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REMARKS BY THE VICE PRESIDENT
TO THE NATIONAL EDUCATION ASSOCIATION

National Education Association Convention Center
Albuquerque, New Mexico

THE VICE PRESIDENT: Thank you very much, ladies and gentlemen. That does me a world of good to get that kind of warm welcome here. I really appreciate it more than I can tell you. Thank you very much. And I want to thank Keith Geiger (?) for that very generous and warm introduction. Thank you, Keith, and thank you for your leadership of the NEA. Keith worked his way up to talking about me being president of the United States Senate and voting on that budget bill, the new economic plan that has turned our country around.

I'm glad you mentioned that because my experience in the last 14 months of voting as Vice President has been an elevating experience that has made me more optimistic about life because I've noticed a pattern which, with all due respect to the news media, has almost been completely missed. (Laughter and applause.) But if you think about it -- you watch -- if you think about it, here is the pattern that I suddenly realize is there. Every time I vote, we win. It works every time. It changed my whole outlook. (Laughter and applause.) And no vote I've cast in 17 years has been more important than that one and had a bigger impact. And I appreciate the chance to cast it.

I want to acknowledge with thanks and respect to Governor Bruce King and his wife, Alice -- longtime friends to me and my family -- and to my friend and colleague, Jeff Bingham, who was my stalwart partner and friend and co-worker in so many of the issues that you all are discussing at this unique conference, and who does such an outstanding job for the people of New Mexico and of the United States. And it's been my pleasure to have a chance to work with his wife, Anne, on the information superhighway issues as she is over at the Justice Department.

To a person who, really, I have boundless respect for, Secretary Riley is a combination of character and competence and courage. And he just provides outstanding leadership in the field of education. It is just a joy to be able to work with him. (Applause.) He'll tell me later I laid it on too thick, but really, it is an honor to serve in the Cabinet with Secretary Riley.

And to Congressman Steve Schiff and to someone who is not present, my friend Congressman Bill Richardson, who's been a great friend of the NEA, as well as to State Senator Mannie Aragon (?) and Speaker Ray Sanchez and Mayor Martin Chavez. And to others who are helping to lead this great organization -- the NEA, Bob Chase as vice president; Marilyn Monihan as secretary-treasurer; Ken Molly (?), my longtime friend, as assistant executive director; Charles Boyer, president of the NEA here in New Mexico.

And while I'm at it, ladies and gentlemen, Keith was kind enough to mention the fact that I've long been a friend and ally of the NEA. I can say the same thing from going in the other direction because you've been a longtime friend and ally to me and you have made a huge difference in every race that I've been involved

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in. And on behalf of President Clinton and our whole administration, I would like to again thank the NEA for getting us elected and giving us the chance to bring change to America. We appreciate your help. Thank you. (Applause.)

Now, I'd like to talk a little bit about the subject that you're discussing here -- technology and education. And I'd like to start not with expansive promises and far-ranging visions, but I'd like to start instead with a recognition of the fact that many in the field of education have at times in the not-too-distant past -- say, the 1970's -- gotten their hopes raised for the prospects of computers in classroom and technology as a way to enhance the productivity of education and then found that the reality did not match the rhetoric and that the hopes that had been so raised were, in too many instances, dashed because there just didn't seem to make that much of a difference. There wasn't the software. There wasn't the teacher training. There wasn't the continuity. There were all kinds of problems. The machines were nice but didn't really make all the difference that people hoped.

So I know there are a lot of people here at this conference who probably went through that experience and felt a little bit burned emotionally and are still a little bit reluctant to once again get back into the business of hoping that there's something there that can make a tremendous difference.

I was looking at a quotation recently, and here it is: "For more than 100 years, much complaint has been made of the unmethodical way in which schools are conducted. But it is only within the last 30 that any serious attempt has been made to find a remedy for this state of things. And with what result? Schools remain exactly as they were." That was written by John Amos Comenius in 1632 -- (laughter) -- in a book called The Great Didactica. And it's worth recalling that this kind of discussion has, in different ways, taken place before.

But in 1632 the world was going through some interesting changes. Only 13 years before that, a young man named Rene Descartes at the age of 23 on the banks of the Danube River had a startling vision based in part on the visual metaphors that came out of Copernicus' discovery of the new model for the solar system. And Descartes' vision was of all matter, all the universe being made up of dead, inanimate pieces of matter that moved in predictable patterns. And many historians say that in that moment what we call the Scientific Revolution really began.

Three hundred and seventy five years later, we now see a new phase in the scientific revolution in addition to inductive and deductive reasoning. We have a whole new branch of knowledge creation that the scientists are calling computational science. One of my rules of thumb is when you're talking about important things -- and there are only two of them -- and a third one is discovered, that's a big deal.

And that's the case with computational science. Computers are now beginning to transform the way we think about this world we live in. The effects are also creating a lot of problems. There has been an explosion of data. Information about everything is now available in much larger quantities than was ever dreamed possible only 30 years ago. Indeed, in some fields of knowledge, the total quantity of knowledge is doubling every eight months.

And so the traditional approach to keeping up with a field of knowledge seems, to many people, no longer adequate if the total sum of that knowledge is doubling in less than a year and the new knowledge is displacing some of the old.

The Library of Congress, I was told on a recent visit, now receives 10,000 periodicals a year from the nation of India alone. There is a surplus of data. And if you look at the delicate, indecipherable process by which data is turned into information and then further transformed into knowledge conveyed to the mind of another human being and then with luck and time gradually ferments into wisdom, it's interesting to ask, what happens to that process when, at the front end, in the first step, there is suddenly an enormous explosion in the amount of raw data. Does it clog up the pipes? Does it create the irony that more data can result in less wisdom? One is tempted to believe that at times, when we look at the problems we face around the world and all the information we have available to solve those problems, if we could only figure out how to turn it into knowledge and convey it to others in the right way -- and convey it to ourselves in the right way.

And so it becomes obvious to more and more people outside the teaching profession that education, more than ever before, is the key to our future. But it is also apparent that education may have a somewhat different role to play in a world with such vast quantities of raw information. Any approach in years past that relied on learning lots and lots of facts in order to accumulate knowledge looks a little different in a world where all those facts become instantly available to students outside of memory, on line as you could say.

And so many ask, how can we cope with this new reality, and what role can education play? A friend of mine who works in the field of computational science once told me that if you tried to analyze and describe the human mind in terms that computer scientists use to describe the way the mind handles information, you could say that we people have high resolution but a low bit rate. Now, what does that mean? (Laughter.) I asked him what that meant, and he said that if we tried to absorb information bit by bit by bit, we don't absorb it very rapidly that way.

Years ago, the telephone company, back when there was one telephone company, did a lot of studies and found out that seven digits was the most we could keep in short term memory and then they added several more. (Laughter.) But the other half of that -- high resolution -- is the hopeful part of it. That, my friend told me, means that if we see thousands or millions or billions of bits of information arrayed in a recognizable pattern, we can glance at it and absorb and understand all that information in one gulp -- the Milky Way, a map of the United States.

And so, clearly part of our challenge in this new era of such vast amounts of information, is to find better ways to form lots and lots of information into patterns that we can recognize and gulp in large quantities.

The new generation of computers that are now coming off the manufacturing lines, unlike the ones that were tried so hopefully in classrooms in the 1970s, have so much more power to deal with large quantities of information that they can make a dramatic difference in our ability to do two things: First, our ability to array large quantities of information into recognizable patterns; and secondly, they can make a huge difference in our ability to sort through large amounts of information to find the needle in the haystack that we're looking for at any given moment about the particular subject that we're interested in at that moment.

Now, here's the catch: These powerful machines that can make a huge difference in our ability to navigate through all the information that's out there now cannot talk to each other. They cannot convey these patterns that contain lots of information from one place to another place unless the lines that connect them can handle large amounts of information flowing through them. This

phrase, the information superhighway, really began as a simple metaphor describing the difference between the little two-lane roads that criss-crossed America at the end of World War II that were inadequate when Americans bought automobiles in such large numbers.

I remember when I was a young child driving back and forth from Carthage, Tennessee, to Nashville, Tennessee, and Highway 70 all of a sudden was just clogged bumper to bumper for almost 50 miles on some occasions. And then the interstates came in -- the superhighways to handle the big increase in the number of cars and trucks. Well, the so-called information highways that we have in a great deal of our country, were built for telephone conversations and they don't need that much information.

And so it makes sense now to build networks of information superhighways that can convey large amounts of information and take them right to the classroom. Our administration has called upon the industries involved and set as a national goal the linking of every public school classroom in America to this information superhighway by the turn of the century. We believe that it can be done. And there are many hopeful signs that it is now in the process of being done.

We know also that unless we take a new approach to greatly improve the access that teachers have to the tools that people in other professions are increasingly gaining access to, then we're going to be in trouble. (Applause.) And we've got to change that.

Right now, 22 percent of our classrooms have a telephone line. That means that more than three-quarters of our classrooms do not. That doesn't make any sense -- 100 percent of our classrooms should be hooked up. (Applause.)

You all know the statistics about the challenge -- the math scores of the top one percent of our high schools seniors put them in the 50th percentile in Japan. You know the dropout rate -- 29 percent of ours, compared to nine percent in Germany and six percent in Japan, and, you know, that's just got to change. And the 22 percent of our classrooms that have telephone lines, what percent do you think have modems? (Laughter.) Four percent, four percent. Well, you know, that's just not right. We cannot move into this new era of education when only four percent of our classrooms are able to take advantage of it. And our administration is committed to changing these facts and making this new technology is available.

I believe in my heart that by the turn of the century, and in many, many places well before then, it will be possible for children in every classroom to plug into digital libraries; to plug into the Library of Congress; to explore a whole universe of knowledge at his or her own pace driven by his or her own curiosity. We're determined to make these advantages for American students available all over our country.

And let me say in echoing what Secretary Riley said earlier -- and, of course, he and I have worked together so closely on this -- we are determined that this nation cannot and will not become a nation of information haves and have-nots. It has to be available in rural areas, in poor areas, in every school. (Applause.)

Last week, the President signed the Goals 2000 bill. I'm sure you all saw the bill signing ceremony. Secretary Riley was there and has talked to you about the changes that it will bring. And I want to discuss a couple of aspects of this Goals 2000 package, and how they fit in with this vision of the way we can give our schools the advantages of the national information infrastructure. This Goals 2000 measure is going to develop and adopt national

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performance standards. As you know -- you all know exactly how it works and that it aims to improve teacher training, textbooks, instructional materials and technologies.

And we need to set standards that we and our children can be proud of and will enable us to have a population that is better educated than any population in the world, and a work force as educated and skilled as any on the face of this planet. And that's why it doesn't have mandates, it has standards that teachers and parents want to, and can, reach. And to make sure these standards are reached, we're prepared to help with new and innovative approaches that many of you are coming up with and that many of you have talked about at this conference.

Your role as pioneers and guides in making sure that the information that is available over this new infrastructure applies to the standards of your communities and that states adopt is absolutely crucial. Your role is the key. You can say that in this new era the role of teachers is greater than ever before.

This information superhighway, after all, is going to break through traditional barriers by bringing resources and experts from around the world into your classroom. Now, that, also, is not a new idea. You may have heard the phrase, "bring the world to the child." That was the motto of a museum constructed in St. Louis 90 years ago, built because of the success of an exhibit at the World's Fair that offered a view of the university of the future.

Well, the idea of visual education and access to information about other parts of the world isn't new, but with e-mail and video conferencing and networking and these new, more powerful computers, the possibilities are much, much larger than ever before.

Secretary Riley's establishment of an Office of Educational Technology, Deputy Secretary Kunin's work as Chair of the Committee on Education and Technology, and the technology planning grants in the Goals 2000 act are among the things that show our conviction that technology has a crucial role to play in the future of education.

Let me give you just a couple of examples of how students, parents and teachers will both get and use this information. The Secretary talked about linking teachers to one another -- that is an important role because teachers can use this new network to deal with the current problem of being disconnected from your peers. Just as it is crucial for students to be linked, teachers also need networks to share common concerns and experiences, whether on a curriculum or effective teaching techniques.

One such network is the Department of Education's Ask ERICH Service. ERICH stands for Educational Resources Information Clearing House Service. By sending educational questions through e-mail to Ask ERICH, educators can receive a response, either a direct answer or a list of further resources, within 48 hours. You can ask about lesson plans, education techniques, or you can ask for more information on Goals 2000 or lots of other things. Are people using it, are teachers using it, and does it help? Absolutely. Already, every week, more than 400 questions come in from teachers around the country, and the information which ERICH processes is immediately available on line. Frequently-asked questions and answers are then accessed more than 65,000 times a week.

Teacher networks are a success -- they work. Teachers need to make wider use of these networks. And Secretary Riley is having the first conference on educational technology in May to help other teachers replicate the success of those who are already using it.

Now, this brings up another development in the information superhighway that took some people by surprise. The old saying, "there's strength in numbers," shows up in this network because people are finding that when lots of folks with personal computers and modems work together on the same problem, like how to make the best lesson plan in geography, or whatever, the results can be much more powerful than if all the work is done in one central location by a powerful computer or by a single group of people just looking at the problem in the same way.

I noticed -- just to illustrate this fact -- I noticed a article in one of the science sections of the newspaper a couple of weeks ago about a mathematical problem in the area of codes where these scientists had put together two giant prime numbers that could be multiplied together to serve as the basis of an unbreakable code, and they confidently predicted that the most powerful computer likely to be created in the foreseeable future would take four quadrillion years to break through to the answer to that problem.

Well, that got out there on the information superhighway, and folks took it as a challenge. (Laughter.) And somebody organized several thousand people with personal computers to break up the problem into little bitty component parts and spread it around, and now they expect the answer in a few weeks. (Laughter.) Four quadrillion years ahead of schedule. (Laughter.)

Now, there's a lesson in that, and I really do sincerely believe that there is a deep lesson in that. There are two kinds of computers that they tell us about now -- the kind that has the powerful central processing unit that sends out to the field of memory to get information and bring it back and work on it quickly, and then put the answer back into the memory field; and then there's the new kind that they call parallel computers, or massively parallel computers. And the difference, I'm told, is that instead of having one big powerful central processing unit, they break it up into lots of little bitty processing units and they spread them all around through the field of memory, so that every place some of that information is stored, a little bitty processor is there.

And then, when a big problem has to be solved, all of those little bitty processors attack their little piece of the problem at the same time, and all the pieces of the answer are assembled very quickly. So instead of the very powerful unit having to go out and back so many times, they all do just a little bit of processing and bring the answer together in the center.

Now, when you stop and think about it, isn't that similar to what happens in democracy? You could say without too much of a stretch of the imagination that the reason the Soviet Union collapsed and the reason communism failed is that it was just impossible for all of those central planners to figure out what was going on out in every part of that empire and bring all that information back and make decisions. They didn't make very good decisions; they couldn't make very good decisions. They weren't close to the information they needed on which to base those decisions. And when the pace of change speeded up, they were completely overwhelmed.

Our nation began with the revolutionary principle that the average citizen who was closest to the information about his or her life is the person best capable of understanding what needs to be changed, what needs to be kept, what decisions need to be made about the future. And then, when all of our citizens in this nation we love do that at the same time, and their verdicts are collected through free speech or at election time, then the answers, by and large, are much better as a basis for guiding the destiny of a nation and the decisions of some dictator, or some communist ruler trying to

do everything there in the center. You could also say that capitalism works that way, too.

But, ladies and gentlemen, education has to work that way. You know that; you do that all the time. But now that we have these new technologies, we've got to spread them around, and we've got to make them accessible to every teacher in every classroom as we've been saying up here. And the net result will be to lift our ability to equip the children and others seeking education in this nation as we have never been able to do it before.

Let me give you just a couple of other quick examples. There's something called the Senior Net. Anybody here heard of that? It provides a forum for older Americans to help one another. I heard a story the other day that I think is just great. A 93-year-old woman whose family circumstances changed absolutely refused to enter a nursing home unless there was a line installed for her modem. (Laughter.) That's a true story. (Applause.) And I don't really blame her at all. (Laughter.) Sometimes we think that only young people are comfortable with technology. Some people say that is one of the reasons why some teachers have resisted technology. I don't believe it, although I have heard many times that a child is the only one who can stop 12:00 from flashing on the VCR. That's true in my house. (Laughter.)

But it's a pothole on the information superhighway, but -- (laughter) -- but the truth is that telecommunications technology will benefit people of all ages, from one to 93 and older. Right here in New Mexico, the La Plaza Telecommunity Foundation formed an on-line computer network in Taos County that is helping everybody of all ages in that community.

Well, in any event, there are many partnerships that we need to create, there are many new approaches that we need to take. One partnership involves our national labs, and Governor King and Senator Bingaman certainly know how important that is. And, incidentally, today I'm pleased to announce that Secretary Riley and Secretary O'Leary from the Energy Department will be signing an agreement that will enable the two departments' labs, Education and Energy, to work together in enhancing science, mathematics and technology education, and this is a step forward. (Applause.)

This means that we'll have a lot more programs like the partnership here in New Mexico between Los Alamos and Sandia and New Mexico Tech Net, the University of New Mexico and Philips Laboratory.

But in closing, I have often been struck by a saying at the Madison building of the Library of Congress on Capitol Hill, which is filled with research tools and fascinating exhibits. But on the wall there is something that James Madison wrote. He wrote: "What spectacle can be more edifying than that of liberty and learning, each leaning on the other for their mutual and surest support?"

We must take advantage of the new opportunities in education that technology is now truly bringing. And one of the single most hopeful signs I've seen in a long time is this gathering, this conference of teachers who are dedicated to creating the kind of future that our country deserves, and I congratulate you for it, and thank you for the opportunity to be here. I appreciate it very much. (Applause.)

END

A TEN POINT EXECUTIVE ACTION PLAN

1. *Launch the Tech Corps*

The Tech Corps will recruit, place, and support volunteers from the technology community to advise and assist schools in the introduction and integration of new technologies into the educational system.

Specific actions:

- *Launch the Tech Corps* by calling for all states to send representatives to the Chartering Conference on October 30th. The President can take credit for starting the national Tech Corps (while acknowledging the idea came from Gary Beach).
- *Direct agencies to actively participate in the Tech Corps* to the full extent that their mission and budgetary authorities allow (this will enable the government to participate in Tech Corps at the same level as the private sector).
- *Streamline federal donations of computers* to ensure that federal contributions can be made as easily as private contributions.
- *Announce specific regional plans to provide wiring for schools* (e.g. the California "barn raising").
- *Charter the Tech Corps to develop and maintain TeacherNet and LearningNet in cooperation with educators and parents.* This will be a state-of-the-art web page on the Internet that will provide (a) gateways to educational resources, (b) communication areas for teachers to compare notes and exchange ideas, (c) community communication areas for teachers and school systems to communicate with parents and kids.

Impact: The Tech Corps expects to be operational in all 50 states by September of 1996 (see attached Tech Corps document for detailed timeline). Based on the experience with the pilot project in Massachusetts, we project that Tech Corps could have 15,000 volunteers active in 600 school districts in the program by the end of 1996 and more than 125,000 volunteers in 5000 districts by the end of 1998.

Estimated value: The volunteer time is estimated to be worth about \$60 million/year. It is expected that contributing companies might also provide equipment and teacher training but no estimates are available.

Federal costs: NONE (credit can be taken for cost of donated equipment and time).

Attachments: (1) Timeline for Tech Corps Action; (2) Federal Time and Donations (need from VP) (3) TeacherNet/LearningNet Background.

2. *Support Snowe Rockefeller and Universal Service Trust Fund.*

The Snowe Rockefeller Amendment and the Universal Service Trust Fund are the two best tools in the current Telecom Bill to allow schools to connect to the Information

Superhighway.

Specific Actions:

- Strong Presidential statement supporting the *Snowe-Rockefeller amendment and expansion of Universal Service provisions* in the telecommunications bill (or veto threat?).

Estimated value: \$125 million/year for a total of \$625 billion over 5 years.¹ This could cut rates for half the schools by 50%.

- Propose a *new amendment* to the telecommunication bill which would make it clear that universal service funds could be used to provide connections within a school.

Estimated value: The value of the proposal depends on how it is written and how FCC interprets the act. Covering 20% of the cost of wiring schools implies a cost of about \$1 billion. Spread over 5 years, this would imply a cross subsidy on the order of \$200 million/year. Since total telecom revenues are now \$200 billion, this can be valued at about 1/10 % of sales.

Federal costs: NONE.

Issues: (1) How are we credible here, when we've already said we'd veto whole Telecom Bill? Possible statement -- "The President won't sign telecom bill unless it includes universal service expansion and Snowe-Rockefeller?" (2) Does the FCC (or State regulators) have authority to do this on their own without new Telecom Bill -- e.g., by a number of telecommunication companies coming and volunteering to do free or reduced price stuff for schools -- compared to businesses and homes. Much of this is tied up in the larger regulatory vs. free market debate. And there is confusion over the expansion of the universal service trust fund. The way Universal Service Trust Fund works now is that rural carriers get subsidized by everyone else for hooking up to more costly remote telephone service. But how does it work when it's hooking up all schools/classrooms/student (and at home?) -- no one has this figured out.

Attachments: (1) Snowe Rockefeller Background

3. Request that FCC set aside a specific piece of spectrum for educational use.

Specific Action:

- Send a strong letter to FCC requesting that a specific piece of spectrum be set aside (*the "NII Band"*) which can be used to (i) lower the cost of internal networking for schools

¹ Assumes total annual connections for schools are \$500 million and that 50% of schools require a 50% reduction in the rate.

with difficult installation problems and (ii) lower the cost of connecting rural schools.

Estimated value: \$500 million over five years for rural and urban schools.²

Federal costs: NONE.

Issues: This piece of the spectrum is currently owned (but unused) by the FAA. DOT needs to be brought into discussions on this issue -- it is likely that the FAA will not want to give up this piece of spectrum. The Department of Commerce's NTIA must approve, then send request to the FCC.



4. Request Permission of the FCC and State Public Utilities Commissions for Differential Pricing for Schools.

Specific Action:

- Challenge phone companies to allow discounted rates for schools (eg. volume or long term discounts). Ask FCC to expedite approval of modified pricing for schools when phone companies propose it.

Estimated Value: uncertain.

Federal Costs: NONE.

5. Technology Learning Challenge II, expanded to Pre-School.

Re-issue Technology Learning Challenge, significantly increase funding, and expand to preschool. This grant program challenges local communities to develop consortia of schools, teachers, local businesses, information technology and telecommunication firms, and universities to design and implement programs for using educational technology. Local funds cover purchase and installation of communications, computer, and software as well as curriculum development and teacher training. Federal matching funds stimulate investment in development of creative, interactive content and new teaching and learning strategies.

Estimated value: \$1.5 billion (300 million in federal funds over 4 years matched by \$1.2 billion in private and state funds).³

Federal costs: \$75 million/year.

² Assumes \$5 billion installation costs for school telecom system and cost reductions of 10% possible because of the spectrum available.

³ Assumes an \$85 million program ramps up to an average of \$200 million/year over five years.

Issues: The TLC authorizing legislation calls for these funds to be allocated by 50 state challenge programs when funding exceeds \$75 million. The criteria for such state challenges include all aspects of the essential four components of POTUS initiative. The President requested \$50 million for this program in FY96. The House gave \$25 million and the Senate zeroed it out. Assuming that we get \$25 million this year, do we ask for full \$75 million in FY97-2000 OR ask for much more and use the authorizing legislation as the vehicle for setting up the 50 state Trust Funds? [See discussion below.]

6. Establish federal funding for 50 State Technological Literacy Trust Funds.

Specific Actions:

- **Auction spectrum** and use proceeds to fund a \$1-2 billion/year for matching state commitments in education technology. [Two sources: already CBO scored sale of auxiliary wireless spectrum or non-CBO scored sale of digital broadcast spectrum.] or
- Budget the Department of Education (and/or Department of Commerce) to **spend equivalent of 5%** of Federal Elementary and Secondary funds for 50 education technology trust funds beginning in FY 1997 (available on October 1, 1996) under existing authorization for TLC.

Estimated value: At least \$500M to \$2B more in increased federal funding for educational technology, conditioned on each participating state committing to match federal resources several times over. Stronger defense of existing budget request. Credibility with private sector and local school systems being asked to make similar commitments. Better focus in use of formula grants.

Federal costs: Under first option, dedication of portion of spectrum sales to Trust Fund rather deficit reduction; under second option, reprioritizing within proposed POTUS FY 97 budget.

Issues: First, how important is dedication of federal financing to matching State Technology Trust Funds to credibility and effectiveness of entire POTUS initiative to achieve technological literacy for all classrooms and students by year 2000? Second, how does including such federal funding fit with message and substance of Balanced Budget strategy? Third, assuming that federal funding is essential and can fit Balanced Budget strategy, what is best way to propose Trust Fund that is credible but invites Congress/Private Sector to devise alternatives to achieve same ends? Finally, does proposing such a major federal-state fund add-to or subtract from credibility of President in leading this national initiative?

7. Bring the Smithsonian to Your School

Establish a cost-shared program to bring the collections of the Smithsonian, the National Park Service, and the National Archives to the classroom. Secretary Heyman is willing to stand with the President and announce a plan. He's not yet sure what the plan will be, but he wants in.

Specific action:

- *Announce a new policy allowing cost-shared partnerships* with publishers to digitize and distribute federal cultural collections granting them exclusive rights to the digital collections, and the logo of the institutions, for a fixed period [e.g. 1-2 years]

Estimated value: The Smithsonian, Archives, and Park Service hold priceless collections in American cultural history, natural science, and other areas. Only about 1% of the collections are on view and these only to Washington visitors. The value of this material to classrooms around the nation is impossible to estimate. The cost of converting these collections to digital form is on the order of a billion dollars. Centuries would be required to fund this with public money.

Federal costs: NONE.

Issues: Secretary Heyman has been looking at this issue for some time now, and has run in to problems surrounding the nature of the proposed agreements with private sector partners to distribute federally-owned cultural collections -- can the Federal government give exclusive rights to federally-owned assets to a private company for any period of time? Does it want to?

8. *21st Century Schools.*

The development of exciting interactive learning content is a critical component of the educational technology initiative. Today's public schools need exemplars of 21st Century Schools. Parents and teachers need to know that incorporating learning technology into the K-12 curriculum can significantly improve student performance. They need to know that children find learning technology easy and fun to use and that home computers can augment learning in the classroom. Industry needs some encouragement to launch into the full-scale development of computer-based curriculums.

Specific Actions:

- Use Department of Defense Dependents Schools (DoDDS) as a *model for the Nation's 21st Century Schools*: Demonstrate how computer-based learning can be systematically designed, developed, and integrated in a large K-12 school system in order to significantly improve student achievement and performance across all academic areas and at each grade level. Goal is to have an hour of interactive courseware per day at every grade level geared to National education standards by the year 2000.
- Ask DoDDS to also support 1) teacher technology training; 2) preschool modules; 3) partnerships with Indian Schools; and 4) partnerships with several public schools.
- Establish *cooperative development contracts with software developers* in order to share

development cost. Obtain rights for DoDDS use -- permit industry to sell to wider market.

Estimated Value: Unclear.

Federal Costs:

Issues: If you build around standards and core curriculum to lift these schools out current mediocrity with technology, and then offer resulting "stuff" to any interested k-12 buyer, do we run any risk of folks saying there they go again trying to set national standards and one curriculum? On the other hand, if we don't do this in DoDDS schools, many in military community (and in education community) will say you've lost major opportunity to show real results for this ed tech revolution (as the military has already proved it can do for adult training through distance and interactive learning.) How does DoD preempt challenge that this is just another attempt to use Defense budget to fund civilian priority? There may be an internal DoD issue over funding DoDDS effort here.

Attachments: (1) Background on DoDDS Schools Initiative.

9. Learning Levers for Every Head Start student.

Launch a major initiative to provide Head Start kids with interactive learning hardware and software.

Specific action:

- Use Head Start funds to create an RFP for **interactive learning equipment** that could be used both at home or in the Head Start centers (or fold this into the expansion of the second round of TLC to include

Impact: This initiative could put a powerful learning tool in the hands of every head start kid within five years. Portable systems could be taken home and connected to home TVs.

Federal costs: A procurement of 750,000 units at \$100-700/unit would cost on the order of \$100-750 million. The range depends on the characteristics of the set. Individual devices could cost \$100-500 and a TV receiver would be needed to provide a display.

Issues: Our real problem here is more than the will to pony up the budget money; it's that we can't now credibly claim to know what the "lever" is going to be. Product development (that will allow the playing of diverse learning content over time) is the key. That's all we can do; and HHS-DoED are prepared to put together a bang-up counterpart of extension of the TLC for pre-school kids to actually do this in the same challenging, bottom-up local learning community challenge way. If we want to claim that we're going to do "x" for every Head Start Kid in 1999, we could state a price -- but we don't know if it's rocket ship or a cannon yet. We therefore would have to come up with a credible way of claiming to know

what a reasonable price is -- we'd need some powerful outside validators (both in the private sector and in the early childhood community) to have a shot at this.

10. Reinventing the Government's Role in Education.

The public has heard a great deal of talk about reinventing Government, but they may not fully appreciate the tangible benefits that are there. At a time when Government has been portrayed as the problem, it is particularly important to get out a positive message. That message is: In the past Government has invested billions in research and development programs relating to education and technology, but the benefits have been hit or miss --- they have not directly benefited public schools. The President can direct the agencies to make the benefits of the prior and continuing research available to American Schools as quickly as possible. To ensure vigorous pursuit of this goal, he can formally establish an Interagency Learning Technology Office to focus and expedite the transition of existing and new federal research to schools. (The Interagency Learning Technology Office is already up and running the Technology Learning Challenge within the DoEd, but it could get a big bump up in mission and importance through formal POTUS directive).

Specific Action:

- *Issue an executive order establishing the Interagency Learning Technology Office* designed to (a) focus research and state-of-the-art demonstration programs for education technology in DoD, NASA, DoE and other technology agencies -- working in cooperation with the private sector and educators -- on topics of value to public schools; (b) in cooperation with private developers, conduct an advanced demonstration in each of three areas -- pre-school, K-12, and school-to-work; and (c) work with the private sector and the States to get the results of existing and future research marketed to schools, students, and parents.

Impact: This office would focus and coordinate work on education and training technologies currently done in many agencies. These programs can be used as the basis for pathfinding public-private demonstrations of technology, which would be replicable, scalable, and affordable in education and training programs across the country.

Federal costs: NONE.

Issues: Does the ILTO sell as reinvention that fosters the private sector nature of the POTUS initiative or does it sound like a rationalization to keep governmental research going in an area that is better handled by universities and schools establishing cooperative R&D relationships with the private sector?

Attachments: (1) Sample Executive Order

ADDITIONAL FEDERAL OPTIONS

11. *Public Broadcasting Spectrum*

Proposals now in play in the House and Senate call for selling the current PBS spectrum and setting up something called the Public Broadcasting Corporation and closing CPB. Closing CPB is essential to the GOP for political reasons. The corporation could be capitalised by selling the digital spectrum associated with current public analog spectrum (on the order of \$3 billion) OR by granting to each local PBS station its existing digital and analog (as now appears likely for broadcasters).

Specific Actions:

- The President (in conjunction with PBS) proposes that this idea is expanded by chartering the new organization(s) as public information corporation(s) or some other title that implies that the charter(s) would include providing public education using means other than direct broadcasts (i.e. interactive technologies).

Issues: The argument for this action is that use of this one-time resource should not be limited to broadcast technology in an era where communication technology is changing fast. It is particularly important a time when we are preparing to convert standard tvs to "advanced tvs" which are digital and have the ability to put a powerful digital machine in everyone's living room (and make it cheap enough for schools to use). The primary issue is whether to support a one-time sale to support a central PBS endowment fund or to provide each local community with its own digital/analog spectrum and the opportunity to use these resources to develop and finance its own plan for interactive education programming.

12. **Laptops for Every 5th Grade Student.**

News reports of the California CEO meeting with the President indicated that the heads of Oracle and Apple agreed to produce a powerful, portable, multi-media, interactive computer for a price of \$500 per unit. Assuming this price point, it would require approximately [\$x] per year to provide the [y #] of indigent 5th graders (measured by reduced or free lunches) with such a computer, starting in 1998.

- **Specific Action.** [Separate funding under Chapter 1? Condition of Trust Fund?]

13. **Teacher Training Initiatives**

See Attachment "Training Teachers"

Assignments Breakout

Ten Point Plan

1. Launch the Tech Corps

Ed Fitzsimmons

- Streamline federal donations of computers

Toby Donenfeld

- Announce specific regional plans to provide wiring for schools

Tom Kalil

2. Support Snowe Rockefeller and Universal Service Trust Fund.

Greg Simon

3. Request that FCC set aside a specific piece of spectrum for educational use.

Jonathan Sallet

4. Request Permission of the FCC and State Public Utilities Commissions for Differential Pricing for Schools.

Greg Simon

5. Technology Learning Challenge II, expanded to Pre-School.

Linda Roberts, Martha Moorehouse (HHS)

- Call sheet and action plan for private funding

David Stevenson

- Check permissible contacts

Mike Schmidt

6. Establish a Technological Literacy Trust Fund.

Mike Smith, David Stevenson, Ken Apfel, Paul Dimond

7. Bring the Smithsonian to Your School.

Henry Kelly

- Vice President to call Heyman

Toby Donenfeld

8. DoDDS 21st Century Schools.

Don Johnson, Lou Finch

- Indian Schools

Mike Schmidt

9. Learning Levers for Every Head Start student.

Peter Edelman

- Challenge Grant Approach

Tom Carroll

10. Issue an executive order establishing the Interagency Learning Technology Office.

Julie Swisshelm

Additional Options

1. Public Broadcasting Spectrum

Henry Kelly

2. Laptops for Every 5th Grade Student

Linda Roberts

PRIVATE SECTOR TEN POINT CHALLENGE -- ASKS

1. *Electronic Barnraisings.* Continue to locate and encourage volunteer efforts to connect the schools.
 2. *Commitments from Telecommunications Companies* that they will provide access to schools for free or discounted rates - or that they will seek regulatory approval to do so.
 3. *Teacher Training: Announce Technology Certification/Standards for Every New Teacher and for Experienced Teachers*
 - 1) For experienced teachers, AFT, NEA, and the School Boards Association are putting together a proposal to create a standard on using technology for merit awards;
 - 2) For experienced teachers, the National Board of Professional Teaching will create a requirement that teachers must demonstrate skill in using technology for learning as one standard to qualify as an "extraordinary teacher."
 - 3) For new teachers, we have to work with the Chief School Officers and the Standards Boards to make use of technology for teaching a requirement for certification of all new teachers.
- Federal Costs: NONE.
4. *Content: 5% of Creative Resources on Learning Games.* Secure pledge from major software developers that at least 5% of their resources will be spent on developing learning content/learning games.
 5. *Work with HHS to develop Head Start kit.* Secure private sector commitment to work with HHS to develop an interactive learning kit for head start and other pre-school students.
 6. *Computers: challenging new devices that are inexpensive.* Secure private sector commitment to develop low-cost interactive learning devices.
 7. *Adopting Schools.* AT&T is planning on "adopting" schools in every state to create model technology schools. We need to encourage other schools to do the same.
 8. *National Media Campaign.* Launch Ad-Council campaign to encourage the use of technology for learning.
 9. *Parents: 2-3 major companies commit to "training" parents in the use and benefits of educational technology.* Apple is already conducting free "training" seminars for parents around the country to teach them how to use technologies and how important those technologies are for children. We need to encourage other companies to do the same and perhaps even combine their efforts to make this happen.

10. Big non-tech CEOs to join in used computer contribution (like bank or insurance company or manufacturer). Secure commitment from at least one CEO from a large, non-technology company to donate equipment to schools.

11. High Tech firms establish mentoring program (ala Hewlett Packard) to bring teachers into high tech companies.

12. Inaugurate the National Technology Honor Society which will be managed by the National Association of Secondary School Principals (NASSP) which has managed the National Honor Society since 1926. The NTHS is designed to (1) provide an organization through which students can help bring computing and communications knowledge and technology into their schools and (2) recognize and reward students who use their technological expertise to serve their schools. Once approved by the NASSP board, NTHS will be made available to all schools by the Fall of 1996. The NASSP is prepared to give the President credit at the launch.

Impact: NTHS is expected to have chapters in at least 60% of secondary schools (over 12,000) and to have at least one million students participating.

Federal costs: NONE.

13. Electronic Villages

14. Mentoring for Teachers

15. Time Warner is about to commit to provide free communication services to schools. We should encourage other companies to do the same

Estimated value: FCC has no estimate of value.

Assignments Breakout

Private Sector Ten Point Challenge

- 1. Electronic Barnraising*
- 2. Commitments from Telecommunications Companies*
- 3. Technology Certification/Standards for Every New Teachers*
- 4. Content: 5% of Creative Resources on Learning Games.*
- 5. Work with IHHS to develop Head Start kit.*
- 6. Computers: challenging new devices that are good.*
- 7. Adopting Schools.*
- 8. National Media Campaign.*
- 9. Training for Parents.*
- 10. Big non-tech CEOs to join in used computer contribution (like bank or insurance company or manufacturer).*
- 11. High Tech firms establish mentoring program (ala Hewlett Packard) to bring teachers into high tech companies.*
- 12. Inaugurate the National Technology Honor Society*
- 13. Electronic Villages*
- 14. Mentoring for Teachers*
- 15. Time Warner.*

PROCESS FOR EDUCATIONAL TECHNOLOGY ROLL-OUT

In order to be ready to roll out the President's plan for educational technology, we must complete (a) external outreach with respect to the private sector, foundations, educators and governors and (b) internal policy decisions with respect to each of the possible [5 to 10] federal commitments and clarifying the goals and objectives. To evaluate the essential time-frame to get both done, we provide a current status on each and include a proposal for expediting consideration of the internal policy and political decisions.

A. EXTERNAL OUTREACH

1. Private Sector Outreach

- Calls and Commitments from Champions. We have created a list of 20 top CEO "Champions" on whom we will focus to gain relevant input and specific commitments. These commitments must be ready by the roll out date, and the CEOs must be ready to stand behind the President during the event. We have attached a preliminary list of possible "asks." In order to gain such commitments, the following must take place"
 - a) Initial contacts must be made between the designated high level Administration officials and the CEOs. These contacts have already begun. During this contact, the CEO is approached for his or her ideas and thoughts about the President's upcoming announcement and possible actions that could be taken to support this issue.
 - b) Staff-level follow-up must take place between CEO staff and WH staff to flesh out any specific proposals.
 - c) Another call must be made to the CEO to close on whatever commitment has been agreed upon at the staff level.

Part of the time problem here is that in order for these Champions to want to stand behind a Presidential plan on educational technology, they are going to have to feel like their ideas and suggestions have been taken into consideration, and that they were a part of the plan's creation.

2. Foundation Outreach

The Department of Education, through Secretary Riley, must contact at least 5 major foundations (e.g., Annenberg, Pew, Kellogg, Rockefeller, Ford, Lily, Hewlett, Reader's Digest) in order to gain some level of commitment from foundations to this effort. (Education must be the one to contact foundations, since they have gift authority and can contact foundations on these matters under current ethics rules) The problem here is to determine exactly what we want foundations to commit to -- how specific can they be? Early.

indications are that at least one of these foundations may be interested in supporting a second-round of the challenge grant, while others may have a particular interest in teacher training and networks for teachers. No serious calls have been made yet.

3. Educators

We need to secure five commitments from the education community:

- 1) For experienced teachers, AFT, NEA, and the School Boards Association are putting together a proposal to create a standard on using education technology for merit awards;
- 2) For experienced teachers, the National Board of Professional Teaching will create a requirement that teachers must demonstrate skill in using technology for learning as one standard to qualify as an "extraordinary teacher."
- 3) For new teachers, we have to work with the Chief School Officers and/or the respective Standards Boards to make use of technology for teaching a requirement for certification of all new teachers. This is a critical component of our plan, and it will take a good deal of work to make it happen.
- 4) For teachers in training, we need to work with the associations that represent the Teacher Colleges and Universities to make sure that accreditation and graduation requirements include proficiency in the use of educational technology in the classroom.
- 5) From key university presidents, we need to secure commitments (a) to assist in developing the interactive curriculum and software for early childhood and elementary, middle, and high schools and (b) to include technological literacy in their admission criteria (including in the assessment of applicants).

4. Governors

Calls to Governors who are interested in this issue need to be made soon. Possible commitments to ask for here include:

- Commit to dedicate a larger % of State-local education spending to educational technology over 5 years;
- Commit to work with the private sector in their State to create electronic barnraisings similar to the California announcement last week;
- Support of an expanded use of the Universal Service Fund?

The State actions depend to a large extent on our decisions on the Trust Fund issue. The more we can put on the table through a Trust fund, the more specific the commitments we can gain from Governors.

B. INTERNAL POLICY ACTIONS

1. Federal Commitments

We have attached a summary of 14 possible executive actions that could be announced as a part of the roll-out. As set forth in the summary, almost all of these actions involve policy questions that must be resolved before the actions can be announced. Below, we list the potential actions that have serious policy and political issues to be resolved, and the players that need to be at the table to resolve them. The actions track the order that they appear on the attached summary.

- (2) Snowe-Rockefeller and Universal Service Fund: DoEd, OMB, OVP, DoC, WH
- (3) Spectrum Set-Aside for Educational Use: DoC, DoT, OMB, OVP, WH
- (4) Differential Pricing for Schools: DoC, OVP, OMB, WH
- (5) Technology Learning Challenge II: DoEd, HHS, OMB, OVP, WH
- (6) Technological Literacy Trust Fund: DoEd, DoC, OMB, OVP, WH
- (7) Smithsonian: Smithsonian, OMB, OVP, WH
- (8) DoDDS Schools: DoD, OVP, OMB, WH
- (9) Learning Levers for Head Start Student: HHS, DoEd, OVP, OMB, WH
- (10) Executive Order on Interagency Learning Tech Office: OVP, OMB, WH
- (11) PBS: PBS, OVP, OMB, WH
- (12) Laptops for Every Indigent 5th Grader: OVP, OMB, DoEd, WH
- (13) Teacher Training: DoEd, OVP, OMB, WH

A Suggested Process for Policy Decisions

We could collapse these decisions into three sets of meetings on related policy issues:

- 1) Telecommunication and Connections -- Snowe-Rockefeller, Universal Service Fund, Spectrum, Differential Pricing, and PBS. Attendees include OVP, OMB, WH, PBS, DoC, and DoT.
- 2) Education, Teacher Training, and Financing -- A meeting on [Trust Fund], Technology Learning Challenge, HHS Learning Levers, HHSO Executive Order,

Teacher Training, and Laptops for Every Indigent 5th Grader. Attendees include DoEd, HHS, OMB, OVP, WH.

- 3) DoDDS Schools -- A meeting on as Models of 21st Century Schools Attendees include DoD, OVP, OMB, WH.

We would also have to have a meeting with Smithsonian. For each set of meetings, we could have an options memo completed by the end of this week with representatives from the affected agencies; we could set a meeting of the principals sometime thereafter. Given the overlap of interests among the principals across the policy areas, an alternative would be one single set of meetings, with a schedule for proceeding to decide the related sets of issues in one or more sessions.

2. Goals and Objectives.

We also need to firm up exactly what we want our 4 Goals for Education Technology to be. Here is one cut at defining those Goals:

- 1) Modern Computers as a part of every classroom and accessible to every student -- GOAL: 3:1 national ratio of computers:students.
- 2) Access to the Information Superhighway -- Goal: For Every Classroom.
- 3) Excellent Education Software -- Goal: (a) 5% of all software created to be purely educational software; or (b) 95% of all students using interactive software as a part of their daily learning.
- 4) Well Trained Teachers -- Goal: Every new teacher beginning in 1996 and every teacher by 2000 will have had training in the use of educational technologies.

The overall goal will be for every school to be a 21st Century School by meeting these four objectives by the year 2000. As a matter of process, we need to work with WH Communications, OVP, NEC Principals and Secretaries Riley, Brown, Shalala and Perry (or Deputy Secretary White) to assure agreement. To begin this process, we propose to transmit a slightly edited version of the background briefing memo that we included the President's briefing, which also focussed on goals and objectives; this briefing memo would include a schedule for meeting to resolve policy issues concerning the various federal commitments as set forth above.

THE WHITE HOUSE

Office of the Press Secretary
(San Francisco, California)

For Immediate Release

September 21, 1995

REMARKS BY THE PRESIDENT
ON EDUCATION TECHNOLOGY AND CONNECTING CLASSROOMS

The Rotunda of The Exploratorium
San Francisco, California

10:42 A.M. PDT

THE PRESIDENT: Thank you very much. First of all, I'd like to thank Mr. Delecourt and all of the people who hosted us here. To Mayor Jordan and your outstanding California Commissioner of Education Delaine Eastin and to all of the others who are gathered here today -- thank you very much for being here with us. (Applause.)

I want to say to all the students here that the Vice President and I are delighted to see you. Normally, we would not want to be responsible for taking you out of class, but today we think maybe we have a good reason, and we hope we have a chance to shake hands with a lot of you as soon as this brief ceremony is over.

I want to say to all of the executives of the information companies that we just met with how very grateful I am to you and I'll say a few words about them in a moment.

I came here to San Francisco today to issue a challenge to America to see to it that every classroom in our country -- every classroom in our country is connected to the Information Superhighway. To demonstrate that this is possible, we are all here today to announce a giant step toward that future.

By the end of this school year, every school in California, 12,000 of them, will have access to the Internet and its vast world of knowledge. By the end of this school year, fully 20 percent of California's classrooms, 2,500 -- kindergartens, elementary, middle and high schools, from one end of this state to the other, will be connected for computers. If that can be done in California, we can do it in the rest of America.

But the key is to have the kind of partnership that we

are celebrating here. The job of connecting California schools will be undertaken by a wide alliance of private sector companies -- among them, Sun Microsystems, Apple, Xerox Parc, Oracle, 3Com, Silicon Graphics, Applied Materials, TCI, Cisco Systems and others.

Our administration has brought these companies together, we have set goals, but they are doing the rest. Just as the connecting of our classrooms is a model for the 21st century, so is the way we are doing it here today -- with government as a catalyst, not a blank check.

So today, I challenge business and industry and local government throughout our country to make a commitment of time and resources so that by the year 2000, every classroom in America will be connected.

Tens of millions of parents all across our nation have watched their children play every kind of video game from Mortal Kombat and Primal Rage to Killer Instinct and Super Streetfighter. But the really important new computer game in America is learning. And we are going to put it at the disposal of every child in this country by the end of the century.

Last month, I announced a broad initiative to stop our children from being addicted to tobacco because it was bad for them. Today I hope to encourage a good habit -- a lifelong commitment to learning. I want to get the children of America hooked on education through computers.

Our country was built on a simple value that we have an obligation to pass better lives and better opportunities on to the next generation. And we see them all here. Education is the way we make this promise real. Today, at the dawn of a new century, in the midst of an information and communications revolution, education depends upon computers. If we make an opportunity for every student, a fact in the world of modems and megabytes, we can go a long way toward making the American Dream a reality for every student. Not virtual reality -- reality for every student.

The facts speak for themselves. Children with access to computers learn faster and learn better. Scores on standardized tests for children taught with computers, according to "Apple Classrooms of Tomorrow," a 10-year report that is coming out in a few days, caused scores to go up by 10 to 15 percent. Children mastered basic skills in 30 percent less time than would normally have been the case. Also, they stayed in school. Absenteeism dropped from over eight percent to under five percent.

I cannot emphasize how important this is at a time when we want people to stay in school and get as much education as they possibly can. Technology enriches education, it teaches our children how to learn better, as the Vice President and I saw with the young people who walked in with us in their three different exhibitions of learning, and we thank them for that today.

With this effort, we are also reinforcing the core convictions that have stood us so well for so long. Computers offer a world that lives up to our highest hopes of equal opportunity for all. And look what we need equal opportunity for all for.

Computers give us a world where people are judged not by the color of their skin or their gender or their family's income, but by their minds, how well they can express themselves on those screens. If we can teach our children these values, if they can learn to respect themselves and each other, then we can be certain we'll have stronger families, stronger communities, and a stronger America in the 21st century.

I could think of no better place for us to begin than here in California -- the state that leads the world in technological innovation. Until now, this leadership too often has stopped at the schoolroom door, for California ranks 45th in the nation in the ration of students to computers. While suburban children often have access to computers in their homes, other children in rural areas and inner cities pass their school years without coming close to the Information Superhighway. The longer they're kept away, the less chance they have of building good lives in a global economy.

Well, thanks to the dedicated Americans gathered here today, all that is going to change. These companies who compete vigorously every day in the marketplace have come together in the classroom. We shared with them our vision, and they shared with us their ideas, their resources, and their know-how. Every company represented here today is making a different contribution, but they're all committed to the goal of connecting California because they know the future depends upon it.

Sun Microsystems is organizing a coalition of companies and volunteering in Net Day, an effort to install networks in at least 2,000 schools. And the number is growing with each new company joining the effort. In the morning, volunteers will arrive at each school. By noon they will have wired the library, the labs, the classrooms. By nightfall, those schools will have the technology they deserve.

Smart Valley, a coalition of Silicon Valley companies, has contributed \$15 million to putting technology in our schools. Smart Valley has agreed to develop 500 model technology schools over the next two years.

America Online has offered Internet services for a year. Even those phone companies that are always going after each other on TV have joined forces in this cause. AT & T will provide Internet access and voice mail to all California schools. Sprint will help to connect the schools. MCI will provide software for entry into the Internet and help to connect the schools. And Pacific Bell, which has led the way in linking California schools, is accelerating its efforts this school year by hooking them up to high-speed phone lines.

I want to thank them all, and I'd like to ask the leaders of these companies here to stand, and I hope the children will give them a hand, because they've done a great thing for your future.

Please stand up, all of you who met with me earlier today. Thank you so much. (Applause.)

This is an enormous effort. It will take the same spirit and tenacity that built our railroads and highways. It will take leadership and dedication of groups like the advisory council I have appointed on the Information Superhighway. So let us begin. Let today mark the start of our mission to connect every school in America by the year 2000.

If we can connect 20 percent of the schools in the largest state in the nation in less than a year, we can surely connect the rest of the country by the end of the decade. In the coming days, I will announce the winners of our Technology Learning Challenge. And over the next several weeks, I will put forward a public-private partnership plan that lays out how we can move our entire nation toward the goal of technological literacy for every young person in America.

Here are its guiding principles: Modern computers in every classroom, accessible to every student from kindergarten through 12th grade, networks that connect students to other students, schools to other schools, and both to the world outside. Educational software that is worthy of our children and their best aspirations and, finally, teachers with the training and the assistance they need to make the most of these new technologies.

Make no mistake: You can count on us for leadership, but the goal we have set cannot be set and cannot be achieved by government alone. It can only be met the way these companies are doing it -- with communities, businesses, governments, teachers, parents and students all joining together -- a high-tech barn-raising.

What we are doing is the equivalent of going to a dusty adobe settlement in early 19th century California and giving every child a slate and a piece of chalk to write with. It's akin to walking into a rough-hewn classroom in the Sierras of the 1860s and wiring it for electricity for the first time. It's like going to the Central Valley in the 1930s to the canvas classrooms of the Dust Bowl refugees and giving every child this book. Chalk boards, electricity, accessible books -- there was a time, believe it or not, when all these were rare. Now, every one is such a familiar part of our lives that we take them for granted.

If we stay on course, we'll soon reach a day when children and their parents and their teachers will walk into a classroom filled with computers, and not even give it a second thought. Let's go to work. Our future depends upon it, and these children's lives will be better for it.

Thank you very much. (Applause:)

END

10:54 A.M. PDT

Connecting Classrooms:

A Critical Step Towards Ensuring That All K-12 Students Have World-Class Skills

Our Commitment

In January 1994, the Vice President announced the administration's commitment to connect every classroom, library, hospital and clinic in the United States to the NII by the year 2000. The Vice President made an important distinction by focussing on classrooms and not just schools. Today, about 35 percent of schools have access to the Internet. But only about three percent of all instructional classrooms in public schools are connected to the Internet. Too often, the only Internet connection in the school goes to Administrative offices, a media lab or a library where it can't be used as part of the curriculum.

"...the Vice President is right: We must work with the Private sector to connect every classroom, every clinic, every library, and every hospital in America to a national information highway by the year 2000. Instant access to information will increase productivity, help educate our children, and provide better medical care and create jobs."

President Bill Clinton, State of the Union Address, January 25, 1994.

It's only when the NII comes to the classroom, where the learning takes place, that we will see the kind of learning breakthroughs that educational technology promises. It is very important to remember, however, that connection is a necessary but not sufficient step towards its full use of educational technology. That is why, there is a series of efforts, that the Administration is also making to increase the number of computers in the classrooms, train teachers in the use of educational technology, and encourage the development of new educational content for school curricula.

Connecting Computers to Each Other

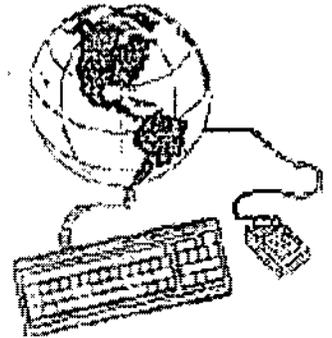
To get an Internet connection from the front door of the school to the classroom, a school needs what is called a local area network or LAN. An LAN can link computers and printers within a classroom, between classrooms and even between campus buildings. In addition to allowing students and teachers to share an Internet connection, a LAN can allow users to communicate and share programs and information. LANs also allow teachers to take advantage of advanced computer features like being able to watch a student's computer work without leaving his/her own computer, voicemail directed at single or groups of students, homework collaboration, and e-mail to students or even parents if everyone is on the Internet.



While 75 percent of public schools have access to some kind of computer network, only 26 percent of schools have access to a LAN -- and that often doesn't extend to the classroom. Our effort in California, is largely focussed on getting the wires into the individual classrooms to make LANs and these kinds of connections possible.

Connecting Classrooms to the World

Our ultimate goal, however, is to break down the classroom walls by connecting the classrooms to the global network of networks -- the Internet. The Internet and its fastest growing segment, the World Wide Web, allow teachers to share teaching materials and other resources with other teachers around the country and around the world, allow teachers to take students on global field trips, allow students to speak directly with experts and researchers around the world, and allows parents to keep track of classroom assignments and projects. This technology is allowing students and schools to connect to some of the best learning institutions in the world. Additionally, the Internet provides rich new resources for classroom video conferencing and exploration. When schools around the country are facing tight fiscal constraints, information technologies can offer new opportunities, efficiencies and improvements in the education process.



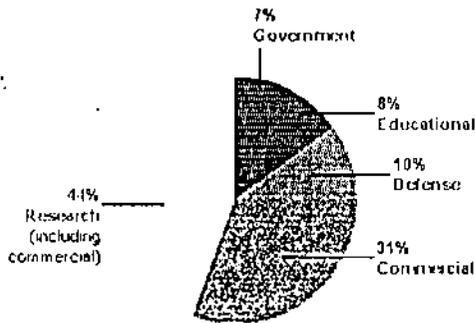
Achieving our Goal

Snowe-Rockefeller

To help achieve our goal of classroom access, the administration supports efforts in the telecommunications reform bill that will ensure affordable access to the NII for schools. For instance, a provision in the Senate passed version of the telecommunications reform bill known as Snowe-Rockefeller amendment enables federal and state regulators to work with telecommunications carriers to ensure that the information superhighway is connected to schools and classrooms at an affordable rate. The House passed bill does not contain the provision (although Chairman Bliley has indicated informally that he is favorable to something like the Snowe-Rockefeller approach.)

NI Advisory Council

Additionally, The President's National Information Infrastructure Advisory Council (NIAC), made up of 37 representatives of industry, labor, academia, public interest groups, and state and local governments, has been carefully laying the analytical foundation for classroom connections. The NIAC is expected to report in January on a series of actions that can be taken to bring not only connections to the classroom, but steps that can be taken to make better and broader use of technology in the classroom.

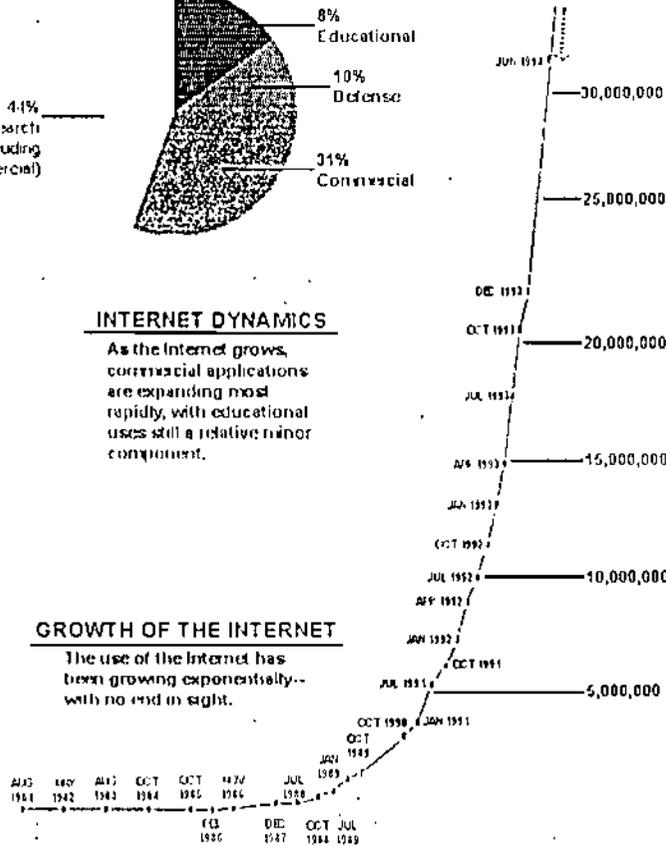


INTERNET DYNAMICS

As the Internet grows, commercial applications are expanding most rapidly, with educational uses still a relative minor component.

GROWTH OF THE INTERNET

The use of the Internet has been growing exponentially--with no end in sight.



The Status of Educational Technology in California

California is known throughout the world for its technological leadership. Approximately 1500 of the 2500 largest electronics firms in the U.S. are located within 30 miles of downtown San Jose. However, California's technological leadership ends at the school room door.

For the second straight year, a solid majority of California's fourth-, eighth- and 10th-graders failed to demonstrate minimal proficiency in reading, writing and math, according to results from the state's controversial educational testing system. More than 40% of the 10th-graders tested in math, for example, achieved only the lowest of six possible levels, meaning that they showed "little or no mathematical thinking and understanding of mathematical ideas." California also has the most crowded classrooms in the country.

Given the state's technological leadership and educational shortcomings, educational technology in California classrooms is a natural.

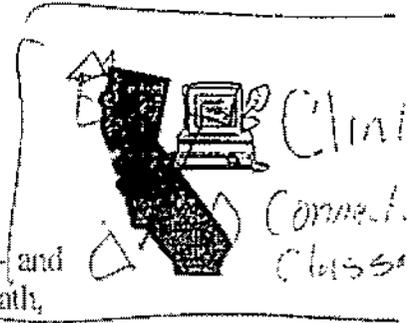
Computers in the Classrooms

Today, California ranks 45th in the nation in the ratio of students to computers. And when there are computers, not only are they too old to run the kinds of multi-media applications that have invaded the home computer market, but they are also too old to run basic computer software like Windows 3.1. The Detwiler Foundation surveyed San Diego County schools and found that computers in elementary schools are on average older than the students themselves. The Foundation also found that less than half of the computers currently used have hard drives. In fact, they found that schools average 39 students for every computer with a hard drive. Imagine what would happen in a business if 39 people were sharing one modern computer.

Computer Networks

Right now, approximately 700 schools of California's 7700 public K-12 schools have some type of digital access to the information superhighway. Pacific Bell, which is participating in the California event, has a \$100 million program to connect all schools (not classrooms) by the year 2000. The program offers free installation and one year of free ISDN service to all K-12 schools, private non-profit schools (with 100 or more students), community colleges and libraries in Pacific Bell's region (which serves 80 percent of California.)

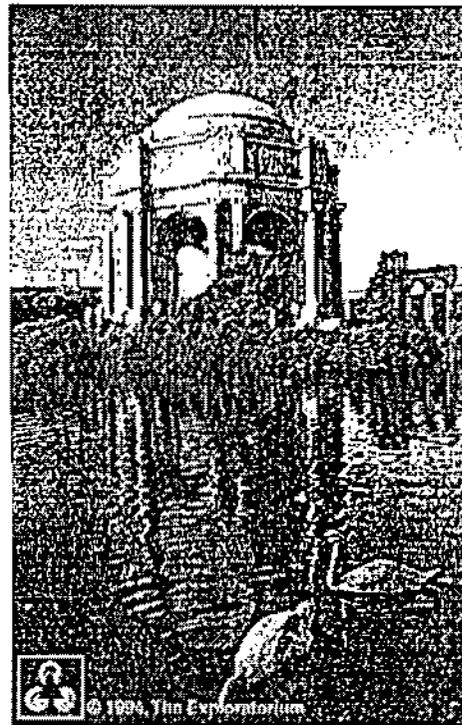
It's unclear how many classrooms in California have the type of connections that we are providing through this initiative. But the national picture is instructive here. Almost every school in the country has at least one television and videocassette recorder, and 41 percent of teachers have a TV in their classrooms. Only one teacher in eight has a telephone in class and less than 1 percent have access to voice mail. Classroom access to newer technologies like CD-ROM and networking capabilities are also limited. While 75 percent of public schools have access to some kind of computer network, and 35 percent of public schools have access to the Internet, only 3 percent of instructional rooms (classrooms, labs, and media centers) are connected to the Internet. Additionally, only 26% of schools have access to a local area network -- still fewer classrooms have access to a local area network.



EXPLORATORIUM

This educational technology event takes place at the world famous Exploratorium. Housed within the walls of the Palace of Fine Arts, the Exploratorium is a collage of 650 interactive exhibits in the areas of science, art, and human perception.

Three dimensional exhibits within the Exploratorium offer the kind of experiential learning that is difficult, if not virtually impossible, to obtain through any other medium, whether it be the classroom, books or television. The exhibits fall within thirteen broad subject areas. These include: Light, color, sound music, motion, animal behavior, electricity, heat and temperature, language, patterns, hearing, touch, vision, waves and resonance, and weather.



The museum is exploring a range of networked media applications to extend learning opportunities both inside and outside the museum. ExploraNet, for example, provides on-line resources to support science education, uses video teleconferencing to guide virtual field trips to the museum, and introduces visitors to on-line technologies through special exhibitions. The Exploratorium has developed multimedia descriptions of science experiments that are available over the Internet. As part of the demonstration you are taking part in, children will use the on-line description to conduct the experiment and learn about its significance. Utilizing a multimedia message board, students are able to send stills, video, and audio versions their science questions to the Exploratorium. Staff at the museum are then able to post responses utilizing a range of Exploratorium resources including exhibits. Through these "virtual field trips" students have access to the museum and its experts.

The Exploratorium is also an important resource for teachers. More than 500 elementary, middle and high school science and mathematics teachers annually attend institutes that use the Exploratorium's exhibit collection as a basis for hands-on teacher education in various sciences. The Center for Teaching and Learning's programs for the in-service training of teachers and other educators stresses the interplay between informal and formal approaches to science. Plans for pre-service training are underway.

Pete Wilson on Education

Goals 2000 money

Pete Wilson last week took aim at "federal dictates" saying he may reject \$41.5 million in Goals 2000 aid for California Schools until Congress has reviewed the program. The Governor has told Superintendent of Schools Delaine Eastin, whose office administers the grants, that money is not part of his 1995-96 budget. But a conservative think tank, the Clairmont Institute, questioned Wilson's sincerity on the issue, noting that he has already authorized spending as much as \$10 million in a previous Goals 2000 grant.

Education was the First Victim of Wilson's Presidential Campaign

Wilson began his run for President just as the controversial statewide educational testing system test results revealed that a majority of California students in the fourth, eighth and 10th grades could not read, write or compute at a level considered basic -- the results left California tied with Louisiana for last among the states. Wilson has responded that "last in the nation is simply intolerable," but he has made no new proposals for change.

Wilson and Eastin

Wilson is reportedly considering signing an executive order to make immediate improvements in public schools, but the announcement has been repeatedly delayed. Meanwhile schools chief Delaine Eastin continues to upstage Wilson on education issues with an announcement this month that she would use her authority to lift Education Code requirements for some districts that agreed to set rigorous standards for student achievement -- a move immediately challenged by Wilson.

The Wilson Record

"What happens here in the classrooms is too important for the governor to be on the sidelines." -- Pete Wilson, LA Times, 9/1/90 (from campaign TV commercial) "We cannot afford mediocrity in education." -- Pete Wilson, L.A. Times, 11/5/90.

The pupil-teacher ratio has declined during Wilson's four-year term from 24.2 to 25.1 in elementary schools; and from 23.4 to 24.5 in secondary schools. -- Fact Book '94-95, CA Dept. of Education

- During '91-92 Wilson proposed suspending Prop. 98 and reducing total funding for K-14 education programs by \$2 billion. -- [The 1991-92 Budget: Perspectives & Issues, LAO]
- In '92 Wilson proposed shutting the door on 110,000 kindergartners in order to balance his budget.
 - "Gov. Pete Wilson's proposal to help balance the state budget by keeping thousands of children out of kindergarten this fall is playing havoc with the carefully made plans of thousands of California families for work, money, transportation and child care." [LA Times, 7/26/92]

- During Wilson's first four years as governor educational spending for the state of California has decreased by 4% and Wilson proposed slashing funding even lower, but was unable to obtain legislative approval.

Pete Wilson on Educational Technology

Education First

Last year, Governor Wilson along with Pacific Bell executives unveiled the "Education First" program that would connect the state's 8,600 schools and libraries to PacBell digital phone lines by the year 2000. Education First is the largest private-sector project of its kind. Other participants in the Education First program are offering equipment at discounted rates -- they include Apple computer, Hewlett-Packard Co., IBM, Intel and AT&T. Under the plan, schools and libraries would generally pay nothing for the digital connection in the first year. After that, they would pay a flat rate of about \$72 per month for the service. AT&T has filed protests with the state PUC arguing that the plan is against state regulations because Pac Bell has the potential to offer digital phone services at below cost while others are not allowed to make a similar offer because they aren't allowed to compete in the market. To date, the Education First project has had limited success as a joint venture. From January to September of 1995, they have only wired up 215 schools through the program.

Business Leadership

Over the last three years, business leaders in California have been involved in a number of planning committees and task forces on educational technology that have mostly convened along partisan lines. Even though recommendations from all of these efforts are very similar, there has been little implementation and funding. There is a general perception that all that happens is planning, while little gets done. Our effort is specifically targeted at achieving real demonstrable results this school year.

Gingrich on Educational Technology

Newt Gingrich attempted to champion educational technology issues when he suggested last fall that we need a tax credit in order to give a laptop to all our low-income families. Although he discarded the idea as "nutty," he nonetheless positioned himself in the educational technology debate. He foresees a world in which first-graders check out laptop computers, and where the communications revolution can help reverse the slipping standards of literacy.

- Gingrich told House members, "maybe we need a tax credit for poor Americans to buy a 'laptop' computer so that they, too, can join the information society. "It was a dumb idea," he said later. "I shouldn't have said it. "But let me tell you what I was trying to get at. We've got to find some way to say to the poorest child in America, 'Internet's for you.' I'm trying to set up a debate, a partnership." [The Arizona Republic, 1/15/95]
- He's also said, "There's a very grave danger that the upper middle class has the resources so that their child gets a PC at 5 years of age, their children get on Internet, their child gets virtual reality. . . . We have got to think through a way of bringing the poor into the information age. If it's done right, you will dramatically expand and improve learning for the poor and you will open opportunities in an immense way." [The Buffalo News, February 28, 1995]

Walker Hearing on October 12th

We are told that House Science Committee Chairman Walker will hold a hearing on October 12th that will focus on educational technology at which both Newt Gingrich and Ed McCracken, chairman of Silicon Graphics and co-chair of our NII Advisory Council, are scheduled to testify.

Private Sector Commitments

The President and Vice President have challenged America to connect every classroom, library and clinic to the information superhighway by the year 2000. This national goal can be met with local action when government and industry work together. There is not one model or plan that works for every school. For that reason we are trying to nationalize the problem without nationalizing the solution. It is an electronic barn-raising in which every community does its part. This event symbolizes the diversity and resources private industry brings to bear to help connect every classroom by the year 2000. Each participant has made a significant pledge to use its time, treasure and talent in a particular way to connect classrooms in California. As the following efforts make clear, we will be able, through private efforts, to connect nearly one-fifth of California's public and private schools to the information superhighway and to each other through a variety of means demonstrated here.

Net Day -- Sun Microsystems has organized an ambitious effort to install wire that would connect classrooms to other classrooms inside a school and allow them access to the Internet in about 2000 schools throughout California. This is a private initiative: volunteer parents, teachers, administrators, and students, together with volunteer engineers from California's high-technology companies, businesses, and unions will come together on NetDay to link all California schools with the global Internet. This is the critical connection that brings an Internet connection or other connection from a central point in the school to all of its classrooms, school libraries, and science labs. Companies will use exactly the same technology for the schools that they use to network their own companies and institutions. Sun has put together an impressive who's who of California companies to participate in NetDay -- a day next March -- when engineers from these various companies will show up and run wires through heating ducts and walls. Installing wiring uses lots of people, but not lots of money. Also, Sun has created a new interactive site on the Internet listing every school in California where they will coordinate school hook-ups.

Smart Valley Commitment -- Smart Valley and its member companies have taken an integrated approach to helping the schools in San Mateo and Santa Clara Counties realize the full potential of the Internet and the World Wide Web. Within two years, each of the 500 public schools will have high speed connectivity to the Internet for a library, computer lab or media center. Local companies have contributed \$15M of technology, technical resources and cash as part of the Challenge 2000 fund for systemic change in schools. In order to take advantage of funds raised, schools need to prepare a Technical Plan, which includes a network architecture plan, equipment list, operating budget and a technical support strategy. To assist the schools in this process, Smart Valley member companies have developed the Smart Valley Technical Guidelines for Schools. Apple, Xerox Parc, Oracle, 3Com, SGI, Applied Materials, and Cisco are all participating in this process.

Other Commitments -- Other Companies have also made some very generous commitment.

- AT&T will provide Internet access and a voice mailbox to all California schools. They will completely network 10 California schools using wireless modem technology -- this is important for schools that have asbestos problems that make it difficult to physically wire them.
- America On-Line will provide one year free access to America on-line for schools connected under this effort.

Company	Person coming	Commitment
Connect 20 % of California's Classrooms This Year		
Sun Microsystems	Bill Raduchel, Chief Information Officer	Sun is coordinating efforts to install internal network wiring in 2000 California schools this school year. Other companies are joining in this effort and have pledged a certain number of schools in this effort.
MCI	Bert Roberts, CEO	MCI is connecting 100 schools through this effort and providing Internet access software
Sprint	Gary Forsey, Chairman and CEO	Sprint is connecting 100 schools through this effort
PacTel	Phil Quigley, CEO	PacTel is accelerating their ongoing program by connecting 500 schools with high-speed digital phone lines this school year
500 Model Technology Schools		
Smart Valley	Harry Saal President	Smart Valley, a non-profit organization of Silicon Valley companies, is developing 500 model technology schools over 2 years. Smart Valley member companies have donated \$15 million dollars to make it happen.
Apple	Michael Spindler, CEO	A SmartValley contributor
Xerox Parc	John Seeley Brown, Chief Scientists, Corporate VP, Director	A SmartValley contributor
Oracle	Larry Ellison, CEO (tentative)	A SmartValley contributor
3Com	Eric Benhamou, CEO	A SmartValley contributor
SGI	Ken Coleman, Senior VP	A SmartValley contributor
Cisco	John Morgridge, CEO	A Smart Valley contributor
Applied Materials	Glen Toney Vice President	A SmartValley contributor
Other Bold Commitments		
AT&T	Steve Hooper President of AT&T wireless service	AT&T is donating free Internet access and Voicemail for every school in California. Additionally, they are creating 10 model wireless schools
America Online	Stephen Case CEO	America On-Line is contributing one year free access to America On-Line for all schools connected under this initiative
TCI	Bruce Revenel Sr VP and COO	TCI is providing high-speed cable and connections to all schools in TCI's service area.

'Children with access to computers learn faster and learn better... our mission is to connect every school in America by the year 2000'

— PRESIDENT CLINTON

Clinton Goal — Internet in Every School

In S.F. address, he sets target date of year 2000

By Susan Yoachim
and Edward Epstein
Chronicle Political Writers

President Clinton chose a stop in San Francisco yesterday to propose that every school in the nation be linked to the Internet by the year 2000 through a government-industry venture he called a "a high-tech barn-raising."

The initiative, which Clinton will formally announce as a national endeavor by the end of the year,

INSIDE

■ What Oracle's Larry Ellison and other technology CEOs told Clinton and Gore.

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end of this year.

"I came here to San Francisco today to issue a challenge to America to see to it that every classroom in our country is connected to the information superhighway," Clinton said. "By the end of this school year, fully 20 percent of Califor-

nia's classrooms, 2,500 kindergartens, elementary, middle and high schools, from one end of this state to the other, will be connected for computers."

In his speech to business executives and politicians at the Exploratorium, the president termed the plan "an enormous effort" comparable to building the nation's networks of railroads and highways. He said that for schoolchildren it was "just as essential as teaching them to read and write and the new math."

With Vice President Al Gore by his side, Clinton stressed the groundbreaking nature of what he, Gore and the business executives had proposed.

"Even those phone companies that are always going after each other on TV have joined forces in this cause," Clinton joked to the crowd, shivering in the morning fog.

"I want to get the children of

America hooked on education through computers," Clinton said after meeting with a group of third-, fourth- and fifth-graders.

After the meeting at the Exploratorium, Clinton and Gore proved that they are hooked on campaign cash — picking up \$650,000 over poached salmon at the Fairmont Hotel and later \$1.2 million in Los Angeles.

Radio Interview in L.A.

Before the fund-raiser in Los Angeles, Clinton followed up on his theme of the day with a radio interview in Los Angeles in which he took questions sent in by users of the Internet, the global computer network.

His press secretary, Mike McCurry, told reporters that "what we are so excited about today is that private-sector involvement. We believe California will be a model for the national initiative."

For example, America Online unveiled a plan to offer unlimited, free access to its online service for California's public schools in the coming year. And Smart Valley, a coalition of Silicon Valley companies, has contributed \$15 million to putting technology into the schools.

McCurry also credited the efforts of one of Clinton's would-be GOP rival challengers, Governor Wilson, for beginning talks with some of the companies.

Earlier, at the Exploratorium, Clinton said, "Children with access to computers learn faster and learn better. Just as essential as teaching them to read and write and the new math, our mission is to connect every school in America by the year 2000. It will take the same tenacity and effort that it took to build the nation's railroads. So let us begin."

All Schools in California First

The first step is a project to provide Internet access to all public and private schools in California by the end of the current school year. One-fifth of the state's schools would be networked with each other.

"If we can connect 20 percent

(Clinton Goal)

of the schools in the largest state in the nation in less than a year, we can surely connect the rest of the country by the end of the decade," he said.

The hardware and software for the California project will be provided by an alliance of companies recruited by the Clinton administration. They include Xerox Corp., Sun Microsystems Inc., AT&T Corp., Sprint Corp., TCI Communications Inc., MCI Communications Corp., Apple Computer Inc. and Silicon Graphics Inc., among others.

According to a new survey done for Apple, test scores rise as much as 15 percent in computer-equipped schools and students master basic skills 30 percent faster.

Clinton said he would announce a plan next month to achieve "technological literacy" nationwide.

At his Fairmont Hotel fundraiser, attended by about 700 people, Clinton once again attacked fashion designer Calvin Klein for his company's recent ad campaign that featured children in sexy poses. After widespread controversy over the use of the ads as "child pornography," Klein withdrew the ads.

'Out of My Shoes'

"Maybe I'm just getting old-fashioned, but I just came out of my shoes when I saw those children depicted the way they were in those Calvin Klein ads. I thought

it was wrong," he said to applause from the crowd.

Clinton also ticked off many of his accomplishments and said, "We have to figure out how to keep these good things coming and bring everyone on board."

His message was aimed squarely at the Republican-led Congress, as he attacked GOP plans on welfare, the environment, crime and Medicare. While defending his own balanced-budget plan, he accused the Republicans of seeking spending cuts that will deprive millions of Americans of opportunity, all in pursuit of their version of a balanced budget.

Clinton Wants All Schools On the Internet by 2000

California Cited as Model in Getting Firms' Aid

By John F. Harris
Washington Post Staff Writer

LOS ANGELES, Sept. 21—Extolling the benefits of high technology as a tool for educating children, President Clinton today said he wants all U.S. classrooms to be connected to the Internet by 2000.

But he warned that in an era of limited government, his administration could do little more than set a national target and encourage private sector firms voluntarily to devote resources to meeting it. Clinton said government can act "as a catalyst, not a blank check."

Clinton, visiting the Exploratorium science museum in San Francisco, said earlier today California would serve as a national model. He boasted his administration has prodded such companies as Xerox, Apple and Sun Microsystems to make donations allowing all the state's 12,000 schools to be connected to the Internet computer network by the end of this school year.

"What we are doing is the equivalent of going to a dusty adobe settlement in early 19th century California and giving every child a slate and a piece of chalk to write with," Clinton said.

After his technology address, Clinton flew to Los Angeles, where he took questions from a nationwide radio "town meeting" sponsored by the Westwood One radio network and moderated by talk show host Larry King. Prompted by callers, Clinton discoursed broadly on numerous subjects far removed from the ordinary business of his administration, including the O.J. Simpson murder trial and the Calvin Klein ads featuring scantily clad child models.

Responding to a caller from Britain, Clinton said the Simpson case was so unusual "we should be hesitant" to embrace "sweeping changes" to the U.S. criminal justice system based on public outrage over the way the trial has progressed.

But he volunteered that televising the proceedings "has contributed to the circus-like atmosphere" of the case. While stopping short of flatly opposing cameras in courtrooms, Clinton said, "You run a serious risk when you do it in a high-profile trial."

On the Calvin Klein ads, Clinton said he had "an emotional, visceral reaction" against them, saying it was wrong to have "teenagers out there selling jeans in commercials that show their underwear."

Clinton said he was not suggesting

the ads were legally obscene, merely that they were offensive, and that the uproar prompted before Klein agreed to pull them shows "some things are more important than commerce."

Switching topics, Clinton said he sympathized but disagreed with a caller who was angry at The Washington Post and New York Times for jointly publishing a lengthy manifesto from the so-called Unabomber—"a murderer's diatribe," as the caller put it.

Clinton noted Attorney General Janet Reno and FBI Director Louis J. Freeh recommended publication, believing on the basis of a "psychological profile" of the bomber that there is a good chance the terrorist will live up to the promise to stop sending mail bombs once the manifesto is published.

"I think The Post and the Times did the right thing, and I appreciate the risks they took with their journalistic integrity and principles," Clinton said.

After the show, Clinton returned to what has been the principal purpose of his week-long trip: fund-raising. Campaign finance chief Terence McAuliffe said the campaign expected to raise \$5.1 million this week, including \$1.4 million at three events today in San Francisco and Los Angeles.

TODAY IN CONGRESS

SENATE

Meeting time unavailable.
Committees:
Banking, Housing & Urban Affairs—10 a.m. The economy. 538
DeWitt Office Bldg.
Governmental Affairs—10 a.m. Mark up budget reconciliation. 342 DOB.
Judiciary—10 a.m. Constitution subc. Judiciary, constitution, federalism & property rights subc. Impact on affirmative action of Supreme Court decision on *Adarand v. Peña*. 226 DOB.
Judiciary—10 a.m. Terrorism, technology & government information subc. The assault on Ruby Ridge. G-50 DOB.
Labor & Human Resources—9:30 a.m. Mark up budget reconciliation recommendations & vote on pending nominations. 430 DOB.

HOUSE

Meets at 10 a.m.
Committees:
Commerce—10 a.m. Mark up committee print of transformation of Medicaid. 2123 Rayburn House Office Bldg.
Ways & Means—10 a.m. Future of Medicare & budget reconciliation. 1100 Longworth House Office Bldg.

LENN SLATE Inc.

What Tech Executives Told Clinton And Gore

By Jeff Pelline
Chronicle Staff Writer

Like putting a chicken in every pot, Oracle chief executive Larry Ellison is proposing to put a computer on every student's desk to help bolster education. The cost? Just \$500 a pop.

He's not offering to foot the national bill mind you, but that should be the goal. Ellison's bold plan was disclosed at a private meeting held in San Francisco yesterday between technology business leaders, President Clinton and Vice President Al Gore.

The most optimistic time frame: the year 2000.

The bold idea raised eyebrows, but Ellison, who

also wants to help revamp practices at the California Department of Motor Vehicles, is not one to set the bar too low.

He's got supporters, too. Apple chief executive Michael Spindler, who also was at the meeting, nodded in agreement that his company was looking into a \$500 computer.

In an interview, Ellison said Apple "made a horrible series of mistakes" and that its board "should be taken to task" for letting some of its problems fester. But he said Apple's technology was great, and that the two companies would work together to help bring better, cheaper technology to consum-

TECH EXECS: Page B2 Col. 4

From Page B1

ers. While the idea of a \$500 PC at every desk may sound too idealistic, don't sell this group short. In 1994, Gore challenged technology CEOs to wire California schools. At yesterday's meeting, Pacific Tele- sis chief executive Phil Quigley said he reminded Gore that the telecommunications giant delivered on the challenge. He was commended for that.

Another attendee, MCI chief executive Bert Roberts, commended Clinton and Gore for meeting with the group for about an hour and seeking their input on how to improve education with technology.

Ellison said he prefers to call his box a network — not a personal — computer, because it will be hooked up with other students and giant data systems. He said it should be as common as the pencil in the classroom.

3Com chief executive Eric Benhamou, another attendee, liked that. His company is eager to enter the consumer market for computer networking equipment.

Clinton is a baseball fan, but 3Com Park didn't come up.

Clinton to log on to plan to wire schools for Net

■ **Netday '96:** His endorsement will launch alliance of volunteers to install lines.

BY MICHAEL ZIELENZIGER
Mercury News Staff Writer

President Clinton, speaking in San Francisco today, will endorse an unprecedented alliance of high-tech companies and citizen-volunteers that will march into California schools March 9 and install the high-speed telephone

and cable lines needed to link each science lab and library to the Internet.

At the end of "Netday '96," proponents say, virtually all of the state's 12,000 public and parochial schools will have the internal high-end lines needed to connect school computers to the

World Wide Web, an easy-to-navigate, multimedia section of the Internet.

Combining the donated resources of more than 80 high-tech companies, including Hewlett-Packard, Sun Microsystems, Apple Computer, Sprint and Pacific Telesis, and the labor of interested volunteers who will sign up by computer, organizers believe that in a few hours on one Saturday, each school in the state can be hooked into the global network.

No public funds will be used, and no committee meetings will

be held, planners say. The Internet will permit volunteers to just show up and do it.

"Every school will do it on their own; the Net allows you to have a fully decentralized process," said one high-tech executive helping to spearhead the effort. "You will be able to find

your own school, or a school near you, and volunteer to help do the installation. We're confident that this (Internet) technology alters the way the public can participate in creating the environment of the life they want to lead. The technology will change the politics."

While the federal government is not directly involved in "Netday '96," Clinton's endorsement helped prod the companies to agree on a joint effort.

"Without the White House thinking this is a great idea, it would have been far more difficult to get people to stand up and commit their efforts to this one day," said John Gage, chief scientist at Sun Microsystems, a long-time advocate of using the Internet to improve schooling.

"Netday '96" will provide only the wiring to link a school's computers to each other. Other programs already exist to put computers in schools and to provide

the phone service needed to connect schools to the outside world.

During discussions today with high-tech executives, Clinton will challenge the nation to improve educational technology in its schools and will set as a target the wiring of one-fifth of the nation's schools to the Internet by the end of the decade.

By supporting high technology in the classroom, Clinton also will align himself with the executives whose support is crucial to his re-election. Many high-tech leaders supported Clinton in 1992, and without their backing the president would be hard-pressed to win California in next year's presidential election.

Both Clinton and Vice President Al Gore often have promoted the use of advanced computers and the Internet to create new opportunities for remote learning and to bridge the gap between well-funded and disadvantaged school districts. Smart Valley Inc., the Silicon Valley consortium, is working on plans that someday would link all of Santa Clara County's schools to the Net.

But never before have high-tech companies agreed to throw themselves into a crash, state-wide effort to lay the wiring necessary to make that dream come true.

As outlined by its proponents, interested volunteers will use the Internet to select specific schools to which they are willing to donate their time on "Netday." Using a click-and-point interface, Web users will be able to de-

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Clinton
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mine which schools need help getting on-line and will be able to volunteer their services. The Web page will be accessible beginning today at the URL <http://www.w3.com/netday96>

Between now and March, high-tech companies around the state will donate the time of networking experts who will survey each school and determine how the installation should occur best.

On March 9, a group of eight to 10 volunteers will arrive at the school and essentially drill a few holes in walls and ceilings. Then they will string high-speed telephone line from a central point in the building through baseboards and ducts to all of the school's computers in libraries, computer labs and classrooms, using the same technology that companies in Silicon Valley use to create networks of their own computers.

By afternoon, volunteers from hundreds of high-tech companies will come to each building, survey the work and certify that the network is working properly. For the first time, proponents say, each school's information backbone will have been inventoried, and

each school will know what steps need to be taken next.

Organizers believe that by creating the backbone needed for computer networking, they can complement other programs designed to bring computers into classrooms and link the central telecommunications hub in each school to the outside world. The volunteers will install so-called "Category 5" telephone line, capable of carrying up to 622 megabytes of data per second. Such line currently costs about 11 cents a foot at a computer retailer.

Laying data cables is not the only obstacle schools face in going on line. Volunteers won't be able to install advanced wiring in schools where asbestos is found. Many schools have antiquated electrical circuits incapable of supporting more than a handful of computers in each classroom. Rewiring schools to allow one computer for each student would cost \$6,000 a classroom, said Dave Downing, facilities director at San Jose's Alum Rock Union Elementary School District.

Clinton's high-tech allure fade

President visiting Silicon Valley

By Ilana DeBare
Bee Staff Writer

Silicon Valley businesswoman Gloria Rose Ott still recalls her first contact with Bill Clinton in 1991 when the then-governor of Arkansas was arranging his first foray into this high-tech mecca.

"The request from his office was fairly simple," Ott said. "They said, 'It seems like you folks in Silicon Valley understand the economic changes that are going on in this country and have got a lot to offer. The governor would like to meet with you.'"

Those early contacts ultimately paid off in a big way for Clinton, who entered into a storybook romance with California's high-tech leaders — many of whom forsook their longtime Republican ties to back the baby boomer candidate who spoke their language.

Today Clinton will once again visit the Bay Area and extol the benefits of technology, meeting with high-tech executives and then holding an on-line video conference with a class of Marin County schoolchildren.

As his 1996 re-election campaign draws closer, the computer world remains friendly turf for Clinton. But industry observers say some of the glow of that early romance has faded.

"I don't get the same sense of 'we are going to cross the road to support Clinton' that I got in 1992," said Ron Smith, a Republican political consultant who does

a lot of work in Silicon Valley.

"There's still a tremendous amount of respect for the president and vice president, but there's also some amount of disappointment and some confusion," said Ott, who runs a San Jose vehicle-design firm called Rapid-Tech.

There's no single overarching dispute that has dampened computer executives' initial ardor for

Clinton. Rather, high-tech thumbs turn up or down depending on the specific company and the specific issue — be it trade policy, tax policy or aid for technology research.

Clinton gets universally high marks from high-tech executives on his efforts to lift international trade barriers. He gets lower marks for his refusal to cut the capital gains tax — a long-sought goal of computer entrepreneurs who amassed millions of dollars in stock when they took their young companies public.

High-tech companies give Clinton credit for loosening some of the old Cold War-era barriers to exporting supercomputers, although they wish he'd loosen them even more.

But they remain at loggerheads with the White House over how to balance the needs of law enforcement agencies and private business when it comes to encryption software.

Administration officials insist that all exported software contain a "key" allowing law enforcement officials to decode it and read it if necessary for a criminal investigation. But overseas buyers are naturally reluctant to use products

that leave them open to U.S. government surveillance.

"Our international market for encrypted products is virtually zilch," complained Eben Tisdale, government affairs manager for Hewlett Packard. "That's an area where we've been very disappointed by the administration."

Perhaps the most intriguing gap between Clinton and Silicon Valley leaders has quietly risen around the issue of government funding for high-tech research.

Early in his term, Clinton made a point of boosting grants for non-defense-related technology research. One such effort — the Advanced Technology Program — has funneled more than \$148 million to 74 California companies and organizations.

Now the new Republican-controlled Congress is threatening to completely scrap ATP and scale back other non-defense research

But Silicon Valley executives have been relatively silent when it comes to defending these programs — a legacy of their traditional, Republican mistrust of government involvement in the marketplace.

"We support the administration on funding for basic university research," said Intel Corp. lobbyist Mike Maibach, "but we do not support ATP, where the grants don't go to the whole industry but to individual companies."

"I have not seen, as I would have expected, a uniform willingness to lobby hard and support the administration on some of the funding issues," acknowledged Hewlett Packard's Tisdale. "We may have let them down a little on that one."

Some observers say the general cooling of enthusiasm for Clinton has less to do with the president than with the continued political naivete of the high-tech world. Before Clinton, Silicon Valley leaders generally steered clear of national politics. When it comes to campaign fund raising, they still are notorious for "deep pockets but short arms."

"There were enormously high hopes this would be the technology president," said Gloria Rose Ott. "But the reality is, when you go back to Washington, the bureaucracy is so entrenched even the president can't change it. This is one of the most fast-paced industries, coming up against the reality of a slow-paced government."

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Clinton in S.F. to boost high-tech education

Delivering funds — and looking for contributions

By Verise Wagner
OF THE EXAMINER STAFF

President Clinton and Vice President Al Gore came to San Francisco Thursday to push the administration's program to provide federal money for high-tech improvements in California schools and rake in contributors' money for their re-election campaign.

Air Force One landed at San Francisco International Airport shortly before 3 a.m. Thursday after a snow delay of more than three

hours in Denver. The president immediately headed to The City in his motorcade to spend the night. Gore arrived an hour earlier aboard Air Force Two.

California is the fourth state Clinton has visited on a five-day tour in which he has combined \$1,000-a-plate fund-raising dinners with Republican-bashing speeches. Earlier he visited Pennsylvania, Florida and Colorado.

Thursday's issue was education. Clinton planned to watch a demonstration of education technology at the Exploratorium and hold a teleconference with Marin County elementary students before heading off to the Fairmont Hotel for a

[See CLINTON, A-16]

Clinton's re-election team already taking shape [A-17]



EXAMINER/PAUL CHINN

President Clinton gets an early morning greeting after arriving at San Francisco International Airport on Thursday.

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◆ CLINTON from A-1

President visits the Bay Area

fund-raising luncheon.

Then he planned to move onto Los Angeles in the afternoon for two more fund-raisers and a live radio "town hall" meeting hosted by Larry King. On Friday he is to wrap up his visit, his 21st to California since taking office.

In San Francisco, Clinton had been expected to announce a federal initiative that would bring about \$20 million in grants for more technology in Northern California schools, but an administration spokesman said Thursday morning the grants would be announced later.

The grants would be made under the administration's national education plan, called "Connecting Classrooms, Computers and Communities." The plan aims to create public-private partnerships among universities, cable television networks, telephone companies, and computer hardware and software companies.

The goal of the initiative is to connect all the nation's schools to the Internet by the year 2000.

About 65 percent of the nation's schools have no access to the Internet. Of the 35 percent of schools that do have a ramp onto the information superhighway, only half have at least one classroom or lab where students, teachers and administrators can log on.

Despite being the home of Silicon Valley, California, with its 11,809 public and private schools, ranks 48th in the country in the number of students per computer: 20-1.

Part of the problem is that most schools are not wired. Some don't even have phone lines to their classrooms. The other barrier is lack of knowledge among teachers.

The administration's program has the cooperation of such industry giants as Sun, Microsoft Systems, Pacific Bell, AT&T, America Online, Apple, Silicon Graphics and a consortium of computer companies called Smart Valley.

"There are lots of challenges for schools," said Rebecca Weill, a spokeswoman for Pacific Bell, which hopes to have the 9,000 schools in its territory around the state wired and ready to jump on

the Internet by the year 2000.

"There's the fear of technology and limited knowledge of telecommunications (and) infrastructure," Weill said. "(School) administrators are also worried about the uncertainty of ongoing costs."

Under its Education First program, Pac Bell covers the \$70 installation of high-speed phone lines and one year's worth of the monthly flat rate, which runs between \$26 and \$33.

The state Public Utilities Commission is also considering a proposal to create a discounted rate for schools and libraries.

But even when schools get wired, they must also consider the cost of buying computers and

training teachers on how to use them.

San Francisco schools Superintendent Bill Rojas conceded that students often know more about the computers than their instructors.

The district does have its technology centerpieces. Among San Francisco public schools, Bryant Elementary and Thurgood Marshall Academic High are way ahead of the pack.

At Marshall, students use computers for all classroom presentations and homework. The school is installing video conferencing equipment, and students routinely get on the Internet.

Another showpiece school is

Katherine Delmar Burke, which has been a part of Gore's GLOBE program electronically linking students, teachers and scientists around the world in the monitoring of global environmental conditions.

Each of these three schools will have a chance to demonstrate its programs to Clinton and Gore during their visit to the Exploratorium.

While the district can point to such programs, Rojas conceded that its use of high technology is spotty. He said the district cannot bring kids into the 21st century without the financial backing of corporations.

Ray Delgado of The Examiner staff contributed to this report.

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Clinton's trip heralds '96 campaign

By Kandace Bender
EXAMINER POLITICAL EDITOR

Forget the pretense that President Clinton's two-day visit to California is official government business. He has re-election on his mind.

It was 1992 campaign politics all over again Thursday as Clinton, accompanied by Vice President Al Gore, attended mega-fund-raisers, chatted with schoolchildren and returned to his old campaign theme of "change."

He met with boisterous talk-show host Larry King, who played a novel role in the 1992 presidential race, and waited on the sax at a late night gig.

There was even the ghost of Ross Perot — this time as possible third-party candidate Colin Powell.

The only thing missing was George Bush.

Clinton isn't officially in the race yet, and said Thursday he "would like to put off announcing as long as possible because there's so much work to be done."

But it's no secret his four-state blitz across the country this week was designed to bring in big bucks — \$5 million is the goal — for the 1996 campaign.

Money in the bank

The president's trip, which began Monday and concludes Friday, shot through Pennsylvania, Florida, Colorado and California. It marked his last big fund-raising push toward \$43 million, the limit for the 1996 primary campaign season.

By Nov. 1, Clinton should have \$20 million in the bank and another \$10 million "in the mail," as one aide put it, referring to the direct mail campaign put together by Terry McAuliffe, Clinton's re-election campaign finance chairman.

The money will free Clinton to campaign as much as possible next year against his Republican opponent and maybe even a third-party candidate.

On King's radio program in Los Angeles, Clinton said Powell would be a formidable candidate, but said he was not worrying about whether the retired general would enter the race.

"I've worked with him, and I like him," said Clinton, under whom Powell served as chairman of the Joint Chiefs of Staff. "He's a very appealing man."

Democrat at heart

"I think, at heart, he is probably a Democrat," Clinton added. The president also said for the first time that he had considered offering Powell the vice presidential nomination during the 1992 cam-

paign.

Clinton's comments were his first extensive remarks on a possible presidential bid by Powell since the general launched a nationwide book tour last week that will include a stop next Monday in San Francisco. The tour is aimed as much at testing the political waters as earning money.

The King show has been a favorite political playground since Perot popped up in 1992, saying he was in — and then out — of the presidential race. Clinton, Gore and all the Republican candidates have made appearances.

Earlier in San Francisco, the president collected a cool \$650,000 during lunch for 700 at the Fairmont Hotel.

It was Clinton's 21st visit to California since taking office. Sen. Dianne Feinstein's husband, Richard Blum, praised the president for "making more trips to California than the four previous presidents, including one who lived here," a reference to Ronald Reagan.

The California speech

In a speech similar to one he gave earlier this month at the Alameda County Labor Day picnic, Clinton touched on issues important to Californians — the environment, crime and safety, affirmative action, immigration and high technology.

"We are living in the biggest period of change America has seen in 100 years," Clinton said. "This age is dominated by information and technology. . . . It is exciting and challenging."

"One of Clinton's laws is that everyone is for change in general, they're just against change in particular," he said.

"In the sharpest sense, our (fears of change) are manifested in racial tension and hatred," the president added. "We must be open to new ideas but stay faithful to our traditional values."

Thursday night, Clinton headlined a fund-raiser at the Century Plaza Hotel and Tower in Los Angeles attended by 700 people, including television mogul Aarón Spelling, director Steven Spielberg, actress Mary McCormack and actors Tom Hanks, Kirk Douglas and Christina Stamatou.

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SAN FRANCISCO EXAMINER



AP/SCOTT APPLEWHITE

President Clinton strikes a cool pose with actor James Belushi, left, and Al Gore at L.A.'s House of Blues.

After the dinner, Clinton went to the House of Blues to play with a

group of saxophonists. Hundreds were turned away when fire officials declared the popular club filled to capacity.

The president and vice president were to make stops in Orange County and San Diego on Friday before heading back to Washington.

The Houston Chronicle contributed to this report in Los Angeles.

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EXAMINER/GRAD LEE

President Clinton and Vice President Al Gore watch Fidel Ferrel hook up with another school via computer.

President explores ABCs of Internet with school kids

By Venice Wagner
OF THE EXAMINER STAFF

Emily Warren from Katherine Burke School talked to the president about weather conditions around the world. Bryant Elementary third-grader Latt Thwa explained to him the magic of static electricity.

But as elementary students from Ross School in Marin County watched via teleconference, Bryant student Luis Ochoa might have asked Bill Clinton one of the most important questions of the day.

"You ever hear of Hurricane Luis?"

"Why, was that you?" quipped Clinton, who got a wide smile from

the fifth-grader and hearty laughs from the other students and a crowd of reporters.

Luis and other students from the San Francisco schools hosted Clinton and Vice President Al Gore on a tour of the Internet and educational computer programs at the Exploratorium on Thursday.

The high-tech demonstrations were an introduction to Clinton's plan to encourage partnerships between schools and private businesses to give every student access to the Internet by the year 2000.

Clinton said his administration would unveil the formal plan in the fall. The program is expected to include grants totaling \$20 million for Northern California cities that aim to bring more technology in the schools.

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With the support of such high-tech companies as America Online, AT&T, Silicon Graphics and Sun Microsystems, 20 percent of the

schools should be hooked up to the Net by the end of the year, Clinton said.

Clinton, who met privately with CEOs of Silicon Valley corporations Thursday, dubbed this initiative "high-tech barn raising."

"The goals that we set cannot be met, cannot be achieved by government alone," Clinton said. "It can only be met the way these companies are doing it, with communities, businesses, governments, teachers, parents and students all joining together.

"What we are doing is the equivalent of going into a dusty settlement in early 19th century California and giving every child a slate

and a piece of chalk," Clinton said.

A lack of teacher training, wiring and equipment have placed California 46th out of 50 states in the country in the number of students per computer: nearly 14-1.

Educators and business people have agreed that the only way schools will get up to speed technologically will be through a private-public partnership.

Virginia Davis, a technology resource teacher at Bryant, said computers are tools like pencils and paper.

For example, Davis said, experts are difficult to get into the classroom but are accessible via computers.



AP/DENIS POROY

President Clinton reaches out to shake hands with teachers and students in San Diego Friday.

Clinton wraps up California visit

Delivers funds for schools, health care

EXAMINER NEWS SERVICES

SAN DIEGO — President Clinton has wrapped up a five-day, four-state fund-raising swing that netted his re-election campaign \$5.1 million.

On Friday, Clinton visited Los Angeles, Orange County and San Diego, returning to old-fashioned campaigning and a Clinton campaign staple — pressing the flesh.

Looking slightly sunburned and relaxed in Orange County, he gave what amounted to a 15-minute pep talk to 2,500 school-age children at the Boys and Girls Club of Santa Ana and later waded into the crowd briefly.

At one point, Clinton was momentarily upstaged by basketball superstar Shaquille O'Neal, on hand to represent a corporate sponsor of Clinton's appearance. O'Neal towered over Clinton and drew far louder applause than the president when the two were introduced to the youthful audience.

Still, Clinton was a hit in Santa Ana, particularly when he spoke of pressures facing young people. "I think it was good that he talked about staying in school and opportunities for young people," said Jorge Ornelas, a high school senior from Santa Ana.

In San Diego, the president spoke about the importance of maintaining federal funding for education in the face of a Congress bent on slashing the budget.

"We can't balance the budget by destroying our commitment to education," Clinton told a cheering crowd of students, teachers and administrators at one of California's innovative charter schools. "We can balance the budget and increase our commitment to education, and that is exactly what I intend to do."

He cited O'Farrell Community School, which warmly hosted him in a dusty courtyard, as a national model in advancing new ideas in public education. The school is one of about 100 in California approved by the state under an experimental plan designed to create more alternatives and choice within the public school system.

Later, in his speech, Clinton announced that the Department of Education has granted \$6 million in additional funds to open more charter schools in 11 states, including California.

After he finished speaking, Clinton plunged into the crowd, shaking hands and chatting.

In Los Angeles earlier in the day, Clinton announced plans for a \$364 million bailout for the crippled Los Angeles County health care system.

Delivered dramatically at a Santa Monica Airport news conference, Clinton's announcement came just nine days before thousands of workers were to be laid off, hospitals and clinics closed, and medical care severely interrupted for tens of thousands of residents, most of them poor.

"It will allow the county to avoid closing any of its hospitals and to keep open a majority of the clinics that had planned to close," Clinton said.

The President had visited Pennsylvania, Florida and Colorado earlier in the week. On Thursday he spoke in San Francisco.

Los Angeles Times first-edition Page 1 for Friday,
Sept. 22, 1995:

Top of page:

Col 1: Two families who moved north to keep their sons safe from gangs have found that what they thought was the land of opportunity is a land of broken dreams. (ALASKA, moving Friday).

Cols 2-4: President Clinton announces an effort funded by California-based high technology companies to connect every school in California to the emerging information superhighway by the end of this school year. (with art). (CLINTON-TIMES, moved).

Cols 5-6: A tentative \$364 million rescue package that would save Los Angeles County's crippled health care system from imminent collapse is hammered together in Washington, according to sources familiar with the bailout plan. (COUNTY, moved).

Above fold:

Cols 2-3: House Republicans, still unable to agree on the details of a Medicare plan that would save \$270 billion over the next seven years, issue a general blueprint calling for heavy government supervision of hospitals, doctors and other health providers. (MEDICARE-TIMES, moved).

Col 6: Over the vehement objections of the lawyers for O.J. Simpson, Superior Court Judge Lance A. Ito clears the way for jurors to consider possible compromise verdicts in the case, allowing the jury to consider whether Simpson might be guilty of second-degree murder even if they cannot agree to convict him of first-degree murder. (SIMPSON, moved).

Below fold:

Col 3: A day after NATO's air campaign is called off, Croat army units withdraw from northern Bosnia after Serb rebels take to the skies to bomb them, turning back a joint Croat-Bosnian government offensive that consumed large swaths of Serb-held land, the U.N. says. (BALKANS-TIMES, moved).

Cols 5-6: When the O.J. Simpson jurors take their courtroom seats for a final time to render a verdict, some observers will be interested in more than their decision; a group of legal experts and psychologists nationwide is eager to know just how these individuals endured a trial that could emerge as a blockbuster case study on juror stress. (SIMPSON-STRESS, moving Friday).

Bottom of page:

Cols 1-2: Researchers have discovered how nicotine exerts its potent physiological effects on the brain cells of smokers, a finding that could help explain why the substance is addictive, as well as how it alters mood, improves alertness and increases the ability to concentrate. (NICOTINE, moved).

Cols 5-6: A Los Angeles gang member and suspected associate of the Mexican Mafia is arrested as one of the gunmen who ambushed a family that strayed onto a darkened, dead-end street last weekend, killing a 3-year-old girl and wounding two others in a spray of bullets. (GANGKILLERS, moved).

Clinton: California Schools to Go on Info Highway By John M. Broder and Richard Lee Colvin. (c) 1995, Los Angeles Times

SAN FRANCISCO President Clinton Thursday announced an effort funded by California-based high technology companies to connect every school in California to the emerging information superhighway by the end of this school year.

Speaking before a group of school children and technology executives at the Exploratorium children's museum in San Francisco, the president said the initiative would involve no federal money. The computer hardware, software, training and Internet access costs all will be borne by the private sector, he said.

Clinton likened the effort to a "high-tech barn-raising," in which more than a dozen technology companies would donate equipment and personnel to bring every California primary and secondary school on line by the end of the current school year.

He called it an example of the kind of public-private partnership the administration is trying to achieve to bring Internet access to every school in America and keep the U.S. economy competitive with other nations.

He said the strained federal budget does not allow substantial public investment in such efforts but that Washington can serve as "a catalyst" even if it cannot write a blank check to bring America's classrooms into the information age.

The goal of the initiative is to connect all of California's 12,000 public and private schools from kindergarten through high school to the Internet. While there is not enough money to bring online services to every classroom in the state, the hope is to have Internet-capable computers in 50,000 California schoolrooms by next June.

Clinton's announcement raises the profile of existing private industry efforts to equip classrooms with computers and wire the state's schools for Internet access.

Coalitions in the Bay Area, Los Angeles County and elsewhere are aimed at combining private corporate and foundation contributions with public dollars to upgrade students and teachers' access to computers and communications technology.

The nation's most ambitious privately funded project to link schools to the Internet is the \$100 million Education First initiative launched a year ago by Pacific Bell to wire 9,000 schools, colleges and libraries with high-speed, integrated data lines.

That project is the brainchild of Phil Quigley, the chairman and CEO of Pacific Telesis, the parent company of Pacific Bell.

Quigley, who was among the business executives who met Thursday with Clinton, said in an interview that the president's appearance boosts the credibility of such efforts. Even though California is near the bottom among states in terms of the number of computers and other communications technology available for its students, the efforts of private companies to help address that shortage stand out, he said.

"It doesn't hurt to challenge those who are already engaged in these things," Quigley said.

Even though there was no announcement Thursday of any new resources to be committed by private companies, Quigley said, the occasion might encourage others to get involved. He said Education First is on target to wire 2,500 schools by the end of the school year to lines that, among other things, allow students and teachers to interact via video cameras, giving them opportunities to collaborate on projects with peers across the street or around the world.

(Optional add end)

became a demonstration site for the project.

Manual Assistant Principal Earl Veits said the electronic access gives his students a window on the world. "Our kids still live in a neighborhood and their personal universe is where they live, but with ... the computers and the Internet they're going to be able to access people in all kinds of areas, economic strata and ethnic backgrounds."

A fledgling effort, led by the Los Angeles County Office of Education, is under way to get Internet access to every classroom in the county by the end of the decade. That project has raised between \$1 million and \$2 million worth of cash and in-kind contributions.

HMOs, Payment Controls Included in House GOP Medicare Plan By Robert A. Rosenblatt and Edwin Chen (c) 1995, Los Angeles Times

WASHINGTON House Republicans, still unable to agree on details of a plan to save \$270 billion from Medicare over seven years, issued a general blueprint Thursday calling for expanded choices for beneficiaries, combined with tough government controls on payments to hospitals, doctors and health providers.

The GOP outline expressed confidence that millions of Medicare beneficiaries will save government revenues by moving into health maintenance organizations and other forms of managed care.

But the 60-page document did not offer dollar figures on how much of the \$270 billion goal would come from managed care savings, and how much would be provided through higher payments by the beneficiaries themselves.

House Speaker Newt Gingrich, R-Ga., admitted there is no way to know whether the GOP plan will in fact sharply increase membership in HMOs, which typically cost less than traditional fee-for-service medicine. "We will find out in three years who is right," he said, noting that the Congressional Budget Office may disagree with the GOP about the potential savings.

In a bid to blunt Democratic criticism that the savings will hurt senior citizens, Gingrich said Medicare's total spending would rise every year under the GOP plan.

"This is an increase," he said emphatically. Costs have been climbing at a rate of 10 percent annually. The GOP plan would restrict the growth to 6.5 percent a year.

(Begin optional trim)

The government now spends an average of \$4,816 a year for each Medicare beneficiary, a figure that would rise to \$6,734 in 2002 under the GOP plan. A central issue, however, is whether \$6,700 in 2002 will buy the same package of Medicare hospital and doctor services that now costs \$4,900.

Republicans say costs will be controlled effectively through the saving from managed care by the government restrictions on payments to doctors and hospitals. Democrats insist that expenses will keep rising, and that beneficiaries will have to spend much more out of their own pockets for medical services.

"Our mission is to preserve Medicare, to protect Medicare and to strengthen Medicare," Gingrich said at a news conference.

In response, Senate Democratic Leader Tom Daschle, D-S.D., said the Republican proposal was a "cruel hoax" on seniors. And House Minority Leader Richard Gephardt, D-Mo., promised the "biggest fight ... most controversial fight we've ever seen in Congress."

Democrats say the \$270 billion in savings is far in excess of the amount needed to guarantee the solvency of the Medicare in the short-run, and they accuse Republicans of seeking money to finance tax cuts targeted heavily toward the rich.

The leading provisions of the GOP plan would:

Offer all beneficiaries a once-a-year selection from among several government-approved plans, including HMOs, or other networks of doctors and hospitals, or special Medical Savings Accounts. Under such an account, the government might spend \$5,000 for Medicare coverage. The beneficiary could buy a low-cost, high-deductible policy for \$3,000 a year. The other \$2,000 would go into a savings account to be available to pay deductibles if the person gets sick or to be rolled over for next year if not used.

Beneficiaries who select none of these choices would remain in the current fee-for-service system, which allows them to select any doctor or hospital.

Increase the monthly Part B premium paid by all beneficiaries for doctor services, now \$46.10, to approximately \$70 in 2002.

Impose "mean testing" on seniors making more than \$75,000 a year, or couples with more than \$125,000, and require them to pay more their part B coverage.

Impose a limit of \$250,000 for "pain and suffering," in addition to economic damages, for those who win malpractice suits. Claims would have to be filed no more than two years after the incident.

(Optional add end)

The malpractice relief for doctors was designed to ease the burden of potentially drastic reductions in payments to physicians and hospitals under the Medicare program. The federal government would set a target each year for total payment under Medicare to doctors, hospitals, home health care agencies, laboratories and other providers.

If spending exceeds the targets, the government would cut the rate of reimbursement the next year to stay within the target. This could mean lower fees for surgeries, less money for an office visit, and other measures to restrain spending. The Republican plan calls this a "fail-safe" mechanism to assure that it meets the budget targets.

Medicare spending, now about \$170 billion, would be limited to a specific figure each year, reaching \$280 billion in 2002. The GOP plan would convert Medicare from an open-ended entitlement under which all eligible people get benefits, with no ceiling on total national spending to an entitlement with fixed outlays.

Gingrich said payments to providers also will increase each year.

"Hospitals will get more. Doctors will get more. Laboratories will get more. Home health will get more. And specialized nursing facilities will get more," Gingrich said.

Potts Denies Easing Rules for Use of Force in Siege By Ronald J. Ostrow and Robert L. Jackson (c) 1995, Los Angeles Times

WASHINGTON Former FBI Deputy Director Larry A. Potts Thursday denied approving rules that said FBI snipers "should" fire on any armed adult male at the 1992 Ruby Ridge siege, adding that "recently discovered" contemporaneous notes support his testimony.

But Potts, ignoring his lawyers' advice against testifying before a Senate panel while criminal inquiries are under way into the Idaho siege, where a deputy U.S. marshal and the wife and son of white separatist Randy Weaver were shot to death, said the Justice Department has

(Untitled on wire) By Philip J. Tronstin
Knight-Ridder Newspapers

SAN FRANCISCO President Clinton on Thursday declared "technological literacy" an educational imperative and pledged his support to connect every classroom in the country to the world-wide computer network by the year 2000.

"Preparing our children for a lifetime of computer use is now just as essential as teaching them to read and write," Clinton said. Pointing to a school-wiring project sponsored by Silicon Valley and other high-tech companies as a model for the nation, Clinton likened their \$13-million effort to a "high-tech barn-raising."

"Tens of millions of parents all across our nation have watched their children play every kind of video game from 'Mortal Kombat' and 'Primal Rage' to 'Killer Instinct' and 'Super Streetfighters,'" Clinton said, drawing a giggle from about 200 youngsters beneath the dome at the Palace of Fine Arts.

"But the really important new computer game is America is learning," Clinton said. "I want to get the children of American hooked on education through computers."

Although he offered no details, Clinton also pledged that in coming weeks he would unveil a plan to achieve technological literacy for the country's youth. Jonathan Sallet, director of the Office of Policy and Strategic Planning in the Commerce Department, said the goal of connecting schools and libraries across the country would demand a combination of public and private spending, a specific plan for which has not yet been devised.

Speaking outside of the Exploratorium, where he earlier met with executives whose companies are working to provide Internet access to California's 12,000 schools, Clinton stole some of the high-tech glow that Gov. Pete Wilson has sought as governor of the state that is home to the computer revolution.

While Clinton and Vice President Al Gore, who accompanied him, have paid unusual attention to high-tech policy issues, aligning themselves with the initiative of glamorous electronics companies also is a crafty political move. Winning the imprimatur of Silicon Valley executives, many of them Republicans, was an important coup for Clinton in 1992 a feat he'd like to replicate in 1996 when he needs to win California.

White House press secretary Michael McCurry was careful to credit Wilson with having supported efforts to proliferate computers in the schools. But one less charitable White House source turned on its head Wilson's claim to be a governor who gets things done. "There's been a lot of talk and not much happening," the source said of efforts to wire California schools that Wilson seemed unable to catalyze. "The president was anxious to really make this happen."

Wilson sides responded defensively to the president's incursion.

"We could have a computer on the desk of every fifth grader in the state of California if we didn't have to spend \$1.75 billion per year on educating illegal immigrants," said press secretary Paul Krauthold.

"This is nothing new," said Maureen DiMarco, secretary of child development and education, pointing to the \$10 million Wilson has invested this year in classroom computer technology and a longstanding commitment to interconnecting schools.

In his closed-door meeting with about 15 high-tech leaders at the Exploratorium, Clinton said he sees Internet access in the schools as a way for educators and students to learn from one another how to solve educational challenges, according to one participant.

Use of the Internet will allow advances made in one school to be shared with others, the president said. Computer links will also make schools and teachers more accountable

because they will have easy access to innovations pioneered by others.

The executives in turn told the president that teacher training will be a fundamental barrier toward acceptance of the Internet, since educators will have to instruct young people how to use computer technologies. In turn, the firms said they are working to create small, relatively inexpensive machines that would permit easy access to the Internet.

The Clinton-Gore trip to San Francisco, on day four of a five-day political tour, was not just a romp through what Clinton called "the world of modems and megabytes." In the president's words the reality not just virtual reality of the visit was underscored by a \$1,000-per-napkin fund-raising luncheon at the San Francisco Fairmont where Clinton-Gore raised \$650,000.

There, before a decidedly partisan crowd, Clinton warned with the same appeal he has peddled from Florida to Pennsylvania to Colorado: that "it is a violation of our solemn obligation to give people a chance to make the most of their own lives" to needlessly cut spending on education, training, Medicare, environmental regulation and other programs threatened by Republicans in Congress.

"It is not fundamentally about money," Clinton insisted. "It's about whether we're going to be a community or a crowd."

And though Clinton was expected to steer clear of some of the hot-button issues that have riled up Californians, he seemed unable to resist, vowing again to fix, not eliminate, affirmative action programs, and standing against anti-immigration rhetoric.

"Let's not forget something," he said. "Except for the Native Americans, all the rest of us come from somewhere else. We're a nation of immigrants."

Later in the day, Clinton participated in a live call-in radio show with Larry King in Los Angeles. He told callers he will delay formally declaring his candidacy for a second term as long as possible and said he hoped America would be blind to Colin Powell's race if he seeks the White House.

Thursday evening Clinton attended two more fund-raisers, including one at the House of Blues. Friday he is scheduled to make appearances in Orange County and San Diego.

(Michael Zielenziger of Knight-Ridder Newspapers contributed to this report.)

(This article is from the San Jose Mercury News.)

U.S. budget: Raid on trust funds proposed if debt-hike delayed

By Steve Marcy Knight-Ridder Financial News

WASHINGTON Robert Reichauer, one of the more savvy, more experienced fiscal policy advisers in Washington, thinks he's figured out how President Bill Clinton can overcome Republican intransigence to raise the U.S. debt limit: raid the civilian federal employees' retirement funds.

Such a maneuver would allow the U.S. in effect to lower its outstanding debt by \$350 billion and sell new securities for that amount of cash, enough funds to finance the U.S. deficit for well over a year, if necessary, he said.

Congressional Republicans have already set in motion measures to tie an increase in the debt limit to legislation they will pass this fall to balance the budget by 2002. Clinton doesn't like the upcoming legislation because it cuts too deeply into taxes, Medicare, Medicaid and programs he favors.

Republicans figure that by tying the balanced-budget package to a needed increase in the debt limit, Clinton will be forced to sign it, since his officials have all warned of a meltdown on U.S. creditworthiness if he vetoes it and risks the possibility of a default. That possibility looms Nov. 15, when

October 9, 1995

EDUCATION TECHNOLOGY WORKING BREAKFAST WITH CEOS AND TEACHER LEADERS

Date: October 10, 1995
Time: 8:00 a.m. to 9:00 a.m.
Location: The Cabinet Room
From: Gene Sperling/Greg Simon/Jonathan Sallet

I. PURPOSE

The purpose of this working breakfast is: (1) To consult with leading private sector CEOs and the leaders of the two teachers associations to gain their advice on the launch of a national private-public partnership to ensure that all children are technologically literate by the dawn of the 21st Century; and (2) To obtain a commitment from these leaders to work with the Administration to make this partnership a reality.

This working breakfast will be an action oriented meeting where you and the President will discuss specific steps for future action with these leaders. A meeting agenda will be distributed, and you will act as a moderator to follow this agenda.

II. BACKGROUND

On September 21, you and the President met with a group of CEOs in California to discuss the issue of educational technology and to announce a series of private sector steps to connect California schools to the Information Superhighway. In the President's remarks at that event, he laid out four goals for educational technology:

- (1) That modern computers are a part of every classroom and accessible to every K-12 student;
- (2) That these computers connect students to other students and to the Information Superhighway;
- (3) That educational software is made to be as engaging as the best video game and as meaningful as an expert tutor, and;
- (4) That teachers have the training and assistance they need to employ new educational technologies effectively.

You and the President also used these private sector efforts to connect schools in California as a platform to challenge the private sector, teachers' organizations, universities, communities, and local schools to work with the Administration over the next several weeks to help develop a nationwide public/private plan to meet these four goals to achieve

technological literacy for all of our young people.

This working breakfast is the first step in developing this public/private plan. It will give you and the President the chance to consult with 14 leading information industry CEOs and the leaders of the two teachers associations (NEA and AFT) on your vision on educational technology. The meeting will also give you an opportunity to obtain a commitment from these CEOs and teachers leaders to work with the Administration on this initiative to make technological literacy for all of our young people a reality.

III. PARTICIPANTS

YOU

The President

Secretary Riley

Secretary Brown

Laura Tyson

Jack Gibbons

14 Information Industry CEOs (see attached list)

Keith Geiger, National Education Association

Al Shanker, American Federation of Teachers

IV. PRESS

There will be no press at the meeting with CEOs.

V. SEQUENCE OF EVENTS

- At 7:45, the meeting participants arrive in the Cabinet Room.
- At 8:00, YOU and the President are briefed by staff in the Oval Office.
- At 8:05, YOU and the President enter the Cabinet Room.
- The President greets the guests and thanks them for coming.
- YOU make opening remarks and summarize the four pillars of the educational technology goal – computers, connectivity, content and teacher training. (See attached talking points and agenda).
- YOU will moderate the discussion, focusing on contributions and suggestions the CEOs can provide for each of the four pillars. It will be your responsibility to move the discussion from one pillar to the next while you and the President ask the CEOs questions on each topic. (See attached scripts of questions). Start the discussion

Now, I know that you're providing resources to educators and you're working on a documentary. How can we use the creativity and power of your industry to enrich the content of educational technology?

For Ted Turner

You've been very active in the effort to use cable systems to reach classrooms. That's important because we shouldn't lose sight of the fact that computers are not the only way to reach classrooms. How do you think that other technologies, including cable, can best be used to meet our goals?

2. Teacher Training

For Al Shanker and Keith Geiger

Teachers have to be comfortable with and proficient in the use of technology. That's why we've put such emphasis on teacher training in our four basic goals. Tell us what you believe we should do to reach that goal. How soon can we have every teacher trained?

For William Neukom

As such a large producer of software, Microsoft has regularly dealt with the the problem of training computer users. How might the private sector play a role in preparing public school and other teachers for the 21st century?

For Alex Mandl

AT&T has done significant work in the schools. Can you share some of your wisdom on teacher training?

3. Connection: Ray Smith

Ray, I know you've really focused a lot on connecting classrooms in your area. What do you think is the key to getting classrooms connected across the country?

D. A National Effort -- Next Steps (15 minutes)

Coordinating individual efforts to benefit all of the nation's children.

Let's talk about a few practical things that are underway today.

For Ed McCracken and Del Lewis

Your Advisory Committee has been hard at work on this issue, and I know that over the next two days you'll be talking about a report called "Kickstart." Can you tell us about that report and how your work is going? And can you tell us about what's happening now in local communities?

For David Shaw

I know you have been giving a lot of thought to educational technology through my Advisory Council on Science and Technology. What do you think are the dynamics of private sector financing in educational technology?

- **Commit Them to the Vision** -- Today we've outlined a vision of the four things that need to happen for 21st-century schools. Are we all in agreement that these are the basic elements of a national vision on educational technology?
- **Follow-Up** -- To make sure that we translate this vision into reality, I'd like to ask you to assign a liaison from each of your companies or organizations to work with us and attend a follow-up meeting.
- **Contributing to a National Effort** -- In particular, I'd like to ask you to get back to us with specifics on what your organization is doing with educational technology, and how it can be part of a national effort.

Vice President wraps up.

President thanks everyone for coming.

REPORT ON CEO MEETING
OCTOBER 10, 1995

Attending

Gary Beach	Computerworld
Michael Eisner	Disney
Keith Geiger	National Education Association
John Hendricks	Discovery Communications
Gerald Levin	Time Warner
Del Lewis	NPR
George Lucas	Lucas Foundation
Alex Mandl	AT&T
Diana MacArthur	Dynamac
Ed McCracken	Silicon Graphics
William Neukom	Microsoft (Gates is out of country)
Al Shanker	American Federation of Teachers
David Shaw	D.E. Shaw and Co.
Ray Smith	Bell Atlantic
Ted Turner	Time Warner/CNN
Alan Wurtzel	Circuit City

Possible

Stephen Case

America On Line

probable

Others on List

Low Gerstner
Michael Spindler
John Young

IBM
Apple

*Invited
Still no reply*

Unavailable - not attending

Robert Allen	AT&T
Norman Augustine	Martin Marietta
Carol Bartz	Autodesk
Bill Esrey	Sprint
Richard Notebaert	Ameritech

Unavailable

September 19, 1995

MEMORANDUM FOR THE PRESIDENT AND THE VICE PRESIDENT

FROM: Gene Sperling, NEC
Paul Dimond, NEC
Bill Curry
Greg Simon, OVP
Jim Kohlenberger, OVP
Jonathan Sallet, DOC
Henry Kelly, OSTP
Ed Fitzsimmons, OSTP
Mike Schmidt, DPC

SUBJECT: Background on Broader Educational Technology Initiative

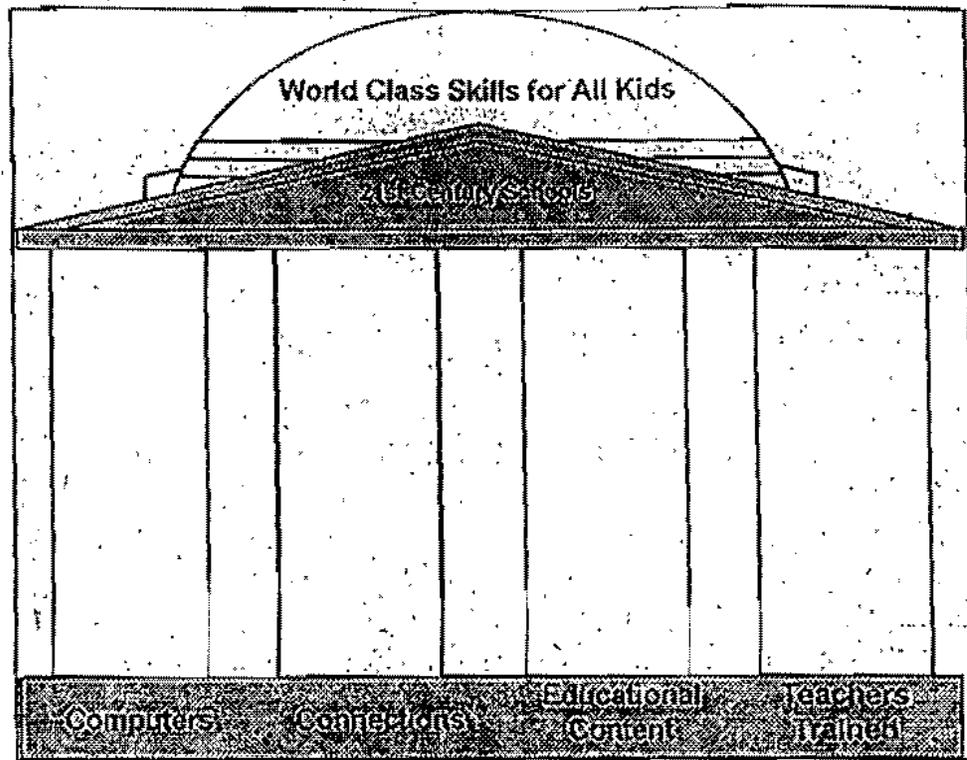
INTRODUCTION

Pursuant to your request, the OVP, NII and NEC- DPC Education Working Groups, OSTP, and WH Communications have been working together to develop a proposal for making educational technology a defining issue for you and for the nation -- now, through the State of the Union Address, the 1996 Campaign and the Second Clinton-Gore Term. The proposed campaign is premised on a major launch by you and the Vice-President on or about October 2. The build-up to this launch will occur over the next three weeks. Policy and communication issues remain to be resolved. This background memo is designed to assist you in addressing key issues as they arise over the next three weeks.

GOAL

As depicted in the graphic on the next page, the ultimate goal is to enable all children to learn the skills they need to thrive in the knowledge-intensive, information age that is sweeping the global economy at the dawn of a new century. The United States can do this if emerging technologies can be focussed on driving four related changes:

- to make modern computers an integral part of every classroom.
- to connect these classrooms to the emerging National Information Infrastructure
- to train teachers and provide the on-going support they need to use these new learning tools to engage all student in active learning by doing
- to make available education software that is as engaging as the best video game and as meaningful as learning with an expert tutor.



BACKGROUND ON TECHNOLOGY AND LEARNING

The Challenge

We are in the midst of an information and communications revolution that is changing the nature of how we work, how we learn, and how we live. There has been much higher investment in computers and related telecommunications equipment during this economic recovery. The state of the art in telecommunication, computers, and software is advancing rapidly and provides a host of new opportunities for workers and firms to add new and higher value to the goods and services they produce. As businesses lean more heavily on emerging telecommunication, electronic technology and software, American workers must increasingly learn the ways of electronic communications just to carry out their day-to-day responsibilities. Over the past ten years, the number of workers who directly use computers at work has grown from 25% in 1984 to 47% in 1993. It is estimated that more than 60% of new jobs in the year 2000 and beyond will require technology skills held today by about 20% of the workforce. Technological skills are also tied to higher wages: — in 1993 workers who used a computer at work were paid 23% more than those who didn't. Well-educated and skilled workers are prospering in the new technology-driven economy, while those with skills that are out-of-date or out-of-synch with the new economic landscape are being left behind.

As the new information technologies rapidly transform the way America operates, they are also transforming what our children need to learn. Technological literacy will be as much a part of the 21st century as knowing how to use a telephone is today. This generation of children and youth is uniquely positioned to so: they are more comfortable than many of their parents and teachers in playing and working with VCRs, interactive electronic games, and computers. 42% of households in America now have video game software, and 36% have home computers.

The problem is, when we walk through the doors of most schools today, we enter a time warp. In a burgeoning information age, where technological skills are crucial to personal success and national prosperity, we are using industrial age tools to educate our sons and daughters. In classrooms that should be information and communications hubs for learning, the basic medium of instruction continues to be blackboards and chalk, textbooks, pencil and paper. The only ubiquitous 20th century technologies in classrooms are the P.A. system and the bell — to keep classes moving in lock step. Unconscionably, telephones, television and VCRs, fax machines and the first several generations of computers simply passed by most classrooms. Fewer than 20% of all classrooms have phones, let alone modern telecommunications equipment. Less than 3% have computers and connections that are even capable of bringing the Internet and the other emerging resources on the Information Superhighways to students in the classroom. Our schools are technologically impoverished in a technologically rich world, and this has serious economic consequences for the future of our children and our nation.

Barriers to the Effective Use of Technology in the Classroom

There are four principal barriers to the effective use of education technology in our nation's classrooms:

Connecting Schools and Classrooms to the Information Highway. Most classrooms lack two types of connections that are vital to their joining the information revolution: First, they are not connected externally to the outside world, either by cable wire, phone wire, wireless telecommunication or satellite. Second, most classrooms are not connected to each other (and to homes) so that students and teachers (and parents) can share information, communicate with each other, and learn together in schools (and on their own time at home).

Getting Up-to-Date Computers and other Interactive Technologies into the Classroom. The problem is not only in bringing computers into the schools, but bringing relevant, up-to-date computer and other interactive technologies into the classroom. Over the past decade, schools have made a concerted effort to add computers for student use, and the number of students per computer has decreased from 125:1 in 1983 to 12:1 in 1995. Unfortunately, 80% of all computers used for instruction in the classroom aren't capable of running most new software being designed today; and only one computer for every 48 students is capable of connecting

to the Internet. Additionally, schools lack many of the basic "hardware" items that would allow them to access the information revolution that is sweeping the private sector.

Teacher Training and Support. The vast majority of teachers in the classroom today have had no formal training in the use of technology as a teaching and learning tool. As discussed above, most teachers don't even have the opportunity to come into contact with education technologies at all during their daily work in the classroom. Schools of Education continue to downplay the importance of technology in training teachers. If teachers do have access to technology at all, follow-up training and technical support for teachers is almost non-existent, with only 6% of elementary and 3% of secondary schools providing a person for technical support of technology equipment let alone assistance in integrating learning technologies into the daily curriculum to help all students learn.

Shortage of Meaningful Content. Most of the "educational" computer software that is currently being produced in this country does not get used in schools: there is a limited supply of material; most teachers and classrooms aren't equipped to use the available education software; and most education software applies only to a limited range of any curriculum. Too often teachers see this sort of narrow instructional software as a distraction that is not central to their basic teaching goals. Furthermore, the software that is developed for schools is too often "drill and kill" — nothing more than an electronic version of flash cards. Until educators and software developers do a better job of communicating with one another, the education software market will continue to lag behind other forms of software — in 1993, for example, the retail sales of the violent video game "Mortal Kombat" alone were about 50% of all educational software sales to the home.

Reason for Hope: Three Converging Shifts in Paradigm.

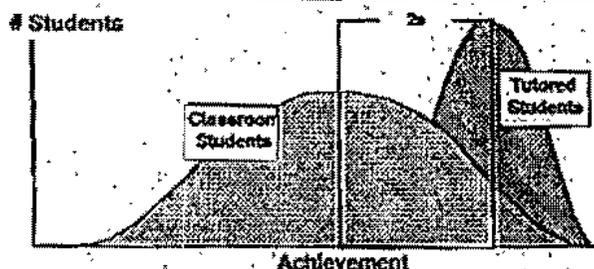
The good news is three major shifts in paradigm are now converging that provide a new base for launching a revolution in the productivity of learning in schools and homes:

First, a new consensus is emerging about the dynamics of learning: The primary work of learning is done by the learner, not the instructor. All students learn at their own pace, often in different styles. Learning is more engaging for the student if it involves active interaction and occurs in a meaningful context, rather than through passive listening in the abstract or rote memorization. In this new perspective, the role of the teacher shifts from a "talking head" imparting knowledge onto the students to a learning "coach" or "tutor" working with students who are actively exploring issues and ideas in a contextual setting. Research shows that students taught by individual tutors do better than 98% of students taught in traditional "mass production" setting of most schools and classrooms designed for the industrial age; and studies of DQD education and training programs shows that it is possible to achieve such

gains through the student's use of interactive learning technologies with standard teacher-pupil ratios.

Learning Productivity High-Tech Learning Is Effective

On average, tutored students score better than 96% of classroom students — A 2 Sigma Shift.



Adapted from: Bloom, B.S. The Two Sigma Problem: The Search for Methods of Group Instruction as Effective as One-to-One Tutoring. Educational Researcher, 11, 5-6 (1984)

Second, digital technologies are emerging — in computers, simulation, data compression, multi-media — that offer new ways for learners and their teachers and peers to engage actively in learner-centered environments. Such engaging experiences allow learners to experiment and to explore — by using simulated equipment (telescopes, submarines, airplanes, spaceships etc.) to walk freely through ancient cities, to explore the physical environment or conduct experiments (around the world, in jungle settings, outer-space, etc.). We can exploit this potential, however, only if we can bring the creators of these new technologies together with the makers of essential learning content to transform games, information and entertainment into engaging curricula and research opportunities for all ages, interests and styles of learners.

Third, diverse means of transmission, telecommunication and portability are being developed that will enable students to connect with these learning tools — and with other learners, experts and tutors — in classrooms and at home. Long-distance and regional telephone carriers, cable and wireless companies, even electric utilities will be able to connect classrooms and homes to vast new libraries of easily accessible information, interactive learning games and curriculum, and dialogues with experts and peers. Virtual learning communities can thereby be created that will enable students of all ages to use these new learning tools at all hours of the day, weekends, throughout the year. Parents, as first teachers, can be empowered to continue to work and play with their children in learning from early childhood through graduation from high school. The extent of learning and the effectiveness of teaching no longer need be a prisoner of the amount of time in the classroom at school nor a captive of passive watching in front of TV at home.

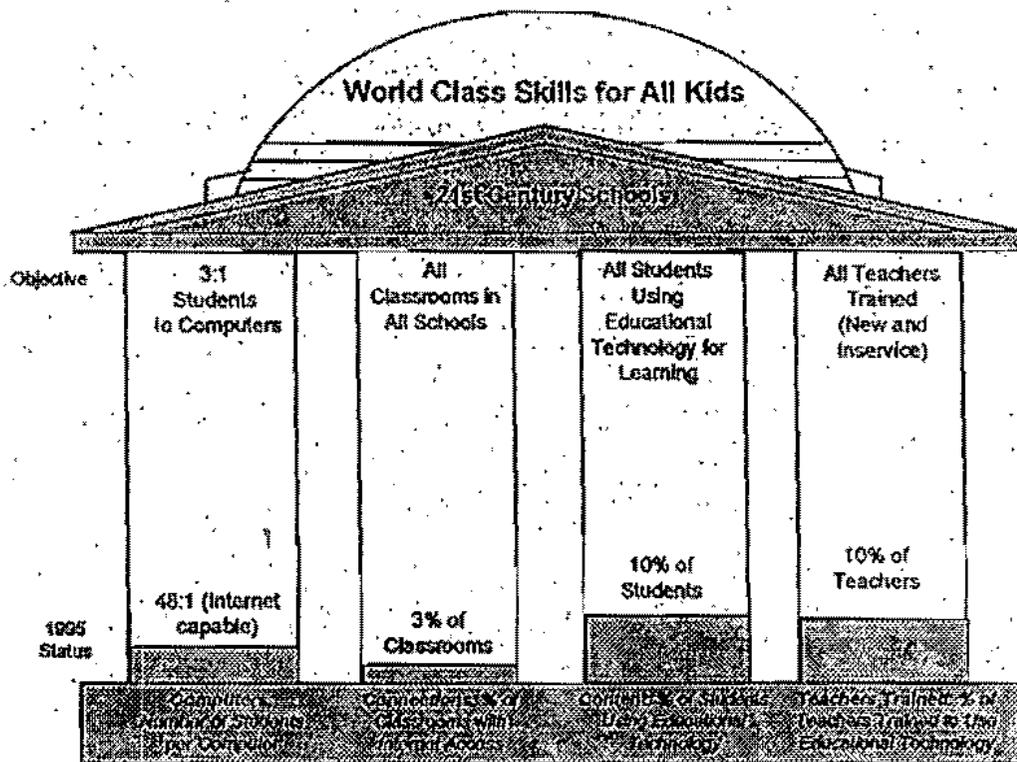
These three paradigm shifts finally make it possible to develop what was virtually unthinkable even ten years ago: engaging and entertaining content and curriculum that will entice learners

of all ages to play a new game — learning to acquire world-class skills, including the ability to solve unexpected problems, to explore knowledge and information available throughout the world, and to learn how to learn throughout life. New, interactive learning curriculum, education games, and personal research and discovery opportunities can unlock the full potential of the three paradigm shifts. As a result, we stand on the brink of a revolution in schooling, teaching and learning:

schools can become the high-tech sailing ships chartered to enable all students to make the historic crossing to high skills needed to thrive in the 21st century

teachers (and parents) can become the navigators and guides to help all students make a successful crossing

students will have greater opportunities — and can take personal responsibility — for learning the skills they need to make a successful crossing to the twenty-first century information age and to blaze their own paths to a better future for themselves and their families.



III. FRAMEWORK FOR PROGRESS

To reach our ultimate goal -- "to equip all American children with the skills they need to thrive in the knowledge intensive, information age that is sweeping the global economy at the dawn of a new century" -- we believe that you and the Vice President can use the framework provided by the four components to establish clear objectives and meaningful indicators of progress for each.

The figure above offers an example of what the objectives and indicators might be: all classrooms connected to the NII; 1 interactive computer for every 3 students; all teachers trained to use the new learning tools in their teaching; all students using interactive learning tools as a regular part of their work and play at school (and at home). The "capstone" objective might then be 100,000 21st Century Schools (that integrate all four components into the daily work and play of students), say by the year 2000 (or 2002). The ultimate goal displayed in the dome might then be described as "World Class Skills," with which our children and youth can, indeed, use to thrive in the decades ahead. Progress -- each year or quarter -- can be depicted on each of the four components by filling in the "pillars" (as in a

bar chart) and the "capstone". (as shown).¹

Each of the related objectives, indicators, and capstone can be defined differently. Consider two examples. In the newly emerging world of digital communication, multi-media and software, the "computer" as we now know it may be converging with the TV, the video game, cable, VCR's and other "set-top boxes," the telephone, the copier and the fax into a range of related, competing and possibly interchangeable products or components. Calling such emerging "instruments" a "computer" as we begin a multi-year campaign may run the risk of the elites suggesting either that we are tilting the playing field among the competitors towards today's computer companies or that we haven't thought about the range of new "instruments" that are already emerging.

Similarly, the objective and indicator for content is also problematic. We could highlight, for example, (1) sales or revenues for education software, (2) the development and availability of education software, or (3) the use by students of new learning tools. Education software revenues (from sale and use of various learning and research resources on the NII) as a % of K-12 budgets may provide the easiest to measure, but surveys of actual usage of educational software by students might be a more relevant guide.

Finally, the "capstone" objective could be labeled, defined and measured in a number of ways. In evaluating alternative options, three criteria are vital: credibility based on the available evidence, relevance to the overall goal, and clarity of meaning for the American people.²

CONCLUSION.

You and the Vice-President have provided leadership in focussing the nation's attention on the potential and importance of the NII and education technology to the future of the country. The time is now ripe to propose a major campaign to realize their full potential for the nation's children and youth. Only you and the Vice-President can provide the essential leadership. You should know that Chairman Walker is holding a hearing on October 12, at which Speaker Gingrich is the lead witness. No administration officials have been asked to

¹ The target date is an open issue. Rand and McKinsey studies indicate that the four objectives can be achieved in most schools in the 2005-2010 time frame. Setting the target date as 2000 makes it less credible that all four objectives can be realized in all schools. Based on the extent of the on-going campaign, it might be more realistic to set a target date of 2002 or 2004. Choosing a date later than the Year 2000, however, may raise confusion with the Balanced Budget issues or enable the Republicans to trump your leadership by setting an earlier date.

² We also will need to determine whether and how to define any intermediate target dates, e.g., within a year (1) double the number of schools or classrooms connected to the Internet, (2) double the number of modern computers in the classroom, (3) double the number of teachers trained to use computers connected to the Internet, and (4) double the number of students using education software in their daily learning.

testify, although the two private sector leaders who co-chair the NII Advisory Committee have been called to discuss how they believe the nation can realize the full potential here. You and the Vice-President will seize the initiative on this issue through your actions and announcements leading up to the launch of your technological literacy campaign on or about October 2.

October 9, 1995

**ANNOUNCEMENT OF THE WINNERS OF THE TECHNOLOGY LEARNING
CHALLENGE GRANT COMPETITION, AND THE CREATION OF THE U.S.
TECHNOLOGY CORPS AND THE AMERICAN TECHNOLOGY HONOR SOCIETY**

Date: October 10, 1995
Time: 9:05 a.m. to 9:30 a.m.
Location: The Roosevelt Room
From: Gene Sperling/Greg Simon/Jonathan Sallet

I. PURPOSE

The following announcements will be made: (1) That the President and you will be launching a national private-public partnership to ensure that all children are technologically literate by the dawn of the 21st Century; (2) That the President and you have brought leading CEOs in to get their advice and commitment to work with you on this partnership, and; (3) An announcement of three examples of the kinds of partnerships that are needed to make a national private-public partnership a reality:

- Technology Learning Challenge Grant winners
- The creation of the U.S. Technology Corps
- The creation of the American Technology Honor Society.

II. BACKGROUND

The President will be making three announcements on Tuesday:

- **The Winners of the first Technology Learning Challenge Grant Competition:** The Technology Learning Challenge brings together community-based consortia of K-12 schools, telecommunication companies, software developers, other businesses, and community organizations. These consortia will create interactive curriculum and learning games for use in schools and homes, and deploy these educational technologies in their local schools and communities. This year's awards of \$10 million in federal funds to 19 winning consortia will leverage over \$50 million in local support and private sector funding in the first year, and an estimated \$300 million over the five year life of these projects. (see attached background on the Technology Learning Challenge)

- **The Creation of the U.S. Technology Corps:** The Tech Corps is a national, non-profit organization of private sector volunteers with technological expertise dedicated to helping improve K-12 education at the local level. Its mission is to recruit, place, and support volunteers from the private sector who advise and assist schools in the integration of new technologies into the classroom. Gary Beach, president of Computerworld Inc., founded the Tech Corps as a demonstration program in Massachusetts in 1994. Today's announcement will be that Tech Corps is now a national organization that will be in every state by the end of 1996. (see attachments on the Technology Corps, and a list of Technology Corps corporate partners)
- **The Creation of the American Technology Honor Society:** The American Technology Honor Society (AHTS) will be a school-based organization through which students with technological expertise can help expand their school's use of technology, and which will recognize and reward students who use their technological expertise to serve their schools. The organization will be managed by the National Association of Secondary School Principals, the same organization that runs the National Honor Society. It is expected that the AHTS will be made available to all schools by the Fall of 1996.

These three initiatives will build off the "electronic barn-raising" theme from September 21st at the San Francisco Exploratorium-- they are the equivalent of raising 21st century electronic schoolhouses by learning communities around the country. The Technology Learning Challenge provides the content and the collaboration, and the Tech Corps and American Technology Honor Society the technical on-site expertise, to make the vision of 21st century electronic schoolhouses real in communities around the country.

The Department of Education has organized regional events for all 19 Technology Learning Challenge Grant award winners. (see attached list of regional events)

III . PARTICIPANTS

YOU

The President

Secretary Riley

Secretary Brown

Laura Tyson

Jack Gibbons

Working Breakfast Participants

Representatives of 15 of the 19 TLC grant winners, the Tech Corps, and the American Technology Honor Society (list attached)

IV. PRESS

There will be an expanded pool spray at this announcement.

V. SEQUENCE OF EVENTS

- You, the President, Secretaries Riley and Brown, Laura Tyson, Jack Gibbons, and the Working Breakfast participants enter the Roosevelt Room at 9:00.
- At 9:05, You will give remarks and introduce the President.
- The President will speak for 10 minutes, making remarks on the vision for educational technology and announcing the Technology Learning Challenge grant winners, the creation of the U.S. Technology Corps, and the American Technology Honor Society.
- YOU the President leave the Roosevelt Room.

VI REMARKS

Your remarks are attached.

Attachments:

- Background on Technology Learning Challenge
- Background on Technology Corps
- Background on American Technology Honor Society
- List of Regional Technology Learning Challenge Events
- Gary Beach Bio
- List of Announcement Participants

**REMARKS FOR VICE PRESIDENT GORE:
ANNOUNCEMENT OF TECHNOLOGY LEARNING CHALLENGE, AND
THE CREATION OF THE TECH CORPS AND THE AMERICAN
TECHNOLOGY HONOR SOCIETY**

Tuesday, October 10, 1995

The President and I just came from a very constructive meeting with these information industry and education leaders (standing behind me) in which we discussed how to bring our schools into the 21st century. We agreed on the vision and the goals outlined by the President: that we must get good computers into classrooms, connect those computers to the information superhighway, train teachers and create engaging educational content. This meeting is what it's all about -- the public sector working with the private sector to provide the best resources to our schools, so that our children will be ready and able to meet the challenges of the growing information society.

It is through these joint partnerships of the public and private sector that we can achieve these national goals. The federal government cannot afford to take on this initiative alone. Nor would it be wise for the federal government to propose solutions for individual schools. What the government can, should, and is doing is lead a national effort for technological literacy and act as a catalyst by bringing groups together and leveraging money from the private sector.

One of the best examples of how this works -- and works well is the Technology Learning Challenge Grants. I am so pleased to be here with the President congratulating the winners of this year's Technology Learning Challenge Grants. These grants are provided to partnerships of schools and private sector companies that will create interactive

curriculum and learning games for use in schools across the country. Challenging communities to work together for the best interest of the local schools is our best solution. We must recognize that federal dollars used to leverage private sector funds in connection with schools, yield remarkable results. It is through your effort that we will achieve technological literacy for all the nation's children.

Two other examples of successful public-private partnerships include the Tech Corps and the American Technology Honor Society, both of which will be announced this morning. I am pleased to welcome those of you who are here representing the Tech Corps and the American Technology Honor Society and congratulate you for your efforts. It's people like Heather Stokeley, who is the National Vice President of the Technology Student Association, and a

fellow Tennessean, who are working today to ensure that all students have the tools they need for the 21st century.

I would now like to announce the man who shares the vision of technological literacy and will see it through to the day when all our nation's children will be empowered with the tools for the 21st century, the President of the United States, Bill Clinton.

TECHNOLOGY LEARNING CHALLENGE GRANTS

Description of Program

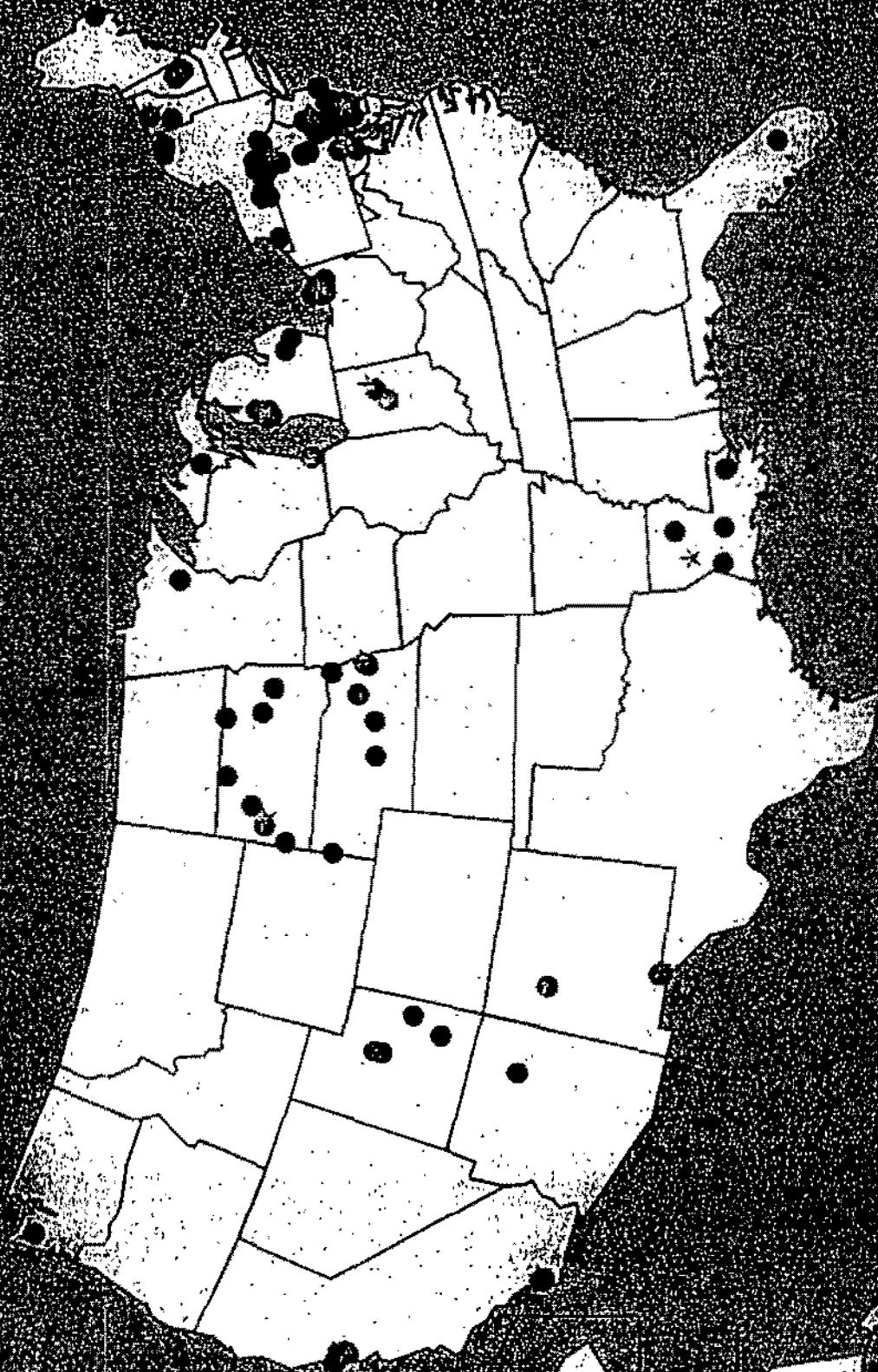
The Technology Learning Challenge Grant program is an Administration Initiative that was announced by the Vice President in March of this year. The program, which is administered by the Department of Education, will award grants to community-based consortia of K-12 schools, telecommunication companies, software developers, other businesses, and community organizations. These consortia will create interactive curriculum and learning games for use in schools and homes, and deploy these educational technologies in their local schools and communities. Their ultimate objective is to use these powerful new technologies and the information superhighway to transform their schools into information age learning centers.

Number and Location of Grants

- The Department of Education is awarding \$9.5 million in Challenge Grants to 19 communities in 16 states across the country. Those communities are: Redwood City, California; San Diego, California; Dover, Delaware; Waukegan, Illinois; Anderson, Indiana; Indianapolis, Indiana; Natchitoches, Louisiana; Baltimore, Maryland; White Cloud, Michigan; Omaha, Nebraska; Manchester, New Hampshire; Laguna, New Mexico; Cuyahoga Falls, Ohio; Philadelphia, Pennsylvania; Towanda, Pennsylvania; Sturgis, South Dakota; El Paso, Texas; Price, Utah; Montpelier, Vermont.
- The 19 school districts in these communities will work in partnership with 134 other school districts in 23 states. Challenge grants will average \$1 million a year for five years.

Program Statistics

- Over 380 partners will participate in the activities of these 19 Challenge Grant communities, including 120 private sector firms, 34 universities and colleges, 10 museums, 5 libraries, 9 state education agencies, the education offices of 5 national parks, an Army and Navy base, and 3 Governors and 2 Mayor's offices.
- A total of 154 school districts will use new technologies as a result of this program.
- The total value of the matching commitments to the \$10 million in federal funds will be over \$70 million in 1996, and is expected to be over \$300 million over five years.



Challenge Grant Awards

● 134 Partner School Districts ★ 19 Challenge Grant Districts

OCTOBER 10 TECHNOLOGY LEARNING CHALLENGE GRANT REGIONAL EVENTS

- **Dover, Delaware:** Members of the winning consortia, state representatives, and 25 local dignitaries will hold an awards celebration event at the Town Point Elementary School Library. Local media will attend.
- **Baltimore, Maryland:** Will hold an awards event. The superintendent of Baltimore schools will be on hand to accept the grant award. Local media will attend.
- **Manchester, New Hampshire:** Will have an event with 50-60 people at the Manchester School Administration Building.
- **San Diego, California:** Will have an event sponsored by the Mayors office and the San Diego Schools. Pacific Bell will get consortia partners involved in the event.
- **Redwood City, California:** Will hold an event at a local high school. Members of Smart Valley, Inc will coordinate the event.
- **Towanda, Pennsylvania:** Will hold an event at the Commonwealth Telephone Company Headquarters. Video-links will be set up with consortia-member schools. Local media will attend.
- **Philadelphia, Pennsylvania:** Will hold an event at the Philadelphia School District Building at the beginning of the School Board Meeting. The Superintendent of Schools and the Chairman of the Board of Education will accept the check, presented by Assistant Secretary Moreno.
- **Natchitoches, Louisiana:** Will hold an event at the State Capital Building in Baton Rouge. The Governor may attend.
- **White Cloud, Michigan:** Will hold an event on October 12 at the School Board Meeting with all of the country Boards of Education and the Superintendent of Schools.
- **Sturgis, South Dakota:** Will hold a small event on the 10th and a large event on the 23rd.
- **Laguna, New Mexico:** Will Hold an event.
- **El Paso, Texas:** Will hold an event
- **Price, Utah:** Will hold an event in the State Department of Education. It will include the Governor's office.
- **Montpelier, Vermont:** Will hold an event in the Montpelier High School Auditorium. Deputy Secretary of Education Madeline Kunin will present the grant.

- **Cayahoga Falls, Ohio:** Will hold an event with the President of the Board of Education, the Superintendent of County Schools, and the Akron OH City Superintendent of Schools.
- **Waukegan, Illinois:** Will hold an event at the Board of Education meeting with the Mayor of Waukegan, the Principals of participating schools, and other elected officials.
- **Anderson, Indiana**
- **Indianapolis, Indiana**

**Administration Speakers at the Challenge Grant Events, October 10
As of Friday, October 6 3:00 p.m.**

FINAL * FINAL *** FINAL**

Location and Local Time	Administration Speakers
San Diego (3:30 p.m.)	Loni Hancock, SRR
Redwood City/Silicon Valley	Charles "Chick" Tooker, Office of SRR
Dover, DE (11:00 a.m.)	Senator Biden
Waukegan, IL (8:30 p.m.)	Scott Fleming, Office of Legislation
Anderson, IN (7:00 p.m.)	Stephanie Jones, SRR
Indianapolis, IN (2:00 p.m.)	Stephanie Jones, SRR
Baton Rouge, LA (at Governor's mansion) (10:00 a.m.)	Mario Moreno
Baltimore (10:00 a.m.)	Henry Smith, Deputy Assistant Secretary
White Cloud, MI (Thursday, 6:00 p.m.)	Stephanie Jones, SRR
Omaha (10:00 a.m.)	Sandra Walker, SRR
Manchester, NH (10:00 a.m.)	Jan Paschal, DSRR
Laguna, NM (10:00 a.m.)	Sally Cain, SRR
Cuyahoga Falls, OH (8:30 a.m.)	Sharon Robinson, Assistant Secretary
Philadelphia, PA (11:00 a.m.)	Leslie Thornton, Deputy Chief of Staff
Dallas, PA (10:00 a.m.)	Wilson Goode, SRR
Sturgis, SD (10:30 a.m.)	Lynn Simons, SRR (phone call)
El Paso (10:00 a.m.)	Trini Garza, DSRR
Salt Lake City, UT (10:00 a.m.)	Julia Anderson, ITO/ED 801/328-2000 x921
Montpelier, VT (10:00 a.m.)	Ed Augustus, chief of staff, OIIA

TECH CORPS

Vision:

A national, non-profit organization of technology volunteers dedicated to helping improve K-12 education at the grass roots.

Mission:

The mission of Tech Corps is to recruit, place, and support volunteers from the technology community who advise and assist schools in the introduction and integration of new technologies into the educational system. Volunteers provide assistance with local planning, technical support and advice, staff training, mentoring, and classroom interactions. The organization utilizes the abilities of skilled individuals and groups across the country in an effort to prepare students, teachers, and schools for the 21st century.

Mode of Operation:

Tech Corps is a volunteer organization. It is funded principally through corporate sponsorships. It has a small headquarters staff to set the Tech Corps mission and agenda, establish and maintain the culture, provide national media liaison, and ensure quality. The broader organization is based on a bottom-up philosophy and draws on the expertise and enthusiasm of technology-literate members of local communities.

Activities:

Tech Corps volunteers work with the teachers and school administrators in their local communities. They do whatever is necessary to promote the effective use of computing and communications technologies in K-12 education. Thus, their tasks may range from getting local contractors to upgrade the electrical wiring in a school, to installing a local area network, to providing assistance in obtaining computing hardware and networking services, to finding a volunteer systems administrator, to helping with the development of a school's World Wide Web home page, to providing assistance with the development of teaching materials, to mentoring students, teachers, or administrators in the uses of computing and communications technologies. Since the determining factors are local needs, a wide variety of tasks are conceivable.

History:

Tech Corps was conceived by Gary Beach. The Massachusetts pilot was supported by Computerworld, Massachusetts Software Council, and Deloitte and Touche. The national Tech Corps was created by Beach, Karen Smith (now the Exec Director of Tech Corps), and Gary Johnson (a White House volunteer and now a Director of Tech Corps) and is being launched at the Oct. 10th event. The Cellular Telecommunications Industry Association (Tom Wheeler) is the founding sponsor of the national organization. Tech Corps' web site is: <http://www.ustc.org>

AMERICAN TECHNOLOGY HONOR SOCIETY

Purpose: The purpose of the American Technology Honor Society is (1) to provide an organization through which students can help apply computing and telecommunications knowledge and technical expertise to expand their school's use of technology and (2) to recognize and reward students who use their technological expertise to serve their schools.

Function: In their schools and communities student members will (1) assist teachers, school administrators, and adult volunteers with integration and use of technology; (2) train teachers, administrators, classmates, and parents in the use of technology; (3) participate in mentoring programs with elementary schools; and (4) perform other functions that serve the goal of increasing and improving the use of technology for learning in their communities.

National Sponsor: The National Association of Secondary School Principals will manage and guide this effort which has as its roots the National Honor Society and the Technology Student Association.

Potential Faculty Sponsors: Computer science, engineering, tech prep, vocational education, science, physics, and math teachers, computer coordinators, librarians and media center managers and other faculty with technology expertise and interest.

Parental Involvement: The American Technology Honor Society will work with the PTA and other groups to involve parents in school and community technology efforts.

Impact: NASSP estimates that the number of students who will join the American Technology Honor Society is higher than the number who are currently members of the National Honor Society (NHS), due to the rising popularity and emphasis on technology. The NHS has one million high school student members in 12,000 high schools and 6,000 junior high schools. The Honor Society has chapters in 60% of the secondary schools in the U.S. Therefore, the ATHS is expected to have chapters in at least 60% of secondary schools (over 12,000) and to have at least one million students participating. We expect that the ATHS will be made available to all schools by the Fall of 1996.

Tech Corps Rollout:

- MAY 95 Begin Tech Corps incorporation and tax exemption
- JUNE 95 Tech Corps prototype in six states;
Obtain corporate and DOE/NSF laboratory assistance in building
Tech Corps computing and communications infrastructure
- AUGUST 95 Tech Corps home page and mirror sites on the Internet in experimental
mode;
Refine Tech Corps definition, based on feedback from prototype
- SEPTEMBER 95 Announcement of Charterers' Conference;
Public debut of Tech Corps home page
- OCTOBER 95 Presidential announcement of Tech Corps and call for organizers;
Pointer from White House home page activated;
Charterers' Conference held in Washington, DC
- NOVEMBER 95 Tech Corps call to businesses at Comdex (possibly by Vice
President);
Home page focus shifts to recruiting business participants
- JANUARY 96 Tech Corps media release and call for participation by school districts;
Home page focus shifts to recruiting school districts
- APRIL 96 Tech Corps media release and call for participation by volunteers;
Home page focus shifts to recruiting individual volunteers
- SEPTEMBER 96 Tech Corps operational in all states

Gary J. Beach
President and Chief Executive Officer
Computerworld, Inc.

Mr. Beach was instrumental in launching the Massachusetts Tech Corps, a volunteer organization whose goal is to accelerate the adoption of technology into public schools. He also serves on the U.S. Tech Corps' board of directors.

Beach is president and chief executive officer of Computerworld, Inc., Framingham, Massachusetts. He joined the International Data Group family of newspapers and magazines as publisher of *Network World* in 1987. In 1992, he was named publisher of *Computerworld*.

Beach is active in promoting efforts that raise the information technology industry's awareness of social responsibility, including advocacy of computer literacy among the general public. In 1992, Beach started a foundation called the Computers For Classrooms Foundation, whose goal is to challenge American corporations to donate quality used computer hardware and software to public schools.

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ANNOUNCEMENT PARTICIPANTS

Daniel Paul is the superintendent of schools in Towanda, Pennsylvania. He has also served as executive director of the Northern Tier Rural Distance Learning Consortium.

David C. Gibson is the director of curriculum and instruction for the Montpelier, VT public schools.

Steven Gutentag is the assistant to the chief information officer for the Philadelphia public schools.

Steve Snyder is the director of instructional technology for the Summit County Education Service Center in Ohio. He is co-author of the Cuyahoga Falls, OH grant proposal.

Dr. Gay Fawcett is the director of curriculum and instruction for the Summit County Education Service Center. She is co-author of the Cuyahoga Falls, OH grant proposal.

Dr. Elaine Armani is the associate superintendent for curriculum and instruction for the Waukegan, IL public schools.

William A. Mehojah is deputy director of the Office of Education, Bureau of Indian Affairs, U.S. Department of the Interior.

Ben DeBellis is director of elementary education for the Socorro, TX Independent School District.

Kenneth M. Bird is the superintendent of the Westside Community Schools in Omaha, NE.

Lajeane Thomas is president of the International Society for Technology in Education. She teaches at Louisiana Tech.

Heather Stokeley is national vice president of the Technology Student Association. She lives in Knoxville, TN.

Rosanne White is the executive director of the Technology Student Association. She lives in Reston, VA.

William R. Brittingham is director of federal relations for Pacific Telesis, Inc.

Mary Baumeister is the deputy executive director for the Black Hills (SD) Special Services Cooperative.

James Parry is director of Technology & Innovation Education (TIE) in Sturgis, SD.

Gary Beach (will be in CEO meeting) is the CEO of Computerworld and the founder of the Technology Corps.

Karen Smith is the Executive Director of the Technology Corps.

Gary Johnson is the Director of the Technology Corps.

Mary Roddy Betzler is the Director of the CTIA foundation, a Tech Corps Founding Sponsor.

David Blohm is the CEO of Virtual Entertainment and the Chair of the Massachusetts Tech Corps.

Timothy Dyer is the Executive Director of the National Association of Secondary School Principals.

Roseanne White is the Executive Director of the Technology Student Association.

VP TALKING POINTS SUMMARIZING THE EDUCATION TECHNOLOGY INITIATIVE

1. I would like to summarize for you our initiative to bring into American classrooms today the technology students will need for success tomorrow. You all understand the importance of the information revolution and the way it is changing the workplace and society. Our goal is to make sure we prepare our schools, students and teachers to take advantage of these changes, rather than be left behind.
2. We believe that technological literacy requires a four part effort. First, computers need to be an integral part of every classroom. They need to be up-to-date, capable of joining networks and able to run the latest software.
3. Second, we must connect schools and classrooms to each other and to the outside world and the INTERNET. On September 21st, the President announced in San Francisco that, through private sector efforts, around 3000 California schools could be wired to the classroom this school year and that every California school could obtain free Internet access. These commitments demonstrate the diversity of efforts and wealth of ideas that private industry can bring to bear to solve a national problem.
4. Third, we need to train teachers on how to use these new technologies to improve their skills in educating students. We need to create a support system that teachers can rely on and provide a stable curriculum that uses educational technology to the best advantage.
5. Finally, we must make educational software as attractive and enticing as the best entertainment products but as useful as an expert tutor. Working with teachers and industry we should make software a key ingredient in education, not a distraction.
6. These are the four pillars of our proposal: computers, connectivity, content and teacher training. Each of you is playing a role in furthering one or more of these goals. We asked you here today to get our advice and counsel on how we can work together to make this vision a reality.

AGENDA/ SCRIPT

- A. The President's Introduction (5 minutes)
- B. The Vice President – A National Vision (5 minutes)
 - 1. Computers – in Every Classroom and Accessible to Every Student
 - 2. Connection -- of Students to Each Other and to the Information Superhighway
 - 3. Content -- Software that is Meaningful and Engaging
 - 4. Teacher Training
- C. The Public-Private Partnership: A Discussion of Roles and Responsibilities (35 minutes)

Due to the brevity of the meeting, let's focus on content and teacher training first.

- 1. Content

Question For Michael Eisner

Better than anyone in America, you know how to captivate the imagination of children. How can we make educational computer programs just as engaging?

For Gerald Levin

Apart from engaging content, we also need enough variety in educational programming to address all the issues we want our children to learn about. What do you think needs to be done to ensure an adequate supply of educational content for our students?

For George Lucas

You've been a leader through the Lucas Foundation in developing educational technology because you believe that educational technology can be used much more effectively in our classrooms.

with the pillars of content and teacher training because the CEOs can contribute the most to these areas and you have a limited amount of time with them. As time permits, move to the other pillars, computers and connectivity.

- You will then discuss the "next steps" the CEOs can take. (Questions are in the attached script).
- You will summarize the meeting.
- The President will thank the guests for attending.
- At 9:00, YOU, the President, Secretary Riley, Secretary Brown, and the meeting participants leave the Cabinet Room and proceed to the Roosevelt Room for the announcement of the winners of the Technology Learning Challenge, and the creation of the U.S. Technology Corps and American Technology Honor Society.

VI REMARKS

Talking Points for CEO meeting are attached.

Attachments:

- Talking points on the national goals for educational technology.
- The agenda for the meeting.
- List of Meeting Participants
- A memo on the vision for the national goals.