parents cobbled together $ 46,000 to cover the teacher's salary. When city **schools** chancellor Rudy Crew nixed the buyout, saying it would "adversely affect the opportunity for equity" among the city's **schools**, the parents went to court and took to the streets. After a week of rancorous meetings, the two sides struck a deal last Thursday that reinstated the teacher, Lauren Zangara, and returned the parents' money--but barred them from any future attempt to pay faculty salaries. The city "will allow parents to make valuable contributions to their **schools**," Crew said, "within appropriate limits."

The rumble in the Village highlighted a quandary facing middle-class parents across the U.S. With state and local governments slashing public-school budgets, parents often face an unhappy choice: supplement their children's creaky classrooms with their own cash or stick the kids in pricier, more exclusive private schools. While parents have long held bake sales and sold raffle tickets to drum up extra funds for local schools, fund raising today is growing more elaborate and controversial. In Bowie, Md., a nonprofit foundation set up by parents is helping finance a $ 5 million auditorium. In Winchester, Mass., the Foundation for Educational Excellence dispenses $ 50,000 a year in grants to enterprising teachers. And public-school boards in most major cities say parents are free to kick in for everything from clean football uniforms to new computers.

So why all the fuss about P.S. 41? Well, buying extra classroom materials is one thing; buying extra teachers is another. When directed toward items like staff salaries, educators say, private funds can widen the disparity between schools in poor neighborhoods that rely on government funds, and those in middle-class communities that can tap off-the-books parental money. Even some parent advocates got uneasy over the New York parents' brazenness. "The running of public schools should be the responsibility of the public through tax monies," said Lois Jean White, president of the national PTA. Other critics weren't so diplomatic. "It's not an 'extra' when you're talking about

subsidizing salary for a teacher," says Jonathan Kozol, author of the 1991 book Savage Inequalities. "The moral justification of public education is being ripped apart."

Several parents did threaten to relocate their children to private schools if Crew didn't reinstate Zangara. But the parents refuted the image that they were pampered yuppies with money to burn, pointing out that the school has working-class families too. They also say that the loss of one teacher would make the size of each fourth-grade class 10 students larger than the state average. Said P.S. 41 father Fred Moshary: "Parents anywhere would have done the same thing." Those words were prophetic. At week's end, parents of second-graders in nearby Queens had raised $ 20,000 toward saving a teacher from the budget ax. They vowed not to rest until they succeeded.

--By Romesh Ratnesar. With reporting by Elaine Rivera/New York

GRAPHIC: COLOR PHOTO: TODD MAISEL, VILLAGE VANGUARDS: P.S. 41 parents like Carrie Bianchi, left, and Sandra Soehngen raised $ 46,000 to pay a teacher

LANGUAGE: ENGLISH

LOAD-DATE: September 30, 1997

LEVEL 2 - 6 OF 22 STORIES

School Planning and Management

July, 1997

SECTION: No. 7, Vol. 36; Pg. 18

IAC-ACC-NO: 19766971

LENGTH: 4397 words

HEADLINE: A lesson in classroom size reduction; includes related articles; Cover Story

BYLINE: Hymon, Steve

BODY:

Administrators nationwide can learn from California's classroom size reduction plan and how districts implemented it.

In May of 1996, California Governor Pete Wilson found himself in a difficult position. California **schools** were swelling with students, the result of the recent baby boom and the state's continual growth in population. Simultaneously, test scores revealed that reading skills in many of California's **schools**, especially those located in urban areas, lagged behind scores in the rest of the nation. Another publicized study found that California ranked 40th in the nation on spending per pupil.

Fingers were pointed at Wilson, whose approval rating had dropped dramatically since his embarrassing withdrawal from the 1996 presidential election. But Wilson fought back. The state had collected extra tax revenue for 1995, and state law dictated that the money had to go to education.

The Plan

Sensing an opportunity, Wilson created a $ 771 million initiative called classroom size reduction (CSR). Wilson's goal was simple: He wanted all kindergarten, first-, second- and third-grade classrooms to have 20 or fewer students. Wilson said that the would give school districts $ 650 for each student in a reduced classroom in the 1996-97 school year. An additional fund of $ 200 million would be created to help those schools facing a critical shortage of facilities. This past May, Wilson proposed expanding the amount to $ 800 per student in the new state budget (which will be voted on this summer), while allowing schools to use some of that $ 800 for new facilities.

The CSR program received high praise from parents, teachers and the press. And, in many ways, the results have been extraordinary: By February of this year, 851 of the state's 895 public school districts had qualified for the program, according to the latest figures from the state department of education.

Although many schools were unable to reduce **class size** in all four grades, many schools were able to reduce first and second grades from more than 30 students per class.

But there are two sides to the story. While few people criticize the legitimacy and effectiveness of smaller classrooms, many school district administrators have found that the $ 650 Wilson was paying for each student was, in fact, nowhere near the real cost of the program.

Three questions hounded California administrators.

1. Where were all the extra classes created by CSR going to be housed?

2. Who was going to teach those classes?

3. If $ 650 per student didn't cover the cost, where was the extra money going to come from?

Los Angeles' Strategy

The mother of all California school districts, Los Angeles Unified, provided some revealing answers to all three questions. LAUSD is the second-largest school district in the nation (with more than 668,000 students) and its many serious problems - deteriorating buildings, crime and a top-heavy administration - are well chronicled in the press, often on a daily basis.

CSR was asking LAUSD to reduce **class size** at a time when LAUSD was already looking at a record enrollment increase of 18,000 students heading into the 1996-97 school year. Factoring in CSR, it appeared that LAUSD would be short 27,000 seats. This was the problem that faced Gordon Wohlers, LAUSD's assistant superintendent in charge of classroom size reductions.

Wohlers and his colleagues tackled the problem systematically. First, they realized they were dealing with a facility shortage and convinced the LAUSD board to order 1,000 portable classrooms, all of which should be in place by this fall.

Next, they asked the LAUSD board of education to approve various temporary measures that would ease pressure on schools. One measure allowed schools to use any available space for classrooms, including teachers' lounges, auditoriums and libraries. Another measure allowed 40 students to use the same classroom as long as two teachers were present to divide the class in half. Other schools, already stuffed to the gills, were permitted to adopt multitrack, year-round programs.

These measures, along with hiring more than 1,000 teachers, allowed LAUSD to place 98 percent of its first and second graders in the CSR program. "The problem we have now is that we can't go further than this," says Wohlers. "The reason is we have nearly 100 elementary schools that are filled to capacity. Absent of new construction, we cannot expand the CSR program to the third- and fourth-grade level."

The other problem, and one that has become endemic throughout the state, is money. LAUSD, even with the $ 650 per student received from the state, had to spend approximately $ 97 million from its own general funds, not including the

cost of the portables and educational materials. Wohlers estimates that the real cost of implementing CSR was almost $ 1,000 per student.

The district did receive some good news in early April, when L.A. voters passed a $ 2.4 billion school bond measure - the same measure that had suffered a narrow defeat at the polls last November. The problem, however, is that the money is specifically earmarked for desperately needed school repairs and to fund construction of much-needed high schools.

Thus, the future of CSR in Los Angeles is already in question shortly after it has begun. Everyone loves the smaller classrooms, but LAUSD faces an enrollment that will continue to grow with the Southern California economy.

"Overall, we are going to have to invest more money into education if we are going to get the results the public is investing in," says Wohlers. Schools.

Mammoth Lakes' Strategy

Mammoth Lakes, population 6,000, couldn't be more different from Los Angeles. Located in a remote alpine valley in the Eastern Sierra Nevada Mountains, Mammoth Lakes is a popular year-round destination because of its skiing, fishing and camping.

Mammoth Elementary School serves not only the town of Mammoth Lakes, but much of Mono County, one of the more sparsely populated counties in California. Interestingly, its elementary school has 634 students, whereas its middle school and high school have about 300 each - reflective, again, of the mini-baby boom of the late 1980s.

Before CSR, Mammoth Elementary also had as many as 34 students in some of its first- through third-grade classes. This did not represent the quality of life that many of Mammoth's residents left L.A. to pursue. Any possible way of reducing **class size** was appealing.

"We went into CSR with our eyes open," says Brian McBride, principal of Mammoth Elementary School. "The benefits of smaller classes are obvious, but the downside is that it cost our general fund about $ 83,000 because [CSR] was not fully funded."

Mammoth Elementary hired seven teachers, all with experience, which wasn't difficult because the town is a desirable place to live. But the school is now using every inch of the building for classrooms and is facing the prospect of changing to a year-round schedule to accommodate CSR. The school also placed an order for a portable classroom, which cost $ 60,000 because the portable must withstand the sizable snowfalls typical of the area.

The architecture of the school provided common areas in the middle of the classroom area. Two of those areas were converted to classrooms, and a conference room was thrown into the mix as a small-group instruction area. McBride is thankful that, for now, he was spared having to use the cafeteria, but he isn't happy about losing his second grade's common area, which was previously used for art projects and theater activities.

Nevertheless, all 16 of Mammoth's first through third grades now have 20 or

fewer students. "Most of us who went into this thing knew it wasn't a moneymaker," says McBride. "But we went into it with the thought that we can afford to do it right now and that we should because we have very high **class sizes.**"

But McBride offers a warning: "The state is going to have change the funding or this will be a two-year experiment."

Oxnard's Strategy

Oxnard is located in a fertile agricultural valley just north of Malibu. The school district has 14,300 students enrolled, many of whom are from low-income families.

"Everyone applauds the concept of CSR," says Sandra Herrera, assistant superintendent of business and fiscal services for the Oxnard School District. "But we were already 100 percent multitrack at all of our schools, and all of our classrooms were in use year-round. We have no place to put the children."

Oxnard, like many other school districts, faced political pressure to im-ple-ment CSR. But, as of late April, the district had managed to get only the first grade into the program. An elementary school under construction is scheduled to open this summer and, if the second grade is fully implemented into CSR, the new school will open at complete capacity.

One of the problems with CSR in California is that the $ 650 per pupil funding is not 'meant to cover the cost of building new facilities. Districts that need extra money for facilities can apply for money from a separate $ 200 million fund - but $ 200 million represents little money for the most populous state in the nation. One of the results of this, according to Herrera, is that school districts with critical needs, such as Oxnard, are unable to compete with districts that do have space. In other words, a problem that CSR was designed to alleviate - overcrowding in schools - tends to help overcrowding only in wealthier districts, while furthering crowding in poorer districts.

Oxnard added 45 portable classrooms, which it will pay for from its general funds in the next 10 years. A school bond failed to pass by 80 votes on March 4 of this year, but passed on June 3, rising above the two-thirds vote required for passage by just 42 votes. "You try to get the word out in relationship to the need," says Herrera, "but it's hard for people to realize how great the need is."

San Diego's Strategy

The San Diego Unified School District, with about 136,000 students, was fortunate. Two years before Governor Wilson's CSR program was implemented, the city school district had begun its own program. Heading into the 1996-97 school year, the average **class size** in first and second grades was already 25.5 students.

"The CSR program wasn't as hard on us because, financially, we made sacrifices earlier," says Jan Hintzman, supervisor of facilities program for the San Diego Unified School District.

Hintzman and her colleagues solved the most serious problem - lack of facilities - by considering every inch of every school as fair game for use as classrooms. What Hintzman and her colleagues soon found was that most schools were giving up anything to participate in CSR, including lounges, auditoriums and libraries. Hintzman estimates that replacing such facilities will cost the district $ 14 million.

"As a facility planner, I could never have gone out and done some of these things," says Hintzman. "I think it's a sign that everyone realized we had to do something to improve student performance."

Long Beach's Strategy

The Long Beach Unified School District, which has 84,000 students, made similar sacrifices. As soon as the initiative was signed into law, principals and elementary school teachers were called back from summer vacation. The district immediately organized a teacher recruitment fair and put the word out through the local media.

On the day of the fair, candidates for teaching jobs were lined up out the door, and officials from LBUSD were there, serving them soft drinks. Several television and radio stations and newspapers covered the fair, resulting in even more candidates - some who heard about the fair on the radio while commuting to work and decided to stop to apply. The result: Long Beach got the pick of the teaching litter.

"We have the challenge of being a large, urban school district growing by 3,000 students each year," says Richard Van Der Laan, the district's spokesperson. "We could have waited to implement CSR, but we didn't want to. We felt that, with a little ingenuity, we could get a high percentage of primary school kids into the program."

By the end of the first semester of the 1996-97 school year, 100 percent of Long Beach's first graders, 69 percent of the second graders and about 40 percent of the kindergartners were in classes of 20 and under. In total, about 16,000 students are involved in CSR.

How did Long Beach find the space? Like other districts, Long Beach brought in 40 portables and then went about "recapturing" any areas that could be used for classrooms. The district also decided to forgo small classes for subjects such as music and physical education--which freed rooms for other classes. The district even took back an old school it had been leasing to Los Angeles County and, today, the school is operating at 100 percent capacity.

"We had a number of principals and superintendents who were all supportive of making this thing happen," says Van Der Laan. "They were all convinced that our children shouldn't be left behind because of the inconvenience this might cause - we were deeply convinced that urban youngsters should get the same opportunities as children in other areas."

It didn't hurt that Long Beach, according to Van Der Laan, had an adequate reserve of money set aside. In fact, many of the portable classrooms had already been ordered before CSR was signed into law. Still, Van Der Laan insists, attitude was what made Long Beach successful: "Other places decided to walt and

to think the program through but, in reality, the ones who stuck around the starting gate probably, in hindsight, should have jumped into it wholeheartedly."

From a National Perspective

Education has finally become an issue politicians from both parties are embracing. It's no secret that President Clinton is hoping to make improving education the defining issue of his second term. In California, Governor Wilson would like to expand CSR to the fourth grade. He is also talking about putting a $ 2 billion statewide bond for education on the ballot next year.

If CSR programs prove to have a dramatic impact on reading and math skills in California, it is likely that CSR programs will expand to other states as well. The argument for CSR programs is appealing to politicians, and it's a notion hard to dispute: Our children will need better skills to compete in a global marketplace.

RELATED ARTICLE: HOW DO YOU TURN AN ELEMENTARY SCHOOL CAFETERIA AND AUDITORIUM INTO FOUR CLASSROOMS?

Last August, Valencia Park Elementary School in Fullerton quickly learned how. The school has an enrollment of 950 students or so, and the staff wanted to reduce the size of its first-grade classrooms before the school year began. The problem was that four additional classrooms were needed until the middle of the year, when more portable classrooms would be arriving.

As it happened, the school's cafeteria and auditorium occupied the same large room, with a stage at one end and the kitchen at the other. First, the decision was made that the cafeteria could be sacrificed. Lunch tables and benches were moved outside to the playground, which meant students began dining al fresco. When it rained, which wasn't often, "rainy day lunches" were declared, and students ate in their classrooms. To alleviate playground crowding, students were divided into three groups, each eating at a different time.

To convert the cafeteria/auditorium to a classroom, movable walls were used. Carpet was laid over the linoleum floors, and the walls were repainted or covered with murals of such things as schoolhouses and flowers painted on large pieces of paper. Three of the classrooms were used for first graders, and the fourth was used for an English as a second language classroom.

This begs the obvious question: Are these good-quality classrooms?

"We thought it looked very cozy and not sterile - like a cafeteria," says Michele Succar, the school's psychologist. "We were all very pleased, especially the teach-em. It was wonderful to have the 20-to-one."

But were first graders a little alarmed to be attending class in a cafeteria?

"Well, these are first graders," says Succar. "Most of them don't come with preconceived notions about what a classroom should look like, and I doubt it affected them. They were in a school classroom with good teachers and a warm, caring environment. And that's what's most important."

RELATED ARTICLE: FIVE LESSONS FROM CALIFORNIA CSR

The following lessons can be learned from California's struggles and successes with CSR.

THINK AHEAD. Even if your district has adequate space, survey all buildings to see where and how, in a pinch, classrooms could be added at a later date. Also, view every inch of space as a potential classroom; temporary partitions can do wonders.

CSR ATTRACTS TEACHERS. Obviously, teachers love smaller classes. Districts like Long Beach and Mammoth used the promise of CSR to sell themselves to teachers and, as a result, the demand was greater than the supply. Both districts feel they greatly enhanced their staffs by hiring skilled and experienced teachers.

MONEY OFTEN FOLLOWS RESULTS. Schools that achieve CSR by any means possible have something to sell to the public when the inevitable bond ends up on the ballot. Jan Hintzman, of the San Diego school district, says that she wanted to wait a year and study the numbers before implementing CSR. The district didn't wait, believing that the facilities the district lost to CSR were a worthwhile sacrifice: Give the community smaller classes, and the community will then pass the next school bond issue.

BE MEDIA SAVVY. "If there's something negative going on, all the press comes out," says Sandra Herrera of the Oxford School District. "If it's something good, we can't get them to come out, even if we buy ads in the paper. It's a continuing frustration."

One strategy widely used in dealing with the press is going to the press before it comes to you, which the Long Beach district did to great effects when it held a job fair to recruit new teachers. Keep in mind, too, that reporters at small newspapers often tend to be young and inexperienced. Introduce yourself to them. Invite them to your office to talk about the issues maybe lunch with them once a month. And, hard as it might be, don't take offense when they write something that angers you or, perhaps, is dead wrong. Their readers are the people who vote for bonds and politicians.

BE A LEADER. "Hopefully, **class size** reduction will help people see the need for additional facilities," says Van Der Laan. "And there is a growing awareness that, if we are going to get into the 21st century, we still need to finish getting into the 20th century. Our thinking is that, if you decide to do it, find a way. Do it sooner rather than later. Be a leader rather than a follower."

RELATED ARTICLE: THE "AVERAGE" SCHOOL DISTRICT

A major study conducted in 1995 by McKinsey & Company, Inc. describes the "average" school district in the United States as having:

* 5.7 schools per district,(*)

* 533 students per school,(*)

* 25 students per class,(*)and

* 121.4 classes per district.(**)

This means that the "average" school district would have to add 30.4 classrooms in order to bring its **class-size** average down to 20 students. While the "average" school district doesn't exist in most places, some interesting extrapolations can be made from the data when combined with typical **class sizes** in each state.

Assuming that the "average" district does exist in each state, it would have to add the indicated number of classrooms in order to achieve the 20 students per classroom standard set by California (see the third column in the chart below).

Based on these figures, California is in the worst shape, needing to add 48.2 classrooms to the "average" district while Nebraska, Vermont and South Dakota are already at or below the 20 student goal.

Obviously, this simplified analysis leaves out many factors. Dozens of other considerations, including increasing enrollment, differences in student populations in specific grades and the actual size of a district, impact the number of classrooms needed.

- Tim Bete, editor

State	Average Elementary **Class Size**(***)	New Classrooms Needed per "Average" District
California	29.3	48.2
Utah	27.5	41.4
Michigan	27.3	40.6
Maryland	26.3	36.4
Florida	26.0	35.1
Washington	25.9	34.6
Arizona	25.8	34.1
Pennsylvania	25.2	31.3
Ohio	25.0	30.4
Delaware	24.8	29.4
North Carolina	24.8	29.4

Colorado	24.7	28.9
Illinois	24.5	27.9
Minnesota	24.5	27.9
Kentucky	24.4	27.4
Nevada	24.4	27.4
Oregon	24.4	27.4
Tennessee	24.4	27.4
idaho	24.0	25.3
New York	23.9	24.8
Missouri	23.7	23.7
Hawaii	23.6	23.2
Mississippi	23.6	23.2
South Carolina	23.3	21.5
New Jersey	23.2	21.0
Rhode Island	23.2	21.0
Massachusetts	23.1	20.4
Wisconsin	23.1	20.4
Louisiana	22.9	19.2
Alaska	22.6	17.5
Virginia	22.6	17.5
Iowa	22.5	16.9
Georgia	22.2	15.1
Indiana	21.9	13.2
New Mexico	21.9	13.2
District of Columbia	21.8	12.5
New Hampshire	21.8	12.5
Alabama	21.7	11.9

Maine	21.5	10.6
Connecticut	21.4	9.9
Montana	21.2	8.6
Arkansas	21.0	7.2
Wyoming	21.0	7.2
West Virginia	20.9	6.5
North Dakota	20.7	5.1
Kansas	20.6	4.4
Oklahoma	20.5	3.7
Texas	20.1	0.8
Nebraska	20.0	0.0
Vermont	19.7	n/a
South Dakota	19.2	n/a

* Calculated from data from the National Center for Education Statistics.

** Calculated by Tim Bete from McKinsey data.

*** U.S. Department of Education, National Center for Education Statistics, Schools and Staffing Survey, 1993-94. Table 39-2: Public school teachers' average **class size**, by teacher level and state: School year 1993-94.

Steve Hymon is a California-based freelance writer.

GRAPHIC: Photograph; Table; Illustration

LANGUAGE: ENGLISH

LEVEL 2 - 2 OF 22 STORIES

U.S. News & World Report

October 13, 1997

SECTION: U.S. NEWS; Pg. 22

LENGTH: 3005 words

HEADLINE: Does **Class Size** Matter?

BYLINE: By Thomas Toch; Betsy Streisand; Steven Butler

DATELINE: Tokyo

HIGHLIGHT:
The newest trend can transform **schools**--or waste billions of dollars;

BODY:
There are so many students crammed into P.S. 14 in Queens, N.Y., that lunch is split into three shifts beginning at 10:25 a.m. To manage the traffic of 1,700 students, many of them recent immigrants from Latin America and South Asia, each grade level has its own designated exit door. An art studio and a science lab have been sacrificed for use as regular classrooms. Until two years ago, many students spent exercise periods in their classrooms because the **school's** gym was being used for regular studies. Dancing the macarena at their desks counted as physical education.

Most important, the size of P.S. 14's classes affects the way Rehana Longi teaches and the way her students learn. Angling her body to squeeze between desks, she struggles, unsuccessfully, to give each of her 34 fifth-grade students a few minutes of individual attention. During a 35-minute arithmetic lesson, she gets to check the answers of about 12 students. Creativity is limited. "There's a lot of emphasis on textbooks," she says. "It's got to be that way."

Not for many children in California. In Los Angeles's Hancock Park Elementary School, teacher Sandy Sutton spots one of the 20 students in her second-grade class struggling with a reading task. "Sssttttiiicckk," Sutton says, helping the girl sound out the word. Sutton says the shy kids in her class don't fade into thebackground as they once did. She can pinpoint slow readers within the first days of school and give them special attention. She can cover more ground during each class period.

In the past, Sutton routinely taught classes of 31 or 32 students and faced difficulties similar to Longi's. But last year the **size** of Sutton's **class** was cut under a wildly popular initiative pushed by Republican Gov. Pete Wilson to reduce the **size of classes** statewide in kindergarten through third grade. Sutton, for one, is thrilled at the change. "If I ever had to go back to that, I'd quit teaching," she declares.

The **class-size** cuts have already changed the look and feel of California's

schools, where nearly an eighth of the nation's students are enrolled. In slightly over a year, the state has created at least 17,000 new classes and over half of the state's 1.9 million eligible students have been placed in classes of no more than 20 students. (In recent years California has had classes averaging 30 students.) Parents overwhelmingly say that smaller classes have increased their children's reading and writing skills. Perhaps most amazingly, parents in Beverly Hills and other affluent enclaves have begun shifting allegiances to public schools, in part because they are now guaranteed small classes similar to those offered by private schools.

As a result of the **class-size** initiative, Wilson's approval ratings are now the highest he has enjoyed. Democrats in the state legislature are singing the reform's praises. Even the state's teachers' unions have been silenced by surveys showing that over 90 percent of their members believe the class cuts have improved instruction.

"Silver bullet." As President Clinton and Congress fight in Washington over the wisdom of using national exams to spur school improvement, California has found that this bold solution has forged a rare alliance of educators, Democrats, Republicans, unions, and taxpayers. And California's **class-size** trend seems to be spilling into other states. The Wisconsin Senate last month approved a plan to spend up to $ 50 million to reduce average **class sizes** in poor areas to 18 students or fewer. The move is "a silver bullet, a sure-fire, proven way to improve the quality of education," says Democratic state Sen. Chuck Chvala. New York, North Carolina, and several other states also have passed class-shrinking measures recently, and another half dozen are debating such steps. The issue is expected to be the center of discussion during a special session of the Florida legislature this fall.

But there is one catch: Reducing **class size** is expensive. California is spending $ 2.5 billion over two years to cut **class size**, and the annual cost of sustaining the reform will start at about $ 1.5 billion (a 7.5 percent increase in state-level education spending) and rise steadily as new teachers climb salary ladders. To reduce the average **class size** by 10 students nationally would cost on the order of $ 85 billion for teachers alone. But while the California approach is politically popular, across-the-board cuts in **class size** are not the most cost-effective way to spend education money. As the **class-size** crusade spreads to other states, the question of how the reform is implemented--who benefits and who doesn't--deserves scrutiny. Smaller classes could be one of the most important school reforms of recent years--or a colossal waste of money.

The popularity of the **class-size** initiative stems in part from the perception among parents that increases in education spending over the years haven't found their way into classrooms. On the one hand, public-education spending has increased by at least 61 percent beyond inflation during the past 30 years, and the bulk of the money has been spent on hiring new teachers. Yet the size of regular classrooms has dropped only slightly, largely because the majority of the new teachers work with small groups of disabled students and others with special needs. Wilson rallied support for his expensive initiative by saying he would give subsidies only to those schools that actually succeeded in reducing **class size**. To voters, smaller **classes** are "the single strongest rationale for spending more money on schools," says pollster Celinda Lake of Lake Sosin Snell Perry & Associates. Indeed, nearly 60 percent of parents surveyed in a new U.S. News poll say they'd be more likely to vote for a

political candidate who wants to raise taxes if the money went to pay for smaller **class sizes** in kindergarten through third grade. The poll was designed for U.S. News by Democrat Lake with Republican pollster Ed Goeas.

In some regions, large classes are a serious problem. While the average elementary **class size** in the nation's public schools has declined from 30 to 25 over the past four decades, poor urban school systems continue to struggle with overflowing classrooms. So do schools in Florida and other booming Sun Belt states. The problem isn't likely to ease: Enrollment is expected to increase by 2 million students nationally during the next decade.

In deciding to invest so heavily in smaller classes, Wilson's advisers relied on the findings of an experiment in Tennessee called Project STAR, the nation's only large, long-term study of **class size.** In 1985, Tennessee put 6,500 kindergartners in 330 **classes** of different **sizes.** A third of the **classes** had between 13 and 17 students; a third had between 22 and 26 students, the typical size of classrooms in the state; and a third had enrollments of 22 to 26 students plus a full-time teacher's aide. The students in small classes stayed in them for four years and then returned to larger ones in the fourth grade. The test scores and behavior of students in the small classes were better than those of kids in the larger classes. For instance, 69 percent of first graders in smaller classes passed the state's reading test, compared with 58 percent of students in larger groups. Teachers said students who had been in the smaller classes also paid closer attention, asked more questions, and had fewer discipline problems. They even participated more in school clubs and generally became more engaged in school life.

But the benefits that the Tennessee study found in smaller classes are easily squandered if implementation isn't handled properly. California, in reducing **class size,** might be lowering the quality of teaching. School districts have had to find teachers for the 18,000 new slots; as a result, nearly two thirds of the new hires have little or no teaching experience. In Los Angeles, new teachers have included Nordstrom clerks, a former clown, and several chiropractors. The state needs to hire 15,000 more teachers in the next 10 months. While some of the new blood may be good, education experts like Michael Kirst of Stanford University believe that the quality of many new hires is suspect--and the schools may be stuck with bad teachers for many years. Urban schools with a lot of tough-to-educate kids are suffering the most. Not only is it difficult to lure new teachers into the inner city but many of their best veterans are departing for openings created by the **class-size** initiative in often higher-paying and less stressful suburbs.

While students may be getting more attention, new teachers may be getting less. The California State University system, which trains 60 percent of the state's teachers, will start offering courses needed for teaching licenses over the Internet in January. Teachers-in-training will be able to earn a semester's course credit using a textbook and a 4 1/2-hour video of classroom techniques.

Some schools have resorted to steps that directly undermine the potential value of the **class-size** initiative. Last year many schools placed 40 students in single rooms with two teachers; in others, two teachers traded off teaching the entire group of 40 students. Some schools have even assigned three classes to two rooms, with each class rotating in and out during the day. "It was a nightmare," says Teri Ortt, a second-grade teacher at Hobart Elementary School

in Los Angeles who was in such a "troika" system last year. "Teachers were constantly packing up their students and teaching materials, grabbing two hours of class time in the library or outside under a tree."

Breathing room. Smaller classes and more teachers require more classrooms than California schools can currently provide. Hundreds of schools have given up libraries and science labs for class space. Others have discontinued preschool and parent-education programs for lack of room. At Hancock Park, two third-grade classes are set up in the school's auditorium. Statewide, schools are parking portable classrooms on their playgrounds as fast as they can purchase them; more than 7,000 are already on back order. Several thousand of the portables in place are hastily constructed "temporary" structures that state law permits schools to use for only two years.

Many crowded inner-city schools--including 57 schools in Los Angeles--don't have room even for portables, however, and are thus unable to fully reduce **class sizes**. The state's richer suburban school systems, on the other hand, have room to expand and are reducing **class sizes** for a greater percentage of their students, officials say. Once the cost of new construction is considered, the true cost of the **class-size** initiative may be far higher than now projected.

Beyond the practical difficulties of introducing **class-size** cuts on a California-like scale, there is a more fundamental question: Is the effort to make this initiative broadly popular wasting money on students and schools where the impact will be minimal? All parents want their children in small classes, but the Tennessee STAR study found that smaller classes helped disadvantaged students, many of whom were African-American, more than they helped affluent students. Black students in the larger first-grade classes scored 14 percent below whites on a key reading test, but the gap narrowed to 4 percent in the smaller classes. A major study of **class size** to be released this fall by Rand of Santa Monica, Calif., reaches a similar conclusion: Smaller classes benefit students from low-income families most, middle-class kids less, and those from upper-income backgrounds least of all.

Efforts to reduce **class size** are more cost effective if focused on certain subjects. It makes more sense, experts say, to have larger groups during instruction in subjects such as music and to create smaller groupings during the teaching of reading, the most important elementary school subject. Over 700 schools have done just that as part of a reading program called Success for All, and the achievement results have been impressive. Robert Slavin, the Johns Hopkins University professor who developed the approach, says California could have improved instruction in its elementary schools dramatically for a fraction of the money it has spent simply by hiring and carefully training retired teachers and other part-timers as reading instructors to reduce the **size of classes** during the time reading is taught.

States that shrink **class size** by only a few students across the board will probably be throwing their money down the drain. Studies have shown that benefits become measurable only if classes are cut by a third or more--and even then such cuts may make only a marginal difference in affluent areas. Yet the 141,000-student Palm Beach County, Fla., school system just spent nearly $ 6 million hiring 220 teachers to reduce **class sizes** in kindergarten through 12th grade by about one student per class. Part of the reason Tennessee succeeded was that its schools got STAR classes down to the very low average of 15 (often low-income) students--and even then many researchers considered the actual

improvements in test scores to be modest, given the reform's cost. The new Rand study also suggests that there's more benefit to reducing **class sizes** in early elementary grades than in middle schools and high schools.

Reducing **class size** seems to be most effective in combination with other reforms. Evidence comes from a study of 16 low-income schools in Austin, Texas. In the late 1980s, each of the schools was awarded an extra $ 300,000 a year for five years as part of a desegregation case. Fourteen of the schools spent the money to reduce **class size** and yet in five years didn't manage to improve student attendance or test scores. But the other two schools reduced **class size**, set higher standards, provided intensive teacher training, and established health clinics on their grounds to address physical problems that were keeping students from learning. Test scores and attendance both improved significantly at those schools.

Money is also wasted if classes get smaller but teachers don't adjust their styles. Yet teachers in schools that have cut **class sizes** often continue to use large-class techniques like relying on textbooks, instead of working directly with students, says Nikola Filby, a researcher at WestEd, a San Francisco-based think tank.

Japanese style. In fact, schools can get many of the benefits of smaller classes, without the cost, by making classes seem small. In Japan, where classes often include as many as 40 students, teachers involve students without relying on one-on-one contact by frequently asking small groups of students to present their findings to the entire class. They build self-discipline among students by giving them responsibilities like calling the class to order after recess. Japanese schools work hard to build bonds between teachers and students, devoting as many as 30 days a year to hiking excursions, festivals, and other activities, says Catherine Lewis, author of Educating Hearts and Minds, a study of Japanese schools. (Japan is, however, concerned that its education system discourages creativity and independent thinking, and a government panel recently recommended that the average **class size** of 29 students be lowered to help teachers nurture students' talents.)

In this country, Catholic schools, which have earned a reputation for doing a good job educating disadvantaged urban students, often have classes of over 30 students. They compensate with high expectations, traditional teacher lecturing, and a strong sense of community that makes kids feel cared about. And P.S. 14 shows that bulging big-city schools can work: A sense of order pervades the school, and teacher morale is surprisingly high.

Educationally, using smaller classes selectively produces the biggest dividends. It frees up money to spend on other reforms that dollar for dollar have produced greater increases in student achievement, such as high-quality teacher training and peer tutoring. Unfortunately, a targeted approach may undermine the political effectiveness of reducing **class size.** An instructive analogy is Social Security. It is arguably an incredibly inefficient way of reducing poverty among the aged because so many middle- and upper-income families benefit. Yet because the program was designed to be universal--helping seniors regardless of background--it has enjoyed broad support for decades. The **class-size** initiative may prove to be similar. California's approach may be an inefficient but reasonable compromise between what's substantively ideal and what's politically possible.

Class size
States with largest and smallest average **class sizes** in 1993-94

LARGEST		SMALLEST	
state	students per class	state	students per class
1. California	30.1	1. Vermont	20.4
2. Maryland	28.7	2. S. Dakota	20.7
3. Utah	28.7	3. Kansas	21.0
4. Washington	28.6	4. Montana	21.5
5. Florida	27.7	5. Arkansas	21.6

Source: U.S. Dept. of Education

Future shock
Enrollment in the nation's schools is expected to grow by 2 million students during the next decade, making smaller classes tougher to achieve.
Students K-12
[Data for chart is not available.]

Number of teachers
[Data for chart is not available.]
Source: U.S. Dept. of Education

GRAPHIC: Picture, Crowd control. Rehana Longi's fifth-grade class at P.S. 14 in Queens has 34 kids. Giving attention to individuals is difficult. (Photography by Kenneth Jarecke--Contact for USN&WR); Picture, Close encounters. Sandra Kessler teaches her third-grade class at Carpenter Avenue Elementary School in Studio City, Calif. The class now has fewer than 20 students. (Photography by Kenneth Jarecke--Contact for USN&WR); Picture, Teacher school. California has hired 16,700 new teachers, including chiropractors and a former clown. Here, some trainees get instruction at the Lanai Road Elementary School in L.A. (Photography by Kenneth Jarecke--Contact for USN&WR); Picture, A popular reform. Shrinking **class size** has proved wildly popular. But the reform is most effective when targeted to low-income students, and when used for teaching reading. (Photography by Kenneth Jarecke--Contact for USN&WR)

LANGUAGE: ENGLISH

LOAD-DATE: October 9, 1997

LEVEL 2 - 1 OF 22 STORIES

U.S. News & World Report

November 17, 1997

SECTION: OUTLOOK; UPDATE; Pg. 5

LENGTH: 430 words

HEADLINE: **Class size:** a cutting edge issue?

BYLINE: By Kent Jenkins Jr.

BODY:

Republican James S. Gilmore was elected governor of Virginia last week after a campaign dominated by his promise to cut an unpopular tax on cars. But a second issue, whose impact went largely unnoticed, also played a key role in the victory: Gilmore's promise to reduce the **size of classes** in elementary **schools.**

It is an idea whose political appeal is growing greater. In California, as reported by U.S. News ("Does **Class Size** Matter?" October 13), Gov. Pete Wilson has already won wide acclaim for a program to reduce **class size.** But Gilmore went even further, turning **class size** into a partisan issue. Don Beyer, the Democrat who lost to Gilmore, had campaigned under the slogan "Education First!" He proposed to improve education by significantly raising teachers' salaries--a notion that Virginians had supported in the past. By contrast, Gilmore promised to give teachers only a cost-of-living raise--and to apply the savings to hiring new teachers.

Virginia Democrats and Republicans both say their polls found that Gilmore's approach proved more popular with voters than Beyer's. This was particularly significant--and surprising--because support for education traditionally has been one of the great political strengths of the Democratic Party.

M. Boyd Marcus, a senior strategist for Gilmore, said he believes that even though the GOP candidate's proposed tax cut was hugely popular, taxes alone would not have turned the election. "[The **class-size** initiative] opened people's eyes and ears and showed them this guy was serious about education," said Marcus.

Gilmore's success could give the issue a big national boost with the GOP, which is seeking new ideas on education. Clinton Key, executive director of the Republican Governors Association, said he is certain that the question of **class size** will surface at the group's annual meeting later this month. The session will focus on education.

In Congress, reducing the **size of classes** may well attract GOP lawmakers who have had little success winning broad public support for such complex proposals as quasi-independent "charter schools" or taxpayer-funded vouchers that subsidize private-school tuition. Several Republican strategists say that class reduction is especially appealing because it is easy to understand and reflects

common sense. The idea offers extra political appeal for Republicans with its emphasis on limiting teacher raises. That is one political gesture that won't be lost on the National Education Association, which has long been strongly Democratic.

GRAPHIC: Picture, A class issue for voters (Kenneth Jarecke--Contact for USN&WR)

LANGUAGE: ENGLISH

LOAD-DATE: November 14, 1997

LEVEL 1 - 196 OF 201 STORIES

January, 1996

SECTION: Vol. 34 ; No. 1 ; Pg. 152; ISSN: 0095-2583

LENGTH: 9439 words

HEADLINE: The influence of classroom characteristics on high **school** teacher turnover.

BYLINE: Mont, Daniel ; Rees, Daniel I.

BODY:

I. INTRODUCTION

A number of authors have suggested that the U.S. will face a shortage of qualified teachers in the near future, especially in the areas of math and science.(1) **School** districts facing such a shortage could respond in a variety of ways. For instance, hiring standards could be lowered, teachers could be asked to teach outside their areas of certification, or, funds permitting, starting salaries could be increased in an effort to attract the most promising candidates.

Still another option would be to raise teaching loads (i.e., average **class size** or the number of **classes** taught), thus making do with fewer teachers. This option is particularly alluring in light of the fact that average **class size** has been falling rapidly in the U.S. over the last twenty years, and yet no strong connection between smaller classes and increased student learning has been established.(2)

There is, however, a possible hidden cost that needs to be investigated before recommending such a course of action. If teachers respond to larger or more frequent classes by quitting, then a district that tries to solve its hiring problems in this fashion could simply be increasing its demand for new teachers.

This paper uses data from the New York State Education Department's Personnel Master File for the years 1979 to 1989 in order to investigate whether an increased teaching load affects the likelihood that a teacher will leave his or her district. In order to obtain an unbiased sample of job lengths, the sample is restricted to full-time high school teachers who were newly hired in 1979.(3) We estimate a discrete-time hazard model in which teaching load is measured as the average **class size** taught by an individual, the number of classes taught, and the proportion of classes taught in the teacher's certified area. In interpreting our results we pay special attention to whether the behavior of math and science teachers differs from that of other teachers. This is an important issue because shortages of qualified teachers in these two areas

are predicted to be especially acute.

II. BACKGROUND

The market for teachers differs from a well-functioning neoclassical labor market in that salaries are determined through a political process involving various levels of government, the public, and often teachers unions.(4) If the demand for teachers increases as retirements and student enrollment increase, then starting salaries cannot be counted on to quickly move to the market-clearing level, and thus a shortage of teachers becomes a possibility.(5) Few observers, however, believe that there will be an actual shortage of warm bodies. The more likely scenario is that there will be a lack of teachers trained in specific areas and of high-quality teachers in general (see Murnane et al. 1991,1-2).

Given a limited budget, what are the options available to a school district facing this type of shortage? The district could settle for hiring lower quality teachers, but this might be seen as an unnecessary measure, with long-term implications, taken in response to what could be a temporary situation. Another option that has been suggested is to increase teacher workloads.(6) Whether this option is workable depends, in part, on the exit decisions of teachers.

A large number of empirical studies have investigated the determinants of teacher turnover. However, no work specifically directed toward capturing the effect of increased teaching responsibilities on turnover has been done.(7) Without knowing whether such an effect exists, and what the magnitude of it might be, informed policy decisions at the district level in response to a shortage of qualified teachers becomes impossible.

Past studies have shown that the probability of a teacher leaving his or her job is high in the first few years after entering the profession, falls after the third year,(8) and again increases as the teacher nears retirement age (Murnane et al. 1991, 5963 ; Eberts 1987 ; Greenberg and McCall 1974). It is possible that as shortages materialize districts will be more reluctant to fire marginal teachers when they come up for tenure. Certainly the opposite is true: declining student enrollments during the 1970s led to increased terminations of younger teachers (Murnane 1981).

Higher salaries are another factor associated with greater retention of teachers (Rees 1991 ; Murnane and Olsen 1989; 1990 ; Baugh and Stone 1982). The effect of increased salaries is especially pronounced for beginning teachers (Murnane et al. 1991, 71-75).

Studies by Murnane et al. 1991, 67-71 and Murnane and Olsen 1990; 1989 have emphasized the role of outside opportunities in a teacher's decision to leave the profession. They find that higher teacher test-scores are associated with a greater likelihood of leaving, and that high school physics and chemistry teachers are more likely to leave than their colleagues in other areas. These results suggest the possibility that increased teaching responsibilities could drive out those teachers who are the most difficult to replace.(9)

Finally, factors associated with unionization seem to affect teacher exit behavior. Eberts 1987 shows that teacher turnover is reduced by the presence of layoff and **class size** provisions in the collective bargaining agreement. He argues that these provisions acted as guarantees against layoffs, and so are

viewed as a type of job benefit. Rees 1991 finds that stronger grievance procedures are associated with a lower probability of quitting, and argues that a union "voice effect" on quits is responsible. Both of these lines of research point to the importance of union rules and institutions in the exit decisions of teachers. Indeed, where there exist strong contract provisions with regard to the maximum number of hours in a day or students in a class, it would be difficult for a district to increase teaching loads in response to a shortage of qualified teachers.(10)

III. THE DATA

Data for this study were primarily drawn from the New York State Education Department's Personnel Master File.(11) Every year the New York Education Department surveys all public school teachers in New York State, asking a wide range of questions having to do with personal characteristics and working conditions. Each teacher is assigned an ID that is constant across years, so it is possible to collect information on a teacher over the course of his or her career.

Our sample consists of 525 individuals, all of whom were newly hired by a district outside of New York City in the fall of 1979.(12) Only full-time academic teachers with pupils in grades 9 through 12 were included in the sample.(13)

A job separation was defined as a teacher leaving his or her district. Teachers were defined as having left their original 1979 school district if they did not appear in the Personal Master File for two years running, or if their district code changed and did not change back in the next year. It is common for teachers to take a leave of absence or a sabbatic. Therefore an absence of two years instead of one was used to indicate a separation.(14) In fact, many teachers in the sample were absent for one year and then returned to teaching in the same district. Those teachers who were not separated from their original district were followed until 1987, at which time they were right-censored.(15)

IV. EMPIRICAL ANALYSIS

Survival Analysis

A discrete hazard model was estimated to determine the correlates of teacher job turnover. This model provides estimates for the probability of experiencing a job separation conditional on the number of years employed. For example, it estimates the probability of experiencing a job separation in one's third year of job tenure conditional on still being employed in that third year.

More formally, a discrete-time hazard rate at time f is defined as

P.sub.it - Prob (T.sub.i = t (T.sub.i greater than or equal to t, X.sub.it)

where T.sub.i is the period job i terminates, and X.sub.it is a vector of explanatory variables. It can be shown that the log likelihood function for estimating a discrete-time hazard rate is simply

Mathematical Expression Omitted

where y.sub.it equals one if a separation occurs at time t and zero otherwise, and t.sub.i is the final period in which job i is observed.(16)

Since the above likelihood function is simply the likelihood function for the ordinary regression analysis of a limited dependent variable, it can be estimated using a standard maximum likelihood logit program. The only difference is that a unit of observation is no longer a job per se, but a job-year.(17)

Survival analysis was used previously to determine teacher job separations by Murnane and Olsen 1989; 1990 , Willet and Singer 1988 , Mark and Anderson 1978; 1985 , and Whitener 1965 , but these studies lacked information on class characteristics other than subject specialties.

Quits vs. Layoffs

There are basically two types of separations--involuntary and voluntary. The determinants of job quits versus job layoffs can be similar or quite different. We expect age to be correlated with fewer quits (as predicted by job-matching models) as well as fewer layoffs (as predicted by models with specific human capital or seniority), at least prior to retirement years. However, there are other variables, for example **class size,** that may act differently on quits than on layoffs. Smaller **class sizes** might be desirable and thus lessen quits. However, smaller **class sizes** might mean a school district's population is shrinking and it requires fewer teachers and so increases layoffs. Unfortunately, as in other studies of teacher turnover (Murnane and Olsen 1989; 1990 , Eberts 1987 , Grissmer and Kirby 1987 , and Murnane 1981) quits and layoffs can not be distinguished. This muddies the analysis, but the issue will be addressed at least partially by taking into account the institution of tenure within the teaching profession.

The Explanatory Variables

Economic research on quit behavior typically begins with the assumption that workers compare the expected utility from staying at their current job with the expected utility that could be realized at the next best alternative. Ideally, then, one would like to have information on current working conditions and pecuniary rewards, and at least some proxies for these variables at alternative jobs.

Because of data limitations, most empirical studies have employed only broad (school or district level) measures of working conditions at the current job. Our specification, however, includes a number of teacher-specific variables relating to current working conditions. Those of primary interest are average **class size** (CSIZE), number of **classes** taught (CNUMBER), and the proportion of classes taught in the teacher's certified area (CERT). They serve as measures of the amount of stress, preparation time, and grading time involved in class room teaching. Also included in the vector X.sub.it is a variable representing the average quality of students taught by a teacher (AQUAL).

In addition to the above measures, we employ a number of district-level explanatory variables, such as high school enrollment, the dropout rate, the percentage of students who go on to college, the percentage of white students, and the percentage of households in the district with children. These variables

are intended as indirect measures of working conditions at the current job.(18) Other district-level explanatory variables can be thought of as indicators of the availability and/or desirability of alternative employment, as well as influencing conditions at the current job. Median household income and the percentage of residents who live in an urban area fall into this category.(19)

We use starting salary as our measure of the expected pecuniary returns to remaining at the current job. Thus, following Finnie and Mont 1991 and Meitzen 1986 , the entire salary projection path is conceptually collapsed into one variable. A number of teacher turnover studies have used current salary to measure the pecuniary returns to remaining on the job. This alternative approach yielded similar results to those reported below.(20)

Finally, previous work has shown that many personal characteristics such as age, sex, and job tenure influence job separations, both for workers in general (Finnie and Mont 1991 , Light and Ureta 1990 , Meitzen 1986) and teachers in particular (e.g., Jacobsen and Sweet 1982 , Greenberg and McCall 1974). A group of personal variables was therefore included in the empirical specification, although race and ethnic background variables were not available. A list of all independent variables employed in this study can be found in Table I. Means and standard deviations are shown in Table II.

TABLE I

Variable Definitions

From the New York State Education Department's Personnel Master File, 1979-1989

Time Varying:

CNUMBER number of classes taught

CERT percent of classes taught in area of certification

AQUAL AQUAL is the average of a "quality of students" variable for each class taught.

The "quality of students" variable for each class is coded as follows:

1 = below average

2 = average

3 = above average

Class quality was determined by the teacher.

CSIZE average **class size**

CSIZESQ CSIZE squared

BELOW a dummy variable equal to one if a teacher's average **class size** is

below the

mean **class size** of the sample

ABOVE a dummy variable equal to one if a teacher's average **class size** is above the

mean **class size** of the sample

YR1 dummy equal to one if the first year on this job

YR456 dummy equal to one if the fourth, fifth, or sixth year on the job

YR789 dummy equal to one if the seventh, eighth, or ninth year on the job

(note: the ninth year is the last year observed)

Time Invariant:

FEMALE dummy variable equal to one if female

SALARY starting salary in thousands of $ 1979

AGE age in years

EXPER years of teaching experience prior to starting the observed job

PHD dummy variable equal to one if teacher holds a Ph.D.

From the NYS Education Department's Institutional Master File, 1979-1987

Time Varying:

ENROLL the high school enrollment of the teacher's school district in thousands

PDROP the percentage of high school students in a teacher's school district that drop

out of school each academic year

P4YEAR the percentage of high school seniors in a teacher's school district that graduate

and go on to attend a four year college

PWHITE percentage of high school students in a teacher's school district that are white

From the 1980 Census of the Population: School District File

Time Invariant:
PURBAN percentage of residents in a teacher's school district that live in an urban area PHHWC percentage of families in a teacher's school district that have children MHI79 The median household income of residents in a teacher's school district in 1979,

in thousands of 1979 dollars

TABLE II

Sample Means

(standard deviations in parentheses)

	Mean
FEMALE	0.631
	(0.48)
SALARY	14.988
	(4.63)
AGE	31.966
	(8.03)
CNUMBER	5.013
	(0.81)
CERT	0.983
	(0.10)
PHD	0.013
	(0.11)
EXPER	7.295
	(6.43)
AQUAL	2.035
	(0.45)

CSIZE	20.763
	(4.77)
CSIZESQ	453.839
	(192.70)
YR1	0.156
	(0.36)
YR456	0.215
	(0.41)
YR789	0.126
	(0.33)
ENROLL	1.285
	(3.24)
PDROP	0.027
	(0.02)
P4YEAR	0.172
	(0.20)
PWHITE	0.742
	(0.22)
PURBAN	0.507
	(0.47)
PHHWC	0.679
	(0.09)
MH179	19.753
	(5.86)

n = 1362

Results

Initially we divided the sample according to whether an individual taught in the math and sciences or in another discipline. A log-likelihood ratio test indicated that very little is gained in explanatory power by dividing the sample along these lines.(21) In other words, it would seem that the exit behavior of math and science teachers is not significantly different from their colleagues specializing in other academic areas. Thus the hazard model estimations, reported in Table III, are for the full sample of teachers. The first specification (column 1), which does not include district variables, is rejected at the 99 percent confidence level in favor of a specification in which district variables are included (column 2). This result indicates the importance of these variables as correlates of teacher attrition.

TABLE III

Hazard Estimation Results: Full Sample

	(1)	(2)
CONSTANT	1.338	1.384
	(1.33)	(1.10)
FEMALE	-.202	-.324
	(1.57)	(1.22)
SALARY	-.077(**)	-.069(**)
	(3.75)	(2.34)
AGE	.032(**)	.051(**)
	(2.44)	(3.37)
CNUMBER	-.073	-.061
	(0.87)	(0.66)
CERT	-.983(*)	-.982(*)
	(1.76)	(1.69)
PHD	.219	.137
	(.46)	(0.23)
EXPER	-.020	-.079(*)
	(1.04)	(1.69)
AQUAL	-.398(**)	-.803(**)
	(2.79)	(4.97)

CSIZE	-.091(*)	-.217(**)
	(1.81)	(2.96)
CSIZESQ	.0025(**)	.0051(**)
	(2.07)	(2.99)
YR1	1.490(**)	.697
	(9.09)	(2.47)
YR456	.022	-.104
	(.12)	(0.52)
YR789	-.246	-.067
	(1.16)	(0.27)
ENROLL		-.007
		(0.27)
PDROP		5.888
		(1.15)
P4YEAR		-1.172
		(1.09)
PWHITE		-.602
		(1.15)
PURBAN		-.276
		(1.08)
PHHWC		-2.23(*)
		(1.81)
MHI79		.054(**)
		(2.11)
-2 Xlog likelihood	1758.01	1418.58
job endings	392	285
observations	2078	13262

(*) significant at 90% confidence level

(**) significant at 95% confidence level
absolute t-statistics in parentheses

Student Quality. Student quality is found to be significantly linked to the probability of observing a separation. As indicated by the negative coefficient, higher levels of student quality lessened the probability of a teacher leaving. No rationale could be developed for why student quality would be linked to layoffs. District characteristics such as income are controlled for, and the sample does not include special education teachers who might experience a different susceptibility to budget cuts than regular teachers. Therefore, it is hypothesized that higher student quality diminished quits. Teaching students with higher abilities might be associated with different amount of flexibility and variability in curriculum, fewer disciplinary problems, or a different level of personal satisfaction.

Average **Class Size.** The estimated coefficients of average **class size** (CSIZE) and **class size** squared (CSIZESQ) indicate that at low average **class sizes,** cutting **class size** would increase turnover, and at high levels of average **class size** cutting **class size** would decrease turnover. The turning point, in fact, occurs at just about the sample mean.(22) One explanation for this could be that the first effect is a result of layoffs and the second effect is the result of quits. In other words, when **class sizes** shrink to very small levels positions are eliminated, but when **class sizes** get too big teachers quit because of poor working conditions. Since we are interested in the determinants of teacher retention vis-'a-vis quits, this poses a problem.

One way to address this issue is to re-estimate the model separately for teachers with four or more years of experience and for teachers with less than four years of experience. All teachers in New York State who enter their fourth year of full-time permanent employment have tenure. It is very difficult to fire them, and they are less susceptible to layoffs then nontenured teachers. The coefficients for average **class size and class size** squared obtained using these subsamples (reported in Table IV) show no substantial difference from the results for the full sample. Although the tenured sample is not immune from layoffs, the results provide some support for the hypothesis that the observed effect of average **class size** is being driven by quits.

TABLE IV

Results from Sample Divided by Length of Job Tenure

	4 or more years(a)	Less than 4 years
CONSTANT	1.22	2.49
	(0.81)	(0.83)
FEMALE	-.197	-1.01

	(1.11)	(1.40)
SALARY	-.062(**)	-.073(*)
	(2.27)	(1.86)
AGE	.047(**)	.087(**)
	(2.49)	(2.56)
CNUMBER	-.031	-.164
	(0.29)	(0.73)
CERT	-.350	-2.479(*)
	(0.46)	(1.65)
PHD	.078	1.48
	(0.12)	(0.64)
EXPERIENCE	.025	-.851(*)
	(0.65)	(3.21)
AQUAL	-.818	-.627(*)
	(4.20)	(1.83)
CSIZE	-.124(*)	-.165(**)
	(1.94)	(2.82)
CSIZESQ	.0047(**)	.0046(**)
	(2.43)	(2.04),
YR789	-.012	NA(b)
	(0.06)	
ENROLL	-.012	.002(**)
	(0.30)	(2.17)
PDROP	8.47	1.58
	(1.36)	(0.12)
P4YEAR	-2.12(*)	4.52(**)
	(1.87)	(3.62)
PWHITE	-.333	-2.495(**)

	(0.46)	(3.03)
PURBAN	-.357	-.541
	(1.21)	(0.86)
PHHWC	-3.317(**)	5.376(*)
	(2.26)	(1.83)
MH179	.089(**)	-.002(**)
	(2.90)	(2.30)
-2 X log likelihood	556.83	626.7
job endings	88	207
observations	761	601

(*) significant at 90% confidence level

(**) significant at 95% confidence level

absolute t-statistics in parentheses

(a) The sample for this specification consists of only those teachers who were in the previous sample but did not experience a job separation prior to their fourth year of teaching. This means that all teachers in this sample are tenured. (b) not applicable for this sample.

To further investigate this issue, expected separation probabilities were estimated to examine the magnitude of the average **class size** effect above and below the turning point. Again, it turns out that this point is just below the sample mean in every case. Therefore, expected separation probabilities were computed using actual **class size**, and 60 percent, 80 percent, 120 percent and 140 percent of average **class size**. The expected separation probability estimated using actual **class size**, of course, preserves the sample mean.

The expected separation probabilities were estimated as follows: average **class size** was set equal to .6 x CSIZE and **class size** squared was set equal to the square of .6 x CSIZE for every observation in the sample used to estimate the model in column 2. Then the probability of observing a separation for every observation in the sample was computed using the parameter estimates in column 2. The mean of these probabilities is the predicted separation rate conditional on a 40 percent decrease in average **class size**. The same method was used for the other levels of average **class size**.

These results are presented in Table V. They demonstrate that the practical

significance of the average **class size** effect is much larger above the mean (when increases in average **class size** are associated with a higher probability of a job separation) than they are below the mean (when increases in average **class size** are associated with a lower probability of a separation). Increasing average **class size** by 40 percent is predicted to increase the separation rate from .209 to .349, an increase of 67 percent. Decreasing average **class size** by 40 percent only increases the separation rate from .209 to .218, an increase of less than 5 percent.

In Table VI, we split average **class size** and average **class size** squared into four variables, allowing for unrelated effects of average **class size** above and below the mean. The results in Table VI suggest that there is no significant relationship between average **class size** and the probability of a job separation when average **class size** is below the sample mean. A positive relationship between job separations and increases in average **class size** is found above the sample mean. Although the coefficient on the above-average **class size** variable is negative, it must be remembered that this variable is equal to zero for every observation where average **class size** is less than the sample mean. When average **class size** is equal to or above the sample mean, the combined effect of above-average **class size** and its square is such that an increase in average **class size** leads to an increase in the probability of a job separation. This supports the hypothesis that small **class sizes** are not associated with layoffs, but large **class sizes** are associated with quits.(23)

Number of Classes. There was no statistically significant correlation between the number of classes taught and turnover. Teachers with smaller class loads might have more administrative duties and thus may be more likely to leave their jobs for administrative positions, whereas teachers with very high class loads might leave their jobs looking for better working conditions. It may be that these two effects counterbalance each other, leading to no relationship between **class size** and turnover.

Proportion of **Classes** Taught in Area of Certification. Although there was not much variance in this variable, it still was found to be significantly correlated with the probability of separation. The probabilities reported in Table V suggest, holding other factors constant, that decreasing the percentage of classes taught in one's area of certification by 10 percent is likely to increase the job separation rate by approximately 3 percent. Once again, teaching out of one's certification area could either be considered a poor working condition that inspires quits, or a sign that one's skills are not those required by a school district, inspiring layoffs. However, very few teachers taught less than 80 percent of their classes in their area of certification, so even in the most extreme case most classes were being taught within a teacher's specialty. This combined with the negative coefficient of CERT in the model using only tenured teachers (see Table IV), seems to suggest that this may be more of a quit effect than a layoff effect.

TABLE VI

Allowing for Different Effects of **Class Size** above and

below Its Mean.sup.a

BELOW x CSIZE	-.087
	(0.92)
BELOW x CSIZESQ	-.0033
	(0.79)
ABOVE x CSIZE	-.217(**)
	(1.99)
ABOVE x CSIZESQ	.0053(**)
	(2.06)
-2 x log likelihood	1236.51
job endings	285
observations	1362

(*) significant at 90% confidence level

(**) significant at 95% confidence level

absolute t-statistics in parentheses

(a) Other coefficients suppressed

TABLE V

Mean Probability of Job Separation.sup.a

Baseline.sup.b	.209
Year 1	.331
Years 2-3	.229
Years 4-6	.167
Years 7-9	.091
Females	.198
Males	.230

.6 x Average Class Size	.218
.8 x Average Class Size	.214
Actual Average Class Size.sup.C	.209
1.2 x Average Class Size	.242
1.4 x Average Class Size	.349
.8 x Salary	.261
.9 x Salary	.246
Actual Salary.sup.c	.209
1.1 x Salary	.196
1.2 x Salary	.183
.8 x % Classes in Certification Area	.227
.9 x % Classes in Certification Area	.216
Actual % Classes in Certification Area	.209

(a) The method for computing these mean probabilities is described in section IV.

(b) Baseline is computed by taking the average of the predicted probability of observing a job separation for each observation in the sample. This is equivalent to the percentage of observations experiencing a job separation, i.e. 285/1362 = .209.

(c) Equivalent to the baseline.

Job Length. As predicted by standard job-matching models and as found in numerous other job separation studies, the probability of job separations decreases with job length (Finnie and Mont 1991 , Meitzen 1986).(24) The expected separation probabilities generated for Table V predict that the turnover rate in the first year is .331. This drops to .229 for the next two years even before the tenure decision occurs. By years seven, eight, and nine, this drops further to .091. These predictions are in keeping with national statistics on teacher quit rates.(25)

Salary. As expected, higher salaries were associated with fewer quits. In the past there has been some conflicting evidence on the effect of salaries on

teacher attrition. At least one study, Eberts 1987 , was unable to find a statistically significant relationship between salary and attrition rates, while other studies have found strong evidence of a negative relationship between salary and the probability that a teacher leaves his or her district (Murnane and Olsen 1989; 1990 ; Baugh and Stone 1982). Our estimates suggest that, holding other factors constant, a 10 percent increase in starting salaries would lower attrition rates by approximately 6 percent.

District Variables. Estimates from the full and tenured samples suggest that as median household income in a district rises, teachers are more likely to leave their job. This result might be ascribed to the availability of better non-teaching opportunities in higher-income districts. In the sample of teachers with less than four years of experience, the opposite relationship is found. For these newer teachers it is possible that working conditions associated with the higher-income districts may out weigh the more attractive non-teaching alternatives.

Other results also suggest that teachers with less than four years of experience are quite sensitive to changes in workplace conditions. For these teachers, the relationship between high school enrollment and the probability of separation is positive, a result perhaps indicative of the increased bureaucracy in larger districts. Also, an increase in the percentage of students who are white is associated with a decrease in turnover for these teachers.

The results with regard to the percentage of students entering a four-year college after graduation and the percentage of families with children are somewhat puzzling. In the non-tenured sample the relationship between these variables and the probability of separation is positive, whereas in the tenured sample it is negative. An explanation for this pattern of results may be that tenure standards at the schools with better students and a more supportive public are higher, but after having received tenure these qualities are associated with an easier, more rewarding job.

Personal Characteristics. Age was found to be positively associated with job turnover, although the large bulk of the sample was not near retirement. This result is contrary to what has been found for the population in general, and is even at odds with studies of teachers' turnover.(26) However, upon closer observation these results are in line with prior expectations. The interpretation of the age variable must be made in light of the fact that previous teaching experience is included in the estimation. Given the same previous teaching experience, an older teacher is likely to have more nonteaching experience and thus more nonteaching opportunities.

Previous teaching experience was found to be negatively related to the probability of job separation, as expected. The estimated coefficients for female teachers and Ph.D.s were not statistically significant.

V. CONCLUSION

We included classroom characteristics in an estimation of the job separation rate of teachers, and found these to be significant correlates of job separation. In particular, average **class size** was found to be positively associated with the job separation of high school teachers, although this effect begins to occur at roughly the mean average **class size** in the sample. Similarly,

teaching outside one's area of certification was also associated with higher job separation rates. It is reasonable to conclude, therefore, that efforts to reduce education costs by increasing **class size** and asking teachers to teach outside their areas of certification may be undermined by increased teacher turnover. However, controlling for average **class size**, the number of **classes** taught seems to have no effect on teacher separation rates.

Separate estimations were conducted for science and math teachers and for teachers of other academic subjects. Log likelihood ratio tests do not support the hypothesis that science and math teachers' turnover is structurally different from that of other high school teachers.

The population of high school age children in New York State is predicted to rise 6.8 percent from 1995 to the year 2000 (New York State Council on Children and Families 1988). Without adjusting the number of teachers accordingly to maintain present average **class sizes**, the hazard function we estimate would predict a corresponding 7.2 percent increase in teacher turnover, from .209 to .224.(27) Our results suggest that to keep turnover rates constant without increasing teaching staff size would require an increase in starting salaries (and the corresponding salary scale for other teachers) by between 5 and 10 percent. In determining a cost-minimizing strategy, school districts will have to balance an increase in turnover costs with potential increases in labor costs.

There is an important caveat, however. Some teacher quits involve teachers moving to other districts, as opposed to leaving the profession. If all school districts raised salaries (or increased average **class size**, for that matter) the effect may not be as large as those predicted above. This is because the effects of higher salaries or **class sizes** estimated here reflect the impact of having a particular salary level or **class size** level relative to other districts. In order to more clearly address policy from a statewide or nationwide perspective, as opposed to a school district perspective, we would need data that enabled us to distinguish between teachers moving from one district to another and those leaving the profession altogether. Unfortunately, this information was not available to us. Therefore these estimates serve as an upper bound on teacher exit effects.

Nevertheless, we can conclude that class load variables, used here for the first time in a study of teacher job turnover, are important correlates of teacher attrition. Any future studies of teacher attrition or policy recommendations in this area should incorporate them into their analysis.

(1.) See, for instance, Murnane et al. 1991, 1-2 or Haggstrom et al. 1988, 2 . Predictions of teacher shortages are typically made on the basis of two facts: (1) the large cohort of teachers hired during the 1950s and 1960s is reaching retirement age, and (2) public school enrollment is rising as the children of the baby boomers enter and advance through the school system. (2.) According to a report by the National Education Association 1987, 34 , the mean number of pupils taught per day by secondary and departmentalized elementary teachers fell from 134 in 1971 to 97 in 1986.

See Hanushek 1989 for a review of the literature m this area. Hanushek identified 152 studies in which the teacher/pupil ratio was used as an explanatory variable in an education production function. Of these 152 studies

only 14 found a statistically significant positive relationship between the teacher/pupil ratio and student achievement. (3.) The sample was restricted to newly hired teachers in order to assure a random sample of job spells. The unit of analysis in hazard rate estimation is the job spell, not the teacher, per se (see Lancaster 1990 , Allison 1984 , Cox and Oakes 1984 , Kalbfleisch and Prentice 1980). Selecting a sample consisting of aR job spells currently in process in a given year oversamples long spells, and creates a non-random sample of job lengths. This type of sample is sometimes referred to as a stock, as by Lancaster 1990 , or straddled sample, as by Sheps and Menken 1973 . If, for example, job tenure had no effect on termination rates whatsoever (i.e., an exponential distribution), a stock sample would have job lengths on average twice as long as a random sample of job lengths (Lancaster 1990, 95). It is for this reason that only new hires were sampled (i.e., a flow sample that is random in job lengths) instead of all teachers employed in 1979. (4.) See Fogel and Lewin 1974 for a general discussion of public sector wage determination. Also see Ehrenberg and Schwarz 1986 . (5.) Weaver 1983, 5-19 identifies two twenty-year periods (1908-1928 and 1950-1970) in which there were general shortages of qualified teachers. Shortages of math and science teachers seem to be more frequent. Avoiding shortages in these areas

> will inevitably require some form of
>
> differentiating salary incentives...The resistance
>
> to this solution will likely come from the
>
> teaching profession itself...Merit pay and
>
> other forms of differential compensation,
>
> apart from seniority and credentials, have
>
> had, to say the least, a less than enthusiastic
>
> response from organized teacher groups
>
> (Weaver 1983, 124). (6.) For instance, according to Weaver 1983, 80 ,
>
> i n the short term, adjustment m average
>
> **class size** is the most probable policy action
>
> in response to a teacher shortage because
>
> of its direct and immediate effect...budget

savings. (7.) Rees 1991 found a small but positive effect of **class size** on the probability that a teacher left his or her district. His sample, however, included elementary as well as secondary school teachers. Because **class size** could potentially mean quite different levels of stress and effort for these two groups, it is not clear how to interpret his results. Also, Rees did not include a measure of the number of classes taught in his estimations which could have led to biased results. (8.) Tenure decisions are generally made at the end of a teacher's third year. (9.) Our data permit us to test if an increased teaching

load has a particularly adverse impact on the retention of science teachers. However, because we have no test-score data, we cannot examine whether there is an interaction between "ability" and teaching load. (10.) In addition to the factors discussed in this section, personal and community characteristics have also been shown to be important determinants of teacher attrition. All teachers in this sample are unionized. (11.) Other data sources are detailed in Table 1. (12.) Some teachers arrived with experience from private schools or other public school districts. The rules governing inter-district movement within the New York City school system are unique, and it is for this reason that New York City teachers were excluded from the sample. (13.) Teachers specializing in physical, special, and industrial education, the fine arts, and various types of non-academic fields were excluded from the sample. Full-time was defined as a teacher who taught four or more classes in 1979 and was reported to be working at least 80 percent of a full work load. (14.) Models were estimated using a one-year absence as a job separation as well. The results were not significantly different from those reported below. Since some of these absent teachers re-appeared the following year (e.g., returning from a sabbatic) two-year absences were our preferred definition for a job separation. (15.) Determining if a teacher left his or her district in 1987 actually required examining the 1988 and 1989 Personnel Master Files. (16.) Some observed job spells were still in progress at the end of the sampling frame. That is, the beginning of the job was observed but not its ending. According to Lancaster 1990 these "right censored" observations do not typically lead to bias or consistency problems. (17.) It can be shown that estimates from the discrete-time hazard model are also estimates of the underlying continuous-time proportional hazard model. For the derivation of this log likelihood function and a discussion of its properties, see Allison 1982 . For a good introduction to survival analysis in general see Allison 1984 . For more formal treatments, see Lancaster 1990 , Cox and Oakes 1984 , and Kalbfleisch and Prentice 1980 . (18.) The percentage of households with children may be positively related to the level of support a school system receives from the community it serves. (19.) Of the district variables, the percentage of residents living in an urban area, the percentage of households with children, and median household income are time invariant and refer to 1979. (20.) The estimated coefficient of the salary variable changed from -.069 to -.081. The estimated coefficients and t-statistics of the other explanatory variables in the model did not change appreciably. (21.) This test was performed at a 95 percent confidence level. (22.) The turning point for the model with district variables is 20.98. The sample mean for **class size** for this sample is 20.76. The turning point for the model without the district variables is slightly below the mean at 18.2. (23.) Another way of trying to disentangle quit from layoff effects would be to split the sample into those districts with growing enrollments and those with declining enrollments. Districts with growing enrollments presumably face fewer layoff pressures. Unfortunately, the large majority of school districts in New York had falling enrollments over this time period and so this strategy was not used. Instead, a variable was constructed equalling the percent change in district enrollments over the time period. This variable was included in the analysis and interacted with CSIZE and CSIZESQ, (average **class size and class size** squared). The estimated coefficients of all three terms were negative, a result consistent with the hypothesis that there are fewer terminations when enrollments increase (or decrease less). However, only the coefficient of the percent change variable was statistically significant. The results with regard to the other explanatory variables in the model did not appreciably change.

Another possible criticism of this basic finding is that **class size** is endogenous. For instance, it may be that popular teachers draw large enrollments and are also more likely to be happy and well liked by administrators. This source of endogeneity would most likely mitigate against finding a positive relationship between **class size** and reacher turnover. (24.) Hazard functions with dummy variables for each year (one through nine) were also estimated. However, a log likelihood test failed to reject the restricted models reported in Table III. (25.) According to Grissmer and Kirby 1987, 38-39 , at two years after entry just under 40 percent of all teachers have left their district, as compared to approximately 48 percent in our data. That is, .331 + (1.331) .229 = .484. (26.) For instance, Eberts 1987, 18 found a negative relationship between turnover and age until a teacher approached his or her fortieth birthday. (27.) A simulation was run similar to those reported in Table V with CSIZE and CSIZESQ being allowed to grow by 6.8 percent.

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Making BIG SCHOOLS SMALLER

By Timothy B. Berkey
From *The High School Magazine*

RESEARCH on the relationship between size of the school population and students' academic performance is inconclusive and fails to establish any clear implication for educators to follow. Public perception, however, appears to be married to the notion that students will be more successful in schools with smaller student populations. With this intuitive hunch unvalidated by research, educational leaders find themselves pressured into making decisions to use scarce financial resources to build smaller or additional school buildings rather than focusing on programs and initiatives that make significant improvements in teaching and learning.

In my five years as Principal and Assistant Superintendent at Adlai E. Stevenson High School, in the Chicago suburb of Lincolnshire, Illinois, we've grown from 2,100 to over 3,000 students and participated in a successful referendum campaign that expanded the campus to accommodate future growth to a school of 4,000 by the turn of the century.

My experience is that size of school population has little to do with potential enhancements to be made by investing resources in school programs and initiatives that will have direct impact on academic, personal, and social development of students. Bricks and mortar won't change schools; people and programs will.

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Therefore, to deal with public fear of large schools—and more important, create successful school environments—we must look for ways to make big schools smaller. A cornerstone of making big schools smaller is to design a restructured organization that captures the individual attention provided to students in small schools *while taking advantage of the rich and broad opportunities that present themselves in large school programs.*

We introduced a school-within-a-school arrangement. We organized a 21-member transition task force made up of students, parents, teachers, and administrators to examine other school-within-a-school models and identify key elements that would meet the needs of our organization. Here are some of the features we found important in our design:

- Establish zoned areas of campus called "houses" in which students take the majority of their core subjects while also allowing for movement to other houses for electives or courses not available within one's house.
- Provide additional travel time only for students who need to move to a classroom outside their house. There is no need to put the entire school in the hallways for additional travel time.
- Allow students access to their friends regardless of house assignment. For example, although we have two cafeterias, students can use either one to meet with friends assigned to other houses.
- Give teachers the opportunity to determine their own assignments. Some of our teachers prefer to stay within a given house while others like to teach in a second location.
- Avoid creating artificial barriers between each house. Students and staff are not looking for separation but for the continuation of a sense of unity. We did not divide our athletic teams, student government, or clubs based on the school-within-a-school arrangement.
- Locate student services within each house. We have assigned counselors, deans, and social workers to students within a given house. Siblings are assigned to the same house to maintain close relationships between families and student services personnel.

Student Services

A frequent criticism of large schools is that students will go unnoticed and "fall between the cracks," an understandable concern of parents who have watched their child experience difficulty in school and get little or no attention from school personnel. The key to providing effective student services is in the monitoring process.

This process can begin prior to the first day of school for entering freshmen. During the spring, our counselors meet with junior-high and middle-school personnel to identify students who are experiencing academic, social, or personal problems and therefore need to be monitored closely as they enter high school.

As they enroll in our school, each student is assigned to a student support team consisting of a guidance counselor, dean, and social worker. The team meets on a regular basis and

reviews academic, behavioral, and personal/social information about students assigned to them.

Appropriate strategies are discussed and formulated with a lead person within the team designated to carry out the plan and report back at the next meeting. Team members contact parents and, when necessary, involve outside agencies and resources to assist the student. Teachers, support staff members, and administrators are encouraged to report any important information about students to the appropriate student support team.

Drop-in service is available to all students throughout the day. A word of caution, however—make sure the secretarial staff get the name of any student who stops by when everyone is busy or out of the office. It's important to know immediately who may need assistance.

Academic Support Services

Academic support services are also important. Remember the good old days when grades were reported every six weeks? Somewhere along the line, administrators got the bright idea that nine-week grading periods would be less costly and more efficient. Teachers rallied around this idea as they saw an opportunity to reduce some of the voluminous paperwork that comes with the job. Did anyone think about the impact on students and parents? Probably not.

Several years ago, we made the decision to go back to six-week periods with a progress report at each interim. Every three weeks, parents get feedback about the academic performance of their students.

Once a problem is identified, be ready to put a series of support services in place. At Stevenson, we have developed a progression of tutorial services to assist students with their studies:

- Resource centers staffed by teachers, peer tutors, and community volunteers who can provide daily tutoring throughout the school day;
- Guided study halls where students can get help in a small group arrangement rather than in a large study hall;
- Mentor programs for students who need instruction in study skills and academic intervention.

If these services fail to bring about improved results, the student is targeted for a full case study for possible special education services.

The results of these services have been outstanding. Not only have we reduced the dropout/failure rate for the entire school population, we have been able to help students by intervening at a much earlier stage of a problem.

As schools become larger, teachers begin to feel isolation from their colleagues as common lunch and preparation times become less frequent. Important sharing among teachers of similar curricula can suffer unless the school pays close attention to the need for people to meet. There are several ways to accomplish this:

- Provide shortened school days for teachers to meet for a couple of hours before the students arrive;
- Arrange for substitute coverage when a group of teachers needs a large block of time to resolve issues or complete special projects;
- Fund curriculum team proposals that allow teachers to meet on weekends or during summer months.

Although you will never be able to resolve all the concerns teachers express about lack of meeting time, placing designated times in the school calendar is a step toward building a greater sense of teamwork and collegiality in a large school environment.

Staff Development

This brings us to the area of staff development. For many years, schools have used a menu approach in their staff development programs, allowing teachers to independently select items of interest from a list that is usually determined by some type of needs assessment.

The problem with this approach is that teachers miss the opportunity to work together to integrate their new knowledge and skills in common areas of instruction. In large school environments, it becomes even more problematic with teachers going in so many different directions that staff development becomes an activity rather than a meaningful experience that finds its way back into the classroom.

Three years ago, we decided to provide teachers with the opportunity to select a strand from our staff development as a curriculum team or department instead of as an individual. The vast majority of teachers took us up on the offer and decided to use the team approach.

The results have been amazing. Not only have teachers integrated their new skills in the classroom, our students have set new academic records for virtually every internal and external indicator monitored by the school.

Cocurricular Offerings

The most frequent complaint you will hear from parents as a school grows is about the cocurricular program. Students who get cut from an athletic team or don't get the lead in the school play can be dramatic examples of the negative aspects of growth unless you plan and prepare for improvements in your cocurricular offerings.

Several years ago, we created a special task force to study our athletic, fine arts, club, and intramural opportunities and devise a plan to at least maintain the percentage of students involved in cocurriculars as the school grows.

Here are some of the strategies that were suggested:

- Create a pyramid of teams for each sport that involves a try-out and cut roster approach. For example, it made sense for us to run multiple levels of soccer, baseball, and basketball in grades 9 and 10.
- Provide more intramural activities and allow the programs to share in the use of athletic facilities.
- Support involvement in community service projects by providing bus transportation and adult supervision after school.
- Identify a process for students to start a new club or organization within the school. ▶

This brings me to the subject of parent partnerships. It has always surprised me how many parents drop off their children at our school but rarely step inside our schoolhouse doors. I don't believe this is a function of apathy but more of lack of familiarity with a large school campus. To overcome this, I recommend inviting them into the school.

I don't mean open house. Ask parents to meet with you while school is in session. Throughout the school year, I invite every ninth-grade parent to join me for a meeting, tour of campus, and lunch in the student cafeteria.

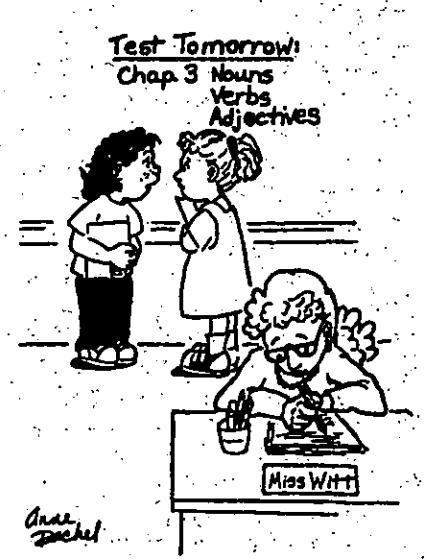
After all, if you want to relieve the anxiety parents may be feeling about the size of the school, show them the busiest place on campus. Not all of my parents come to the luncheons, but those who do walk away as partners of a campus that reflects a calm, organized, and friendly environment conducive to learning.

Defrosting the Look

A final area for consideration is building aesthetics. How many of us have walked into school facilities and immediately felt the cold and impersonal message left by a lack of attention to aesthetics? This problem becomes magnified in large buildings with numerous entrances and hallways that look institutional instead of friendly.

Our students, teachers, and parents have enjoyed working together on projects that have enhanced the physical environment of the school: flags of the United Nations hung in the student cafeteria, student art galleries, framed art posters of famous works, displays of school memorabilia and historical artifacts, student and professional murals, and enlarged pictures of everyday student life.

You can take decisive action to overcome the potential impact of large school size by focusing district efforts on strategies that will remove school size as a key issue in your restructuring and school improvement efforts. By paying close attention to the needs of students, parents, and staff, you can transform your school into a friendly and nurturing environment where each member of the school family takes ownership in success. ED



"It gets worse. In high school, you learn this all over again—in other languages!"

TOUGHER DISCIPLINE, SAFER SCHOOLS

By Mike Rose
From *American Teacher*

IT should come as no surprise that Corpus Christi, Texas, was one of the first districts to make good use of a new Texas law that gives teachers the right to permanently remove chronically disruptive students from the classroom—a law which the Corpus Christi American Federation of Teachers (CCAFT), the Texas Federation of Teachers, and other AFT locals in the state had lobbied hard for. This district has quietly been building a reputation as a leading-edge system when it comes to student discipline.

Most agree that the process began two years ago, when the district established a task force to study discipline problems in the middle schools. Largely as a result of the task force's recommendations, and the publicity it generated surrounding discipline issues, Corpus Christi has gone on to implement alternative learning centers for violent and disruptive youths and to establish a student code of conduct that is one of the best in the nation.

Corpus Christi became the first district in Texas to formally endorse the AFT's nationwide campaign for high standards of achievement and conduct, "Responsibility, Respect, Results: Lessons for Life." Perhaps the most important asset the community brings to the fight, explains CCAFT president Linda Bridges, is a willingness to tackle discipline problems head-on and to look for new opportunities to improve.

"It wasn't that long ago that a former superintendent stood up before the school board and said, 'If there is a discipline problem in this district, then it's the teachers who are to blame.' We're clearly beyond that denial stage now," Bridges says. "People are starting to feel that orderly schools are within reach, and the momentum is clearly driving us in that direction."

School board vice president Dot Adkins says her service as board representative on the middle school task

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Mike Rose is Assistant Editor, American Teacher, *published by the American Federation of Teachers, Washington, D.C. Condensed from* American Teacher, *80 (February 1996), 10-12.*

LEVEL 1 - 108 OF 201 STORIES

November, 1996

SECTION: No. 3, Vol. 78; Pg. 193; ISSN: 0031-7217

IAC-ACC-NO: 19455439

LENGTH: 8342 words

HEADLINE: What matters most: a competent teacher for every child.

BYLINE: Darling-Hammond, Linda

BODY:

The report of the National Commission on Teaching and America's Future offers a blueprint for recruiting, preparing, supporting, and rewarding excellent educators in all of America's **schools**, according to Ms. Darling. Hammond. For the details, read on.

We propose an audacious goal . . . by the year 2006, America will provide all students with what should be their educational birthright: access to competent, caring, and qualified teachers.(1)

With these words, the National Commission on Teaching and America's Future summarized its challenge to the American public. After two years of intense study and discussion, the commission - a 26-member bipartisan blue-ribbon panel supported by the Rockefeller Foundation and the Carnegie Corporation of New York - concluded that the reform of elementary and secondary education depends first and foremost on restructuring its foundation, the teaching profession. The restructuring, the commission made clear, must go in two directions: toward increasing teachers' knowledge to meet the demands they face and toward redesigning **schools** to support high-quality teaching and learning.

The commission found a profession that has suffered from decades of neglect. By the standards of other professions and other countries, U.S. teacher education has historically been thin, uneven, and poorly financed. Teacher recruitment is distressingly ad hoc, and teacher salaries lag significantly behind those of other professions. This produces chronic shortages of qualified teachers in fields like mathematics and science and the continual hiring of large numbers of "teachers" who are unprepared for their jobs.

Furthermore, in contrast to other countries that invest most of their education dollars in well-prepared and well-supported teachers, half of the education dollars in the United States are spent on personnel and activities outside the classroom. A lack of standards for students and teachers, coupled with schools that are organized for 19th-century learning, leaves educators without an adequate foundation for constructing good teaching. Under these

conditions, excellence is hard to achieve.

The commission is clear about what needs to change. No more hiring unqualified teachers on the sly. No more nods and winks at teacher education programs that fail to prepare teachers properly. No more tolerance for incompetence in the classroom. Children are compelled to attend school. Every state guarantees them equal protection under the law, and most promise them a sound education. In the face of these obligations, students have a right to competent, caring teachers who work in schools organized for success.

The commission is also clear about what needs to be done. Like the Flexner report that led to the transformation of the medical profession in 1910, this report, What Matters Most: Teaching for America's Future, examines successful practices within and outside the United States to describe what works. The commission concludes that children can reap the benefits of current knowledge about teaching and learning only if schools and schools of education are dramatically redesigned.

The report offers a blueprint for recruiting, preparing, supporting, and rewarding excellent educators in all of America's schools. The plan is aimed at ensuring that all schools have teachers with the knowledge and skills they need to enable all children to learn. If a caring, qualified teacher for every child is the most important ingredient in education reform, then it should no longer be the factor most frequently overlooked.

At the same time, such teachers must have available to them schools and school systems that are well designed to achieve their key academic mission: they must be focused on clear, high standards for students; organized to provide a coherent, high-quality curriculum across the grades; and designed to support teachers' collective work and learning.

We note that this challenge is accompanied by an equally great opportunity: over the next decade we will recruit and hire more than two million teachers for America's schools. More than half of the teachers who will be teaching 10 years from now will be hired during the next decade. If we can focus our energies on providing this generation of teachers with the kinds of knowledge and skills they need to help students succeed, we will have made an enormous contribution to America's future.

The Nature of the Problem

The education challenge facing the U.S. is not that its schools are not as good as they once were. It is that schools must help the vast majority of young people reach levels of skill and competence that were once thought to be within the reach of only a few.

After more than a decade of school reform, America is still a very long way from achieving its educational goals. Instead of all children coming to school ready to learn, more are living in poverty and without health care than a decade ago.(2) Graduation rates and student achievement in most subjects have remained flat or have increased only slightly.(3) Fewer than 10% of high school students can read, write, compute, and manage scientific material at the high levels required for today's "knowledge work" jobs.(4)

This distance between our stated goals and current realities is not due to lack of effort. Many initiatives have been launched in local communities with positive effects. Nonetheless, we have reached an impasse in spreading these promising efforts to the system as a whole. It is now clear that most schools and teachers cannot produce the kind of learning demanded by the new reforms - not because they do not want to, but because they do not know how, and the systems they work in do not support their efforts to do so.

The Challenge for Teaching

A more complex, knowledge-based, and multicultural society creates new expectations for teaching. To help diverse learners master more challenging content, teachers must go far beyond dispensing information, giving a test, and giving a grade. They must themselves know their subject areas deeply, and they must understand how students think, if they are to create experiences that actually work to produce learning.

Developing the kind of teaching that is needed will require much greater clarity about what students need to learn in order to succeed in the world that awaits them and what teachers need to know and do in order to help students learn it. Standards that reflect these imperatives for student learning and for teaching are largely absent in our nation today. States are just now beginning to establish standards for student learning.

Standards for teaching are equally haphazard. Although most parents might assume that teachers, like other professionals, are educated in similar ways so that they acquire common knowledge before they are admitted to practice, this is not the case. Unlike doctors, lawyers, accountants, or architects, all teachers do not have the same training. Some teachers have very high levels of skills-particularly in states that require a bachelor's degree in the discipline to be taught - along with coursework in teaching, learning, curriculum, and child development; extensive practice teaching; and a master's degree in education. Others learn little about their subject matter or about teaching, learning, and child development - particularly in states that have low requirements for licensing.

And while states have recently begun to require some form of testing for a teaching license, most licensing exams are little more than multiple-choice tests of basic skills and general knowledge, widely criticized by educators and experts as woefully inadequate to measure teaching skill.(5) Furthermore, in many states the cutoff scores are so low that there is no effective standard for entry.

These difficulties are barely known to the public. The schools' most closely held secret amounts to a great national shame: roughly one-quarter of newly hired American teachers lack the qualifications for their jobs. More than 12% of new hires enter the classroom without any formal training at all, and another 14% arrive without fully meeting state standards.

Although no state will permit a person to write wills, practice medicine, fix plumbing, or style hair without completing training and passing an examination, more than 40 states allow districts to hire teachers who have not met basic requirements. States pay more attention to the qualifications of the veterinarians treating America's pets than to those of the people educating the

nation's youngsters. Consider the following facts:

* In recent years, more than 50,000 people who lack the training required for their jobs have entered teaching annually on emergency or substandard licenses.(6)

* Nearly one-fourth (23%) of all secondary teachers do not have even a minor in their main teaching field. This is true for more than 30% of mathematics teachers.(7)

* Among teachers who teach a second subject, 36% are un-licensed in that field, and 50% lack a minor in it.(8)

* Fifty-six percent of high school students taking physical science are taught by out-of-field teachers, as are 27% of those taking mathematics and 21% of those taking English.(9) The proportions are much greater in high-poverty schools and lower-track classes.

* In schools with the highest minority enrollments, students have less than a 50% chance of getting a science or mathematics teacher who holds a license and a degree in the field in which he or she teaches.(10)

In the nation's poorest schools, where hiring is most lax and teacher turnover is constant, the results are disastrous. Thousands of children are taught throughout their school careers by a parade of teachers without preparation in the fields in which they teach, inexperienced beginners with little training and no mentoring, and short-term substitutes trying to cope with constant staff disruptions.(11) It is more surprising that some of these children manage to learn than that so many fail to do so.

Current Barriers

Unequal resources and inadequate investments in teacher recruitment are major problems. Other industrialized countries fund their schools equally and make sure there are qualified teachers for all of them by underwriting teacher preparation and salaries. However, teachers in the U.S. must go into substantial debt to become prepared for a field that in most states pays less than any other occupation requiring a college degree.

This situation is not necessary or inevitable. The hiring of unprepared teachers was almost eliminated during the 1970s with scholarships and loans for college students preparing to teach, Urban Teacher Corps initiatives, and master of arts in teaching (MAT) programs, coupled with wage increases. However, the cancellation of most of these recruitment incentives in the 1980s led to renewed shortages when student enrollments started to climb once again, especially in cities. Between 1987 and 1991, the proportion of well-qualified new teachers - those entering teaching with a college major or minor and a license in their fields - actually declined from about 74% to 67%.(12)

There is no real system for recruiting, preparing, and developing America's teachers. Major problems include:

Inadequate teacher education. Because accreditation is not required of teacher education programs, their quality varies widely, with excellent programs

standing alongside shoddy ones that are allowed to operate even when they do an utterly inadequate job. Too many American universities still treat their schools of education as "cash cows" whose excess revenues are spent on the training of doctors, lawyers, accountants, and almost any students other than prospective teachers themselves.

Slipshod recruitment. Although the share of academically able young people entering teaching has been increasing, there are still too few in some parts of the country and in critical subjects like mathematics and science. Federal incentives that once existed to induce talented people into high-need fields and locations have largely been eliminated.

Haphazard hiring and induction. School districts often lose the best candidates because of inefficient and cumbersome hiring practices, barriers to teacher mobility, and inattention to teacher qualifications. Those who do get hired are typically given the most difficult assignments and left to sink or swim, without the kind of help provided by internships and residencies in other professions. Isolated behind classroom doors with little feedback or help, as many as 30% leave in the first few years, while others learn merely to cope rather than to teach well.

Lack of professional development and rewards for knowledge and skill. In addition to the lack of support for beginning teachers, most school districts invest little in ongoing professional development for experienced teachers and spend much of these limited resources on unproductive "hit-and-run" workshops. Furthermore, most U.S. teachers have only three to five hours each week for planning. This leaves them with almost no regular time to consult together or to learn about new teaching strategies, unlike their peers in many European and Asian countries who spend between 15 and 20 hours per week working jointly on refining lessons and learning about new methods.

The teaching career does not encourage teachers to develop or use growing expertise. Evaluation and tenure decisions often lack a tangible connection to a clear vision of high-quality teaching, important skills are rarely rewarded, and - when budgets must be cut - professional development is often the first item sacrificed. Historically, the only route to advancement in teaching has been to leave the classroom for administration.

In contrast, many European and Asian countries hire a greater number of better-paid teachers, provide them with more extensive preparation, give them time to work together, and structure schools so that teachers can focus on teaching and can come to know their students well. Teachers share decision making and take on a range of professional responsibilities without leaving teaching. This is possible because these other countries invest their resources in many more classroom teachers - typically constituting 60% to 80% of staff, as compared to only 43% in the United States - and many fewer nonteaching employees. (13)

Schools structured for failure. Today's schools are organized in ways that support neither student learning nor teacher learning well. Teachers are isolated from one another so that they cannot share knowledge or take responsibility for overall student learning. Technologies that could enable alternative uses of personnel and time are not yet readily available in schools, and few staff members are prepared to use them. Moreover, too many people and

resources are allocated to jobs and activities outside of classrooms, on the sidelines rather than at the front lines of teaching and learning.

High-performance businesses are abandoning the organizational assumptions that led to this way of managing work. They are flattening hierarchies, creating teams, and training employees to take on wider responsibilities using technologies that allow them to perform their work more efficiently. Schools that have restructured their work in these ways have been able to provide more time for teachers to work together and more time for students to work closely with teachers around more clearly defined standards for learning.(14)

Goals for the Nation

To address these problems, the commission challenges the nation to embrace a set of goals that will put us on the path to serious, long-term improvements in teaching and learning for America. The commission has six goals for the year 2006.

* All children will be taught by teachers who have the knowledge, skills, and commitment to teach children well.

* All teacher education programs will meet professional standards, or they will be closed.

* All teachers will have access to high-quality professional development, and they will have regularly scheduled time for collegial work and planning.

* Both teachers and principals will be hired and retained based on their ability to meet professional standards of practice.

* Teachers' salaries will be based on their knowledge and skills.

* High-quality teaching will be the central investment of schools. Most education dollars will be spent on classroom teaching.

The Commission's Recommendations

The commission's proposals provide a vision and a blueprint for the development of a 21st-century teaching profession that can make good on the nation's educational goals. The recommendations are systemic in scope - not a recipe for more short-lived pilot and demonstration projects. They describe a new infrastructure for professional learning and an accountability system that ensures attention to standards for educators as well as for students at every level: national, state, district, school, and classroom.

The commission urges a complete overhaul in the systems of teacher preparation and professional development to ensure that they reflect current knowledge and practice. This redesign should create a continuum of teacher learning based on compatible standards that operate from recruitment and preservice education through licensing, hiring, and induction into the profession, to advanced certification and ongoing professional development.

The commission also proposes a comprehensive set of changes in school organization and management. And finally, it recommends a set of measures for

ensuring that only those who are competent to teach or to lead schools are allowed to enter or to continue in the profession - a starting point for creating professional accountability. The specific recommendations are enumerated below.

1. Get serious about standards for both students and teachers. "The Commission recommends that we renew the national promise to bring every American child up to worldclass standards in core academic areas and to develop and enforce rigorous standards for teacher preparation, initial licensing, and continuing development."

With respect to student standards, the commission believes that every state should work on incorporating challenging standards for learning - such as those developed by professional bodies like the National Council of Teachers of Mathematics - into curriculum frameworks and new assessments of student performance. Implementation must go beyond the tautology that "all children can learn" to examine what they should learn and how much they need to know.

Standards should be accompanied by benchmarks of performance - from "acceptable" to "highly accomplished" so that students and teachers know how to direct their efforts toward greater excellence.

Clearly, if students are to achieve high standards, we can expect no less from teachers and other educators. Our highest priority must be to reach agreement on what teachers should know and be able to do in order to help students succeed. Unaddressed for decades, this task has recently been completed by three professional bodies: the National Council for Accreditation of Teacher Education (NCATE), the Interstate New Teacher Assessment and Support Consortium (INTASC), and the National Board for Professional Teaching Standards (the National Board). Their combined efforts to set standards for teacher education, beginning teacher licensing, and advanced certification outline a continuum of teacher development throughout the career and offer the most powerful tools we have for reaching and rejuvenating the soul of the profession.

These standards and the assessments that grow out of them identify what it takes to be an effective teacher: subject-matter expertise coupled with an understanding of how children learn and develop; skill in using a range of teaching strategies and technologies; sensitivity and effectiveness in working with students from diverse backgrounds; the ability to work well with parents and other teachers; and assessment expertise capable of discerning how well children are doing, what they are learning, and what needs to be done next to move them along.

The standards reflect a teaching role in which the teacher is an instructional leader who orchestrates learning experiences in response to curriculum goals and student needs and who coaches students to high levels of independent performance. To advance standards, the commission recommends that states:

* establish their own professional standards boards;

* insist on professional accreditation for all schools of education;

* close inadequate schools of education;

* license teachers based on demonstrated performance, including tests of subject-matter knowledge, teaching knowledge, and teaching skill; and

* use National Board standards as the benchmark for accomplished teaching.

2. Reinvent teacher preparation and professional development. "The Commission recommends that colleges and schools work with states to redesign teacher education so that the two million teachers to be hired in the next decade are adequately prepared and so that all teachers have access to high-quality learning opportunities."

For this to occur, states, school districts, and education schools should:

* organize teacher education and professional development around standards for students and teachers;

* institute extended, graduate-level teacher preparation programs that provide yearlong internships in a professional development school;

* create and fund mentoring programs for beginning teachers, along with evaluation of teaching skills;

* create stable, high-quality sources of professional development - and then allocate 1% of state and local spending to support them, along with additional matching funds to school districts;

* organize new sources of professional development, such as teacher academies, school/university partnerships, and learning networks that transcend school boundaries; and

* make professional development an ongoing part of teachers' daily work.

If teachers are to be ready to help their students meet the new standards that are now being set for them, teacher preparation and professional development programs must consciously examine the expectations embodied in new curriculum frameworks and assessments and understand what they imply for teaching and for learning to teach. Then they must develop effective strategies for preparing teachers to teach in these much more demanding ways.

Over the past decade, many schools of education have changed their programs to incorporate new knowledge. More than 300 have developed extended programs that add a fifth (and occasionally a sixth) year of undergraduate training. These programs allow beginning teachers to complete a degree in their subject area as well as to acquire a firmer grounding in teaching skills. They allow coursework to be connected to extended practice teaching in schools - ideally, in professional development schools that, like teaching hospitals in medicine, have a special mission to support research and training. Recent studies show that graduates of extended programs are rated as better-prepared and more effective teachers and are far more likely to enter and remain in teaching than are their peers from traditional four-year programs.(15)

New teachers should have support from an expert mentor during the first year of teaching. Research shows that such support improves both teacher

effectiveness and retention.(16) In the system we propose, teachers will have completed initial tests of subject-matter and basic teaching knowledge before entry and will be ready to undertake the second stage - a performance assessment of teaching skills - during this first year.

Throughout their careers, teachers should have ongoing opportunities to update their skills. In addition to time for joint planning and problem solving with in-school colleagues, teachers should have access to networks, school/university partnerships, and academies where they can connect with other educators to study subject-matter teaching, new pedagogies, and school change. The benefit of these opportunities is that they offer sustained work on problems
of practice that are directly connected to teachers' work and student learning.

3. Overhaul teacher recruitment and put qualified teachers in every classroom. "The Commission recommends that states and school districts pursue aggressive policies to put qualified teachers in every classroom by providing financial incentives to correct shortages, streamlining hiring procedures, and reducing barriers to teacher mobility."

Although each year the U.S. produces more new teachers than it needs, shortages of qualified candidates in particular fields (e.g., mathematics and science) and particular locations (primarily inner city and rural) are chronic.

In large districts, logistics can overwhelm everything else. It is sometimes the case that central offices cannot find out about classroom vacancies, principals are left in the dark about applicants, and candidates cannot get any information at all.

Finally, it should be stressed that large pools of potential mid-career teacher entrants - former employees of downsizing corporations, military and government retirees, and teacher aides already in the schools - are for the most part untapped.

To remedy these situations, the commission suggests the following actions:

* increase the ability of financially disadvantaged districts to pay for qualified teachers and insist that school districts hire only qualified teachers;

* redesign and streamline hiring at the district level - principally by creating a central "electronic hiring hall" for all qualified candidates and establishing cooperative relationships with universities to encourage early hiring of teachers;

* eliminate barriers to teacher mobility by promoting reciprocal interstate licensing and by working across states to develop portable pensions;

* provide incentives (including scholarships and premium pay) to recruit teachers for high-need subjects and locations; and

* develop high-quality pathways to teaching for recent graduates, mid-career changers, paraprofessionals already in the classroom, and military and government retirees.

4. Encourage and reward knowledge and skill. "The Commission recommends that school districts, states, and professional associations cooperate to make teaching a true profession, with a career continuum that places teaching at the top and rewards teachers for their knowledge and skills."

Schools have few ways of encouraging outstanding teaching, supporting teachers who take on the most challenging work, or rewarding increases in knowledge and skill. Newcomers who enter teaching without adequate preparation are paid at the same levels as those who enter with highly developed skills. Novices take on exactly the same kind of work as 30-year veterans, with little differentiation based on expertise. Mediocre teachers receive the same rewards as outstanding ones. And unlicensed "teachers" are placed on the same salary schedule as licensed teachers in high-demand fields such as mathematics and science or as teachers licensed in two or more subjects.

One testament to the inability of the existing system to understand what it is doing is that it rewards experience with easier work instead of encouraging senior teachers to deal with difficult learning problems and tough learning situations. As teachers gain experience, they can look forward to teaching in more affluent schools, working with easier schedules, dealing with "better" classes, or moving out of the classroom into administration. Teachers are rarely rewarded for applying their expertise to the most challenging learning problems or major needs of the system.

To address these issues, the commission recommends that state and local education agencies:

* develop a career continuum linked to assessments and compensation systems that reward knowledge and skill (e.g., the ability to teach expertly in two or more subjects, as demonstrated by additional licenses, or the ability to pass examinations of teaching skill, such as those offered by INTASC and the National Board);

* remove incompetent teachers through peer review programs that provide necessary assistance and due process; and

* set goals and enact incentives for National Board certification in every district, with the aim of certifying 105,000 teachers during the next 10 years.

If teaching is organized as are other professions that have set consistent licensing requirements, standards of practice, and assessment methods, then advancement can be tied to professional growth and development. A career continuum that places teaching at the top and supports growing expertise should 1) recognize accomplishment, 2) anticipate that teachers will continue to teach while taking on other roles that allow them to share their knowledge, and 3) promote continued skill development related to clear standards.

Some districts, such as Cincinnati and Rochester, New York, have already begun to develop career pathways that tie evaluations to salary increments at key stages as teachers move from their initial license to resident teacher (under the supervision of a mentor) to the designation of professional teacher. The major decision to grant tenure is made after rigorous evaluation of performance (including both administrator and peer review) in the first several

years of teaching. Advanced certification from the National Board for Professional Teaching Standards may qualify teachers for another salary step and/or for the position of lead teacher - a role that is awarded to those who have demonstrated high levels of competence and want to serve as mentors or consulting teachers.

One other feature of a new compensation system is key. The central importance of teaching to the mission of schools should be acknowledged by having the highest-paid professional in a school system be an experienced, National Board-certified teacher. As in other professions, roles should become less distinct. The jobs of teacher, consultant, supervisor, principal, curriculum developer, researcher, mentor, and professor should be hyphenated roles, allowing many ways for individuals to use their talents and expertise without abandoning the core work of the profession.

5. Create schools that are organized for student and teacher success. "The Commission recommends that schools be restructured to become genuine learning organizations for both students and teachers: organizations that respect learning, honor teaching, and teach for understanding."

Many experts have observed that the demands of serious teaching and learning bear little relationship to the organization of the typical American school. Nothing more clearly reveals this problem than how we allocate the principal resources of school - time, money, and people. Far too many people sit in offices on the sidelines of the school's core work, managing routines rather than improving learning. Our schools are bureaucratic inheritances from the 19th century, not the kinds of learning organizations required for the 21st century.

Across the United States, the ratio of school staff to students is 1 to 9 (with "staff" including district employees, school administrators, teachers, instructional aides, guidance counselors, librarians, and support staff). However, actual **class size** averages about 24 and reaches 35 or more in some cities. Teaching loads for high school teachers generally exceed 100 students per day. Yet many schools have proved that it is possible to restructure adults' use of time so that more teachers and administrators actually work in the classroom, face-to-face with students on a daily basis, thus reducing **class sizes** while creating more time for teacher collaboration. They do this by creating teams of teachers who share students; engaging almost all adults in the school in these teaching teams, where they can share expertise directly with one another; and reducing pullouts and nonteaching jobs.

Schools must be freed from the tyrannies of time and tradition to permit more powerful student and teacher learning. To accomplish this the commission recommends that state and local boards work to:

* flatten hierarchies and reallocate resources to invest more in teachers and technology and less in nonteaching personnel;

* provide venture capital in the form of challenge grants that will promote learning linked to school improvement and will reward effective team efforts; and

* select, prepare, and retain principals who understand teaching and learning and who can lead high-performing schools.

If students have an inalienable right to be taught by a qualified teacher, teachers have a right to be supervised by a highly qualified principal. The job began as that of a "principal teacher," and this conception is ever more relevant as the focus of the school recenters on academic achievement for students. Principals should teach at least part of the time (as do most European, Asian, and private school directors), and they should be well prepared as instructional leaders, with a solid understanding of teaching and learning.

Next Steps

Developing recommendations is easy. Implementing them is hard work. The first step is to recognize that these ideas must be pursued together - as an entire tapestry that is tightly interwoven.

The second step is to build on the substantial work of education reform undertaken in the last decade. All across the country, successful programs for recruiting, educating, and mentoring new teachers have sprung up. Professional networks and teacher academies have been launched, many teacher preparation programs have been redesigned, higher standards for licensing teachers and accrediting education schools have been developed, and, of course, the National Board for Professional Teaching Standards is now fully established and beginning to define and reward accomplished teaching.

While much of what the commission proposes can and should be accomplished by reallocating resources that are currently used unproductively, there will be new costs. The estimated additional annual costs of the commission's key recommendations are as follows: scholarships for teaching recruits, $ 500 million; teacher education reforms, $ 875 million; mentoring supports and new licensing assessments, $ 750 million; and state funds for professional development, $ 2.75 billion. The total is just under $ 5 billion annually - less than 1% of the amount spent on the federal savings-and-loan bailout. This is not too much, we believe, to bail out our schools and to secure our future.

A Call to Action

Setting the commission's agenda in motion and carrying it to completion will demand the best of us all. The commission calls on governors and legislators to create state professional boards to govern teacher licensing standards and to issue annual report cards on the status of teaching. It asks state legislators and governors to set aside at least 1% of funds for standards-based teacher training. It urges Congress to put money behind the professional development programs it has already approved but never funded.

Moreover, the commission asks the profession to take seriously its responsibilities to children and the American future. Among other measures, the commission insists that state educators close the loopholes that permit administrators to put unqualified "teachers" in the classroom. It calls on university officials to take up the hard work of improving the preparation and skills of new and practicing teachers. It asks administrators and teachers to take on the difficult task of guaranteeing teaching competence in the classroom. And it asks local school boards and superintendents to play their vital role by streamlining hiring procedures, upgrading quality, and putting more staff and resources into the front lines of teaching.

If all of these things are accomplished, the teaching profession of the 21st century will look much different from the one we have today. Indeed, someone entering the profession might expect to advance along a continuum that unfolds much like this:

For as long as she could remember, Elena had wanted to teach. As a peer tutor in middle school, she loved the feeling she got whenever her partner learned something new. In high school, she served as a teacher's aide for her community service project. She linked up with other students through an Internet group started by Future Educators of America.

When she arrived at college she knew she wanted to prepare to teach, so she began taking courses in developmental and cognitive psychology early in her sophomore year. She chose mathematics as a major and applied in her junior year for the university's five-year course of study leading to a master of arts in teaching. After a round of interviews and a review of her record thus far, Elena
was admitted into the highly selective teacher education program.

The theories Elena studied in her courses came to life before her eyes as she conducted a case study of John, a 7-year-old whom she tutored in a nearby school. She was struck by John's amazing ability to build things, in contrast with his struggles to learn to read. She carried these puzzles back to her seminar and on into her other courses as she tried to understand learning.

Over time, she examined other cases, some of them available on a multimedia computer system that allowed her to see videotapes of children, samples of their work, and documentation from their teachers about their learning strategies, problems, and progress. From these data, Elena and her classmates developed a concrete sense of different learning approaches. She began to think about how she could use John's strengths to create productive pathways into other areas of learning

Elena's teachers modeled the kinds of strategies she herself would be using as a teacher. Instead of lecturing from texts, they enabled students to develop and apply knowledge in the context of real teaching situations. These frequently occurred in the professional development school (PDS) where Elena was engaged in a yearlong internship, guided by a faculty of university- and school-based teacher educators.

In the PDS, Elena was placed with a team of student teachers who worked with a team of expert veteran teachers. Her team included teachers of art, language arts, and science, as well as mathematics. They discussed learning within and across these domains in many of their assignments and constructed interdisciplinary curricula together.

Most of the school- and university-based teacher educators who made up the PDS faculty had been certified as accomplished practitioners by the National Board for Professional Teaching Standards, having completed a portfolio of evidence about their teaching along with a set of rigorous performance assessments. The faculty members created courses, internship experiences, and seminars that allowed them to integrate theory and practice, pose fundamental dilemmas of teaching, and address specific aspects of learning to teach.

Elena's classroom work included observing and documenting the learning and behavior of specific children, evaluating lessons that illustrated important concepts and strategies, tutoring and working with small groups, sitting in on family conferences, engaging in school and team planning meetings, visiting homes and community agencies to learn about their resources, planning field trips and curriculum segments, teaching lessons and short units, and ultimately taking major responsibility for the class for a month at the end of the year. This work was supplemented by readings and discussions grounded in case studies of teaching.

A team of PDS teachers videotaped all their classes over the course of the year to serve as the basis for discussions of teaching decisions and outcomes. These teachers' lesson plans, student work, audiotaped planning journals, and reflections on lessons were also available in a multimedia database. This allowed student teachers to look at practice from many angles, examine how classroom situations arose from things that had happened in the past, see how various strategies turned out, and understand a teacher's thinking about students, subjects, and curriculum goals as he or she made decisions. Because the PDS was also wired for video and computer communication with the school of education, master teachers could hold conversations with student teachers by teleconference or e-mail when on-site visits were impossible.

When Elena finished her rich, exhausting internship year, she was ready to try her hand at what she knew would be a demanding first year of teaching. She submitted her portfolio for review by the state professional standards board and sat for the examination of subject-matter and teaching knowledge that was required for an initial teaching license. She was both exhilarated and anxious when she received a job offer, but she felt she was ready to try her hand at teaching.

Elena spent that summer eagerly developing curriculum ideas for her new class. She had the benefit of advice from the district mentor teacher already assigned to work with her in her first year of teaching, and she had access to an on-line database of teaching materials developed by teachers across the country and organized around the curriculum standards of the National Council of Teachers of Mathematics, of which she had become a member.

Elena's mentor teacher worked with her and several other new middle school mathematics and science teachers throughout the year, meeting with them individually and in groups to examine their teaching and provide support. The mentors and their first-year colleagues also met in groups once a month at the PDS to discuss specific problems of practice.

Elena met weekly with the other math and science teachers in the school to discuss curriculum plans and share demonstration lessons. This extended lunch meeting occurred while her students were in a Project Adventure/physical education course that taught them teamwork and cooperation skills. She also met with the four other members of her teaching team for three hours each week while their students were at community-service placements. The team used this time to discuss cross-disciplinary teaching plans and the progress of the 80 students they shared.

In addition to these built-in opportunities for daily learning, Elena and her

colleagues benefited from the study groups they had developed at their school and the professional development offerings at the local university and the Teachers Academy.

At the Teachers Academy, school- and university-based faculty members taught extended courses in areas ranging from advances in learning theory to all kinds of teaching methods, from elementary science to advanced calculus. These courses usually featured case studies and teaching demonstrations as well as follow-up work in teachers' own classrooms. The academy provided the technologies needed for multimedia conferencing, which allowed teachers to "meet" with one another across their schools and to see one another's classroom work. They could also connect to courses and study groups at the university, including a popular master's degree program that helped teachers prepare for National Board certification.

With the strength of a preparation that had helped her put theory and practice together and with the support of so many colleagues, Elena felt confident that she could succeed at her life's goal: becoming - and, as she now understood, always becoming - a teacher.

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GRAPHIC: Illustration; Other

LANGUAGE: ENGLISH

IAC-CREATE-DATE: June 2, 1997
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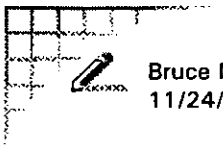
Educatio –
class size initiative



Bruce N. Reed
11/24/97 06:12:00 PM

Record Type: Record

To: Elena Kagan/OPD/EOP

cc:
Subject: Class Size Data -- Grade By Grade

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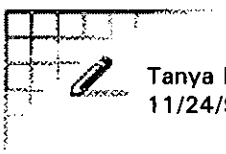

Tanya E. Martin
11/24/97 05:11:19 PM

Record Type: Record

To: Bruce N. Reed/OPD/EOP, Michael Cohen/OPD/EOP

cc: Thomas L. Freedman/OPD/EOP
Subject: Class Size Data -- Grade By Grade

Grade	Average Class Size
Kindergarten	21.8
First	21.1
Second	21.1
Third	21.4
K-3	21.5

The articles on class size reduction have been copied and are on their way over.