Reinvention

Paul J. Weinstein Jr. 05/08/97 10:05:42 AM

Record Type: Record

To: See the distribution list at the bottom of this message

cc:

Subject: NPR's "31 Agency Initiative"

Please let me know today which of these meetings you want to attend. Bruce would like for DPC staff to participate.

---------------------- Forwarded by Paul J. Weinstein Jr./OPD/EOP on 05/08/97 10:08 AM ---------------------------

Bruce N. Reed
05/06/97 06:55:00 PM

Record Type: Record

To: Paul J. Weinstein Jr.

cc:

Subject: NPR's "31 Agency Initiative"

Message Creation Date was at 6-MAY-1997 23:55:00

Let everybody know about this. Thanks.

---------------------- Forwarded by Bruce N. Reed/OPD/EOP on 05/06/97 07:01 PM ---------------------------

John.Kamensky @ npr.gsa.gov
05/06/97 01:40:00 PM

Record Type: Record

To: Elena Kagan, Bruce N. Reed, Kathleen M. Wallman

cc:

Subject: NPR's "31 Agency Initiative"

This is a "heads up" about a series of meetings starting next week that you or your staff may find of interest.

NPR is undertaking a different approach to its work over the next few years by redirecting its energies toward a handful of about 31 bureau-level agencies that have a big impact on the public, business, or other government agencies.

Elaine Kamarck has been meeting with each of the agency heads from these "reinvention impact centers." The goal is to have them commit to a set of goals that have high customer/citizen impact by 2000. OMB is helping through the GPRA process and their spring management review. We've grouped the 31 into 6 "customer clusters" to allow the agencies to learn from each other and possibly work together on some initiatives. We've asked each of the 31 to prepare a draft 1-page set of goals to share with other members of their clusters. The refined versions will be shared with Gore as he meets with the agencies heads each of the 6 clusters next month.

The first of the staff-level cluster meetings to review the 1-pagers before we send them to Gore is next week.

We've got OMB, Departmental, agency, and designated NPR staff attending, so the meetings will be tight. If there are any meetings your staff would be dying to attend, please let Helene Carlson know (632-0150 or email at: helene.carlson@npr.gsa.gov). She can also answer any questions. The schedule is:

BUSINESS - Cluster #1
Commerce, Health and Human Services, Small Business Administration, Health Care Financing Administration, Patent and Trademark Office, U.S. Foreign and Commercial Service
Wednesday, May 14 at 2:00 at the National Performance Review
750 17th Street, N.W. Suite 200

INTERNAL GOVERNMENT - Cluster #2
Treasury, General Services Administration, Office of Personnel Management, Department of Defense Acquisition and Financial Management Service
Thursday, May 15 at 2:00 at the National Performance Review

TRAVELERS AND OUTDOORS ENTHUSIASTS - Cluster #3
Agriculture, Interior, Justice, State, Treasury, Animal and Plant Health Inspection Service , Bureau of Consular Affairs, Bureau of Land Management, Customs Service, Forest Service, Immigration and Naturalization Service, Park Service.
Friday, May 16 at 2:00 at the National Performance Review

GENERAL PUBLIC - Cluster #4
Commerce, Education, Treasury, FEMA, NASA, Census Bureau, National Weather Service, Student Loans, IRS
Monday, May 19 at 2:00 at the National Performance Review

BENEFICIARIES - Cluster #5
Health and Human Services, Agriculture, Veterans Affairs, Social

Security Administration, Veterans Benefits Administration, Veterans Health Administration, Administration for Children and Families, Food and Consumer Service.

Tuesday, May 20 at 2:00 at the National Performance Review

REGULATORS - Cluster #6

Agriculture, Health and Human Services, Labor, Transportation, Environmental Protection Agency, Federal Aviation Administration, Animal and Plant Health Inspection Service, Food and Drug Administration, Occupational Safety and Health Administration, Food Safety and Inspection Service

Wednesday, May 21 at 2:00 at the National Performance Review

050619AA.TXT 050618CG.TXT

Message Sent To:

Sarah A. Bianchi/OMB/EOP
Michael Cohen/OPD/EOP
Elizabeth Drye/OPD/EOP
Laura Emmett/WHO/EOP
Cathy R. Mays @ EOP @ LNGTWY
Leanne A. Shimabukuro @ EOP @ LNGTWY
Diana Fortuna/OPD/EOP
Tom Freedman
Eric P. Goosby/OPD/EOP
Lyn A. Hogan/OPD/EOP
Christopher C. Jennings/OPD/EOP
William R. Kincaid/OPD/EOP
Jennifer L. Klein/OPD/EOP
Jeanne Lambrew/OPD/EOP
Cathy R. Mays/OPD/EOP
MAZUR_M @ A1 @ CD @ LNGTWY
Nicole R. Rabner/WHO/EOP
Cynthia A. Rice/OPD/EOP
Christa Robinson @ EOP @ LNGTWY
Christa Robinson @ EOP @ LNGTWY
Thomas L. Freedman/OPD/EOP
Jonathan Prince/WHO/EOP
Jose Cerda III/OPD/EOP

Close hold

To: The Vice President

From: Elaine

Re: Reinventing Public Education

Date: 3/10/97

1. Establishing Standards as part of competitiveness in the 21st century -- the move from quantity to quality.

In this year's State of the Union, President Clinton challenged America to adopt tough new national education standards. This is critical to preparing our young men and women -- and therefore our country -- to participate in the information age economy.

For years we measured education by quantity. Since the 19th century Americans have stayed in school longer and longer. School has been a good investment - for the individual and for the country.

Now, as we move into the next century we find that we must look at quality as well as quantity. For the last two decades the rate of increase in the number of years of schooling Americans complete has slowed dramatically [Hanusheck, p. 15] and a number of our major international competitors have high school completion rates like ours. [Hanushek, p. 18]. Suddenly we are forced to look at what children learn in school. We are faced with the challenge of increasing quality as well as quantity.

2. More money hasn't bought an increase in quality -- or rising expenditures and falling performance.

A look at the recent history of student performance and educational spending highlights a central mystery of the state of American education today. In 1890 we were spending less than 1% of GNP on public schooling; in 1990 we are spending more than 3.5% of GNP on public schooling. Between 1970 and 1990 education spending per student increased from $3,269 per student to $5,582 per student. This increase, of 3 to 3.5% per year -- is the same as it has been for nearly a century.

In addition three factors generally thought to contribute to educational performance have moved in the right direction. The pupil-teacher ration has decreased, the percentage of teachers with master's degrees has increased and the median years of teacher experience has increased. [See attached chart from Hanushek] And yet performance has been flat in spite of these trends. We are spending more money and not getting anything for it.

Stagnant performance is as common in school districts where there are adequate resources serving relatively advantaged populations as it is in poorer districts.

3. Restructing for the Information Age.

The lack of correlation between higher education spending and higher student performance should not be taken to be an excuse for lower or stagnant education spending. Indeed many poor school districts are dramatically underfunded and the financing of schools has led to a heated debate about educational equity which is important to consider in its own right. In addition, there are powerful societal changes, most importantly the decline in two parent families, that we know are important to children's educational performance.

But in government we can affect some things more than others. The mystery of higher spending and stagnant performance leads us to ask --

- What will school districts have to do to meet the challenge of the 21st century and turn out adults who are competitive in the information age economy?
- Can we manage our education dollars better?
- Is there a way to get better results from the dollars we spend?

In some senses public school systems are no different than other large organizations in this society that have had to confront the challenges of global economic competition. In the public sphere and in the private sphere large organizations are finding that the information age calls for a different way of doing business. Hugh Price, (President of the Urban League??) told the President the other day that when the auto industry found themselves losing out to Japanese imports they had to go back and rethink their old ways of doing business. They had to retool their assembly lines and cut their overhead. Sheree Speakman who works on education reform issues for the accounting house Coopers and Lybrand, calls public education "the last unrestructured industry in America." And the social theorist and former White House official Bill Galston says that there is a mismatch between centralized, bureaucratic governance structures developed for an industrial economy that are colliding with the educational systems needed for an information economy.

These comments track my own experience in reinventing government. President Clinton and I inherited a federal government in which good people were trapped in bad systems. There were too many people at the top writing rules for those who were supposed to be doing the work. Through no fault of anyone in particular, years of rules and regulations telling the federal bureaucrat what he or she could not do had had the effect of obscuring what they should do. The core mission of many agencies had gotten lost in layers of bureaucracy. In too many places more money didn't mean better performance - contributing to even more public disillusionment with government.

There is some evidence that bureaucracy is a culprit in educational performance as well. In 1983, a study in the Digest of Education Statistics found that full-time classroom teachers represented barely half (54%) of all local school employment; administrators represented 13%. [Digest of Education Statistics, Dept. of Education, 9/86; Table 47.] As we have learned in the reinvention of the Federal government, top heavy administration not only takes money from people on the front lines and diverts it to people in the front offices, in order to justify their existence too many people at the top will generate so much bureaucracy for those on the front lines that they will not spend enough time on their core mission. Speakman found that in some schools teachers spent 30% of their time teaching and the rest of their time "complying" with bureaucratic requirements foisted on them by overly centralized school bureaucracies.

In seeking to remedy the problem of excessive bureaucracy in the Federal government, I looked at successful models from the private sector and found that the first step in changing any business was to focus on the customer and then reorient the rest of the company to the service of that customer. It worked for the American auto industry and for many other industries which were in the doldrums two decades ago and which are now back on top. It is working in some parts of our federal government and in many state and local governments where performance is improving in spite of tight dollars. And it can work for our kids if we follow some basic rules and do some tough thinking.

4. Reinventing the School District.

Start with the fact that he most important person in any school district is -- the customer -- the student. Of course everyone says that but does the organization act as if that were the case? The first step in reinventing public education is for everyone from parents to policy makers to ask:

- Is the student at the center of this system?
- What percentage of every education dollar is spent directly on the education of a student?
- How many of the employees that a school system classifies as "instructional" actually spend their days with students?
- How does the money spent on "overhead" contribute to what goes on in the classroom?

• Are the incentives in the system linked to the performance of the students?

• Do current programs have any effect on performance?

• Does the system encourage parental involvement or does it keep parents out?

• Does the system encourage innovation?

• Is innovation always associated with the need for more money?

• How much of the teacher's day is spent on teaching versus bureaucratically dictated paperwork?

We know management failure when we see it on colossal terms as we do, unfortunately, in some of our oldest and biggest cities. A few weeks ago, the Washington Post asked:

"What does a school system that has some of the lowest test scores in the nation do with $594 million a year? How do D.C. schools allot $7,389 per student -- among the nation's highest spending rates -- and still wind up short of books, crayons, toilet paper and, in some schools, even teachers?"

The answer was a long tale of corruption and mismanagement, filled with stories of how, over a five year period, the D.C. school district had spent $50 million more on administrative personnel than they had been authorized and how they had taken the money from funds that should have been spent on textbooks, fieldtrips, athletics and other things directly relevant to the student. Stories of bureaucratic breakdown are all too common in many of our biggest school districts where inadequate planning, excessive numbers of nonteachers and perpetual mismanagment have only added to the problems that our poorest children face. One study of large school districts found that only 52% of every school dollar actually gets into the classroom. [Business Week, April 17, 1995]

But what about all the other districts in the country? The ones in our small cities, towns and suburbs? While they do not share the same dramatic gap between spending and performance that occurs in some big city school districts they too could benefit from asking the hard question -- How much of your education dollar actually gets into the classroom?

When Sheree Speakman of Coopers and Lybrand began working on school reform she and Professor Bruce Cooper of Fordham University found that most school districts cannot even answer that most basic question. And its no wonder. School accounting systems, like accounting systems in many other areas of government, were not designed to look at the allocation of resources in that way. The "Insight" program they developed, allows school districts to see where they spend their money by examining every expenditure line in the budget and then alloting it in ways that will show where the money is going.

When you place the reinventors eye on public education opportunities for improvements emerge.

In New York City "site based reporting" showed that out of total spending of nearly $8000 per student per year -- only $44 was going to classroom materials. [BusWeek, 4/17/97]

In Texas auditors found $640 million in inefficiencies in the state's public schools. In one Texas county there were 12 school systems with 12 school boards, 12 superintendents and so on. And only 5000 students. [US News 1/11/93]

When school districts take a long hard look at where their money goes they can often find unexpected sources of funds. In 1992 in Ohio, the 50,000 student school district of Cincinnati, slashed its administration by 51% and used the $16 million windfall to invest in instructional projects. [US News 1/11/93]

In Durham County North Carolina, schools slashed administrative personnel costs by $1.7 million by reinventing school food service, schools transportation and school facility management. They were able to spare their instructional program from cuts that needed to be made and scores went up and drop out rates went down. [Education Digest, 2/93]

When Nashville Tennessee schools crunched their numbers the discovered that they were spending 24% of their budget on operations such as maintenance, compared with 18% for a typical large school district. That resulted in a program to bring down operating costs and a goal of increasing the percentage of the operational budget that goes directing into instructional spending every year, according to Edward Taylor, Assistant Superintendent of Metro Nashville. [BusWeek, 4/17/95]

In Seattle, the school district shrunk its central administrative staff and is working to cut red tape. They hope to replace 300 pages of documents with a 25 page contract. Teachers unions and the school district recently agreed to an innovative 8 page "truct agreement" that committs to partnership and to school based decision making. [Dept. of Education, ACE program, 11/5/96]

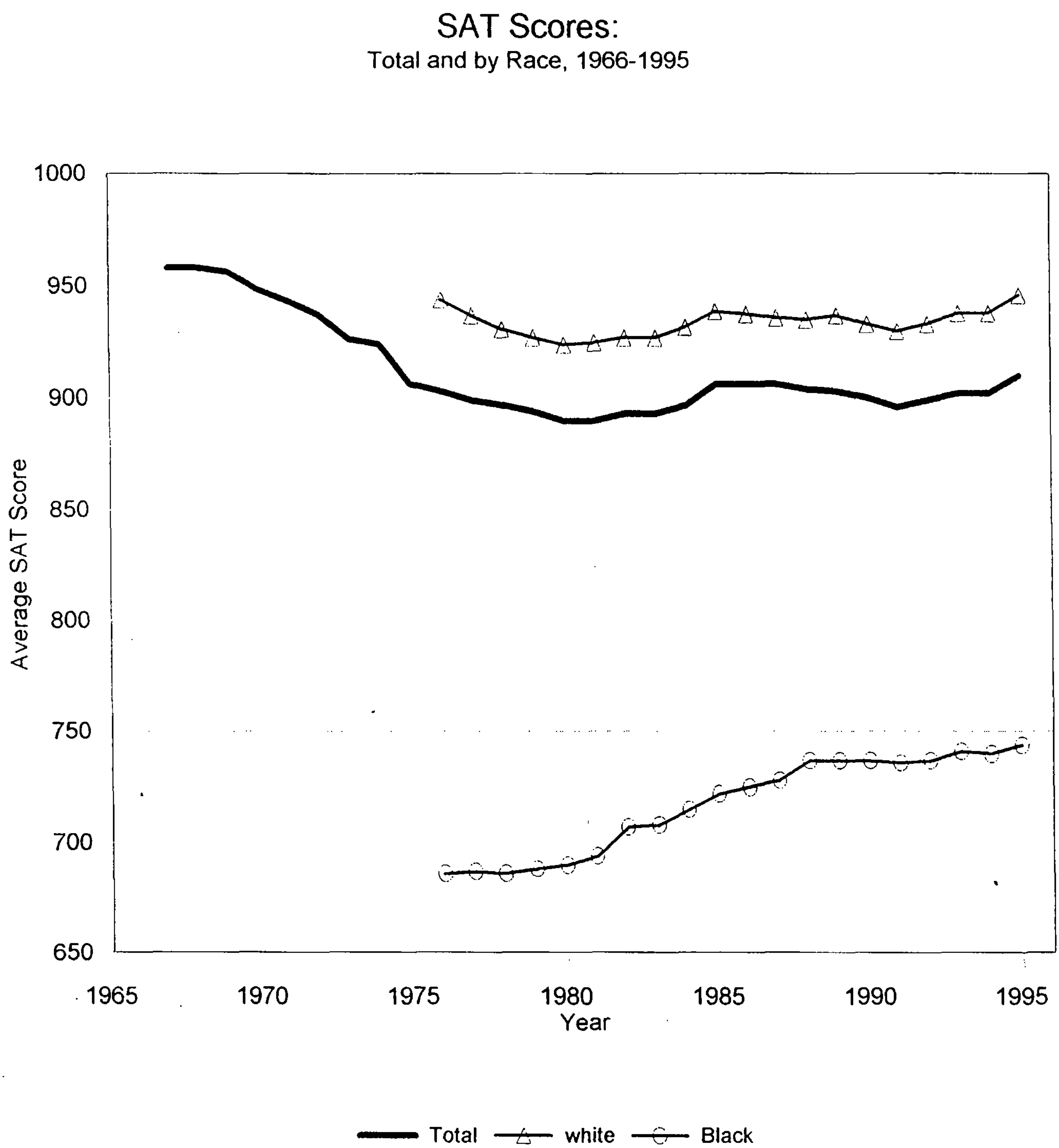
5. Conclusion -- Restructure schools to put children first.

So today, I am calling on school superintendents, school administrators, principals and parents to take a long hard look at the way we spend our education dollars. Remember that the student and those who deal with students day in and day out are the most important people in that system. Create a system that can innovate and learn. Create a system that can deliver the higher standards of the next century.

Public School Resources in the United States, 1961-1991

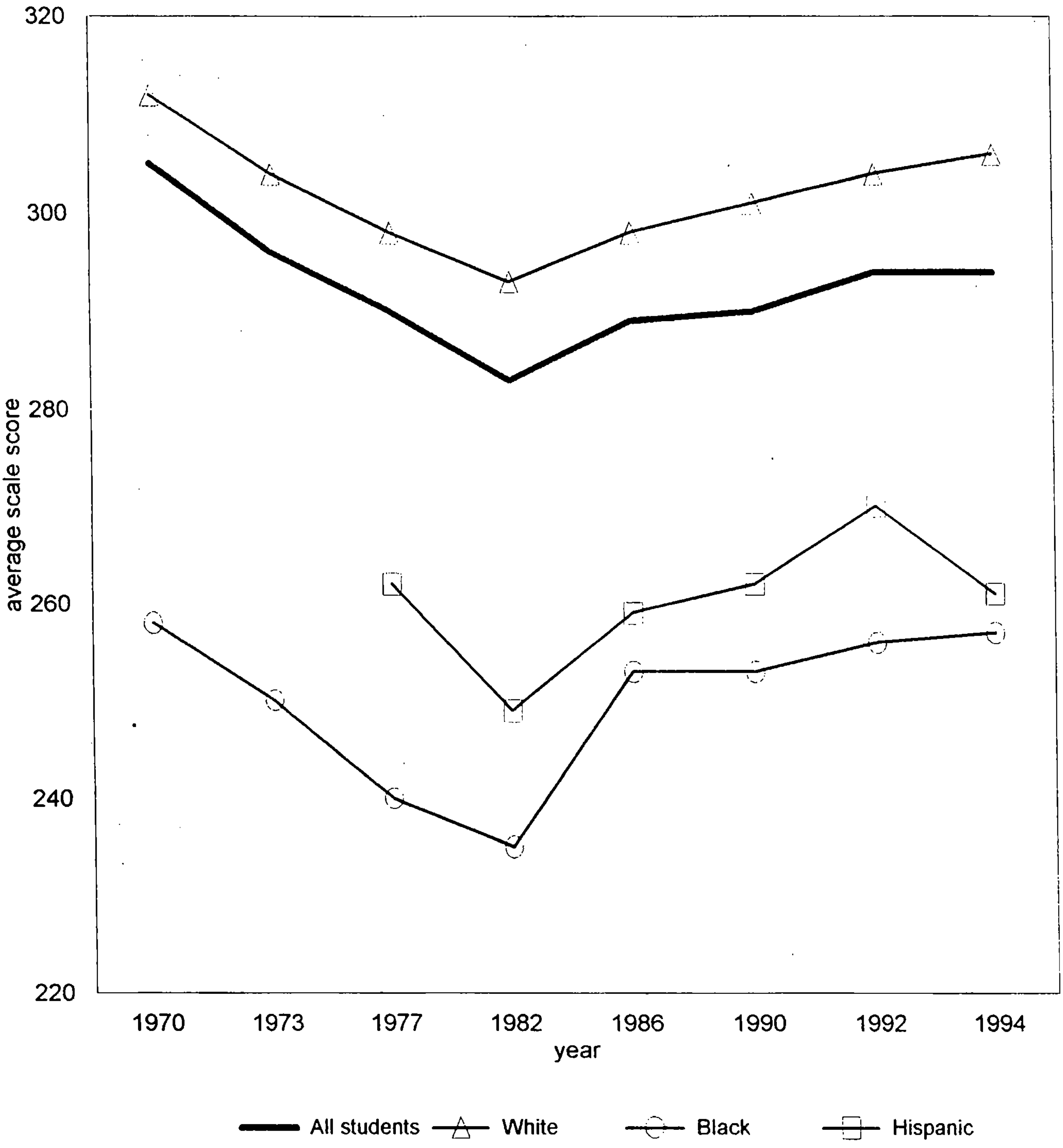
	1960-61	1965-66	1970-71	1975-76	1980-81	1985-86	1990-91
Pupil-teacher ratio	25.6	24.1	22.3	20.2	18.8	17.7	17.3
% teachers with master's degree	23.1	23.2	27.1	37.1	49.3	50.7	52.6
median years teacher experience	11	8	8	8	12	15	15
current expenditure/ADA (1992-93 $'s)	$1,903	$2,402	$3,269	$3,864	$4,116	$4,919	$5,582

Source: U.S. Department of Education[1994]

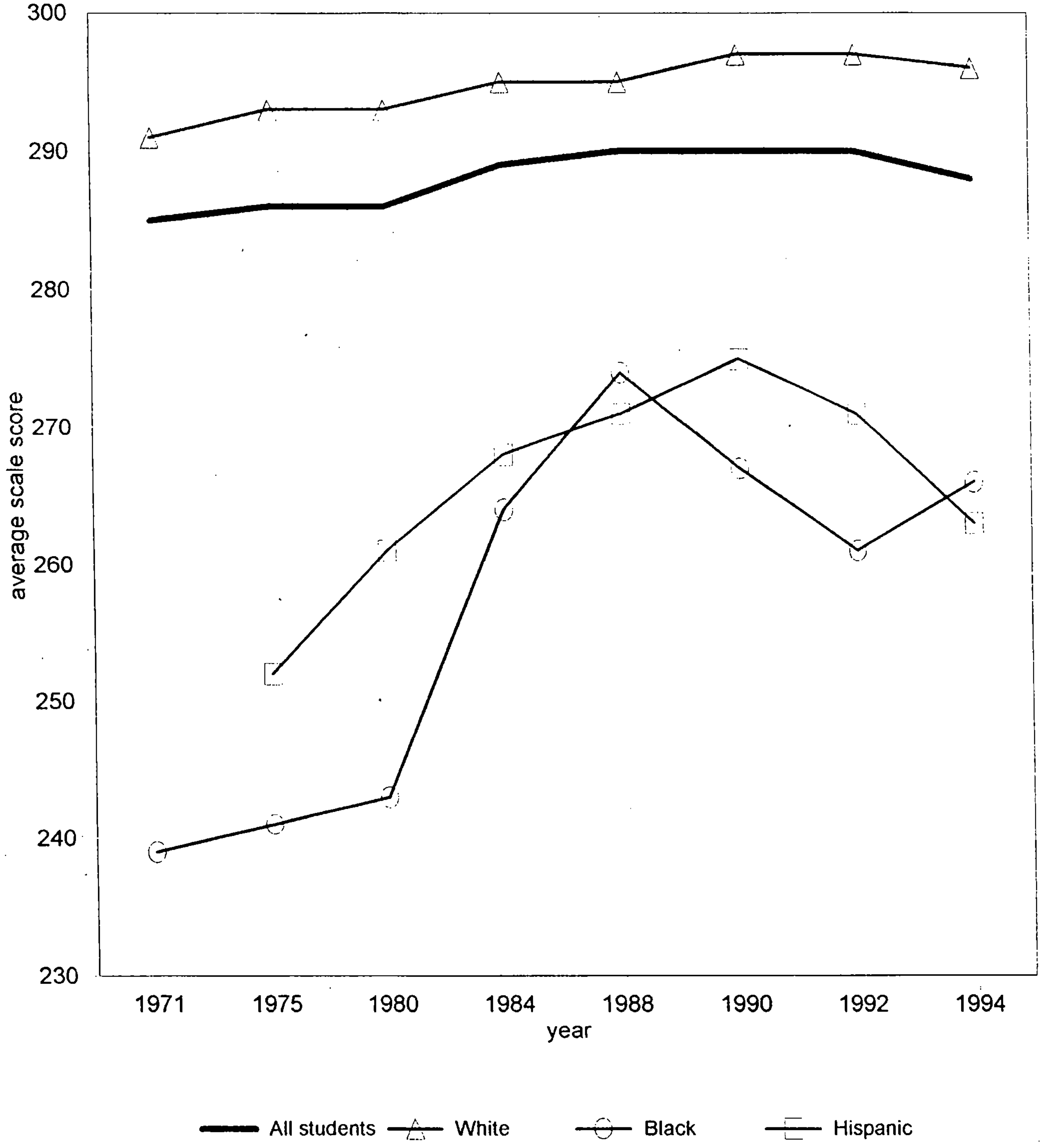

SAT Scores:
Total and by Race, 1966-1995
1000
950
900
850
800
750
700
650
Average SAT Score
1965
1970
1975
1980
1985
1990
1995
Year
Total
white
Black

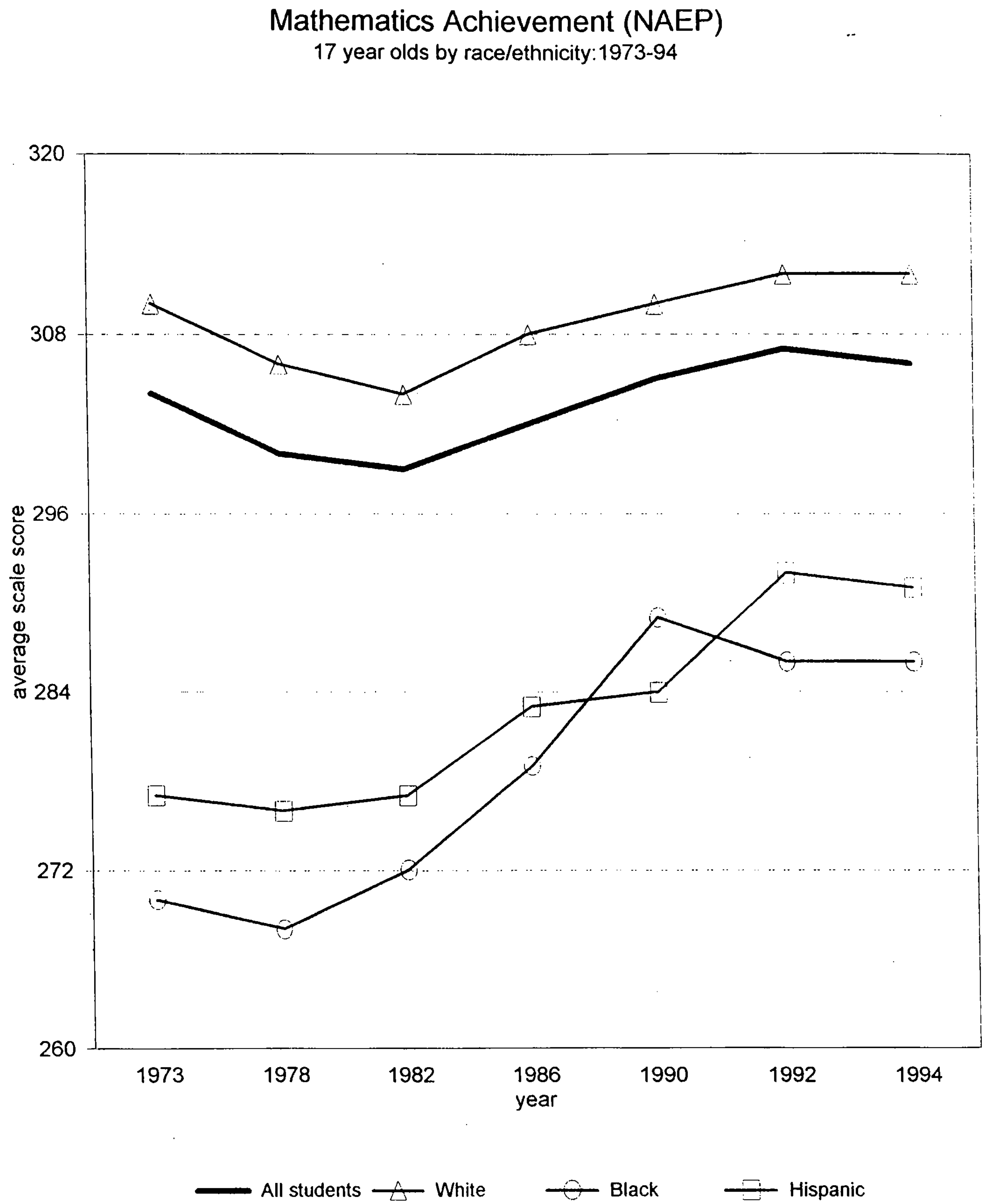
Science Achievement (NAEP)

17 year olds by race/ethnicity:1970-94



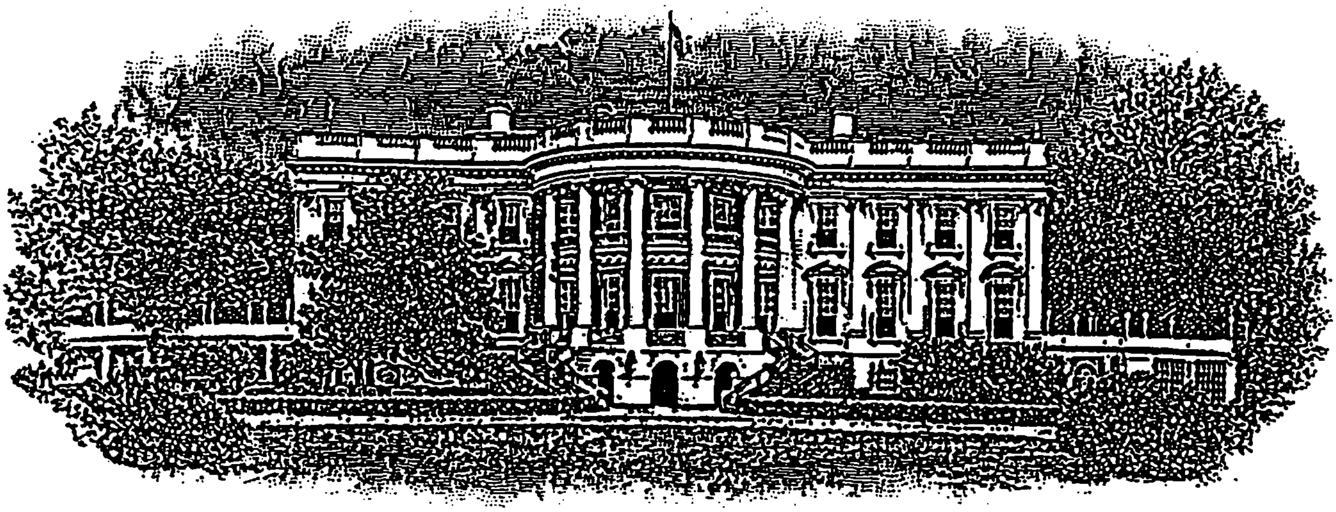
Reading Achievement (NAEP)
17 year olds by race/ethnicity: 1971-94





Mathematics Achievement (NAEP)
17 year olds by race/ethnicity:1973-94
320
308
296
284
272
260
average scale score
1973
1978
1982
1986
1990
1992
1994
year
All students
White
Black
Hispanic

The White House



DOMESTIC POLICY

FACSIMILE TRANSMISSION COVER SHEET

TO: Mike Smith

FAX NUMBER: 401-3095

TELEPHONE NUMBER:

FROM: Bill Kincaid

TELEPHONE NUMBER:

PAGES (INCLUDING COVER): 15

COMMENTS: Mike – You should look at this ASAP – VP is scheduled to speak in CA Thursday – in part on reinventing schools. We have been asked for comment on this "CLOSE HOLD"

- Bill

Cohen

Close Hold

To: The Vice President
From: Elaine
Re: Reinventing Public Education
Date: 3/10/97

1. Establishing Standards as part of competitiveness in the 21st century -- the move from quantity to quality.

In this year's State of the Union, President Clinton challenged America to adopt tough new national education standards. This is critical to preparing our young men and women -- and therefore our country -- to participate in the information age economy.

For years we measured education by quantity. Since the 19th century Americans have stayed in school longer and longer. School has been a good investment - for the individual and for the country.

Now, as we move into the next century we find that we must look at quality as well as quantity. For the last two decades the rate of increase in the number of years of schooling Americans complete has slowed dramatically [Hanusheck, p. 15] and a number of our major international competitors have high school completion rates like ours. [Hanushek, p. 18]. Suddenly we are forced to look at what children learn in school. We are faced with the challenge of increasing quality as well as quantity.

2. More money hasn't bought an increase in quality -- or rising expenditures and falling performance.

A look at the recent history of student performance and educational spending highlights a central mystery of the state of American education today. In 1890 we were spending less than 1% of GNP on public schooling; in 1990 we are spending more than 3.5% of GNP on public schooling. Between 1970 and 1990 education spending per student increased from $3,269 per student to $5,582 per student. This increase, of 3 to 3.5% per year -- is the same as it has been for nearly a century.

In addition three factors generally thought to contribute to educational performance have moved in the right direction. The pupil-teacher ration has decreased, the percentage of teachers with master's degrees has increased and the median years of teacher experience has increased. [See attached chart from Hanushek] And yet performance has been flat in spite of these trends. We are spending more money and not getting anything for it.

Stagnant performance is as common in school districts where there are adequate resources serving relatively advantaged populations as it is in poorer districts.

3. Restructing for the Information Age.

The lack of correlation between higher education spending and higher student performance should not be taken to be an excuse for lower or stagnant education spending. Indeed many poor school districts are dramatically underfunded and the financing of schools has led to a heated debate about educational equity which is important to consider in its own right. In addition, there are powerful societal changes, most importantly the decline in two parent families, that we know are important to children's educational performance.

But in government we can affect some things more than others. The mystery of higher spending and stagnant performance leads us to ask --

- What will school districts have to do to meet the challenge of the 21st century and turn out adults who are competitive in the information age economy?
- Can we manage our education dollars better?
- Is there a way to get better results from the dollars we spend?

In some senses public school systems are no different than other large organizations in this society that have had to confront the challenges of global economic competition. In the public sphere and in the private sphere large organizations are finding that the information age calls for a different way of doing business. Hugh Price, (President of the Urban League??) told the President the other day that when the auto industry found themselves losing out to Japanese imports they had to go back and rethink their old ways of doing business. They had to retool their assembly lines and cut their overhead. Sheree Speakman who works on education reform issues for the accounting house Coopers and Lybrand, calls public education "the last unrestructured industry in America." And the social theorist and former White House official Bill Galston says that there is a mismatch between centralized, bureaucratic governance structures developed for an industrial economy that are colliding with the educational systems needed for an information economy.

These comments track my own experience in reinventing government. President Clinton and I inherited a federal government in which good people were trapped in bad systems. There were too many people at the top writing rules for those who were supposed to be doing the work. Through no fault of anyone in particular, years of rules and regulations telling the federal bureaucrat what he or she could <u>not do</u> had had the effect of obscuring what they <u>should do.</u> The core mission of many agencies had gotten lost in layers of bureaucracy. In too many places more money didn't mean better performance - contributing to even more public disillusionment with government.

There is some evidence that bureaucracy is a culprit in educational performance as well. In 1983, a study in the Digest of Education Statistics found that full-time classroom teachers represented barely half (54%) of all local school employment; administrators represented 13%. [Digest of Education Statistics, Dept. of Education, 9/86; Table 47.] As we have learned in the reinvention of the Federal government, top heavy administration not only takes money from people on the front lines and diverts it to people in the front offices, in order to justify their existence too many people at the top will generate so much bureaucracy for those on the front lines that they will not spend enough time on their core mission. Speakman found that in some schools teachers spent 30% of their time teaching and the rest of their time "complying" with bureaucratic requirements foisted on them by overly centralized school bureaucracies.

In seeking to remedy the problem of excessive bureaucracy in the Federal government, I looked at successful models from the private sector and found that the first step in changing any business was to focus on the customer and then reorient the rest of the company to the service of that customer. It worked for the American auto industry and for many other industries which were in the doldrums two decades ago and which are now back on top. It is working in some parts of our federal government and in many state and local governments where performance is improving in spite of tight dollars. And it can work for our kids if we follow some basic rules and do some tough thinking.

4. Reinventing the School District.

Start with the fact that he most important person in any school district is -- the customer -- the student. Of course everyone says that but does the organization act as if that were the case? The first step in reinventing public education is for everyone from parents to policy makers to ask:

- Is the student at the center of this system?
- What percentage of every education dollar is spent directly on the education of a student?
- How many of the employees that a school system classifies as "instructional" actually spend their days with students?
- How does the money spent on "overhead" contribute to what goes on in the classroom?

• Are the incentives in the system linked to the performance of the students?

• Do current programs have any effect on performance?

• Does the system encourage parental involvement or does it keep parents out?

• Does the system encourage innovation?

• Is innovation always associated with the need for more money?

• How much of the teacher's day is spent on teaching versus bureaucratically dictated paperwork?

We know management failure when we see it on colossal terms as we do, unfortunately, in some of our oldest and biggest cities. A few weeks ago, the Washington Post asked:

"What does a school system that has some of the lowest test scores in the nation do with $594 million a year? How do D.C. schools allot $7,389 per student -- among the nation's highest spending rates -- and still wind up short of books, crayons, toilet paper and, in some schools, even teachers?"

The answer was a long tale of corruption and mismanagement, filled with stories of how, over a five year period, the D.C. school district had spent $50 million more on administrative personnel than they had been authorized and how they had taken the money from funds that should have been spent on textbooks, fieldtrips, athletics and other things directly relevant to the student. Stories of bureaucratic breakdown are all too common in many of our biggest school districts where inadequate planning, excessive numbers of nonteachers and perpetual mismanagment have only added to the problems that our poorest children face. One study of large school districts found that only 52% of every school dollar actually gets into the classroom. [Business Week, April 17, 1995]

But what about all the other districts in the country? The ones in our small cities, towns and suburbs? While they do not share the same dramatic gap between spending and performance that occurs in some big city school districts they too could benefit from asking the hard question -- How much of your education dollar actually gets into the classroom?

When Sheree Speakman of Coopers and Lybrand began working on school reform she and Professor Bruce Cooper of Fordham University found that most school districts cannot even answer that most basic question. And its no wonder. School accounting systems, like accounting systems in many other areas of government, were not designed to look at the allocation of resources in that way. The "Insight" program they developed, allows school districts to see where they spend their money by examining every expenditure line in the budget and then alloting it in ways that will show where the money is going.

When you place the reinventors eye on public education opportunities for improvements emerge.

In New York City "site based reporting" showed that out of total spending of nearly $8000 per student per year -- only $44 was going to classroom materials. [BusWeek, 4/17/97]

In Texas auditors found $640 million in inefficiencies in the state's public schools. In one Texas county there were 12 school systems with 12 school boards, 12 superintendents and so on. And only 5000 students. [US News 1/11/93]

When school districts take a long hard look at where their money goes they can often find unexpected sources of funds. In 1992 in Ohio, the 50,000 student school district of Cincinnati, slashed its administration by 51% and used the $16 million windfall to invest in instructional projects. [US News 1/11/93]

In Durham County North Carolina, schools slashed administrative personnel costs by $1.7 million by reinventing school food service, schools transportation and school facility management. They were able to spare their instructional program from cuts that needed to be made and scores went up and drop out rates went down. [Education Digest, 2/93]

When Nashville Tennessee schools crunched their numbers the discovered that they were spending 24% of their budget on operations such as maintenance, compared with 18% for a typical large school district. That resulted in a program to bring down operating costs and a goal of increasing the percentage of the operational budget that goes directing into instructional spending every year, according to Edward Taylor, Assistant Superintendent of Metro Nashville. [BusWeek, 4/17/95]

In Seattle, the school district shrunk its central administrative staff and is working to cut red tape. They hope to replace 300 pages of documents with a 25 page contract. Teachers unions and the school district recently agreed to an innovative 8 page "truct agreement" that committs to partnership and to school based decision making. [Dept. of Education, ACE program, 11/5/96]

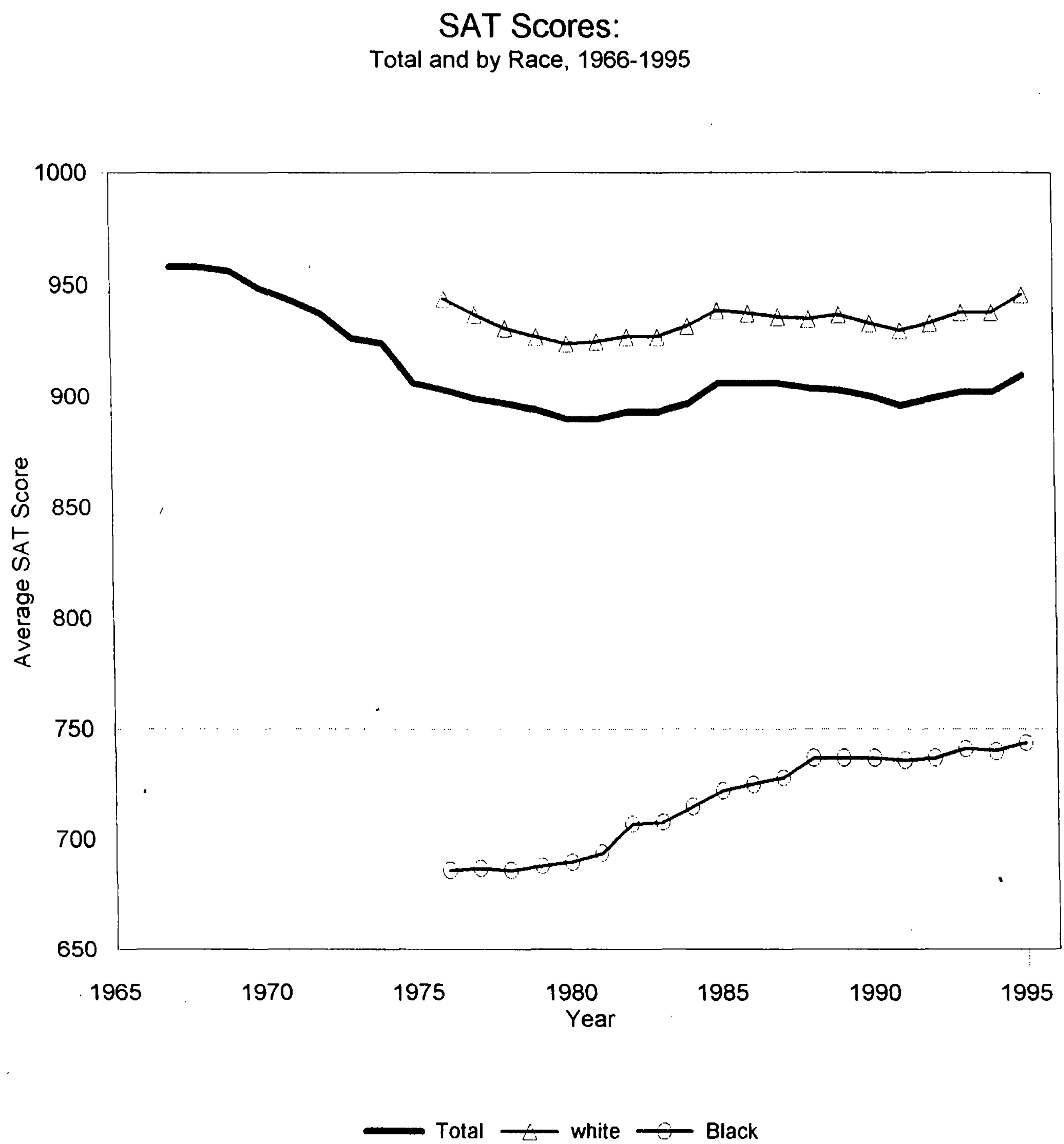
5. Conclusion -- Restructure schools to put children first.

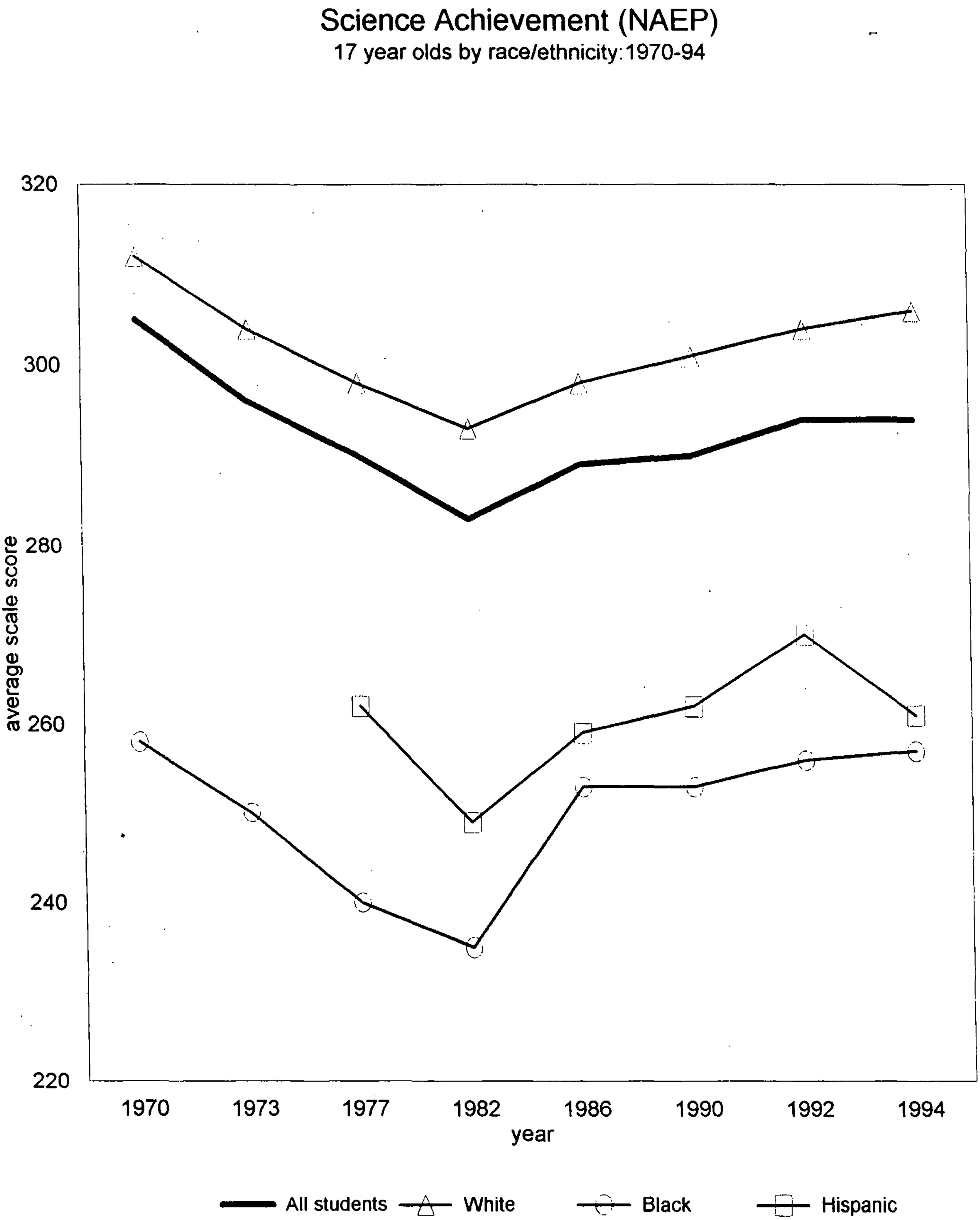
So today, I am calling on school superintendents, school administrators, principals and parents to take a long hard look at the way we spend our education dollars. Remember that the student and those who deal with students day in and day out are the most important people in that system. Create a system that can innovate and learn. Create a system that can deliver the higher standards of the next century.

Public School Resources in the United States, 1961-1991

	1960-61	1965-66	1970-71	1975-76	1980-81	1985-86	1990-91
Pupil-teacher ratio	25.6	24.1	22.3	20.2	18.8	17.7	17.3
% teachers with master's degree	23.1	23.2	27.1	37.1	49.3	50.7	52.6
median years teacher experience	11	8	8	8	12	15	15
current expenditure/ADA (1992-93 $'s)	$1,903	$2,402	$3,269	$3,864	$4,116	$4,919	$5,582

Source: U.S. Department of Education[1994]


SAT Scores:
Total and by Race, 1966-1995
1000
950
900
850
800
750
700
650
Average SAT Score
1965
1970
1975
1980
1985
1990
1995
Year
Total
white
Black


Science Achievement (NAEP)
17 year olds by race/ethnicity:1970-94
320
300
280
260
240
220
average scale score
1970
1973
1977
1982
1986
1990
1992
1994
year
All students
White
Black
Hispanic

Reading Achievement (NAEP)
17 year olds by race/ethnicity: 1971-94


Mathematics Achievement (NAEP)
17 year olds by race/ethnicity: 1973-94
320
308
296
284
272
260
average scale score
1973
1978
1982
1986
1990
1992
1994
year
All students
White
Black
Hispanic